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## **From the Persepolis Fortification Archive Project 7: Accounting for Fruit in the PFA**

*“In most of the accounting texts the mathematical framework is clear. But in these texts, as in others, much remains to be discovered concerning the underlying realities”*  
(Hallock 1969, p. 58)

*“[I]n formulating thoughts on the matter at all I feel more than usually queasily conscious of Hallock’s famous aphorism about seal usage”* (Tuplin 2008, p. 325)

### **Abstract**

Editions of Persepolis Fortification documents that compile multiple records of fruit, a category (provisionally labeled C1/W) postulated by Henkelman & Stolper *Persika* 21, p. 169ff.; editions of selected tabular accounts of fruit (Category W) cited in the same article; a hypothesis about connections among C1, C1/W, and W records of fruit in information processing at Persepolis; a hypothesis about underlying practices of fruit production on terms comparable to those of contemporary Babylonia; appendixes on some Elamite words connected with fruit orchards, fruit processing, and wine.

### **Keywords**

*Production fruitière ; vergers et “paradis” ; dépôts ; évaluations et estimations ; tableaux de comptes ; formulaire administratif et procédure administrative ; lexique élamite*  
*Fruit production ; orchards and “paradises” ; deposits ; assessments and estimates ; tabular accounts ; information form and process ; Elamite lexicon*

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## Introduction

In a volume commemorating the twentieth anniversary of the Achemenet program and the eightieth of its founder Pierre Briant, Wouter Henkelman and I discussed two extraordinary documents from the Persepolis Fortification Archive. They enumerate fruit trees at “paradises” (Elamite *partetaš*) and storage complexes (*balum*) in the vicinity of Persepolis (Henkelman & Stolper 2021).<sup>2</sup> Along with commented editions of the texts, PFa 33 and Fort. 0119-101, we treated the formal properties of these documents and their connections to other Fortification documents, in particular those recording “deposits” of fruit (Hallock’s Category C1), tabular fruit accounts (W), and a newly-postulated category of documents that compile multiple records of fruit (provisionally labeled C1/W). We deferred the supporting information and argument that these comparisons and connections require to separate publications. In one such publication, Henkelman treats the larger agro-historical context of arboriculture around Persepolis and the lexicon of the crops named in the two tree-inventory texts as well

tional Geographic Society Committee for Research and Exploration, the PARSA Community Foundation, the Roshan Cultural Heritage Institute, the University of Chicago Women’s Board, and other donors and organizations. Images of some of the cited unpublished documents are available on line through the applications InscriptiFact (<http://www.inscriptifact.com/>) and OCHRE (<http://ochre.lib.uchicago.edu/>); preliminary draft editions of some are also available through OCHRE. Preliminary editions and images of some texts cited here by PF-NN numbers are published in Hallock & Arfaee 2017. Images of tablets and seals presented here are products of the Persepolis Fortification Archive Project.

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<sup>2</sup> Henkelman 2008, p. 394 and 2021, p. 133, n.1 (citing additional literature) argues against the use of “paradise” to represent Elamite *partetaš* and cognate realizations of Old Iranian \*paridaida- etc. in various ancient languages. He seeks to avoid the connotations of the Greek cognate in the Septuagint and the New Testament. To me, as a native speaker of American English, the connotations of his non-committal alternative, “plantation” (adopted in Henkelman & Stolper 2021, Tuplin 2008, and elsewhere) are more troubling and I avoid it when I can. That one such installation near Persepolis was named Mišbašatiš, “all prosperity” or “all happiness” (Henkelman & Stolper 2021, p. 193, comment on Fort. 0119-101:64 and below, comment on No. 23:36), suggests to me that the connotations of Greek references to pleasure parks were not entirely inappropriate even to the world of the Fortification texts. In discussion, I will sometimes use the Elamite form. Elsewhere, I will use the cognate “paradise,” festooned with warning quotation marks, after the model of Xenophon’s οἱ παράδεισοι καλούμενοι (Oec. IV.13)





as some other tree crops named in Fortification texts (Henkelman 2021). Here, I offer editions of previously unpublished texts invoked in our exposition, including the documents classified as C1/W and selected tabular fruit accounts. An appendix returns to the problematic Elamite word *hur*, which, following Hallock, we rendered in the tree-inventory texts as “seedling?” or “sapling?” (Henkelman & Stolper 2021, p. 179, comment on PFa 33:01, see Henkelman 2021, p. 151f.). The appendix also treats other terms collocated with *hur* and with each other, *pizan* and *danakaš*, perhaps “pomace” and “seed(s),” and words that modify these terms, *mišina* and *pipšina*, “old” and “new.”

## C1 Documents

To provide editions of C1/W documents and the related fruit accounts with context and with synopses or translations requires discussion of the disputed interpretation of C1 documents.

In formal terms, the marker that defines Hallock’s Category C1 is the use of versions of the phrase (*gim*) *uggi zikkaka/daka*, literally “placed on him (as *gim*<sup>3</sup>).” In functional terms, Hallock first interpreted C1 documents as records of deposits of commodities pending final disposition (Hallock 1969, p. 14f.). In procedural terms, he understood the amounts recorded in C1 texts to be tabulated in fruit accounts of Category W under the column heading *ukkap daka*, literally “placed on them,” implying that he saw C1 documents as sources for final accounts. Later, he admitted “I am not really sure what is going on” (1977, p. 132).

Heidemarie Koch, in a wide-ranging reconsideration of the sources of commodities recorded in the Fortification Archive, concluded that *ukku*, the nominal form underlying the key phrases, indicates a tax levied on private proprietors and that C1 documents record receipts of taxes credited to the payers and tabulated as income in the accounts (Koch 1980, with Hinz & Koch 1987, p. 1209 s.v. *uk-gi*). G. G. Aperghis, in a still broader reconsideration of the Fortification Archive (Aperghis 1998, 1999), came to similar general conclusions, that the persons named in the key phrases of C1 documents and of tabular accounts were producers and that the amounts recorded were incoming taxes. His view that C1 documents were receipts issued to producers

**3** Perhaps “as weight, burden”: Henkelman & Stolper 2021, p. 175, n. 5. Elamite *zikka-* and *da-*, which alternate in such phrases in C1 documents, are sometimes collocated in the C1/W documents discussed below. The base *zikka-* produces the agent-noun phrase, *mušin zikkira*, “accountant” (for a suggested etymology, see Henkelman & Folmer 2016, p. 198), but the base *da-* produces no comparable phrase. In C1 and C1/W documents, phrases with *zikka-* may connote reckoning and recording, and phrases with *da-* may connote placement and availability, but such differences of nuance are not rendered in the discussion and editions below.



or local agents (1999, p. 177) presupposed that the C1 tablets actually archived at Persepolis were duplicates (1998, p. 53, 55). His proposal that the distinguishing clause of the sealed C1 documents should not be understood, with Hallock, as “deposited to his account,” but as “supplied by [him]” or “delivered by [him],” was not a translation (as Aperghis called it, 1998, p. 49) since it ignored lexicon, morphology, and syntax, but an interpretation of the underlying relationships that agreed broadly with Koch’s.

Koch inferred that income recorded in the Fortification Archive came not only from taxes paid by private proprietors but also from rents paid by tenants of crown properties and from yields of crown properties under direct management (1980, p. 135). In this respect she envisioned a range of tenure similar to what pertained in Achaemenid Mesopotamia and in later Iran. Aperghis considered only taxation as a likely source (1998, p. 56-59), without regard to historical or institutional circumstances.

Christopher Tuplin’s exhaustive review of the hypothesis that the C1 documents record collections of taxes from persons who stood outside of the greater administrative institution that the Fortification Archive records was based on a larger corpus of Fortification texts than was available to Koch and Aperghis (2008, p. 344-83). Tuplin allowed for much uncertainty in interpretation, but he concluded that the tax hypothesis was untenable. The main elements of his view (if I understand it correctly) are, first, that C1 documents and counterpart account entries did not record taxes coming from outside the system of transfer, storage and disbursal that the Fortification Archive records (2008, p. 335); second, that the people named in the key phrases were not distinct as a class from the population represented in the Archive as a whole (350f.); and third, that the characteristic terminology indicates administrative processes or relationships between people and commodities that could apply in different circumstances (381).

As all commentators emphasized, another distinctive feature of C1 documents is that most of the tablets bear impressions of several different seals, up to six at a time. Most but not all of the seals are impressed only on C1 tablets. None can be associated with the person to whom the phrase *uggi daka/zikkaka*, “placed on him,” refers. They appear in repeating clusters, some of which can be associated with definable geographical areas (Hallock 1977, p. 132, Koch 1980, p. 115, Aperghis 1998, p. 49-51, 1999, p. 189-90, Henkelman 2008, p. 134, Tuplin 2008, p. 354-57, Garrison 2017, p. 62-67).

These seal clusters invite another hypothesis: that the processes and relationships behind the C1 documents are counterparts of processes and relationships that are abundantly documented in Neo-Babylonian and Achaemenid Babylonian legal records arising from agricultural organization and practice. There, payments due from producers were sometimes assessed on the basis of surveys of maturing crops. The assessments, in Akkadian commonly called *imittu* (“impost”), were made by asses-



sors (Akkadian *ēmidū*) working in groups. In the regime of the Eanna (Ajakku) temple at Uruk and its contractors, assessors worked in panels of up to six people at a time. They were sometimes called on to swear oaths assuring that they would perform their work correctly. The product of the assessment was a legal document, a promissory note recording the assessment as an obligation debited to the producer. The note was held by the proprietor until the obligation was paid off and the document was nullified. This practice was followed by institutional proprietors like the temples at Sippar and Uruk in the sixth century and also by private agricultural contractors like the Murašû family at Nippur in the fifth century. It was usual in date and other fruit horticulture and frequent in cereal cultivation (Cardascia 1951, p. 136-39; Petschow 1976-80; Stolper 1993, p. 76f.; Jursa 2004; Janković 2013, p. 137-44, 300).<sup>4</sup>

If similar practices were followed around Persepolis, the groups of “roving officials” represented by the clusters of seals on C1 tablets (Aperghis 1998, p. 50, Tuplin 2008, p. 338, 356-58) were counterparts of the Babylonian panels of assessors. Around Persepolis, however, their work produced different records. The Babylonian practice yielded legal notes sealed by the obliged producers, but the Persepolitan practice produced administrative documents sealed by agents other than the producers.

On this surmise, most ordinary C1 documents dealing with amounts of fruit or *tarmu*-cereal<sup>5</sup> and using versions of the phrase “placed on him” (*uggi daka/zikkaka*) arise from assessments of the maturing crops made by estimators whose seals were impressed on the tablets. The documents record assessments of produce to be delivered and managed locally (*nušgima-*), at “paradises” (*partetaš*), storage complexes (*balum*) or elsewhere.<sup>6</sup> As the fruit account No. 23 indicates, the orchards and the storehouse might be close to each other. As the account No. 25 indicates, they might be at the same place (cf. Aperghis 1998, p. 42 on PF 1984 and PF 1986). As No. 25 also indicates, disbursements of fruit for supplementary payments of the kind called *zippi* could be made from local stores near the point of production, so the characterization of the “account-holders”<sup>7</sup> in the multiple-entry C1/W record PF 2018 not as keepers of trees,

<sup>4</sup> Koch 1980, p. 131 mentions the assessment of rent on maturing crops as a practice of Sasanid Iran but does not suggest it as part of the regime around Persepolis. Noteworthy for comparison here are CUSAS 28 53, a promissory note for rent assessed in this way on a date-orchard in a “paradise” (Akkadian *pardēsu*) in the reign of Xerxes (= Pearce & Wunsch 2014, p. 86, see Tuplin 2018, p. 486); and Stolper 1993, p. 73ff., a lease in dialog form from the reign of Philip Arrhidaeus, referring to royal assessors (*ēmidī ša šarri*, lines 6, 11).

<sup>5</sup> On *tarmu* (emmer?), see Henkelman 2010, p. 750-53 and 2017a, p. 61f. n. 24.

<sup>6</sup> Including fortresses (*halmarriš*), an estate (*irmatam*), *baribara* and *tintaš* structures; Tuplin 1996, p. 94, 2008, p. 359f., 2018, p. 489 and below, comments on No. 1:02', 05", No. 5:02"', No. 13:25.

<sup>7</sup> Following Tuplin 2007, p. 344 n. 68, I use this phrase to refer conventionally and without prejudice to the people named in the key phrases (*gim*) PN *uggi daka/zikkaka*.



orchards, or fruit, but as *zippiš*-keepers (<sup>Giš</sup>*zippiš nuškip*, line 46; Tuplin 2008, p. 374, below p. 11, 15) is appropriate.

An obstacle to the assessment hypothesis as much as to the tax hypothesis, as Tuplin observed (2008, p. 367ff.), is the subgroup of C1 documents that name no “account holder” that is, that do not connect the phrase *uggi daka/zikkaka* with a personal name. Instead, the operative phrase is *ha daka*, before or after a place-name. Despite variable word-order, there can be no doubt that in this usage the nuance of the resumptive pronoun *ha* is locative, “(placed) there.” Hence there can be little doubt that the phrase indicates that amounts were actually deposited at the named places. Almost all of the C1 documents distinguished by this usage have impressions of PFS 0099 with other seals, almost all refer to places in the Fahliyān region to the northwest of Persepolis (Liduma, Hidali, (H)unar, Huhun, etc.), and almost all record amounts of *tarmu*-cereal.<sup>8</sup> A few bear impressions of other seals, refer to other places, or record amounts of fruit. Tuplin’s inference that the variant phrase and the practice it implies were not confined to a particular office or region (2008, p. 367 n. 140) is corroborated by comparable passages in the C1/W texts presented below.

## C1 and C1/W Documents

Henkelman & Stolper 2021 proposed that C1/W documents were a middle term between C1 documents, almost all of which record a single commodity in connection with a single person,<sup>9</sup> and tabular fruit accounts (W), which compile lists of several kinds of fruit, each list connected with a single person. Most of the C1/W documents have entries that resemble C1 documents in form and language, except that they often list several kinds of fruit connected with single persons. We proposed that they were procedural aids compiled at Persepolis from C1 documents as a step in producing the lists that were entered in tabular accounts under the column-heading *ukkap daka*, and correlated with deliveries (*ullaka, duka*) and withdrawals (*mazzika*).

Tuplin anticipated this proposal when he discussed the C1 documents with operative clauses that refer to places (GN *ha daka*) rather than persons (PN *uggi daka/zikkaka*). He contemplated the possibility that such texts were “a bureaucratic summary [of] a set of ... transactions involving more than one person and sometimes ... more than one place” and that they were “the first stage towards a proper global account”

<sup>8</sup> In addition to examples reviewed by Tuplin, Fort. 0734-101 (*tarmu*, place lost) and Fort. 2091-101 (*tarmu*, Hidali), both with PFS 0099; Fort. 0290-102 (*tarmu*, (H)unar), left-edge seal lost.

<sup>9</sup> Exceptions include Fort. 0169-101 (four crops connected with one name); Fort. 1813-111 (five crops connected with one name, identified as *miktam ullira*, “fruit transporter”); Fort. 1819-102 (two crops connected with one name).



(2008, p. 367). In a few of the C1/W documents, summaries that correlate entries of the type PN *uggi daka/zikkaka* with totals of the type GN *ha daka* favor Tuplin's suggestion, thus:

In No. 1, the first three entries are lists of three or four kinds of fruit concluding with subtotals in the form "total x fruit, PN, 'placed on' him" (PAP x *miktam* PN *uggi zikkaka*, lines 05, 09, 13), with a following grand total in the form "x fruit, (at) the 'paradise' [in GN], placed there" (PAP x *miktam* [<sup>GI</sup> KI+MIN] *partetaš* [GN-*ma*] *ha daka*, lines 13-15). Entries on the reverse of the same document have lists of one to three kinds of fruit ending in the form "[fruit] of PN, ditto [= 'placed on' him], ... at (the 'paradise') in GN" (PN KI+MIN [*partetaš*] GN-(*ma*), lines 06'f., 13'f., 15'f., cf. 05'f.).

In No. 5, the first three preserved entries are lists of two or more kinds of fruit with subtotals in the form "total x BAR, PN, 'placed on' him" (PAP x BAR [KI+MIN] PN *uggi daka*, lines 01', 04', 07'), followed by a summary line "this (is) the total?, GN, placed there" ([PAP] 'hi?' [no amount indicated] GN *ha daka*, line 08'); the three preserved entries on the reverse of the same document have lists of two or three kinds of fruit with totals in the form "total x BAR PN, 'placed on' him, GN" (PAP x BAR [KI+MIN] PN *uggi daka* GN, lines 03''f., 08''f., 12''[?]).

In No. 16, subtotals of some entries listing fruit characterized as "of PN" (PN-*na*) identify amounts "(at) GN, PN overseeing" (PAP *hi* x GN PN *dama*, lines 11'f., 29'f., 34'f.), but the last preserved entry is the total of fruit "of PN placed at GN" (PAP *hi* x PN-*na* GN-*ma ha daka*, lines 38'f.)

In No. 6, the first entry on the obverse and the last entry on the reverse, listing four and three kinds of fruit, conclude "this (is) the total of PN, GN, placed there" (PAP *hi* PN-*na* GN *ha daka*, line 04, *ha zikkaka*, line 24). In No. 7:11', *ha zikkaka* qualifies the grand total of fruit recorded in the document.

In No. 9, the only preserved subtotal takes a similar form, "[this (is) the total] of PN, this (is) the total placed at GN" ([PAP *hi* x] PN-*na* PAP *hi* GN *ha zikkak[a]*, line 07').

These variations make it clear that in the C1/W documents amounts designated "placed at GN" (GN *ha daka/zikkaka*) aggregate amounts marked as "of" or "placed on" the named individuals (PN-*na*, PN *uggi daka/zikkaka*), and that they represent actual receipts, as in C1 documents. It is parsimonious to interpret the use of "placed at GN" in C1 documents similarly. Given that in C1/W documents the totals marked "placed at GN" (GN *ha daka/zikkaka*) sum up entries marked "PN, placed on him" (PN *uggi daka/zikkaka*), the entries with the latter phrase, and with the more explicit version "PN, placed on him, GN" (PN *uggi daka* GN), also represent actual deliveries, not outstanding



assessments. Indeed, in two texts the formulations with *ha daka* and with *uggi zikka* connect the same person and place.<sup>10</sup>

On first look, it also seems parsimonious to interpret the use of the *uggi daka/zikkaka* in C1 documents as references to actual deliveries, not to estimates and assessments of unharvested crops. To do so, however, does not account for the seals on C1 tablets. None of the seals belongs to the recipient of the putative delivery. The application of two to six seals that is common on C1 documents but vanishingly rare in other categories of documents must reflect some procedure more particular than receipt of goods for more or less temporary storage.

The single-entry C1 documents and multiple-entry C1/W documents occupy different places in the information stream of the Fortification Archive, hence represent different perspectives on the transactions they record, and their texts need to be interpreted accordingly. C1 documents, normally recording an amount of one crop, connected with one person, to be kept at one storage location, are primary records of single transactions, bearing seals of participants in the transactions, but they were collected at Persepolis afterwards as sources for secondary records. C1/W documents are secondary records, aggregating amounts of several crops connected with several persons at several locations, mostly compiled on unsealed tablets; they were used (as proposed here) in the preparation of final tabular accounts typically on tablets sealed by accountants located at Persepolis. These considerations give rise to an amended hypothesis, thus:

Many C1 documents—those that use versions of the phrase PN *uggi daka/zikkaka* to connect an amount of a single crop with a single person—record assessments of amounts due, estimated on the basis of the maturing crops by groups of assessors who applied their seals to the tablets. The phrases PN *uggi daka/zikkaka* do not themselves refer to the act of assessment. They indicate that the amounts listed are to be delivered to the named person for management. As the various crops—fruits and *tarmu*-cereal—were harvested, deliveries of assessed amounts were to be kept (*nušgima*-) at nearby storage locations (*partetaš, balum*), from which some outlays could be made before the balance was moved to a regional storehouse.

This interpretation resembles Hallock's "deposited to the account" pending final disposition, but it postulates an anticipated credit, rather than a received payment. It envisions the C1 documents, in Henkelman's terms, as prescriptive in their formulation and descriptive in their final use.<sup>11</sup> In a way comparable to letter-orders of Category T that first went out to authorize payments to be made

<sup>10</sup>

PAP *hi Datukka-na Barašba ha daka* No. 6:04; PAP *x miktam Datukka [ug]gi zikka partetaš Barašba* No. 8:06f.

<sup>11</sup>

Henkelman & Garrison 2020, p. 182 (n. 29).





away from Persepolis and that finally came back to Persepolis as source documents when outlays were compiled in journals and accounts, so C1 documents initially authorized the named “account holders” to receive deliveries of assessed amounts, and finally came to Persepolis as sources for tabular accounts.

A few C1 documents – those that use versions of the phrase GN *ha daka/zikkaka* to connect an amount of a single crop (mostly *tarmu*-cereal) with one or more places (mostly in the Fahliyān region) – are, as Tuplin surmised, interim summaries of several assessments paid at the same time, made in the field by estimators who received the amounts they assessed, and who sealed the tablets (mostly with PFS 0099 and other seals). PF-NN 0700, listing a total of dates and figs (*pīṭ*, MA), (paid) assessments “placed on” four individuals at a single place (PAP 4 <sup>Γ</sup>HAL LÚ <sup>Γ</sup>MEŠ?) *uggi* [sic: not *ukkap*] *zikka* GN, lines 07f.) and bearing an impression of PFS 0494 (found on at least two single-entry C1 documents) probably also belongs to this subcategory. In effect, these documents combined assessments with records of payment.<sup>12</sup>

A few other C1 documents – those that use versions of the phrase PN *uggi daka/zikkaka* to connect amounts of two to seven crops with a single person written on unsealed conical tablets – are also interim summaries of paid assessments, probably made at interim storage locations.<sup>13</sup>

Like other memoranda, C1 documents of all subcategories – primary assessment records and interim summaries issued to “account holders” – came to Persepolis for compilation in journals and accounts. In tabular fruit accounts, as Hallock suggested, they were sources for the entries under the column heading *ukkap daka*.

C1/W documents prepared at Persepolis drew on all subcategories of C1 documents to aggregate assessments of many crops (mostly fruit) connected with several individuals at several locations in an administrative subdistrict. The amounts are typically marked with versions of the phrase PN *uggi daka/zikkaka*, but sometimes said only to be “of” a named person (PN-*na*). Entries are sometimes summarized as delivered (GN *ha daka*), but totals are twice explicitly labeled with the plural phrases *ukkap daka/zikkaka* (PF 2018:47, No. 11:09'), corresponding to the column headings in tabular accounts.

<sup>12</sup> On the possibility that assessors/collectors were (or included) agents characterized with the Elamite agent noun *matira* (plural *matip*) or the transcribed Iranian counterpart *bazikara* (\**bājikāra*-), see the comments on No. 26:47'.

<sup>13</sup> PF 0205, PF-NN 0938, PF-NN 2106, Fort. 1819-102. Other unsealed conical tablets with C1 records of single crops (PF 0204, PF-NN 0186, Fort. 1062-102) probably belong to this subcategory as well.



In the tabular accounts, deliveries to the storehouses are totaled as *haduš*, “revenue.” The relationship between assessments and deliveries is tersely indicated under the column headings *ukkap daka*, “placed on them” and *ullaka* “delivered” or *duka*, “received.” It is also sometimes verbosely expressed in summaries at the ends of tabular accounts. For example, No. 23 refers to the grand totals of 11 tabulated lists as “fruit ‘placed on them’ and delivered” (*miktam ukkap daka ak ullaka*, line 62) and then still more definitively as “fruit, revenue delivered in the storehouse at Pārsa” (*miktam haduš kanduma ullaka GN*, line 70).

## “Account Holders”

Koch remarked that many of the people to whom the key phrases *uggi daka/zikkaka* refer in C1 documents do not recur in other texts. She inferred that they were not active in the Persepolitan administration and this was one reason for identifying them as tax-paying private property-holders (Koch 1980, p. 124, cf. Tuplin 2008, p. 339). Tuplin’s critical review of the tax hypothesis upheld the general observation about these “account-holders” but also found that a minority of the people so named were explicitly or potentially identifiable in other administrative activity and concluded that they were “not in essence disjoined from the class of those who (at various levels) made the Persepolis economy work and did so by doing more than simply producing and handing over as levies the commodities that it then distributed” (2008, p. 376). The C1/W texts and additional fruit accounts, along with a larger sample of comparanda, generally support Tuplin’s result.

As Tuplin commented (2008, p. 283), “account holders” in a few C1 texts are identified as officials operating in the system of managing and supplying workers.<sup>14</sup> Of the texts edited here, the few that explicitly characterize named “account-holders” with descriptive words or phrases are merely tantalizing:

No. 10:07f. (C1/W) summarizes a list as “a total of 4 men (at) the ‘paradise’ in GN” (PAP 4 HAL<sub>L</sub>Ü<sup>MEŠ</sup> *partetaš Rakana<sup>2</sup>-ma*, lines 07f.).<sup>15</sup>

No. 11:08' (C1/W) identifies the total of fruit recorded as “placed on (*ukkap zikkaka*)” “6 HAL<sub>L</sub>Ü<sup>MEŠ</sup> [...] *-ba-na-be*, perhaps a word compounded with Iranian \**pāna-*, “protector,” the counterpart of Elamite *nuškir*, plural *nuškip*. No. 2:03' (C1/W) enters a total of fruit “‘placed on’ ([*uk*]*kap zikkaka*)” 3 HAL<sub>L</sub>Ü<sup>MEŠ</sup> *pír<sup>2</sup>-iš-šá-* [...], perhaps another transcription of an Iranian word.

<sup>14</sup> “Chief of workers, logistic overseer” (*kurdabattiš šarara*) PF 0158:09f. (but in similar texts, the person characterized in this way is different from the “account holder” (PF 0159-0160, PF-NN 0141-0143, 1088, 1418, 2599); “chief of ten” (*dasabattiš*) PF 0207.

<sup>15</sup> Cf. PF-NN 0700:07f. (C1), summarizing fruit “‘placed on’ a total of 4 men?” (PAP 4 HAL<sub>L</sub>Ü<sup>MEŠ</sup> *uggi zikka*).





PF 1818:46f. (C1/W) enters the total of fruit as “‘placed on’ keepers of (supplementary) *zippi*-payments (<sup>Giš</sup>*zippiš nuškip ukkap daka*).” The term suggests that these account-holders were allowed or required to hold stocks to be handed out as supplementary rations, if not actually to hand them out. The phrase is not found elsewhere, so it appears to be an *ad hoc* description of a function, rather than an administrative title. The same can be said of Fort. 1813-111 (C1) where amounts of five kinds of fruit are “‘placed on” a named “fruit transporter” (*miktam ullira PN uggi zikkaka*, lines 06-09, above n. 8) and perhaps Fort. 1817-101 (C1), where *karukur*-fruit is connected with a “grain<sup>?</sup> handler” (*kar huttira*), a term otherwise usual in C1 records of *tarmu*-cereal (Tuplin 2008, p. 374-76).

At least two tabular fruit accounts and perhaps a third one identify “account holders” at the ends of lists of fruit, including some who are recognizable in C1 and C1/W texts, with the phrase PN (<sup>HAL</sup>*šá-li-ra* (No. 27:05, 13, 17, 21, 26, No. 28:06, 09, 13, 18, No. 23:60<sup>?</sup>). In another tabular fruit account, the column that names “account holders” is headed <sup>HAL</sup>*šá-li-ma* (sic; No. 29:01); among “account holders” named in the column is at least one who is labeled <sup>HAL</sup>*šá-li-ra* elsewhere (Kaštiš, No. 29:10, 24, No. 27:13; and cf. No. 13:20). Supporters of the tax hypothesis may find comfort here if these are forms of *šalur*, the term that in Fortification texts distinguishes a recipient of full rations, sometimes high rations, commonly rendered as “gentleman, free man,” from *libar*, “servant, subordinate,” a recipient of ordinary rations.<sup>16</sup> Still, the spellings depart from the regular *šá-lu-ir*, plural *šá-lu-ip*. Furthermore, if this is a status term the purpose of introducing it in this functional context is obscure, as is the implied contrast. The following GN Rakkan in No. 27 discourages interpreting *šalira* as a gentilic connected with a place-name or an administrative location.<sup>17</sup> More likely is that *šalira* is another functional term having to do with use or oversight of the crops, an agent-noun on a verbal stem not yet attested elsewhere in Achaemenid Elamite.<sup>18</sup>

<sup>16</sup> And cognate with the Elamite term with which DB describes the family of Darius I as “noble” (Elamite *šalu’ut*, corresponding to Old Persian *amāta*, Akkadian *mār banē*, DB Elamite §03:06, Old Persian §03:07, Akkadian §03:[03]; DBa Elamite §03:08, Old Persian §03:14).

<sup>17</sup> Hallock 1969, p. 753 s.v. *šalir* (“evid. a locale”), Hinz & Koch 1987, p. 1127 s.v. *h.šá-li-ir* (“Ortsname, wohl in der Elymais”). If <sup>AS</sup>*šá-li-ir-man-na* is read correctly in Fort. 0504-101:17 (W, grain account), the Achaemenid GN may rather be *Šalirma* (ibid. line 29).

<sup>18</sup> If <sup>HAL</sup>*šá-li-ma* in No. 29:01 is not emended to <sup>HAL</sup>*šá-li-ip*, it is a Conjugation Im verbal noun (infinitive, supine) in lieu of an agent noun. Despite Hinz & Koch 1987, p. 1127 s.vv. *ša-li*, “Pfahl,” *šá-li-ha* “ich habe auf einen Pfahl gesteckt(?)”, *šá-li-ri*, “ein Pfählender,” it seems unlikely that an agent-noun having to do with staking saplings to raise or train them would be a suitable label for nurserymen in their administrative



A meaning of that kind is required for the uncertain usage in No. 23:60, where the fruit-producer Pukša (Henkelman & Stolper 2021, p. 192, comment on Fort. 0119-101:55) is characterized as <sup>HALF</sup>šā<sup>2</sup>-li<sup>2</sup>-ra while others are summarized as “orchard<sup>2</sup>-makers and ‘paradise’-tenders” (<sup>GIŠ</sup><sub>GIR</sub><sup>MEŠ</sup> *hutti* ak <sup>AŠ</sup>*partetaš nuškip*, lines 54f.). Three “account holders” are also called <sup>GIŠ</sup><sub>GIR</sub><sup>MEŠ</sup> *huttira* in the tabular account PF 2079:02-04. If the proposed interpretation as “orchard<sup>2</sup>-maker” is right, the phrase is a plain functional description of the “account holders” as producers (for other proposals and references, see comments on No. 23:54).

More suggestive are the names of the “account-holders” in C1/W texts. Some, like those in many C1 texts, do not recur elsewhere. Some are homonyms of suppliers named in the phrase *kurman* PN-na in records of outlays of grain, wine, etc. Some are found in C1 texts and/or tabular fruit accounts. A few are arguably identical with like-named individuals found in related contexts in other documents. The attestations of three such “account-holders” are detailed in comments on the tree-inventory text Fort. 0119-101, where they also appear (Henkelman & Stolper 2021, p. 174f., 190-92, comments to Fort. 0119-101:12, 23, 55 and Henkelman 2021, p. 146-48). To summarize:

Gidadda and Pukša, both named in the C1/W text No. 4:10, 44, and Haturradda, named in the C1/W texts No. 3:04', 11'', No. 5:04' and perhaps also in No. 4:21, also appear in the tree-inventory text Fort. 0119-101:13, 23, 55 in the phrase “x saplings<sup>2</sup>, trees (or: an orchard) for PN to take care of” (x *hur husa* (<sup>GIŠ</sup><sub>GIŠ</sub><sup>MEŠ</sup>) *nušgima*).

Gidadda (Iranian \*Gēdāta-, Tavernier 2007a, p. 190 [4.2.653]) and Pukša (Iranian \*Buxša-, Tavernier 2007a, p. 151f. [4.2.373]) are collocated with each other and/or with Haturradda in tabular fruit accounts that enter amounts “placed on” them at a *partetaš* in Matezziš, Persepolis, and perhaps other sites near Persepolis (Nos. 23, 24, 25, 30).

Another C1/W text, PF 2018, also puts Pukša at Matezziš in such a connection, and a C1 fragment names him with amounts of four kinds of fruit at Ankarakkan (Fort. 0169-101).

Haturradda (Iranian \*Ātrrāta-, Tavernier 2007, p. 125 [4.2.194]) appears in these tabular fruit accounts in the same connection. In one he probably recurs in the administrative role of “assigner” (*dama*, No. 24:03''). He is one of three “account holders” characterized as *šalira* in the three-year tabular fruit account No. 28. In other journals and accounts he is named as a supplier (in the common phrase *kurman* PN-na) and a “food-producer” (*abbebe-huttira* (Fort. 1975-101:07', PF 1940:07,

role as account-holders.



PF-NN 2345:16f.) and as a processor or preparer of fruit (*miktam huttaš* PF-NN 2345:03, cf. 10).

The fruit account No. 31 tabulates amounts from persons at three locations (GN PN-(*ikka*)*mar*, lines 03ff.) near Persepolis; the final lines identify the total as “fruit ... from them ‘placed on’ Haturradda (*miktam ... hube-ikkamar* PN [*ug*]*gi zikka*, lines 07-09); at least one and perhaps two of the listed suppliers recur as overseers (*šaramanna*) of producers in a C1/W list (No. 10:08, 16).

Without exhaustive prosopographic review of all the people named in C1/W texts and fruit accounts, these examples suffice to show, first, that several “account-holders” were sometimes active at single sites; second, that some “account-holders” were active at several sites in a region; and third, that Haturradda, in particular, was able to collect fruit from producers or “account-holders” at other nearby sites, to have a role in processing the crops, and to carry out common administrative functions of outlay and oversight.

These three “account holders” were neither independent tax-paying proprietors nor simple nurserymen tending single orchards. They were administrators who were involved with the development of new orchards, who oversaw production, to whom yields were assigned, who stored them and eventually sent balances to regional storehouses. Although they are exceptionally well represented in the record as we have it, enough other “account holders” recur in C1/W and tabular W records to assure that they took comparable roles and had identical accountability for production and delivery of fruit and *tarmu*-cereal.<sup>19</sup> “Account-holders” were, as Aperghis characterized them, producers. As in other aspects of the institutional economy around Persepolis, the production for which they were accountable was supported and overseen by logistics officers named in the phrase PN *šarama(nna)*, “PN overseeing.” C1 texts name logistics officers with reference to individual crops at single sites; entries in C1/W texts and in tabular W accounts name them with respect to many crops at single sites; conclusions of C1/W texts also name logistics officers with wider, regional oversight.

## The Key Phrases

How, then, are we to treat the key phrases *uggi (ukkap) daka/zikkaka* in the kind of quasi-translation that represents administrative texts with so many uncertain terms and components? According to the assessment hypothesis proposed here, when C1 documents were drawn up the phrases marked pending estimates of individual matur-

<sup>19</sup>

See, e.g., comments on No. 1:05, 12', No. 3:09', No. 5:08'', No. 6:24, No. 7:06, 11, No. 8:06f., No. 13:20, No. 16:28'ff.



ing crops for which producers were accountable prior to managing them (*nušgima-*) at storage locations near the production sites. When the C1/W documents were compiled drawing on C1 texts, the phrases indicated totals of paid assessments delivered to local stores. When tabular accounts were compiled drawing on C1 and C1/W texts, the phrases still indicated those paid assessments, but correlated them with deliveries and balances at regional storehouses.

The phrases assign administrative accountability to the producers throughout the movement of the crops from the trees to final storage, and throughout the stream of recording from estimation to delivery. They indicate the named producers' accountability, liability or obligation. They do not necessarily refer to or imply the process of estimation and assessment itself, so they sometimes appear in contexts that do not involve such a process.<sup>20</sup> If anything in the language of the C1 documents refers to the act of estimation or assessment, it is the term *gim*, and even that is questionable.<sup>21</sup>

Considering, first, the still uncertain status of the assessment hypothesis, and, second, the proposition that the key phrases indicate situations that change with the perspective of the document types and their place in the recording stream, I indicate the phrases *uggi (ukkap) daka/zikkaka* not with a real translation, but only with a bland substitution, "assigned to him/them?". I recognize that this only compounds the difficulty of reading administrative documents in translation.

## C1/W Documents: Form and Contents

Henkelman & Stolper 2021 attributed formal variation within and among C1/W documents to *ad hoc* compilation from shorter source documents. Some of the formal differences were already visible in the two examples that Hallock published. He assigned both to Category C1 on the strength of their use of the phrase *uggi daka* and despite their sharp differences from ordinary C1 documents, differences that include tablet shape, sealing, layout, and contents.

<sup>20</sup> E.g., PF-NN 1214 and Arfaee 2008, p. 61 Fort. 3547, classified as C1, but explicitly referring to allocations (*kurman PN-na*) of flour and grain, respectively (Tuplin 2008, p. 353); PF-NN 1670 (Henkelman 2017b, p. 288f., cf. Tuplin 2008, p. 345), provisionally classified as C1, despite exceptional language and contexts, including mention of wine (*sawur*) delivered to a temple (*ziyan lik*) and to be debited or credited to PN (PN *uggi zikkak*); PF 1889, a "label" (Category U) referring to grain "to be given to PN (and) debited<sup>7</sup> against him (PN *i dunen uggi ir zikkak*); Tuplin 2008, p. 366); PF-NN 0258, an account of camels, for which an extra charge<sup>7</sup> was received and debited or credited (*appikanuš ... duka uggi zikkak*, lines 15-17; Tuplin 2008, p. 346f.).

<sup>21</sup> See comment on No. 20:11', mentioning a total of *tarmu* seed deposited as *gim* (*miyataš gim ha daka*), and below, p. 18.



**Fig. 1.** PF 2018 Obverse, Lower Edge, Reverse.

PF 2018 is an unsealed rectangular tablet in portrait format (that is, with short lines of text on a tall tablet, 10.7 x 14.5 x 2.1 cm, [fig. 1](#)). The text includes fourteen entries, each indicating one to four kinds of fruit assigned to<sup>?</sup> (*uggi daka*) one or two individuals at eight places, with subtotals of multiple entries at single places and a grand total labeled “royal fruit assigned to<sup>?</sup> *zippiš*-keepers” (*miktam sunkina zippiš-nuškip ukkap daka*) at Shiraz, under the oversight of a logistics manager (PN *šaramanna*).<sup>22</sup> Some of the entries also name such overseers (PN *šarama*, line 44, restored in 24 and 25), as do many single-entry C1 documents.

PFa 01 is also an unsealed rectangular tablet, but laid out in landscape format (that is, with text running along the longest axis, 8.5 x 5.7 x 2.0 cm, [fig. 2](#)). The text includes two entries, each listing three kinds of fruit assigned to<sup>?</sup> individuals at two places. The total is labeled “fruit under the oversight of PN” (*miktam*

<sup>22</sup> On the ranks, status, and functions connoted by PN *šaramanna*, see Garrison & Henkelman 2020, p. 185–88.





**PFa 01 Obverse**



**PFa 01 Lower Edge**



**PFa 01  
Left Edge**



**PFa 01 Reverse**



**Fig. 2.** PFa 01 Obverse, Lower Edge, Reverse, Left Edge.



PN *šaramanna*). An addition set off on the left edge labels the tablet as “pertaining to” the same overseeing official (*tuppi hi PN tubaka*).

At least 19 other tablets and fragments identified until now resemble the published examples in appearance, layout and contents, but also in the differences among them.

All are rectangular tablets. Most are in portrait format, like PF 2018, but a few (Nos. 6, 10, 14, 19) are in landscape format, like PFa 01.

Almost all are unsealed, but two (Nos. 11, 12) have impressions of PFS 2183 (fig. 13b), a seal not yet identified on any other documents.<sup>23</sup>

The texts of most include forms of the phrases that characterize C1 documents, *uggi daka/zikkaka*, usually more than once. Others lack these phrases, but summarize lists of fruit as “of PN” (Nos. 3, 4, 15, 16), as some individual entries in other texts do (Nos. 1, 16).

Most record fruit, but an entry in one includes *tarmu*-cereal along with fruit (No. 11:01'-06').<sup>24</sup>

Most record more than one kind of fruit in more than one entry, but two have a single entry (Nos. 14, 19; cf. PF-NN 1527).

Where a grand total is preserved, it is ordinarily associated with an overseeing logistics manager (PN *šaramanna*). In some, individual entries are also associated with such officials, as in PF 2018 (PN *šarama(nna)*, Nos. 6, 7, 13). In one, individual entries are associated with overseeing officials marked with a counterpart phrase, PN *dama* (No. 16).

Three include the identifying addendum “this tablet concerns PN” (*tuppi hi PN tubaka*, Nos. 1, 8, 17), like PFa 01 and the tree-inventories PFa 33 and Fort. 0119-101 (Henkelman & Stolper 2021). The addendum is set off on an edge of the tablet, where it would be visible when the tablets were shelved (Brosius 2003, p. 272).

Like the writer(s) of the tree inventories, the writer(s) of at least two C1/W documents (Nos. 17, 18) did not consistently align numbers by place value, with 100s over 100s, 10s over 10s, 1s over 1s, as is usual in Fortification journals and accounts and frequent in some other categories of texts.

A few generally comparable documents fall outside of this range of variation.<sup>25</sup>

<sup>23</sup> Mikołajczak 2018, p. 482f.

<sup>24</sup> Cf. PF-NN 2368, an account of figs<sup>2</sup> (*ma*), dates<sup>2</sup> (*pit*) and *tarmu*.

<sup>25</sup> With the three items summarized here and edited below, compare further PF 1981 and PF-NN 1074. PF 1981, on an unsealed rectangular tablet in portrait format, includes lists of grain (*še.BAR<sup>MEŠ</sup>*, *še.GAL<sup>MEŠ</sup>*) connected



The text of No. 20, an unsealed tablet in portrait format, lists amounts of *tarmu*-cereal, not kinds of fruit, alongside personal names. One of the names can be plausibly identified with a person named in a C1 record of *tarmu*. The distinctive phrase *uggi daka*, “assigned to<sup>7</sup> him,” qualifies totals of *tarmu*, not individual entries. If the entries are compiled from C1 texts and the total is meant to indicate that each listed amount is “assigned to<sup>7</sup>” the name listed with it, then the phrase applied to the total seems to be a grammatical lapse, for an expected *ukkap daka*.

In the two well-preserved lists in No. 20, the totals of “assigned<sup>7</sup>” *tarmu* are preceded by smaller totals, once of seed (*miyataš*, Iranian \*v(i)yāduš), “deposited” at an unspecified location (*ha daka*); and once of grain<sup>7</sup> (<sup>GIŠ</sup>*kar*, Iranian \*kāra-?) connected with a personal name. If, as the arrangement of the text suggests, the smaller amounts of “seed” and “grain<sup>7</sup>” are subtotals included in grand totals of *tarmu*, then this text distinguishes amounts of *tarmu* “grain<sup>7</sup>” for storage and consumption from amounts of *tarmu* “seed” reserved or sown. In rare tabular accounts of *tarmu* (e.g., PF-NN 0147, PF-NN 2204, Fort. 0013-102, Fort. 0369-101, Fort. 2051-101) grand totals of *tarmu* would be entered under the heading *ukkap daka*; subtotals of *kar* were perhaps included under the heading *ullaka*, “delivered,” and subtotals of *miyataš* perhaps under the heading *mazzika*, “withdrawn.” Given the scarcity of tabular accounts of *tarmu*, the absence of comparable C1/W documents, and lack of useful prosopographic evidence, these surmises rest on analogy with the proposed interpretation of the C1/W records of fruit.

The text of No. 21, also on an unsealed rectangular tablet in portrait format, lists amounts of fruit connected with named people and places, in entries that resemble those of other C1/W texts, but the text lacks a version of the distinctive phrases that mark C1 and C1/W documents. The totals here are not “assigned to<sup>7</sup>” (*uggi daka/zikkaka*) the named people, but “allocated by” or “for allocation

with overseeing officials (*šarama*), including one who appears in the same role in a C1/W text dealing with fruit (Napartanna = Napapirzana, No. 12:03', see Henkelman & Stolper 2021, p. 184). It also includes a list of amounts of fruit, combined with food made from grain (*abbebe* ŠE.BAR<sup>MEŠ</sup>) and associated with another person who appears in C1/W texts dealing with fruit (Turpiš, No. 6:17, No. 7-101:11', see Henkelman & Stolper 2021, p. 184). The exceptional operative phrase, *ha sika*, glossed by Hallock as a form of (*h*)*ašša-*, “reckon,” perhaps presents a variant spelling of *zikka*, contracted from *zikkak(a)*, in a phrase comparable to *uggi zikka* in PF-NN 0700:09 (above, p. 9). PF-NN 1074, on a fragment of an unsealed rectangular tablet in portrait format, includes two lists of amounts of oleaster (*šinšittiš*, see below, comment on No. 4:07, 28, Henkelman 2021, p. 161); the total of the first list is connected with an overseeing official (*šarama*) who appears in a comparable role (*dama*) in fruit accounts (No. 27:13, 17, etc., No. 29:06, 10, etc.). No operative phrase is preserved.





by” them (*kurman*). One collocation of personal name and place name can be found also in a C1 text, and again in a tabular fruit account. The amounts of fruit listed are mostly smaller than those entered in other C1/W texts (10-30 l. of figs<sup>2</sup> [MA], mulberries, *irtaštiš*, 10-250 l. of dates<sup>2</sup> [pit], but 1,030 l. of apples). Generally comparable is No. 22, an unsealed rectangular tablet in landscape format, with lists of fruit, grain, and grain-products, with totals marked with *kurman* PN-na.

If the nuance of *kurman* in these two documents is “for allocation by” the named people (Garrison & Henkelman 2020, p. 186), then it is a functional equivalent of *uggi daka/zikkaka*, a usage that is annoyingly opaque to a modern reader but terse and handy for an ancient user of a procedural aid (but see Tuplin 2008, p. 365, rejecting a similar suggestion by Hallock 1969, p. 14). If the nuance is “allocated by” the named people, the lists may compile expenditures from local interim storage.<sup>26</sup>

## Tabular Fruit Accounts

The Fortification Archive’s accounts of fruit, like accounts of other commodities, are laid out in several formats, but the great majority of them tabulate information in either or both of two multi-column formats. One table records income; the other presents a balanced summary account of carry-over, income, and outlays. Among fruit accounts recorded until now, most that are well-enough preserved to assess include both tables.<sup>27</sup> The income tables regularly precede the tabular summaries. Some accounts include several sets of tables. Many add to these core tabulations records of additional outlays, of the disposition of year-end surpluses, and sometimes other specific circumstantial information (Hallock 1969, p. 58, 63-64; Aperghis 1998, p. 41-44; Brosius 2003, p. 270-72).

The tabular balanced summaries in fruit accounts correspond to the line-by-line summaries found in accounts and journals recording grain and wine. The tabular format makes it possible to summarize income and outlay for each kind of fruit, and also to aggregate totals of fruit as a single commodity (Hallock 1969, p. 58). Breaking down the information in this way was perhaps desirable because scheduling, storage, handling, and processing varied more among kinds of fruit than among kinds of

<sup>26</sup> On *kurman* in C1 texts, see Tuplin 2008, p. 365-67.

<sup>27</sup> But of the texts presented here, only Nos. 23 and 28 preserve tabular balanced summaries. In No. 23, only fragments of the table, mostly illegible, survive. Income table only: PF 1982, PF 1983, PF 1984, PF 1985, Fort. 2323-103. Tabular balanced summary only: PF 1989, PF 1990, PF 2081, PF-NN 2180, PF-NN 2205, PF-NN 2276, Fort 1311-101, Fort. 2164-001.



grain. Most of the tabular summaries have six columns with headings that indicate carry-over (*mišina bel #-na*, *halmi PN-nama*), revenue (*haduš*), resulting total (*pap amma*), disbursements (*makka*), withdrawals (*mazzika*), and balance carried forward (*šutur daka*); a seventh column without heading identifies the kind of fruit accounted for in each row.<sup>28</sup> At the end of lists of fruits, rows of totals show aggregated annual summary accounts of all fruit.

The tabulation of income is usually arrayed in three columns, sometimes four, under the headings (i) *ukkap* (*ukku ap*) *daka*, “placed on them,” interpreted here as “(assessed amounts?) assigned? to them,” (ii) *daka*, “received,” or *ullaka*, “delivered,” (iia) *pir* (*ullaka*), “(delivered) in addition,”<sup>29</sup> (iii) *mazzika*, “withdrawn.” The arithmetic relationship among the columns is regularly (i) = (ii) + (iii), that is amounts “placed on them” are divided between amounts “delivered” and “withdrawn.”<sup>30</sup> A final column, usually without heading,<sup>31</sup> has lists of the kinds of fruit accounted for, each list ending with totals connected with named “account holders,” sometimes further characterized by location, overseeing official (*šaramanna*, *dama*), and/or the year(s) to which the tabulated information pertains.

The totals of the second column, amounts “received” or “delivered,” are the source of the amounts entered as “revenue” (*haduš*) in the tabular summaries (Hallock 1969, p. 63, 64). This relationship between the two tables is explicit in No. 23:64-70 and No. 25:23-24, which append to the tabulation of income another multi-column table with totals of each kind of fruit and an aggregate total of all fruit. The amounts entered are derived from the second column of the preceding table, that is, amounts “delivered”

**28** Examples with more columns (e.g., PF-NN 0575 [7+1 columns], PF-NN 2269, PF-NN 2276 [8+1 columns], PF 1990, Fort. 2164-001 [9+1 columns]) tabulate additional inputs, including revenue (*haduš*) from more than one year or inputs characterized as *hapiršimaš* (meaning uncertain; in PF-NN 0575:09 replaced by *hapikanuš*). Examples with fewer columns reduce inputs to the total on hand (*amma*, PF 2080:17, PF-NN 2346:09 [4+1 columns]) or record no disbursements (*makka*) ahead of withdrawals (*mazzika*) (PF 1989 [5+1 columns]).

**29** In all recorded examples, this column has no amounts entered (PF-NN 0575, Nos. 23, 24, 25, 26, 28, 29, 30).

**30** In PF 1982, PF 1983, and PF 1984 this scheme is reduced to two columns of numerical entries, headed *ukkap daka* and *mazzika*. PF-NN 2347 duplicates PF 1983, except that it includes the column headed *ullaka*, with all entries empty (Brosius 2003, p. 271).

**31** Exceptions include PF-NN 0575, where the heading of the final column indicates the place and the overseeing logistics official (*šarama*), and No. 29, evidently identifying the listed “account holders” as <sup>HAL</sup>*šalima*, see above p. 11.



(*ullaka*). The totals are labeled as “annual revenue” (*haduš bel #-na*, No. 25:24) and as “revenue delivered in the storehouse (*haduš kanduma ullaka*, No. 23:70, above p. 10<sup>32</sup>).

If amounts entered under the heading *ukkap daka* record income held by “account holders” named in C1 and C1/W documents, and amounts under the headings *ullaka* or *duka* record incomes actually delivered/received at regional storehouses and booked as annual income (*haduš*), what is implied by characterizing the difference between these amounts as “withdrawn” (*mazzika*)?

Hallock surmised that such withdrawals were “returned to the same superior agency which was the source of the *haduš* receipts ... and which therefore did not need to be specified” (1969:60). Koch (1980, p. 132-33) supposed that immediately after the delivery of commodities to the regional storehouse, amounts required for ordinary disbursements (rations, etc.) were calculated and any surplus was immediately set aside; at the end of the accounting period, these amounts and any additional surplus were withdrawn to an emergency account. Aperghis (1997, p. 278f., 284-88, 1998, p. 38, 41, 44, 55, 1999, p. 183) held that the “withdrawn” amounts never actually passed through the storehouse to which the account pertained; instead, planned quantities sufficient for regular outlays were delivered (*ullaka*, *duka*) and any excess was sent directly to other, royal storehouses (*mazzika*); at the end of the accounting period another kind of withdrawal took place to keep balances low, by exchanging surplus amounts for livestock, and perhaps converting them into silver (Henkelman 2005, p. 149f., Tamerus 2016, p. 265, 274f., Stolper 2017, p. 754f.).

These general interpretations are meant to apply to accounts of the most common stored commodities, grain, wine, and fruit. The underlying realities were surely different for the several commodities, although the differences are far from plain. Grain and fruit were grown and handled in different ways. Wine was itself a secondary product. For fruit, Hallock’s idea that withdrawals were returned to the superior agency from which annual allocations of revenue (*haduš*) were made does not comport with the inference that the *haduš* receipts of fruit came from the numerous “account holders” named in the income tables. For fruit, unlike grain and wine, the Fortification Archive preserves strikingly little evidence of regular outlays, implying that any estimates of regional needs and surpluses of the kind envisioned by Koch and Aperghis were done on different terms, if they could be done at all.

In at least two fruit accounts, conversions of the kind indicated by the disputed phrase “to impress? *šaumarraš*” (*š. hara-*, Tamerus 2016, p. 268-290) are entered not in their usual position at the end of the text or after tabular summaries, indicating end-of-term conversions of surpluses held at the storehouses, but in the income tables, indicating operations carried out by “account holders,” hence prior to deliveries to



the storehouse (PF 1987, PF-NN 0146, see Tamerus 2016, p. 275f.). No. 25:26-37 and Fort. 1421-101 (Stolper 2021, No. 3) record outlays of supplementary fruit rations (*zippi*) at or near the point of production and interim storage, a place mentioned in C1 texts as the site of a *partetaš* and a *balum*. These cases indicate that “account holders” could make outlays from primary collection points before balances were transferred to regional storehouses. If that is so, such outlays were at least part of the difference between amounts “assigned<sup>7</sup> to them” (*ukkap daka*) and actual deliveries to the storehouses (*ullaka*) – that is, in the case of fruit accounts, at least part of the amount entered as “withdrawn” (*mazzika*).<sup>33</sup> That may in turn help account for the C1 documents that combine a record of assessment or deposit (*uggi daka/ha daka*) with a record of outlay (*kurman PN-na*) (discussed by Tuplin 2008, p. 365-67). It is at least conceivable that those that do not name an “account holder” (i.e., that use the phrase *ha daka*), indicate not only (as suggested above) assessment and delivery to local storage, but also immediate outlay from local storage. Of the remaining examples that distinguish between a named “account holder” and a supplier (*kurman*), at least some are unsealed (PF 1889), or bear seals not found on other C1 tablets (PF-NN 1214, with PFS 2537 and PFS 2538), allowing the surmise that that they arise from irregular situations (see also comments above p. 19f, on Nos. 21 and 22).

## Interim Evaluation

The combination of two partly independent hypotheses – that many C1 documents arise from estimates of maturing crops, and that C1/W documents were compiled from C1 documents as procedural aids for preparing tabular accounts – does not solve all of the problems surrounding the tablets, the seals, the texts, the people mentioned in them, their formal variation, and the various nuances of the characteristic phrases. As presented here, it deals only glancingly with the matter of *tarmu* cereal, frequent in C1 documents, but rare in C1/W documents and tabular accounts. It does not resolve the range of practices signified by the verb *mazzi-*, “withdraw,” in accounts or by the common phrase *kurman PN-na* in C1 and C1/W documents. Above all, it does not come to terms with the actual operations of the proposed system on the ground, in the orchards and barns. If we imagine a procedure that begins with an estimate of the

33

I am personally uncomfortable Hallock’s postulate of a nearly undetectable higher authority that is not mentioned in an archive whose purposes include policing responsibility for movements of goods. I am equally uncomfortable with the supposition that regional storehouses routinely made one-year or multi-year schedules of their needs, considering the Archive’s overall portrayal of vibrant activity and development around Persepolis, circumstances that would have defied such scheduling in practice and undercut a record-policing system that relied on it.



crop on the trees and continues by tracking deliveries to interim storage places, who has rights in the case of surplus and obligations in the case of shortfall, and how are they determined and enforced? That begs the larger question of social relationships among primary producers and managers of the produce.

The assessment hypothesis in the narrow sense relies almost entirely on the distinctive use of seals on most C1 tablets, and not on the distinctive language of the C1 texts. It begins with a plain premise, but its elaborate consequences for interpreting the texts evoke both Tuplin's queasiness about the whole topic (2008, p. 325) and Hallock's confession of uncertainty about what is going on (1977, p. 132). It may eventually be judged to multiply entities beyond necessity and be dismissed as merely ingenious and therefore probably false. If it does not yet constitute an ascent to "the sunny uplands of academic certainty" (Tuplin 2008, p. 383) it nevertheless satisfies some of the conditions that Tuplin required of an interpretation. It treats the commodities recorded in C1 documents as income, but it does not require the source of income to be outside the Persepolis administrative regime (2008, p. 335), and so the commodities are neither taxes nor rents in the ordinary use of those terms, not payments levied on independent proprietors and not payments required of tenants under contractual arrangements. It allows for "phraseology [that] is not procedurally univocal" (2008, p. 348), proposes procedures distinct from the activities that lie behind other categories of documents, and allows for variability in the regularity and size of the amounts recorded (2008, p. 381). It explains both the unusual multiple-seal protocol on some C1 tablets and the absence of seal impressions on others. Above all, it rests on a realistic historical presumption that the administration of Achaemenid Pārsa used modes of organization and production that were well established elsewhere in the Achaemenid realm.<sup>34</sup> A hypothesis that amends or replaces it ought to satisfy at least these conditions.

**34** But if comparable Mesopotamian practices favor the hypothesis with respect to fruit production, they do not obviously explain why the production of *tarmu*-cereal (but rarely of other cereals) was managed in this way at Persepolis.

The unique text PF 2032 records grain stores or crops, characterized by their coefficient of yield from seed (*battikanaš*), at the point of production or of local storage (*šulum*), inspected at four locales by a team of four men. The many tables at the ends of grain journals (Category V) with entries that correlate grain reserved (*nutika*), received (*ha duka*) and withdrawn (*mazzika*) with such coefficients of yield suggest that such inspections were more frequent than the preserved sample of the Archive suggests, perhaps even a regular practice (Aperghis 1998, p. 50, Stolper 2017, p. 757f.). But if so, this process did not produce – or the Archive did not preserve – intermediate records, counterparts to the C1 and C1/W documents.



The other element of the hypothesis – the postulate that C1/W documents are a class of procedural devices that organize the information of C1 documents for the production of tabular fruit accounts of Category W – is stronger. It relies on the absence of seal impressions from almost all such tablets, on characteristics of the texts, their phrasing, and variation among them, and on connections among their contents and the contents of C1 and W texts. It does not depend on the specific interpretation of the C1 texts as products of assessments or otherwise, but it does offer information that helps interpret at least some of the C1 documents.

## Appendix: Pomace, Shoots and Seeds, Old and New Wine

### *hur, pizan, danakaš*

In the tree-inventory texts PFa 33 and Fort. 0119-101, *hur* is connected with fourteen kinds of trees, including fruit, olive, and (probably) aromatics. It is counted, not measured. Individual entries mention as few as 5 *hur* (*silte*-fruit, PFa 33:04, meaning unknown, see Henkelman 2021, p. 161) and as many as 1,800 (*karukur*-fruit, PFa 33:12, possibly pomegranate or peach, see Hinz & Koch 1987, p. 447, Henkelman 2010, p. 742, Henkelman 2021, p. 156). Vines (possibly <sup>GIŠ</sup>GEŠTIN<sup>MEŠ</sup>) and grapes (possibly *šap*) do not appear.

The only two other clear occurrences recognized until now (No. 32:43f., No. 33:36-38) are in journals recording outlays and balances of wine. They appear in short tabulations appended to the usual summary balanced accounts. In both, amounts of *hur* for each of two years are measured by dry volume (*irtiba*/<sub>BAR/QA</sub>) and correlated with amounts of *pizan*, in the ratio *pizan:hur* = 2:1. The largest annual amount of *hur* is 173.5 l. (No. 33:37). Once (No. 33:38), the totals of *pizan* and *hur* are said to be “issued<sup>?</sup> for this (wine?)” (*hi parakka*).

The word *piza(n/m)* is only a little better attested. PF 0334 (Category E) records an acquisition of 124 liquid liters (12.4 *marriš*) of <sup>GIŠ</sup>pi-za<sup>l</sup>-um of <sup>GIŠ</sup>SA<sup>MEŠ</sup>. Otherwise, the word occurs only at the ends of wine journals: (a) PF-NN 2265:38 and PF-NN 2362:25, excerpted below, Nos. 37 and 38 (written <sup>GIŠ</sup>pi-za, see Hinz & Koch 1987, p. 228); (b) in the two texts where it is correlated with *hur*, No. 32:43 and No. 33:36 (written <sup>GIŠ</sup>pi-za-an); (c) in two others where it is associated with *danakaš* (No. 34:20', No. 35:35, <sup>GIŠ</sup>pi-za-an); (d) once in fragmentary context (No. 36:09', 11', pi-za-an). Like wine and wine-vats (*muzzi*), *pizan* is characterized as “old” and “new” (*mišina*, *pipšina* No. 34:21', No. 35:35f., No. 37:38, No. 38:25, below p. 27-29). The largest annual amount of *pizan* is 2,040 l. (new *p.* in No. 37:38). Amounts are said to be “issued<sup>?</sup>” (*parakka*, No. 36:09',





11') or "held on deposit as balance" (*šutur daka*, No. 34:21', No. 35:37, No. 37:38f., *daka* No. 38:26).

Hallock (1969, p. 749) interpreted  $GI^S_{SA}ME^S$  in PF 0334:03f. as a liquid commodity, otherwise unattested. Hinz & Koch (1987, p. 228 s.v. *pi-za-um*) proposed emending it to the common  $GI^S_{MA}ME^S$ , "dates?" (so Hinz & Koch) or "figs?." Since *piza(n)* occurs otherwise only in wine journals, it is more likely that  $GI^S_{SA}ME^S$  is a quasi-logographic abbreviation for ( $GI^S$ )*sawur/samar*, "sour wine, vinegar" (on such abbreviations, see Stolper n.d.). Hallock's inference from the use of liquid measure in PF 0334, that *pizam* is a liquid commodity, was followed by other commentators (Hinz & Koch 1987, p. 228 ["Schnaps(?)"]; Tavernier 2007, p. 509 [5.3.4.48, "an alcoholic drink"]). These surmises proved to be incompatible with the use of dry measure with *pizan* elsewhere (Nos. 32, 33, 35). Variation among spellings with final -m, -n, and -Ø hints at an Iranian origin (hence the entry among incerta in Tavernier 2007).

The word *danakaš/m* has an established Iranian etymology and meaning. Cameron recognized it in Persepolis Treasury texts as a transcribed Iranian term for an eighth of a shekel (Cameron 1948, p. 132, 1965, p. 184, see Tavernier 2007, p. 450 [4.4.15.2], with literature; Hackl 2016 on an Achaemenid Babylonian counterpart, *danakku*). In Fortification texts, it has appeared until now only in the texts cited here, and only in connection with *pizan* (No. 34: 20', No. 35:35f., No. 37:38). In all instances, *danakaš* is included with *pizan*, not measured separately.

The specific nuance of "eighth of a shekel" is not appropriate to the Fortification contexts, which deal with volumes, not weights. Similarity between the usage *danakaše hidaka*, "together with its d." (No. 35:35f.) and *rite (h)idaka*, "together with its tithe, tenth," common in wine journals and accounts, raises the possibility of interpreting *danakaš* in this phrase as "one-eighth (of a unit)." More inviting, though, is interpretation on the basis of the underlying Iranian \**dānā-*, "grain." This avenue becomes compelling if we consider the Elamite collocation of *pizan* and *danakaš* in the light of the Vedic collocation *dhānyam bījam* "seed (consisting of) grain," corresponding to Avestan *dānā-* and *mīz-* and other cognates (Bailey 1958, p. 42, cf. Bailey 1956<sup>35</sup>). In the Elamite collocations, however, the relationship between *pizan* and *danakaš* is not appositional or attributive, as in the Vedic. The texts speak of *pizan* "with" *danakaš* or, *danakaš* "of" *pizan*, so *danakaš* is a component of *pizan*, perhaps a characteristic component, but seemingly not a separable component.

To accommodate the use of both liquid and dry measure, we suggested that *pizan* indicates, as a solid, pomace or marc, the dry product of pressing fruit, and, as a liquid, a slurry or must, the unfiltered liquid product of pressing (Henkelman & Stolper 2021,



p. 179, Henkelman 2021, p. 151). To be sure, if *pizan* transcribes an Iranian word having to do with “seed,” this proposal calls for considerable semantic latitude. If it is apt, then the “grain,” *danakaš*, of the pomace either refers specifically to seeds included in it or else to additional solids recovered by filtering after pressing.

We did not address the purpose for which these byproducts might be held on deposit for two years or more, and sometimes issued? (*parakka*) or acquired (*umma*-). The rare mentions of solid *pizan* and the modest amounts recorded make it unlikely that they were intended for animal feed or fertilizer, for instance. For the liquid “*pizam* of sour wine, vinegar?” in PF 0334, one could imagine aromatic vinegar.

Considering that in some wine accounts *hur* follows *pizan* and in others *danakaš* follows *pizan*, one might infer that Elamite *hur* is synonym of Iranian *danakaš*, “grain(s).” That seems an arid syllogism, for it leaves the numbers of *hur* counted out in the tree-inventory texts, between 5 and 1,800, hard to envision realistically. With some stretching, one can imagine counting peach or plum pits, or even olive pits, but hardly apple or pomegranate seeds. Still, if the 2:1 ratio between *pizan* and *hur* is not an arbitrary condition of wine production, but reflects an actual connection between the things denoted – say, pomace vs. sifted material – the range of “grains” might extend to the “seedlings,” and even “shoots” or “grafts,” the meanings already proposed for *hur* in the tree-inventory texts.

An impediment to that line of surmise is another Achaemenid Elamite word with a firmly established meaning, “seed.” Achaemenid Elamite *bar* (written *ba-ir*) is now attested at least twice as a reading of *NUMUN*<sup>MEŠ</sup> (in the phrase *bar nutišda*, “reserved as seed,” PF 0453:05, PF-NN 0122:06, both Category F). It is the descendant of earlier Elamite *par*, its meaning confirmed by the Akkadian gloss *zērum* in the Mesopotamian synonym list *maliku-šarru* (see Hinz & Koch 1987, p. 109 [where CT XVII is an error for CT XVIII]; CAD Z 89f.). If *hur* and *bar* have any semantic overlap, they must still have distinct nuances, at least as distinct as “grain” and “seed.” The same comments apply to the Elamite-Iranian pair *danakaš* and *marda*, the latter probably “seed” (\**varda*-, Tavernier 2007, p. 413 [4.4.5.11]), in the phrase *marda nutukka*, “reserved as seed” (additional occurrences include PF-NN 2040:36, Fort. 1267-101:16, Fort. 1916B-101:13f. [= Azzoni & Stolper 2015, p. 54-57 No. 3]).

Given such uncertain ground—the common condition of Elamite lexicon—it is prudent to separate *danakaš*, probably “grain, granular material,” from *hur*, perhaps “shoots, seedlings” (though doing so evades the question of the 2:1 ratio between *pizan* and *hur*).





## ***pipšina, mišina***

In No. 35:35f. and in No. 38:25 amounts of *pizan* are distinguished as *pipšina* and *mišina*. In No. 32:39f., No. 34:[14'f.], 18', No. 35:26, 28, and No. 37:33-37 numbers of wine vats (*muzzi*), or amounts of wine (<sup>GIŠ</sup>GEŠTIN<sup>MEŠ</sup>) are also distinguished *mišina* and *pipšina*. In No. 32:41 and No. 34:19' balances of wine carried forward (*šutur daka*) are characterized as *pipšina* or as *mišina* and *pipšina*.

Hinz & Koch 1987:195 glossed *pipšina* in terms specific to wine and wine vats, “an (mit) neuem Wein (= Heurigem)(?)”. Henkelman 2021, p. 147 n. 42, observing that the word is not specific to wine, but is applied also to grain (<sup>ŠE</sup>.BAR<sup>MEŠ</sup>, PF-NN 0535:12, PF-NN 0577) and even to a “paradise” (*partetaš*, Nos. 23 and 24), judges the meaning “new” to be “undoubtedly correct.” He elaborates what is implicit in the entry in Hinz & Koch 1987, that *pipšina* is to be parsed as possessive-attributive *-na* attached to a reduplicated stem *pipši-*; and that the stem is the one found as *bepši-*, *pipsi-*, and *pipši-* in Middle Elamite building inscriptions that commemorate the renovation of temples (Grillot & Vallat 1978, “renouveler, rénover, remettre en état,” corresponding to factitive stems of Akkadian *edēšu*, “become new” [ibid. p. 84 n. 16]). I add to this endorsement the comment that the specific nuance of “new, of the current year,” is appropriate to the summary accounts and tabulations in Fortification Archive journals, which distinguish current revenues and inputs from stores carried over from the previous accounting period, the latter ordinarily characterized as *mišina*.

Commentators differ over *mišina*. Hallock (1969, p. 735, s.v. *mušin*) parsed it as “evi-d[ently] = *mušin* + *-na*,” that is, possessive-attributive *-na* attached to a nominal form in *-n*, “account,” on a stem *muša-*, “reckon,” and he translated it with “(on hand/carried forward as per) account.” Others, including me, have followed this interpretation. Hinz & Koch (1987, p. 938, s.v. *mi-ši-na*), however, insist that *mišina* is not connected to *mušin*, “account (Buchung, Abrechnung).” Their translation “as balance, carryover (als Saldo),” is functionally similar, as most contexts require, but it implies a parse as stem *miši-* (not glossed) with possessive-attributive *-na*.

In favor of separating *mišina* from *mušin* is the almost complete orthographic distinction that Fortification texts make between the two words (not “contemporary variation” as in Stolper 2004, p. 72). In *mušin hi*, “this account,” at the beginnings and ends of journals and accounts, in the occupational term *mušin huttira* “account maker,” and in the cognate *mušimme* “account(ing),” the nominal form is written with the sign *mu-*, seemingly without exception. Where amounts carried over or stored are indicated in summary accounts or tables, attributive *mišina* is regularly written with *mi-*, sometimes with initial *muš-* (e.g., PF 2000:06, PF-NN 2043:05, PF-NN 2190:05, all wine accounts; PF 1961:11, Fort. 1717-101:06, 14, Fort. 2166-101:26, 28, 31, all grain accounts; PF-NN 1016:06, sesame account), but to my knowledge only once with ini-



tial mu- (am-ma mu-ši-na, Fort. 1238-101:13, collated). Even if *muši-* and *miši-* were near-homophones in Achaemenid Elamite, most writers of Fortification texts understood them differently.

When Hallock wrote his 1969 glossary, the wine journals that use *mišina* and *pipšina* in contrasting parallelism were not in evidence. He might have reconsidered his analysis, since his conventional rendering “(as per) account,” would fit such parallel uses only awkwardly. Hinz & Koch’s “as balance, carry-over,” makes a more comfortable parallel with their specific nuance for *pipšina*, “of the current year.” Yet if *pipšina* also has the broader sense “new,” then *mišina* ought also to have a corresponding broader sense “old.” And if the stem of *pipšina* is the same *pipši-* that Middle Elamite inscriptions use to indicate rebuilding, then it seems inescapable that the stem of *mišina* is the same *miši-* that the same inscriptions use to describe the prior state of the things renovated (examples in Grillot & Vallat 1978; see Hinz & Koch 1987, p. 936-38 s.vv. *mi-sir-ma-ak*, *mi-sir-ma-na*, *mi-ši-ir-ma-ak*, *mi-ši-ir-ma-(am)-ma*, *mi-ši-ir-ma-na*, *mi-ši-ma-na*). As earlier Elamite kings might have renewed buildings that had become old, so Achaemenid Elamite clerks counted old and new wine or grain.

Then again, earlier Elamite kings did not renew buildings merely because they had become old. By the same token, even if a few Akkadian royal inscriptions speak of renovating (Akkadian *uddušu*, *uteddušu*) buildings that have grown old (*labāru*) far more speak of their disrepair, dilapidation (CAD A/II s.v. *anāhu* meaning 3, *anḫūtu* meaning 2), sometimes because of age (CAD L s.v. *labāru* meaning 1c). With exceptional agreement and confidence, translators of Middle Elamite inscriptions interpret forms of *miši-* in this way, to convey not age, but disrepair, collapse, or ruin.<sup>36</sup>

Even if aging was a condition of what Middle Elamite *miši-* denoted, the primary sense of Middle Elamite *miši-* was not just “old” (cf. Grillot-Susini 2008, p. 21). Conversely, it is out of the question that the writers of Fortification texts described wine, grain, and byproducts that were deposited, held in storage, and carried over from year to year as “ruined.” Middle Elamite temples were ruined by age, Achaemenid wine was not. In fact, both old and new wine were occasionally described not only as sour (*sawur*, *samar*) but also as sweet, fresh (*tena* PF-NN 0699:11ff. and No. 38:20, cited in Hinz & Koch 1987, p. 317, and see comment on No. 28:33).

**36**

E.g., Steve 1967, p. 18, 1987, p. 39 “se ruiner, se dégrader”; Reiner 1969, p. 101 “fall in ruins”; Grillot & Vallat 1975, p. 215 “vou[er] a destruction”; Hinz & Koch 1987 locc. citt. “verfallen”; Malbran-Labat 1995, p. 82 “commenç[er] à se détériorer, tom[ber] en ruine, menaç[er] ruine”; Krebern timer 2006, p. 180 “zu verfallen droh[en]”; Grillot-Susini 2008, p. 21 “démolir, détériorer, détruire, endommager, ruiner”; Tavernier 2011, p. 331, 343 “laisser périr, dégrader.” An exception, notable for this discussion, is Khačikjan 1998, p. 36: “*pepširmah* and *miširmak*, ‘I renovated’ and ‘it became old,’ respectively” (but “fall into decay, be in ruins, dilapidated” *ibid.* 56, 58, 61).



No other forms based on the stem *pipši-* (or unreduplicated *piši-*) are attested yet in Achaemenid Elamite. The stem may have ceased to be productive. More likely is that the absence of other forms reflects in one register the rhetorical needs of Achaemenid kings (who did not commemorate renovation of old buildings with the same reverent frequency as Mesopotamian rulers<sup>37</sup>), and in another register the limited needs of administrative vocabulary. A possible Achaemenid development of *miši-* is *mišnuka* (vars. *mušnuka*, *mišnaka*), “(morally) bad, evil,” in royal inscriptions (Stolper 1978, p. 267). If so, two nuances of the stem had separated: the plain stem *miši-na*, “old (but useful),” vs. the stem with modal *-nu-* (Grillot 2008, p. 87, but cf. Khačijan 1995, p. 36f.), *mišnuka*, “decadent (hence evil).”

To summarize, the sometimes paired attributive words *mišina* and *pipšina* in Fortification texts belong to the same stems as the often paired verbal forms *miši(r)-ma-* and *pipši(r)ma-* in Middle Elamite royal inscriptions, but the match in meaning between older and later products of the stems is incomplete. The general sense of *pipši-* continues from Middle Elamite verbs for “renew” to an Achaemenid attribute “new.” But the sense of *miši-* diverges or specializes between Middle Elamite verbs for “deteriorate” and an Achaemenid attribute “old.” In most occurrences in Fortification texts, in summary accounts and tables, both the frequent *mišina* and the uncommon *pipšina* refer narrowly to the previous accounting period and the current accounting period. “Old” vats of wine (*muzzi*) contrasted with “new” ones may of course be older than a year, but they are not identified by vintage. The “new paradise” (*partetaš pipšina*) at Matezziš (Nos. 23 and 24, Henkelman 2021, p. 147) was truly new, not renovated as Middle Elamite temples were.

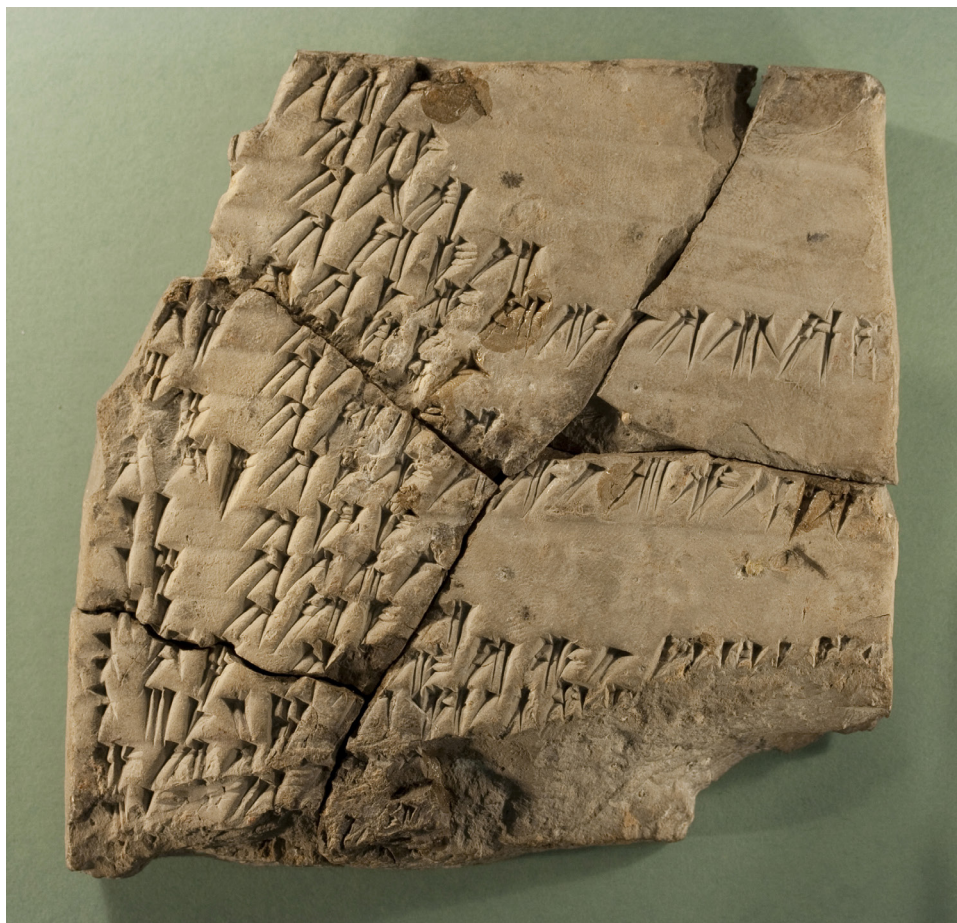
<sup>37</sup>

With the notable exceptions of the Cyrus Cylinder and of A2Sa, where Artaxerxes II commemorates reconstruction of the palace built by Darius I after a destructive fire in the time of Artaxerxes I.



## Texts

### C1/W Documents



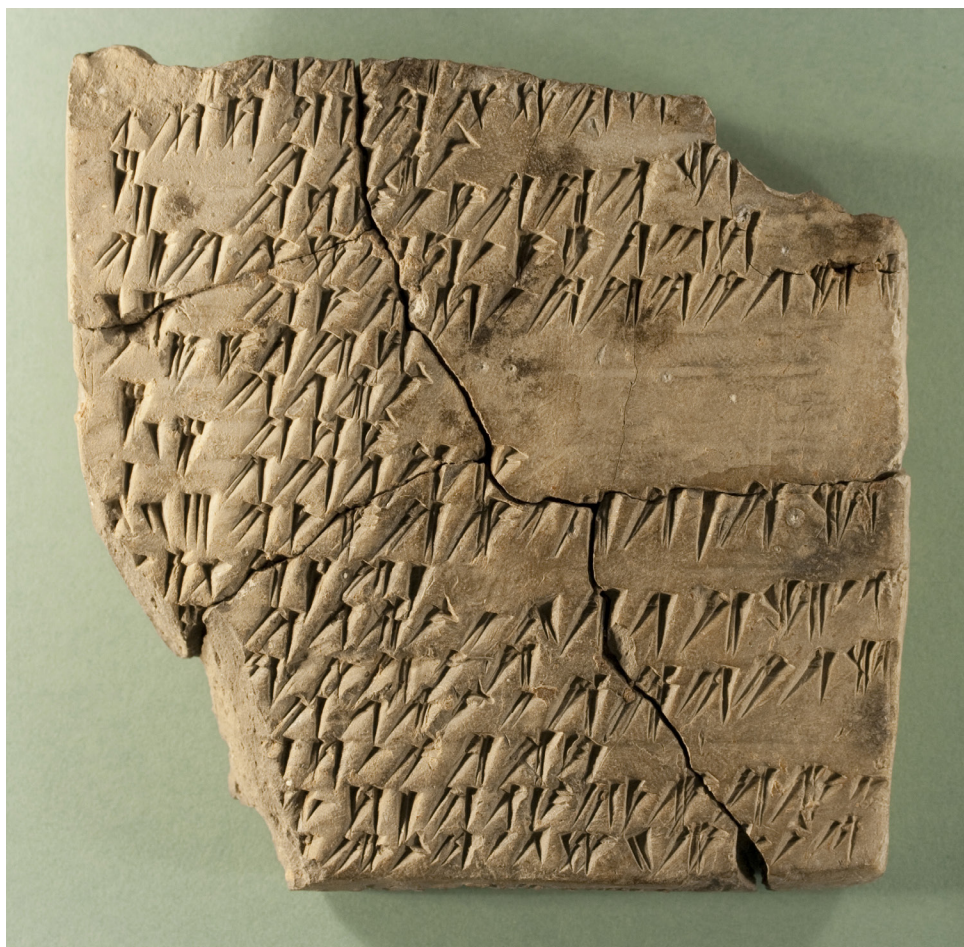
Fort. 1334-102 Obverse



Fort. 1334-102 Right Edge

*Fig. 3a.* No. 1 (Fort. 1334-102) Obverse, Right Edge.





Fort. 1334-102 Reverse



Fort. 1334-102 Upper Edge

*Fig. 3b.* No. 1 (Fort. 1334-102) Reverse, Upper Edge.



## 1. Fort. 1334-102 (Fig. 3a-b)

### Obverse

- (01) [                      <sup>GIŠ</sup> ] <sup>Γ</sup>ka<sub>4</sub>-ru-kur<sup>1</sup>  
 (02) [                      ] <sup>GIŠ</sup><sub>MA</sub> <sup>MEŠ</sup>  
 (03) [                      ] <sup>GIŠ</sup>ka<sub>0</sub>-la  
 (04) [                      ] <sup>GIŠ</sup>da-ku-iš  
 (05) [PAP x ME] 50 <sup>GIŠ</sup>me-ik-da-um <sup>HAL</sup>na-ri-ia-<sup>Γ</sup>ma<sup>1</sup>-na ug-<sup>Γ</sup>gi zik<sup>1</sup>-ka<sub>4</sub>-ka<sub>4</sub>  
 (06) [                      ] <sup>Γ</sup>40+8<sup>1</sup> <sup>GIŠ</sup><sub>MA</sub> <sup>MEŠ</sup>  
 (07) [                      ] 5 <sup>GIŠ</sup><sup>Γ</sup>ka<sub>4</sub>-ru<sup>1</sup>-kur  
 (08) [                      ] 5 <sup>GIŠ</sup><sup>Γ</sup>da-ku-iš<sup>1</sup>  
 (09) <sup>Γ</sup>PAP<sup>1</sup> 50+8 <sup>GIŠ</sup>me<sup>1</sup>-ik-<sup>Γ</sup>da<sup>1</sup>-um <sup>HAL</sup>ú-gi-<sup>Γ</sup>iš<sup>1</sup>-šá-ka<sub>4</sub> <sup>Γ</sup>KI+MIN<sup>1</sup>  
 (10) 10+1 <sup>GIŠ</sup><sub>MA</sub> <sup>MEŠ</sup>  
 (11) 10+5 <sup>GIŠ</sup>ka<sub>4</sub>-<sup>Γ</sup>ru<sup>1</sup>-kur  
 (12) 20+1 <sup>GIŠ</sup>da-ku-iš  
 (13) PAP <sup>Γ</sup>40<sup>1</sup>+7 <sup>GIŠ</sup>[me]-ik-da-um <sup>HAL</sup>da<sup>?</sup>-ma-a-ma<sup>?</sup>-x<sup>1</sup>-da KI+MIN  
 (14) PAP 3 ME 20+5 <sup>Γ</sup>GIŠ<sup>1</sup><sub>KI+MIN</sub> <sup>AŠ</sup>pár-te-<sup>Γ</sup>taš<sup>1</sup> [                      ]  
 (15) ha da-ka<sub>4</sub> [                      ]  
 (16) 30+1 (erasure) <sup>GIŠ</sup><sup>Γ</sup>x x<sup>1</sup> [                      ]  
 (17) [                      ] <sup>Γ</sup>x x<sup>1</sup> [                      ]

### Reverse

- (01') [                      ] <sup>Γ</sup>GIŠme-ik-da-um<sup>1</sup> [                      ]  
 (02') <sup>Γ</sup>pár-te<sup>1</sup>-taš <sup>GIŠ</sup>za-ap-pan-ul-<sup>Γ</sup>la-ma<sup>1</sup> [                      ]  
 (03') 4 <sup>GIŠ</sup>ka<sub>4</sub>-ru-kur [                      ]  
 (04') 2 <sup>GIŠ</sup><sub>MA</sub> <sup>MEŠ</sup> <sup>HAL</sup>ku-la-ia-na <sup>Γ</sup>KI+MIN<sup>1</sup> [                      ]  
 (05') <sup>GIŠ</sup>za-ap-pan-ul-<sup>Γ</sup>la<sup>1</sup>-ma <sup>AŠ</sup>ha-ku-ba-an-ma  
 (06') <sup>Γ</sup>10+6<sup>1</sup> <sup>GIŠ</sup>ha-<sup>Γ</sup>su<sup>1</sup>-ur <sup>HAL</sup>ia-iš-na-ak-ka<sub>4</sub> KI+MIN <sup>Γ</sup>KI+MIN<sup>?</sup><sup>1</sup>  
 (07') <sup>Γ</sup>AŠ<sup>1</sup>ha-ku-ud-da-ma  
 (08') 7 <sup>GIŠ</sup>ka<sub>4</sub>-ru-kur  
 (09') 10+5 <sup>GIŠ</sup><sub>MA</sub> <sup>MEŠ</sup>  
 (10') 1 <sup>GIŠ</sup>na-ud<sup>?</sup>-da-<sup>Γ</sup>ik<sup>1</sup>  
 (11') <sup>Γ</sup>PAP<sup>1</sup> 20+3 <sup>GIŠ</sup>me-ik-da-um <sup>HAL</sup>ú<sup>?</sup><sup>1</sup>-iš-šá-ia KI+MIN  
 (12') <sup>Γ</sup>HAL<sup>1</sup>za-nu-iš-šá du-šá  
 (13') [                      ] <sup>Γ</sup>x]+<sup>Γ</sup>5<sup>?</sup><sup>1</sup> <sup>GIŠ</sup>ka<sub>4</sub>-ru-kur <sup>HAL</sup>kas-su-ud-da KI+MIN <sup>AŠ</sup>pár-te-  
 (14') [taš <sup>AŠ</sup>]ap-pi-iš-tap-da  
 (15') [                      ] <sup>GIŠ</sup>ka<sub>4</sub>-ru-kur <sup>HAL</sup>ia-iš<sup>!</sup>-na-ak-ka<sub>4</sub> KI+MIN <sup>AŠ</sup>pár-  
 (16') <sup>Γ</sup>te<sup>1</sup>-taš <sup>AŠ</sup>hi-su-iš-ma  
 (17') [PAP x] ME 60+2 <sup>GIŠ</sup><sub>BAR</sub> <sup>MEŠ</sup> <sup>GIŠ</sup>me-ik-da-um <sup>HAL</sup>



(18') [ ] ʔšá¹-ra-man-na <sup>Aš</sup>be-ul 20-um-me-man-na

Upper Edge

(19') [ ] <sup>Aš</sup>tup-pi <sup>HAL</sup>ir-še-na tu-ba-ʔka<sub>4</sub>¹

### Translation

(01'-04') [x] *karukur*, [x] figs<sup>?</sup>, [x] *kazla*, [x] *dakuš*: <sup>(05)</sup> [total x]+1,500 (l.) of fruit, assigned to<sup>?</sup> Nariyamana.

(06-08) 480 (l.) figs<sup>?</sup>, 50 (l.) *karukur*, 50 (l.) *dakuš*: <sup>(09)</sup> total 580 (l.) of fruit, ditto (= assigned to<sup>?</sup>) Ugiššaka.

(10-12) 110 (l.) figs<sup>?</sup>, 150 (l.) *karukur*, 210 (l.) *dakuš*: <sup>(13)</sup> total 470 (l.) of fruit ditto (= assigned to<sup>?</sup>) Damamadda<sup>?</sup>.

(14-15) (Grand) total 3,250 (l.) ditto (= fruit) deposited at the “paradise” [in GN].

(16-17) 310 (l.) x [ ... ]

(Reverse 01'-02') [Total<sup>?</sup> x] fruit [assigned to<sup>?</sup> PN] at the “paradise,” in the ... [in GN].

(03'-05') 40 (l.) *karukur*, 20 (l.) figs<sup>?</sup>, ditto (= assigned to<sup>?</sup>) Kulayana [at the “paradise?”], in the ... in Akkuban.

(06'-07') 160 (l.) apples, ditto (= assigned to<sup>?</sup>) Yašnakka, ditto (= at the “paradise”) at Hakudda.

(08'-10') 70 (l.) *karukur*, 150 (l.) figs<sup>?</sup>, 10 (l.) *naddak*<sup>?</sup>: <sup>(11'-12')</sup> total 230 (l.) of fruit, ditto (= assigned to<sup>?</sup>) Uššaya, Zanušša received.

(13'-14') [x]+50<sup>?</sup> (l.) *karukur*, ditto (= assigned to<sup>?</sup>) Kassudda, (at) the “paradise” (in) Appištapdan.

(15'-16') [x (l.)] *karukur*, ditto (assigned to<sup>?</sup>) Yašnakka<sup>?</sup> (at) the “paradise” in Hisuš.

(17'-18') [(Grand) total x]+1,620 l. of fruit, [Iršena<sup>?</sup>] overseeing, year 20.

(19') (This) tablet pertains to Iršena.

### Comments

9.3L x (9.2)W x 1.8Th

No seal impressions.

(01 and passim) *karukur* (pomegranate<sup>?</sup>, peach<sup>?</sup>): cf. Henkelman & Stolper 2021, p. 179-180 comment on PFa 33:02. Henkelman 2021, p. 156, supplementing Henkelman 2010, p. 742-743., reviews occurrences, interpretations and conjectures.



- (03 and passim) *kazla*: see Henkelman & Stolper 2021, p. 180, comment on PFa 33:03; Henkelman 2021, p. 157 surveys occurrences and proposals.
- (04, 08, 12) *dakuš* (a fruit): see Henkelman 2021, p. 153.
- (05) -na ug-<sup>r</sup>gi zik<sup>1</sup>-ka<sub>4</sub>-ka<sub>4</sub> on right edge. Cf. dates<sup>?</sup> (*pit*) from Nariyamana PF 1988:17 (tabular account of fruit at Natinuš, year 22).
- (13) -da KI+MIN on right edge.
- (14) 325 clear; 355 expected.
- (02', 05') On *zappan-nutip*, “copper/bronze handlers?” at the “paradise” of Parsaraš at Persepolis (PF 1815, PF-NN 1280, PF-NN 1368, cf. PF-NN 0948) see Henkelman 2003, p. 104, 2004. One might see a similar phrase here, compounded with an otherwise unattested verbal noun from *ulla-*, hence “copper/bronze delivery.” In this context, however, a location, comparable to *balum* or *baribaraš* in similar contexts, is expected. See comment on <sup>GIŠ?</sup>*šukmaš-ma appa* GN No. 13:25, referring to GN <sup>GIŠ</sup>*tin-taš-ma* PF-NN 0331:07, PF-NN 2114:06f. (both C1).
- (05') Cf. apples in the “paradise” at Akkubba(n) PF-NN 1455 (C1). Hinz & Koch 1987, p. 38, Koch 1990, p. 276, endorsed by Tuplin 1996, p. 180, place Akkuban in the Persepolis region, and collocation here with Appištapdan (line 14') conforms to this location.
- (07') Cf. grain from <sup>AŠ</sup>Hakutaš PF-NN 2415:01 (F).
- (10') <sup>GIŠ</sup>*naddak* (or: *nakadak?*): a fruit?, otherwise unattested until now.
- (12') Cf. *Zanuš kar huttira* at Kutkuš PF-NN 1981:06f. (C1, *tarmu*). Here, “he received” (*duša*) is unlikely to be an exceptional, explicit record of incoming payments, more likely to record an outlay from local storage.
- (13') -te- on right edge. Cf. PF-NN 2346:15 (W, fruit).
- (14') ap over erasure?
- (15') ia-iš<sup>l</sup>:- written ia-ia-.
- (18'f.) Iršena: see comment on No. 23:61, 63, 71.
- (19') Written in a smaller, shallower script than the main text. Cf. PF-NN 1455 (C1, fruit at Akkubba(n), Iršena *šaramanna*).





Fort. 1760-101 Obverse?



Fort. 1760-101 Reverse?

Fig. 4. No. 2 (Fort. 1760-101) Obverse?, Reverse?.

## 2. Fort. 1760-101 (Fig. 4)

Obverse?

- (01') [ ] 'x x x x' [ ] ug-gi]
- (02') [zik]-'kak<sup>1</sup>-ka<sub>4</sub> 'Aš<sup>1</sup>be-ul 10+9-um<sup>1</sup>-me-na [ ]
- (03') [ ] 'x+5<sup>71</sup> Gīš<sup>1</sup>QA.BAR<sup>MEŠ</sup> mi-ik-'tam<sub>6</sub><sup>1</sup> PAP 3 HAL<sup>1</sup>LÚ<sup>1</sup>MEŠ<sup>1</sup> pír<sup>2</sup>-iš-šá-[ uk]-
- (04') 'ka<sub>4</sub>-ap<sup>1</sup> zik-kak-ka<sub>4</sub> Aš<sup>1</sup>be-ul 10+9-um-me-na Aš<sup>1</sup>ap-pi-iš-'da<sup>1</sup>-[ ]



(05')	(blank)	[ ]
(06')	[ x]+ 2 <sup>GIŠ</sup> QA.BAR <sup>MEŠ</sup>	⟨ <sup>GIŠ</sup> ⟩MA <sup>MEŠ</sup> [ ]
(07')	[ x]+ <sup>Γ</sup> x <sup>1</sup> KI+MIN	<sup>GIŠ</sup> pit <sup>MEŠ</sup> [ ]
(08')	[ ] KI+MIN	<sup>GIŠ</sup> ir- <sup>Γ</sup> da <sup>1</sup> -iš-ti-iš [ ]
(09')	[ ] KI+MIN	<sup>GIŠ</sup> mi-ik- <sup>Γ</sup> tam <sub>6</sub> <sup>AS?</sup> 1 [ ]- <sup>Γ</sup> x <sup>1</sup> -za-ik-[ ]
(10')	[ ]	[ ] <sup>Γ</sup> x x <sup>1</sup> [ ]

#### Reverse?

(01'')	[ ]	[ ]
(02'')	<sup>GIŠ</sup> QA. <sup>Γ</sup> BAR <sup>MEŠ</sup>	<sup>GIŠ</sup> pit <sup>MEŠ</sup> [ ]
(03'')	[ ] KI+MIN	<sup>GIŠ</sup> MA <sup>MEŠ</sup> [ ]
(04'')	[PAP x]+1 KI+MIN <sup>GIŠ</sup> mi-ik-tam <sub>6</sub> <sup>HAL</sup> iš?-kán-da hi-še ug- <sup>Γ</sup> gi <sup>1</sup> [zik]-	
(05'')	<sup>Γ</sup> kak <sup>1</sup> -ka <sub>4</sub> <sup>AS</sup> be-ul 10+9-um-me-na	[ ]
(06'')	(blank)	[ ]
(07'')	<sup>Γ</sup> 40+2 <sup>1</sup> <sup>GIŠ</sup> QA.BAR <sup>MEŠ</sup>	<sup>GIŠ</sup> pit <sup>MEŠ</sup> 1 [ ]
(08'')	30+ <sup>Γ</sup> 5 <sup>1</sup> KI+MIN	<sup>GIŠ</sup> MA <sup>MEŠ</sup> [ ]
(09'')	PAP 70+ <sup>Γ</sup> 7 <sup>1</sup> <sup>Γ</sup> KI+MIN <sup>1</sup> <sup>GIŠ</sup> mi-ik- <sup>Γ</sup> tam <sub>6</sub> <sup>1</sup> HAL[ ]- <sup>Γ</sup> kán <sup>2</sup> -da <sup>1</sup> [ug-gi]	
(10'')	[zik]- <sup>Γ</sup> kak <sup>1</sup> -[ka <sub>4</sub>	[ ]

#### Translation

(01'-02') [...] assigned to? [PN], year 19: (03'-04') [total x]+50<sup>2</sup> l. of fruit assigned to? a total of three ...-men, year 19, at Appištapdan.

(06'-08') [x]+20 l. figs?, [x] l. dates?, [x] l. *irtaštiš*: (09'-10') [total x] l. of fruit (at) GN [...].

(Reverse? 01''-03'') [x] l. dates?, [x] l. figs?: (04''-05'') [total x]+10 l. of fruit assigned to? a man named Iškanda?, year 19.

(07''-08'') 420 l. dates?, 350 l. figs?: (09''-10'') total 770 l. of fruit assigned to? Iškanda?

#### Comments

(11.8)L x (6.3)W x 2.3Th

No preserved seals.

(03') *pirišša*?...: perhaps a transcription of an Iranian word; cf. comment on No. 11:08'f.

(04') Appištapdan: see Henkelman & Stolper 2021, p. 183 comment on PFa 33:47; site of a “paradise”: Tuplin 1996, p. 180-181; No. 3:16', No. 1:14'.

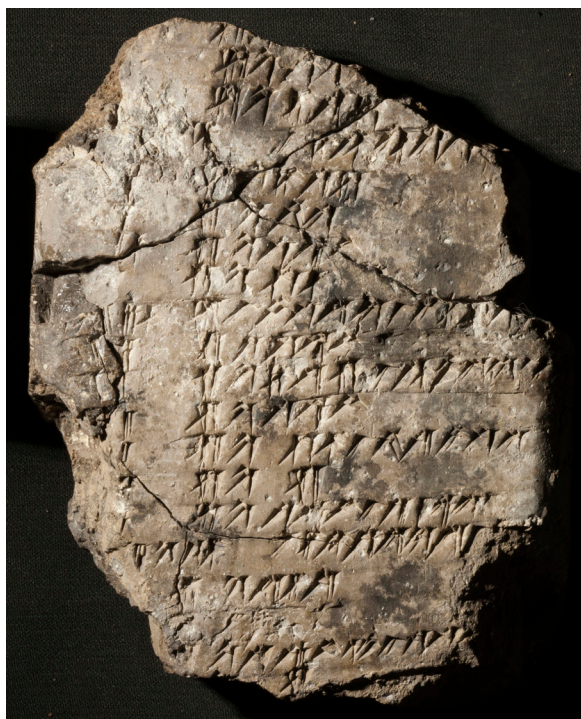
(08') *irtaštiš* (a fruit): see Henkelman & Stolper 2021, p. 190, comment on Fort. 0119-101:05; Henkelman 2021, p. 154-155.



(07', 02'', 07'') pit (É): see Stolper n.d. As Hallock noted in the marginalia of his copy of Hallock 1969, the sign É, formally identical with the sign GAN, has the syllabic value pid/t in a spelling of the GN Pid-da-ma, (Ir. \*Pitava-, e.g., PF 0740:07). The value also appears in ha-pid-da-ni for *hapidanu*(š) (“reservoir,” Ir. \*āpidānīš-, Fort. 2030A-101:14'', 16'', Fort. 0036-101:12'', 20''). Almost all occurrences of the spelling (<sup>GIŠ</sup>)pit(<sup>MEŠ</sup>) for “dates?” are in C1/W texts (No. 10:01, 04, 05, 06, 11, No. 11:08, No. 12:05', No. 13:02 09, 14, 23, No. 14:02, No. 18:08, 11, 14, No. 19:04); one is in a tabular fruit account (No. 27:12, vs. the usual <sup>GIŠ</sup>pi-ut in lines 02, 06, 14, and 18). In other C1/W texts the common pi-ut appears: PF 2018, PFa 01, Nos. 5, 15, 21.

(04'', 09'') Or: <sup>HAL</sup>iš?-pid-da (Iranian \*Spita-)?





Fort. 00X1-101 Obverse?



Fort. 00X1-101 Reverse?



Fort. 00X1-101  
Right Edge

**Fig. 5.** No. 3 (Fort. 00X1-101) Obverse<sup>2</sup>, Reverse<sup>2</sup>, Right Edge.



### 3. Fort. 00X1-101 (Fig. 5)

#### Obverse<sup>2</sup>

(01')	[		]	「KI+MIN <sup>1</sup>	[		]					
(02')	[		]	KI+MIN	GIŠ <sup>1</sup>	x x <sup>1</sup>	[		]			
(03')	[		]	KI+MIN	GIŠ <sup>1</sup>	ha <sup>1</sup> -su-「ur <sup>1</sup>	[		]			
(04')	[		]	「PAP	hi <sup>1</sup>	HAL	ha-tur-ra-ad-「da-na <sup>1</sup>	[		]		
(05')		「4		KI+MIN	GIŠ <sup>1</sup>	ha-su-ur	[		]			
(06')		「4 <sup>1</sup>		KI+MIN	GIŠ <sup>1</sup>	kaz <sub>0</sub> -la	[		]			
(07')		2½		KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> -ru-kur	[		]			
(08')	[		]	「x <sup>1</sup>	「KI+MIN <sup>1</sup>	GIŠ <sup>1</sup>	MA <sup>MEŠ</sup>	[		]		
(09')	「PAP	hi	30 <sup>1</sup> +6½	KI+MIN	HAL	še-ud-da-na	AŠ <sup>1</sup>	ak <sup>2</sup> -ku <sup>2</sup> -x-x-x <sup>1</sup>				
(10')		20+5		KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> -ru-kur						
(11')		20+2		KI+MIN	GIŠ <sup>1</sup>	ha-su-ur	HAL	mar-še-na-na	AŠ <sup>1</sup>	man <sup>2</sup> -da-ma		
(12')	[	x	+3	KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> -ru-kur						
(13')	[	x	+2	KI+MIN	GIŠ <sup>1</sup>	MA <sup>MEŠ</sup>	HAL	kas-su-uk-ka <sub>4</sub> -na				
(14')	[		]	「6 <sup>2</sup>	KI+MIN	GIŠ <sup>1</sup>	KI+MIN <sup>1</sup>	「MEŠ <sup>1</sup>				
(15')	[		]	KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> -「ru <sup>1</sup> -kur	HAL	ú-šá-ia-na	「AŠ <sup>1</sup>	[		]
(16')	[	x	+4		GIŠ <sup>1</sup>	BAR <sup>MEŠ</sup>	AŠ <sup>1</sup>	ha-pi-iš-da-ap-da-「an	x x x <sup>1</sup>	[		]
(17')	[		]	「KI+MIN <sup>1</sup>	GIŠ <sup>1</sup>	da-ku-iš						
(18')	[		]									
(19')	[		]	「KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> -ru-kur	PAP	hi	HAL	ba-ka <sub>4</sub> -[		]
(20')	[		]	KI+MIN	GIŠ <sup>1</sup>	KI+MIN	[					]

#### Reverse<sup>2</sup>

(01'')	[		]				[		]	
(02'')	[			KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> ]- <sup>1</sup> ru-kur <sup>1</sup>	PAP	hi	HAL	ak-ka <sub>4</sub> -man-nu-iš- <sup>1</sup> na <sup>1</sup> [ ]
(03'')	[		]	<sup>1</sup> KI+MIN	GIŠ <sup>1</sup>	KI+MIN				
(04'')	[		] <sup>1</sup> 20+x <sup>1</sup>	KI+MIN	GIŠ <sup>1</sup>	MA <sup>MEŠ</sup>				
(05'')	[		] <sup>1</sup> 10+7	KI+MIN	GIŠ <sup>1</sup>	da-ku-iš				
(06'')	[		] <sup>1</sup> 10+2	<sup>1</sup> KI+MIN	GIŠ <sup>1</sup>	ha-su-ur <sup>1</sup>				
(07'')	[		] <sup>1</sup> 20+5 <sup>1</sup>	<sup>1</sup> KI+MIN	GIŠ <sup>1</sup>	kaz <sub>0</sub> -la <sup>1</sup>	PAP	hi	HAL	ú <sup>1</sup> ?-iš-da-x-x-na <sup>1</sup>
(08'')	[		] <sup>1</sup> 40+3 <sup>1</sup>	KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> -ru-kur				
(09'')		<sup>1</sup> x+x <sup>1</sup>		<sup>1</sup> KI+MIN	GIŠ <sup>1</sup>	MA <sup>MEŠ</sup>				
(10'')		<sup>1</sup> x+x <sup>1</sup>		[KI+MIN	GIŠ <sup>1</sup>	da-ku-iš	PAP	hi	HAL	pír-ma-ia-u-da-na
(11'')		60+ <sup>1</sup> 2 <sup>1</sup>		<sup>1</sup> KI+MIN	GIŠ <sup>1</sup>	ka <sub>4</sub> -ru-kur	HAL	ha-tur-ra- <sup>1</sup> da <sup>1</sup> -na		
(12'')		50+ <sup>1</sup> 3 <sup>1</sup>		KI+MIN	GIŠ <sup>1</sup>	KI+MIN	HAL	ba-ka <sub>4</sub> - <sup>1</sup> x-x-x-na <sup>1</sup>		
(13'')		<sup>1</sup> 40+8 <sup>2</sup>		KI+MIN	GIŠ <sup>1</sup>	KI+MIN	HAL	ba- <sup>1</sup> ak <sup>1</sup> -ka <sub>4</sub> -a-na		
(14'')		10+2		KI+MIN	GIŠ <sup>1</sup>	KI+MIN	HAL	tur-be <sup>2</sup> -na-na		
(15'')		20		KI+MIN	GIŠ <sup>1</sup>	kaz <sub>0</sub> - <sup>1</sup> la <sup>1</sup>	HAL	<sup>1</sup> ma <sup>1</sup> -ra-za-na		
(16'')		<sup>1</sup> 4 <sup>1</sup>		<sup>1</sup> KI+MIN	GIŠ <sup>1</sup>	te-el <sup>1</sup> -te				
(17'')		2		KI+MIN	<sup>1</sup> GIŠ <sup>1</sup>	ú <sup>1</sup> -ma- <sup>1</sup> ru-ud <sup>1</sup> -da	PAP	hi	HAL	še-ud-[da-na]
(18'')		<sup>1</sup> 50 <sup>1</sup> +5 <sup>2</sup>		KI+MIN	GIŠ <sup>1</sup>	du- <sup>1</sup> ud <sup>1</sup> -da-um				



(19'') [ ] 2 KI+MIN <sup>Giš</sup> 'ha<sup>2</sup>1-[ ]x<sup>1</sup> 3 'x<sup>1</sup> [ ]  
 (20'') [ ] KI+MIN <sup>rGiš</sup>1 [ ]

### Translation

(Obverse? 01'-03') [x] l. [x], [x] l. x, [x] l. apples: (04') [x], this (is) the total (of fruit) of Haturradda.

(05'-08') 40 l. apples, 40 l. *kazla*, 25 l. *karukur*, x l. figs?: (09') 365 l., this (is) the total (of fruit) of Šedda at Akku ....

(10'-11') 250 l. *karukur*, 220 l. apples, (fruit) of Maršena (at) Mandama?

(12'-13') [x]+30 l. *karukur*, [x]+20 l. figs?, (fruit) of Kassukka.

(14'-15') [x]+20 l. figs?, [x] l. *karukur* (fruit) of Ušaya (at) [GN?].

(16') [Grand total? x]+40 l., (fruit) (at) Appištadan [x].

(17'-19') [x] l. *dakuš*, ... , [x] l. *karukur*: this (is) the total (of fruit) [of] Baka-[...].

(20') [x l.] *karukur* [...].

(Reverse? 01''-02'') [x l. x], [x l.] *karukur*: this (is) the total (of fruit) of Akkamanuš.

(03''-07'') [x] l. *karukur*, 200+x l. figs?, 170 l. *dakuš*, 120 l. apples, 250 l. *kazla*: this (is) the total (of fruit) of Ušda-... .

(08''-10'') 430 l. *karukur*, x l. figs?, x l. *dakuš*: this (is) the total (of fruit) of Pirmayauda. This (is) the (grand) total (of fruit at) Ukbarakka.

(11'') 620 l. *karukur* of Haturradda.

(12'') 530 l. *karukur* of Baka-... .

(13'') 480? l. *karukur* of Bakka.

(14'') 120 l. *karukur* of Turbena?

(15'') 200 l. *kazla* of Maraza.

(16''-17'') 40 l. *telte*, 20 l. pears: this (is) the total (of fruit) [of] Šed[da].

(18''-20'') 550? l. mulberries, [x]+20 l. apples? ... 3 ..., [x] l. [x].

### Comments

9.3L x (11.8)W x 2.2Th

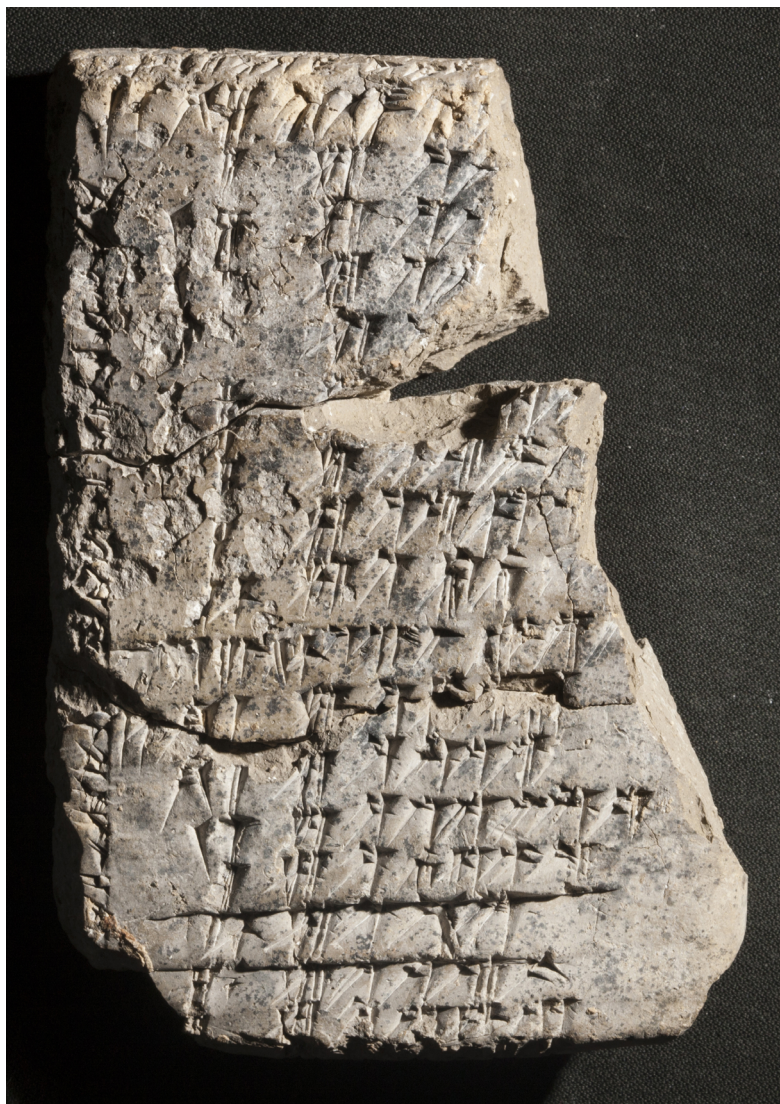
No preserved seal impressions.

(04', 11') Haturradda: cf. No. 4:21, No. 15:04', and Henkelman & Stolper 2021, p. 190-191, comment on Fort. 0119-101:12, and above, p. 12-13.



- (09', 17'') Cf. apples *gim šedda hiše uggi zikkak* <sup>AŠ</sup>ak-ku-ib-ba (= Akkuban) *partetašma* PF-NN 1455 (C1, year 23).
- (11') Last three signs on right edge. Cf. *tarmu*-cereal *Maršena hiše hupirrina uggi zikkaka*, at <sup>AŠ</sup>ma-tan-na (= Matannan) PF-NN 2485 (C1, year 23).
- (13', 14', 15', 03'', 04'') Space follows <sup>GIŠ</sup>, so that initial determinatives are aligned vertically and logographic spellings of fruit are aligned vertically under the middle of the syllabic spellings. See comment on No. 5:02'.
- (15') Cf. *tarmu*-cereal *Ušaya uggi zikkaka*, at Matannan PF-NN 1685, PF-NN 2450 (C1, years 22 and 24).
- (16') *telte* (a fruit, identification unknown): cf. Henkelman & Stolper 2021, p. 180, comment on PFa 33:04; Henkelman 2021, p. 161 surveys occurrences and possible cognates.
- (18') Erasure (of <sup>KI+MIN</sup> <sup>GIŠ</sup><sub>MA</sub> <sup>MEŠ</sup>) follows break.
- (10'') <sup>AŠ</sup>uk-ba-rak<sub>0</sub>-ka<sub>4</sub> small, on right edge. Cf. No. 26:10', 44' (tabular account of fruit at Ukbarakkan and Mandumattiš).





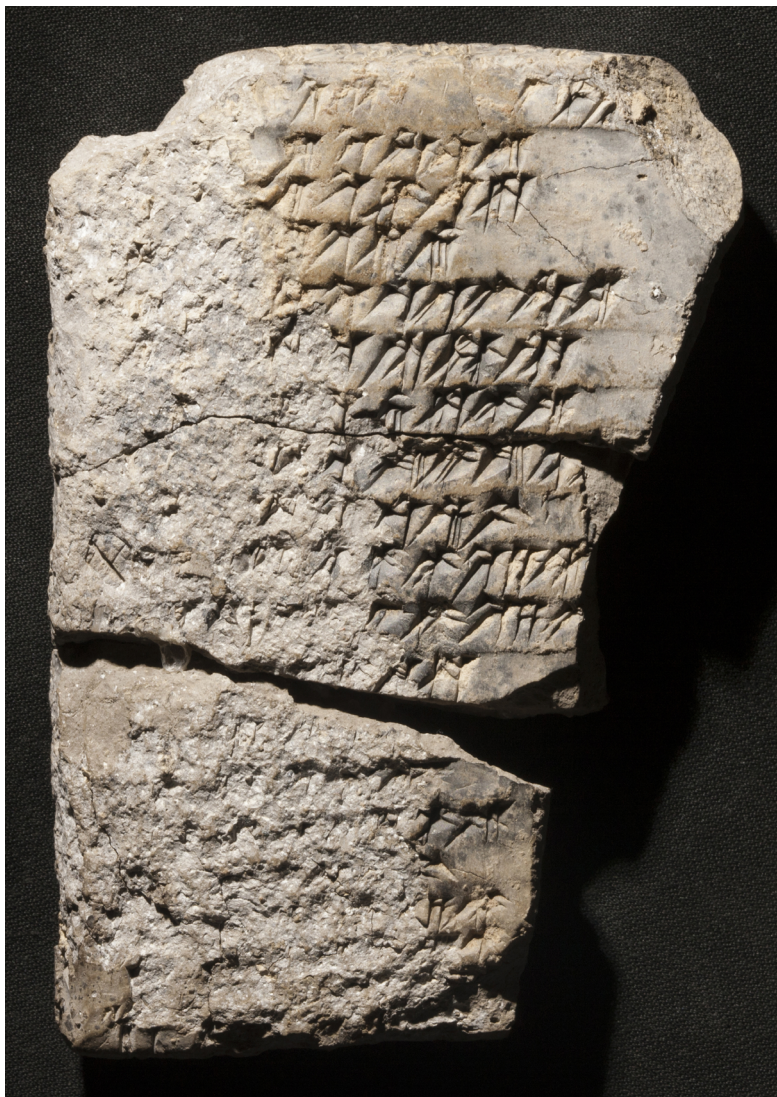
Fort. 1362-101 Obverse



Fort. 1362-101 Lower Edge

*Fig. 6a.* No. 4 (Fort. 1362-101) Reverse, Upper Edge.





Fort. 1362-101 Reverse



Fort. 1362-101 Upper Edge

*Fig. 6b.* No. 4 (Fort. 1362-101) Reverse, Upper Edge.



#### 4. Fort. 1362-101 (Fig. 6a-b)

##### Obverse

- (01) 1 ME 50+5  $\text{Giš}^{\text{BAR}}\text{MEŠ}^{\text{Giš}}$  [ ]  
 (02) 3 KI+MIN  $\text{Giš}^{\text{r}}\text{du}^{\text{r}}\text{[ud}^{\text{r}}\text{-da}^{\text{r}}$  ]  
 (03) 10+5 KI+MIN  $\text{Giš}^{\text{r}}\text{ka}_4^{\text{r}}\text{[ru}^{\text{r}}\text{-kur}$  ]  
 (04)  $\text{r}^{\text{x}}\text{r}^{\text{r}}\text{+2}$  KI+MIN  $\text{Giš}^{\text{r}}\text{r}^{\text{x}}\text{r}^{\text{r}}\text{[}$  ]  
 (05) [ ] KI+MIN  $\text{r}^{\text{Giš}}\text{r}^{\text{r}}\text{[}$  ]  
 (06) [ ]+7 [KI+MIN ]  
 (07) 5 KI+MIN  $\text{r}^{\text{Giš}}\text{r}^{\text{r}}\text{z}^{\text{r}}\text{r}^{\text{r}}\text{-in-r}^{\text{z}}\text{r}^{\text{r}}\text{[ti-iš}$  ]  
 (08) [ ] 4 KI+MIN  $\text{Giš}^{\text{r}}\text{u}^{\text{r}}\text{-ma-r}^{\text{r}}\text{ru}^{\text{r}}\text{[ud-da}$  ]  
 (09) [ ] 1½ KI+MIN  $\text{Giš}^{\text{r}}\text{sa-r}^{\text{r}}\text{r}^{\text{x}}\text{r}^{\text{r}}\text{[}$  ]  
 (10) [PAP<sup>r</sup> hi<sup>r</sup>?]  $\text{r}^{\text{r}}\text{2 ME } 20^{\text{r}}\text{r}^{\text{r}}\text{½}$   $\text{Giš}^{\text{BAR}}\text{MEŠ}^{\text{HAL}}\text{gi-da-r}^{\text{r}}\text{ad}^{\text{r}}\text{[da-na}$  ]  
 (11)  $\text{r}^{\text{r}}\text{1 ME}^{\text{r}}\text{50+1}$  KI+MIN  $\text{Giš}^{\text{r}}\text{ha-su-ur}^{\text{r}}$   
 (12) 50+2 KI+MIN  $\text{Giš}^{\text{r}}\text{du-ud-da}$   
 (13) 10+2<sup>r</sup> KI+MIN  $\text{Giš}^{\text{r}}\text{ka}_4\text{-na-ak-du-iš}$   
 (14)  $\text{r}^{\text{x}}\text{r}^{\text{r}}$  KI+MIN  $\text{Giš}^{\text{r}}\text{ir-taš-ti-iš}$   
 (15) 2½ KI+MIN  $\text{Giš}^{\text{r}}\text{kaz}_0\text{-la}$   
 (16) [ ] 4 KI+MIN  $\text{Giš}^{\text{r}}\text{ka}_4\text{-ru-kur}$   
 (17) [ ]  $\text{r}^{\text{r}}\text{5}^{\text{r}}$  KI+MIN  $\text{Giš}^{\text{r}}\text{te}^{\text{r}}\text{-el-te}$

##### Lower Edge

- (18) [ ] KI+MIN  $\text{r}^{\text{Giš}}\text{ku-ti}^{\text{r}}\text{-iz-za-r}^{\text{r}}\text{iš}^{\text{r}}$   
 (19) [ ] KI+MIN  $\text{Giš}^{\text{r}}\text{u}^{\text{r}}\text{-um-ma-ru-da}$   
 (20) [ ] KI+MIN  $\text{Giš}^{\text{r}}\text{za-a-ud-da-um } 2^{\text{r}}\text{r}^{\text{x}}\text{r}^{\text{r}}\text{[}$  ]

##### Reverse

- (21) [PAP hi<sup>r</sup>?]  $\text{r}^{\text{r}}\text{r}^{\text{x}}\text{r}^{\text{r}}$   $\text{Giš}^{\text{BAR}}\text{MEŠ}^{\text{HAL}}\text{ha}^{\text{r}}\text{r}^{\text{r}}\text{r}^{\text{x}}\text{r}^{\text{r}}\text{[}$  ]  
 (22) [ ] KI+MIN  $\text{Giš}^{\text{r}}\text{du-ud-da}$   
 (23) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}^{\text{r}}$   $\text{Giš}^{\text{r}}\text{ha-su-ur}$  [ ]  
 (24) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}^{\text{r}}$   $\text{Giš}^{\text{r}}\text{sa-r}$  [ ]  
 (25) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}^{\text{r}}$   $\text{Giš}^{\text{r}}\text{ka}_4\text{-na-ak-du-iš}$  [ ]  
 (26) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}$   $\text{Giš}^{\text{r}}\text{te-el-te}$  [ ]  
 (27) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}$   $\text{Giš}^{\text{r}}\text{ir-taš-ti-iš}$  [ ]  
 (28) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}$   $\text{Giš}^{\text{r}}\text{z}^{\text{r}}\text{-in-z}^{\text{r}}\text{-r}^{\text{r}}\text{ti}^{\text{r}}\text{-iš}^{\text{r}}\text{r}^{\text{r}}\text{[}$  ]  
 (29) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}$   $\text{Giš}^{\text{r}}\text{ka}_4\text{-ru-kur}$  [ ]  
 (30) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}$   $\text{Giš}^{\text{r}}\text{ku-ti-iz-za-r}^{\text{r}}\text{iš}^{\text{r}}\text{r}^{\text{r}}\text{[}$  ]  
 (31) [PAP hi x]  $\text{r}^{\text{r}}\text{ME } 40+9$   $\text{Giš}^{\text{BAR}}\text{r}^{\text{r}}\text{[MEŠ}^{\text{HAL}}\text{mi-iz-za-r}^{\text{r}}\text{x}^{\text{r}}\text{r}^{\text{r}}\text{[}$  ]  
 (32) [ ]  $\text{Giš}^{\text{r}}\text{r}^{\text{r}}\text{ha-su-ur}^{\text{r}}$   
 (33) [ ]  $\text{r}^{\text{r}}\text{KI+MIN}$   $\text{Giš}^{\text{r}}\text{x x x}^{\text{r}}$



- (34) [ ]  $\Gamma_{KI+MIN}^{Gi\check{s}} x x^1$   
 (35) [ ]  $\Gamma_{KI+MIN}^{Gi\check{s}} ir-ta\check{s}^1-ti-i\check{s}$   
 (36) [ ]  $\Gamma_{KI+MIN}^{Gi\check{s}} ka_4^1-[ru]-kur$   
 (37) [ ]  $KI+MIN^{Gi\check{s}} ku-ti-iz]-za-i\check{s}$   
 (38)  $\Gamma_{x^1}$  [ ]  $\Gamma_{x x^1}$   
 (39) PAP [hi ]  $\Gamma_{x x x x^1}$   
 (40)  $70^2+1 \Gamma_{x^1}$  [ ]

#### Upper edge

- (41)  $60+2 \Gamma_{KI+MIN}^1 \Gamma_{Gi\check{s}}^{ir^2}]-[ta\check{s}-ti-i\check{s}] \Gamma_{x^{Gi\check{s}^2}} [ ]$   
 (42)  $20+1 \Gamma_{KI+MIN}^1 \Gamma_{Gi\check{s}}^{kazo-la^1} 3 \Gamma_{x^1} [ ]$   
 (43)  $4 \Gamma_{KI+MIN}^{1^1} \Gamma_{Gi\check{s}}^{te-el-te} 5 \Gamma_{x^1} [ ]$   
 (44) [PAP<sup>2</sup>] hi<sup>2</sup> 1 ME  $70^2+6^2$  HAL<sup>1</sup> pu-uk- $\Gamma_{\check{s}a^1}]-[na ]$

#### Obverse

- (45)  $\Gamma_{40+x}^{Gi\check{s}^1} BAR^{ME\check{s}} \langle^{Gi\check{s}} \rangle ha-su-ur \Gamma_{x x^{Gi\check{s}^1}} ka_4^1-ru-[kur ] \Gamma_{x^1}^{Gi\check{s}} MA^{ME\check{s} HAL^1} x x^1 [ ]$

#### Translation

- (01-09) 1,550 l. [apples<sup>2</sup>], 30 l. mulberries<sup>2</sup>, 150 l. *karukur*<sup>2</sup>,  $x+20$  l. [x], [x]+7 l. [x], 50 l. oleaster, [x]+ 40 l. pears, 15 l. *sar*: <sup>(10)</sup> [this (is) the total,] 2,205<sup>2</sup> l. (of fruit) [of] *Gidadda*.  
 (11-20) 1,510 l. apples, 520 l. mulberries, 120<sup>2</sup> l. *kanakduš*, [x] l. *irtaštiš*, 25 l. *kazla*, [x]+40 l. *karukur* 'x] l. *telte*, [x] l. plums, [x] l. pears, [x] l. olives, 25 [x]: <sup>(Reverse 21)</sup> [this (is) the total, x] l. (of fruit) [of] *Ha[turradda]*.  
 (22-30) [x.] l. mulberries, [x] l. apples, [x] l. *sar*, [x. l.] *kannakduš*, [x] l. *telte*, [x] l. *irtaštiš*, [x] l. oleaster, [x] l. *karukur*, [x] l. plums: <sup>(31)</sup> [this (is) the total, x]+1,490<sup>2</sup> l. (of fruit) of *Mizza*-[x].  
 (32-38) [x l.] apples, [x] l. x, [x] l. x, [x] l. *irtaštiš*, [x] l. *karukur*, [x. l.] plums, x [l. x] <sup>(39)</sup> [this (is)] the total, [ x (fruit) of] PN.  
 (40-43) 710<sup>2</sup> [l. x], 620 l.  $\Gamma_{irtaštiš^2}$ , [x (l.)] [x], 210 l. *kazla*, 30 (l.) [x], 40 l. *telte* 50 (l.) [x]: <sup>(44)</sup> this<sup>2</sup> (is) [the total<sup>2</sup>] 1,760<sup>2</sup> (l.) [of] *Pukša*.  
 (Obverse 45) 400+ l. apples, x l. *karukur*, [x] l. figs<sup>2</sup>, [of<sup>2</sup>] PN.

#### Comments

6.7L x 9.7W x 1.9Th

No preserved seal impressions.



- <sup>(07, 28)</sup> *zinzitiš* (written *ši-in-zí-ti-iš* No. 15:08', [*ši*]-in-*ši-ut-ti-iš* PF-NN 1074:10f. (W), and perhaps abbreviated as <sup>GIŠ</sup><sub>ŠI</sub><sup>MEŠ</sup> No. 13:19. For identification as oleaster (Russian olive, etc.), Modern Persian *šenğed*, (rather than “jujube,” Tavernier 2007, p. 460 [4.4.20.15]), see Henkelman 2021, p. 161.
- <sup>(09, 24)</sup> *sar*: also in No. 6:09; dried? *s.* (*sar zitika*) Fort. 1978-102:10, 20, 23, 34, Fort. 2164-001:08, 16 (W, tabular fruit accounts). Perhaps, as the entry in No. 6 suggests, a kind of fig?
- <sup>(10, 21, 44)</sup> On collocations of *Gidadda*, *Haturradda*, and *Pukša* in the “tree texts” PFa 33 and Fort. 0119-101, and in tabular fruit accounts, see Henkelman & Stolper 2021, p.190-192, comments to PFa 33:12, 23, 55, 64, 86, and above, p. 12-13.
- <sup>(12)</sup> Erasure follows *du-ud-da*.
- <sup>(13, 25)</sup> *kannakduš*: probably an aromatic, Akkadian *kanaktu*, rather than a fruit (Henkelman & Stolper 2021, p. 190, comment on Fort. 0119-101:07).
- <sup>(20)</sup> *zayadam*: also in No. 7:10; see Henkelman & Stolper 2021, p. 183 comment on PFa 33:41. Henkelman 2021, p. 141, 162 reviews palynological evidence on Achaemenid olive cultivation in Fārs and surveys occurrences of the word.
- <sup>(45)</sup> Written perpendicular to the main cuneiform text, at the left edge, and possibly continuing with additional, lost, lines on the damaged left edge.

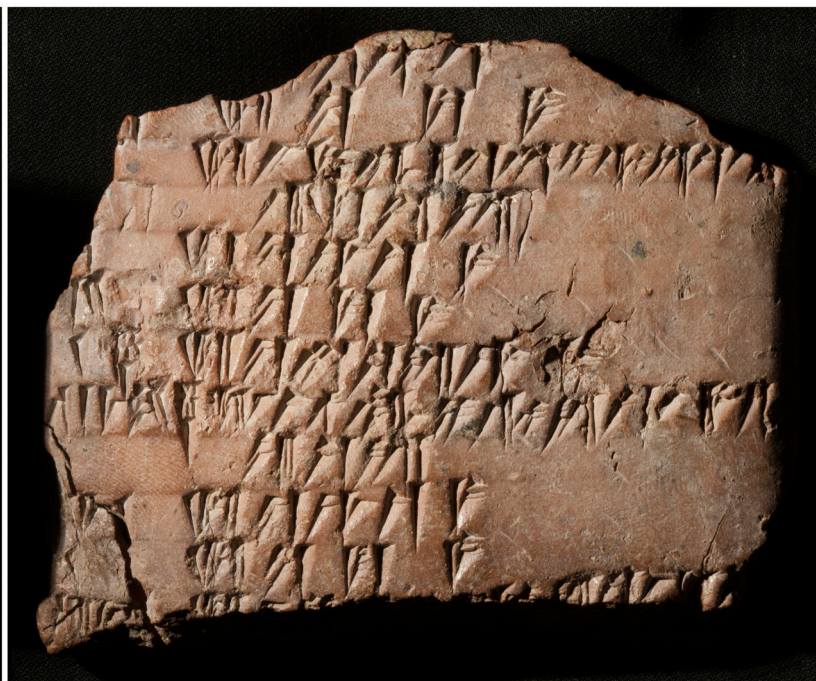




Fort. 1881-101 Obverse?



Fort. 1881-101  
Left Edge



Fort. 1881-101 Reverse?



*Fig. 7.* No. 5 (Fort. 1881-101) Obverse<sup>2</sup>, Reverse<sup>2</sup>, Left Edge.





## 5. Fort. 1881-101 (Fig. 7)

Obverse<sup>2</sup>

(01') PAP 50+X	KI+MIN HAL	X-X-X <sup>1</sup> [X]	「ug-gi da-ka <sub>4</sub> <sup>1</sup> [	]
(02') 60	KI+MIN	Giš	pi-ut	MEŠ
(03') 50+5	「KI+MIN <sup>1</sup>	Giš	MA	MEŠ
(04') 「PAP 1 ME <sup>1</sup> 10+5	KI+MIN HAL	ha-tur-ra-ud-da	ug-gi da-「ka <sub>4</sub> <sup>1</sup>	
(05') 「40 <sup>1</sup> +「5	KI+MIN	Giš	pi-ut	MEŠ
(06') 70	KI+MIN	Giš	MA	MEŠ
(07') 「PAP <sup>1</sup> 1 ME 10+5	KI+MIN HAL	i-hu-ut-ra	ug-gi da-ka <sub>4</sub>	
(08') 「PAP <sup>2</sup> 「hi <sup>2</sup>		AŠ	pír-nu-ku-iš-ma	ha da-ka <sub>4</sub>
(09') [	KI+MIN	Giš	pi-ut	MEŠ
(10') [	KI+MIN	Giš	ba-a-ia	MEŠ
(11') [	「KI+MIN	Giš <sup>1</sup>	du-ud-da-um	MEŠ
(12') [		「Giš	hu <sup>1</sup> -ma-ru-ud-「da	MEŠ <sup>1</sup>
(13') [		Giš	「MA	MEŠ <sup>1</sup> [

Reverse<sup>2</sup>

(01'') [		「Giš	pi-ut	MEŠ <sup>1</sup>	[	]
(02'') [	「X	KI+MIN <sup>1</sup>	Giš	MA	MEŠ	
(03'') [		KI+MIN HAL	mi-ra-za-an-na	ug-gi da-ka <sub>4</sub>	「AŠ	pír <sup>2</sup> <sup>1</sup> -
(04'') [			ri-ma-iš-da			
(05'') [	「X <sup>1</sup>	KI+MIN	Giš	pi-ut	MEŠ	
(06'') [	80	KI+MIN	Giš	MA	MEŠ	
(07'') 10+7		KI+MIN	Giš	du-ud-da-um	MEŠ	
(08'') PAP 1 ME 50+7	KI+MIN HAL	man-pár-ra	ug-gi da-ka <sub>4</sub>	AŠ	ha-iz-	
(09'')			zí-ud-da			
(10'') [	「X ME <sup>1</sup> 10	KI+MIN	Giš	pi-ut	MEŠ	
(11'') [		KI+MIN	Giš	MA	MEŠ	
(12'') PAP 3 ME [		「KI+MIN HAL	X <sup>1</sup> [-	ug]-「gi <sup>1</sup> da-ka <sub>4</sub>	HAL <sup>2</sup> 「X <sup>1</sup>	

Left Edge

(01''') [		Giš	me-ik <sup>1</sup> -da-um	HAL	[	]
(02''') [			「bar-ri <sup>1</sup> -ba-「ráš <sup>1</sup> -še	AŠ	「be-ul <sup>1</sup> [	]

## Translation

(Obverse? 01') Total 500+ l. (of fruit) assigned to<sup>2</sup> PN.

(02'-03') 600 l. dates<sup>2</sup>, 550 l. figs<sup>2</sup>; (04') total 1,150 l. (of fruit) assigned to<sup>2</sup> Haturradda.



(05'-06') 450 l. dates<sup>?</sup>, 700 l. figs<sup>?</sup>: (07') total 1,150 l. (of fruit) assigned to<sup>?</sup> Ihutra.

(08') This<sup>?</sup> [(is) the total] deposited at Pirnukuš.

(09'-13') [x] l. dates<sup>?</sup>, [x] l. quince, [x] l. mulberries, [x l.] pears, [x l.] figs<sup>?</sup> ... .

(Reverse? 01''-02'') [x l.] dates<sup>?</sup>, [x] l. figs<sup>?</sup>: (03'') [total x] l. (of fruit) assigned to<sup>?</sup> Mirazanna, (at) Pirrimašda<sup>?</sup>.

(05''-07'') [x] l. dates<sup>?</sup>, [x]+800 l. figs<sup>?</sup>, 170 l. mulberries: (08'') total 1,570 l. (of fruit), assigned to<sup>?</sup> Manparra (at) Hazidda.

(10''-11'') [x]+1,100 l. dates<sup>?</sup>, [x] l. figs<sup>?</sup>: (12'') total 3,000+[x] l. assigned to<sup>?</sup> PN ... .

(01'''-02''') [ ...x l.] fruit, [PN, overseeing<sup>?</sup>], (at) its *baribara*-building (at) [GN], year [x].

## Comments

7.2L x (9.0W) x 1.9Th

No preserved seal impressions.

(02' and passim) Space between last sign of word for fruit and <sup>MEŠ</sup>, so that entries are aligned both on <sup>GIŠ</sup> and (except for longest words) on <sup>MEŠ</sup>. Cf. comment on No. 3:13' etc.

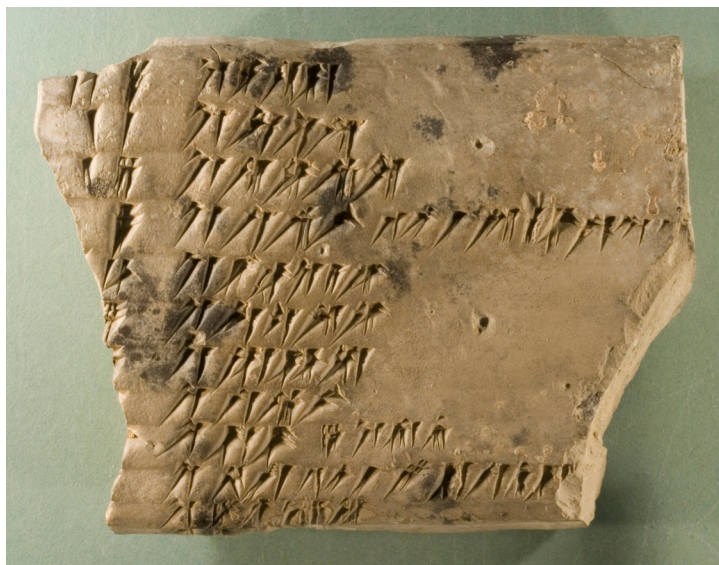
(04') Haturradda: cf. No. 3:04', 11'; Fort. 2151-103 (C1, *tarmu*, *balum-ma* at Harakduš), and Henkelman & Stolper 2021, p. 190, comment on Fort. 0119-101:12, and above, p. 12-13.

(08') Otherwise Pirnakuš, Parnakuš; cf. especially PF 2018:34 (C1/W; fruit, Hatardada and Kapinda, at Pirnaku).

(03'') Cf. Marazana, No. 3:15''.

(08'') Cf. PF 2020, PF-NN 1288, PF-NN 1600 (all C1, fruit, Manparra at Hazidda).

(02''') Cf. *tarmu ... sunkina baribaram* GN-na PF 0161 (C1, year 27); No. 14:08. On *baribara(š/m)*, “enclosure, storage complex” or the like, see Tavernier 2007, p. 440 [4.4.8.18]; Garrison & Henkelman 2020, p. 221 with n. 114, 256.



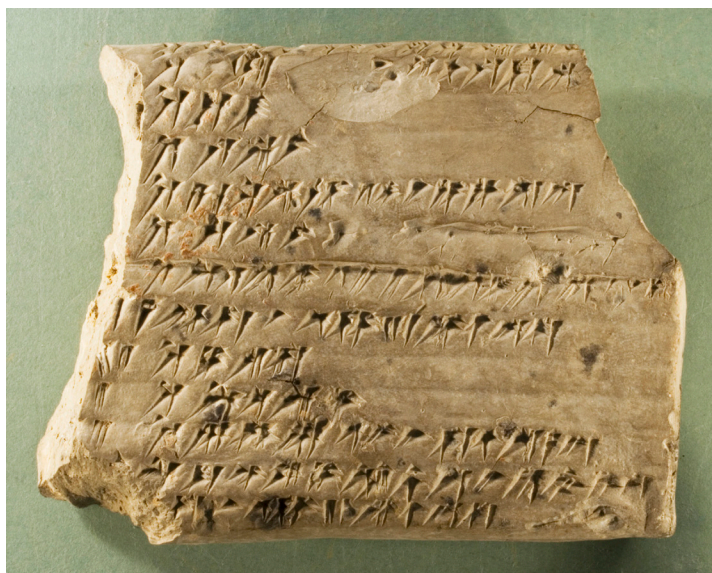
**Fort. 1951-101 Obverse**



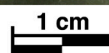
**Fort.  
1951-101  
Right Edge**



**Fort. 1951-101 Lower Edge**



**Fort. 1951-101 Reverse**



**Fig. 8.** No. 6 (Fort. 1951-101) Obverse, Right Edge, Lower Edge, Reverse.



## 6. Fort. 1951-101 (Fig. 8)

### Obverse

- (01) 𐎠 1 ME<sup>1</sup> 8 𐎡𐎴 ha-su-ur  
 (02) 10+1 𐎡𐎴 du-ud-da  
 (03) [ ] 20+6 𐎡𐎴 ú-um-ru-da  
 (04) [ ] 8 𐎡𐎴 ka<sub>4</sub>-ru-kur PAP hi HAL da-a-tuk-ka<sub>4</sub>-na AŠ ba-ra-iš-𐎠 ba ha<sup>1</sup> da-ka<sub>4</sub>  
 (05) [ ] 𐎠 x<sup>1</sup>+1½ 𐎡𐎴 ku-ti-iz-za-um  
 (06) [ ] 8 𐎡𐎴 du-ud-da-um  
 (07) [ ] 𐎠 x<sup>1</sup> 𐎡𐎴 te-el-te  
 (08) [ ] 𐎠 x<sup>1</sup> 𐎡𐎴 ka<sub>4</sub>-ru-kur  
 (09) [ ] ½ 𐎡𐎴 MA<sup>MEŠ</sup> 7 𐎡𐎴 sa-ir  
 (10) [ ] 𐎡𐎴 kaz<sub>0</sub>-la PAP hi HAL tak-ma-ba-ir-ma-[na ]  
 (11) [ ] 𐎡𐎴 ku-ti-iz-za-um

### Lower Edge

- (12) [ ] 𐎡𐎴 ha-𐎠 su-ur<sup>1</sup>  
 (13) [ ] 𐎡𐎴 ka<sub>4</sub>-ru-kur PAP hi HAL ba-pi-ru-iš-𐎠 na<sup>1</sup> [ ]

### Reverse

- (14) [ ] 𐎡𐎴 KI+MIN [PAP hi] HAL ú-nu-ka<sub>4</sub>-ma-na [ ]  
 (15) [ ] 𐎡𐎴 MA<sup>MEŠ</sup> [ ]  
 (16) [ ] 𐎡𐎴 ka<sub>4</sub>-ru-kur [ ]  
 (17) [ ] 𐎡𐎴 za-a-ud-da-um PAP hi HAL tur-pi-iš-na [ ]  
 (18) [ ] 𐎡𐎴 ka<sub>4</sub>-ru-kur [ ]  
 (19) [ ] 𐎡𐎴 du-ud-da-um PAP hi HAL x-x<sup>1</sup>-ku-𐎠 x<sup>1</sup>-na AŠ nu<sup>?</sup>-x-[ ]  
 (20) [ ] 𐎠 x<sup>1</sup> šá-ra-ma AŠ be-ul 20+1-um-me-na-ma  
 (21) [ ] 𐎠 30<sup>1</sup>+2 𐎡𐎴 ha-su-ur  
 (22) [ ] +3 𐎡𐎴 du-ud-da-um  
 (23) [ ] +3 𐎡𐎴 te-el-te PAP hi HAL ma-nu-iš-šá-na  
 (24) [ ] AŠ 𐎠 man<sup>1</sup>-du-ma-ti-iš ha zik-kak-ka<sub>4</sub> HAL ap<sup>1</sup>-pu<sup>1</sup>-uk-ka<sub>4</sub>  
 (25) [ ] šá-ra]-ma AŠ be-ul 20+1-um-me-na-ma

### Translation

- (01-04) 1,080 (l.) apples, 110 (l.) mulberries, 260 (l.) pears, 80 (l.) *karukur*; this (is) the total (of fruit) of Datukka, deposited at Barašba.  
 (05-10) [x]+15 (l.) plums, [x]+80 (l.) mulberries, [x] *telte*, [x] *karukur*; [x]+5 (l.) figs<sup>?</sup>, 70 (l.) *sar*, [x] *kazla*: this (is) the total (of fruit) [of] Takmabarma [...].  
 (11-13) [x] plums, [x] apples, [x] *karukur*: this (is) the total (of fruit) of Bapiruš [...].



- (Reverse 14) [x] ditto (= *karukur*) [this (is) the total (of fruit)] of Unukama [...].
- (15-17) [x] figs<sup>?</sup>, [x] *karukur*, [x] olives: this (is) the total (of fruit) of Turpiš.
- (18-19) [x] *karukur*, [x] mulberries: <sup>(19-20)</sup> this (is) the total (of fruit) of PN (at) GN, [PN<sub>2</sub>] overseeing, in the 21st year.
- (21-23) [x]+320 l. apples, [x]+30 l. mulberries, [x]+30 l. *telte*: <sup>(23-25)</sup> this (is) the total (of fruit) of Manušša, deposited at Mandumatiš, Appukka overseeing, in the 21st year.

## Comments

8.9L x 6.8W x 1.8Th

No seal impressions.

- (04) ba-ra-iš-<sup>1</sup>ba ha<sup>1</sup> da-ka<sub>4</sub> on right edge. On the location of Barašba near Persepolis, see Tuplin 1996, p. 179-180.
- (13) Cf. PF-NN 2141 and PF-NN 2445, both C1, recording plums and mulberries, respectively, assigned to<sup>?</sup> Bapiruš to be kept at a “paradise” at Nupištaš, Rašda overseeing, 22nd year, and, collocated with Turpiš and Datukka, No. 7:06.
- (17) Turpiš: cf. PF 0146, PF-NN 0817, PF-NN 0989, all C1, recording pears, figs<sup>?</sup>, and apples, respectively, assigned to<sup>?</sup> Turpiš to be kept at a “paradise” at Nupištaš, Rašda overseeing, 24th year; collocated with Bapiruš and Datukka, No. 7:11. PF 1981, a record of fruit and grain products at a storehouse in Tukraš (Tikraš), “of” Turpiš (15th year) and PF 1971:05f., recording a delivery of grain received at Tukraš by Turpiš (19th year) may refer to the same person. See Henkelman & Stolper 2021, p. 183, comment on PFa 33:41.
- (18-19) A continuation of line 18 is erased and all of line 19 is written over an erasure.
- (24) Appukka šarama at Mandumatiš: No. 26:21', 41', 45' (W).





**Fort. 1920B-101 Obverse**



**Fort. 1920B-101 Reverse**



**Fort. 1920B-101  
Right Edge**



**Fort. 1920B-101 Upper Edge**

*Fig. 9. No. 7 (Fort. 1920B-101) Obverse, Reverse, Right Edge, Upper Edge.*



## 7. Fort. 1920B-101 (Fig. 9)

### Obverse

- (01) 10+4  $\text{Giš}^{\text{BAR}} \text{MEŠ}^{\text{r}} \text{Giš}^{\text{r}} \text{ha-su-ur}$   
 (02) 6  $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{ku-ti-iz-za-um}$   
 (03) 7  $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{du-ud-da}$   
 (04) 2  $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{ka}_4\text{-ru-kur}$   
 (05) 3  $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{te-el-te}$   
 (06)  $\text{r}^{\text{PAP}} \text{hi}^{\text{r}} 30+2$   $\text{KI}+\text{MIN}^{\text{HAL}} \text{ba-r}^{\text{r}} \text{ip}^{\text{r}} \text{-ru-iš-na}$   
 (07) [ ]  $\text{r}^{\text{r}} 7$   $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{MA}^{\text{MEŠ}^{\text{r}}}$   
 (08) [ ]  $\text{r}^{\text{r}} \text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{ka}_4\text{-ru-kur}$   
 (09) [ ]  $\text{r}^{\text{r}} \text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{ha-su-ur}$   
 (10) [ ]  $\text{r}^{\text{r}} \text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{za-a-ud-da}$   
 (11)  $\text{r}^{\text{PAP}} \text{hi}$  [ ]  $\text{HAL}^{\text{r}} \text{tur-r}^{\text{r}} \text{pi}^{\text{r}} \text{-[iš-na]}$

### Reverse

- (01') [ ]  $\text{r}^{\text{r}} \text{x x}^{\text{r}} [ ]$   
 (02') [ ]  $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{ú-um-ma-ru-r}^{\text{r}} \text{da}^{\text{r}}$   
 (03')  $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{ha}^{\text{r}} \text{-su-ur}$   
 (04') 10+ $\text{r}^{\text{r}} 5$   $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{du-ud-da}$   
 (05')  $[x]+8$   $\text{KI}+\text{MIN}^{\text{r}} \text{Giš}^{\text{r}} \text{ka}_4\text{-ru-kur}$   
 (06')  $\text{PAP hi}^{\text{r}} 1 \text{ ME } 60+2$   $\text{KI}+\text{MIN}^{\text{HAL}} \text{da-a-tuk-ka}_4\text{-na}^{\text{Aš}^{\text{r}}}$  [ ]  
 (07')  $\text{Aš}^{\text{r}} \text{ba-ra-iš-ba}^{\text{HAL}} \text{kar-be-iš šá-r}^{\text{r}} \text{ra}^{\text{r}} \text{-ma}$   
 (08') (blank)  
 (09')  $\text{PAP hi}^{\text{r}} \text{r}^{\text{r}} 3^{\text{r}} \text{ ME } 50$   $\text{Giš}^{\text{r}} \text{BAR}^{\text{MEŠ}^{\text{r}} \text{Giš}^{\text{r}}} \text{mi-r}^{\text{r}} \text{ik-da}^{\text{r}} \text{-um}$

### Upper Edge

- (10')  $\text{HAL}^{\text{r}} \text{ra}^{\text{r}} \text{-da-ud}^{\text{r}} \text{-da šá-ra-ma}^{\text{Aš}^{\text{r}}} \text{be-ul}$   
 (11') 20+2-um-me-na-ma ha  $\text{r}^{\text{r}} \text{zik-kak}^{\text{r}} \text{-ka}_4$

## Translation

(01-05) 140 l. apples, 60 l. plums, 70 l. mulberries, 20 l. *karukur*, 30 l. *telte*; <sup>(06)</sup> this (is) the total, 320 l. (of fruit) of Bap(i)ruš.

(07-10)  $[x]+70$  l. figs?,  $[x]$  l. *karukur*,  $[x]$  l. apples,  $[x]$  l. olives: <sup>(11)</sup> [this (is) the total,  $x$  l. (of fruit) of] Turpiš?

(Reverse 02'-05')  $[x]$  l. pears,  $[x]$  l. apples, 150 l. mulberries,  $[x]+80$  l. *karukur*: <sup>(06')</sup> this (is) the total, 1,620 l. (of fruit) of Datukka at [the “paradise”?] at Barašba, Karbeš overseeing.



(09<sup>1</sup>-11<sup>1</sup>) This (is) the (grand) total, 3<sup>2</sup>,500 l. of fruit, deposited there, Radadda<sup>2</sup> overseeing, 22nd year.

### Comments

7.2L x (6.4)W x 2.2Th

No seal impressions.

(06) Bapiruš: see comment on No. 6:13.

(11) Turpiš: see comment on No. 6:17.

(06<sup>1</sup>-07<sup>1</sup>) Cf. PF 0145 and PF-NN 1439, C1, recording figs<sup>2</sup> and pears, respectively, assigned to<sup>2</sup> Datukka (*Datukka hiše uggi zikkaka*), to be kept (*nušgimak*) at Barašba, in a *par-tetaš*, both dated in year 22; and No. 8:06-07 and No. 6:01-04.

(10<sup>1</sup>) Radadda (if read correctly): otherwise unattested. Perhaps to be emended as ʾra-iš<sup>1</sup>-«ud»-da, or ʾra-iš<sup>1</sup>-<sup>ud</sup>da, on the suggestion of C1 texts mentioning Bapiruš and Turpiš.





Fort. 1323-102 Obverse



Fort. 1323-102  
Right Edge



Fort. 1323-102 Reverse



Fort. 1323-102 Upper Edge

**Fig. 10.** No. 8 (Fort. 1323-102) Obverse, Right Edge, Reverse, Upper Edge.



## 8. Fort. 1323-102 (Fig. 10)

### Obverse

- (01) [                      GiŠ ] ha-su<sup>1</sup>-ur  
 (02) [                      ] GiŠ du-ud-da-um  
 (03) [            x ]+2      GiŠ hu-ma-ru-ud-da  
 (04) [                      ] GiŠ MA<sup>MEŠ</sup>  
 (05) [            x ]+6      GiŠ ka<sub>4</sub>-ru-kur  
 (06) [PAP] 1<sup>1</sup> ME 70 GiŠ mi-ik-da-um<sup>HAL</sup> da-at-tuk-ka<sub>4</sub>  
 (07) [ug]-gi zik-ka<sub>4</sub> AŠ pá-r-te-taš AŠ ba-ra-áš-<sup>1</sup>ba<sup>1</sup>  
 (08) [                      ] GiŠ ka<sub>4</sub>-ru-kur<sup>HAL</sup> har-re-e-na KI+MIN [x] 1<sup>1</sup> x x<sup>1</sup>  
 (09) [                      ] GiŠ KI+MIN<sup>HAL</sup> at-ti-ia KI+MIN      1<sup>1</sup>AŠ [                      ]  
 (10) [                      AŠ ] ba<sup>1</sup>-lu-um-ma  
 (11) [                      ]  
 (12) [                      ] GiŠ ka<sub>4</sub>-ru-kur  
 (13) [                      ] 1<sup>1</sup>GiŠ MA<sup>MEŠ</sup>  
 (14) [                      GiŠ ] du-ud-da<sup>1</sup>-[um ]

### Reverse

- (01') [                      ] 1<sup>1</sup>x [                      ]  
 (02') [ x ] 1<sup>1</sup>ME 50+1<sup>1</sup>2 GiŠ x [                      ]  
 (03') 1<sup>1</sup>da<sup>1</sup>-na šá-ra-man-na AN<sup>1</sup>be-ul 20-um-me<sup>1</sup>-  
 (04') man-na

### Upper Edge

- (05') 1<sup>1</sup>AŠ tup-pi hi<sup>HAL</sup> x x]-1<sup>1</sup>x-da<sup>1</sup>-na 1<sup>1</sup>tu-ba<sup>1</sup>-ka<sub>4</sub>

### Translation

(01-05) [x] apples, [x] mulberries, [x]+20 (l.) pears, [x] figs<sup>?</sup>, [x]+60 (l.) karukur: <sup>(06-07)</sup> [Total:] 1,700 (l.) of fruit, assigned to<sup>?</sup> Datukka, (at) the “paradise” (at) Barašba.

(08) [x] karukur, ditto (= assigned to<sup>?</sup>) Harrena [at GN].

(09-10) [x] ditto (= karukur) ditto (= assigned to<sup>?</sup>) Attiya (at) [GN], in the storage complex.

(12-14) [x] karukur, [x] figs<sup>?</sup>, [x] mulberries ... .

(Reverse 02'-04') [Total x]+1,520 (l.) of [fruit], PN overseeing, 20th year.

(Upper Edge 05') [This tablet] concerns PN.





## Comments

8.0L x (7.5)W x 2.0Th

No seal impressions.

(06-07) See comment on No. 7:06'-07'.

(07) End: -'ba' on right edge.

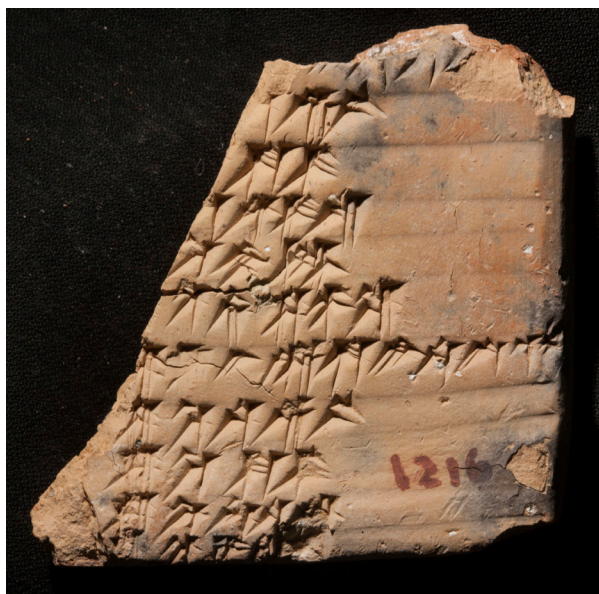
(08) ' x x ' on right edge.

(08, 09) KI+MIN = *uggi zikka*.

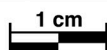
(09) If all entries in this text refer to the same region (as parallels imply) under a single overseer (as the conclusion and note on the upper edge imply), then this Attiya is not the same Atti(ya) named in C1 documents (PF 0201, PF-NN 1171, PF-NN 1475) and C2 documents (PF 0258, PF-NN 0834) as a supplier (*kurman*) at Lidu(ma), to the northwest, but he may be the Attiya named as a supplier (*kurman*) of dates<sup>?</sup> and figs<sup>?</sup> in No. 21:05'.

(04') Two areas of erasures follow, made with deep vertical strokes and indented. They are separated by a ruled line and initial characters of an erased unindented line: man<sup>?</sup> ik<sup>?</sup> 'x'.

(03', 05') Or: -iš-na; traces of preceding signs in 05' do not support, e.g., [<sup>HAL</sup>maz<sub>0</sub>]-'da-ia-iš<sup>1</sup>-na or [<sup>HAL</sup>] 'kar-be-iš<sup>1</sup>-na.



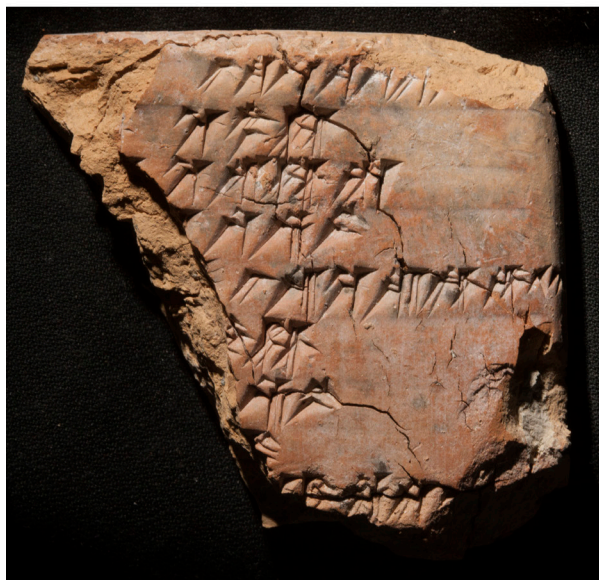
Fort. 1216-103 Obverse



Fort. 1216-103  
Right Edge



Fort. 1216-103 Lower Edge



Fort. 1216-103 Reverse

*Fig. 11.* No. 9 (Fort. 1216-103) Obverse, Right Edge, Lower Edge, Reverse.



## 9. Fort. 1216-103 (Fig. 11)

### Obverse

- (01') [ ]  $\text{r}^{\text{X}} \text{X} \text{X}^{\text{I}}$   
 (02') [ ]  $\text{GIŠ}^{\text{I}} \text{ka}_4^{\text{I}} \text{-ru-kur}$   
 (03') [ ]  $\text{GIŠ}^{\text{I}} \text{MA}^{\text{MEŠ}}$   
 (04') [ ]  $\text{r}^{\text{GIŠ}^{\text{I}}} \text{da-ku-iš}$   
 (05') [ ]  $\text{GIŠ}^{\text{I}} \text{pu-el}$   
 (06') [ ]  $\text{GIŠ}^{\text{I}} \text{ir-taš-ti-iš}$   
 (07') [ ]  $\text{r}^{\text{KI+MIN}^{\text{I}} \text{HAL}} \text{kar-ma-ak-ka}_4\text{-na PAP}^{\text{I}} \text{hi}^{\text{I}} \text{AŠ}^{\text{I}} \text{ma-da-an ha zik-kak-[ka}_4\text{]}$   
 (08') [ ]  $\text{r}^{\text{KI+MIN}^{\text{I}} \text{GIŠ}^{\text{I}}} \text{ka}_4\text{-ru-kur}$   
 (09') [ ]  $\text{KI+MIN}^{\text{I}} \text{GIŠ}^{\text{I}} \text{MA}^{\text{MEŠ}}$   
 (10') [ ]  $\text{KI+MIN}^{\text{I}} \text{GIŠ}^{\text{I}} \text{du-ud-}^{\text{I}} \text{da}^{\text{I}}$   
 (11') [ ]  $\text{r}^{\text{KI+MIN}^{\text{I}} \text{GIŠ}^{\text{I}}} \text{ha-}^{\text{I}} \text{su}^{\text{I}} \text{-[ur]}$

### Lower Edge

- (12') [ ]  $\text{r}^{\text{KI+MIN}^{\text{I}} \text{GIŠ}^{\text{I}}} \text{kaz}_0\text{-la}^{\text{I}}$   
 (13') [ ]  $\text{KI+MIN}^{\text{I}} \text{GIŠ}^{\text{I}} \text{te-el-te}$   
 (14') [ ]  $\text{r}^{\text{KI+MIN}^{\text{I}} \text{GIŠ}^{\text{I}} \text{X} \text{X} \text{X}^{\text{I}} \text{GIŠ}^{\text{I}} \text{X}^{\text{I}}}$  [ ]

### Reverse

- (15') [ ]  $\text{HAL}^{\text{I}} \text{ba-}^{\text{I}} \text{ka}_4\text{-ba-na-na x}^{\text{I}} \text{[ ]}$   
 (16') [ ]  $\text{GIŠ}^{\text{I}} \text{pu-el}$   
 (17') [ ]  $\text{r}^{\text{X}^{\text{I}}} \text{GIŠ}^{\text{I}} \text{te-el-te}$   
 (18') [ ]  $\text{r}^{\text{GIŠ}^{\text{I}}} \text{ka}_4\text{-ru-kur}$   
 (19') [ ]  $\text{x}^{\text{I}} \text{HAL}^{\text{I}} \text{z}_1\text{-iz-z}_1\text{-ra-um-be-na}$   
 (20') [ ]  $\text{GIŠ}^{\text{I}} \text{r}^{\text{I}} \text{pu}^{\text{I}} \text{-el} \text{[ ] ka}_4^{\text{I}}$   
 (21') [ ]  $\text{GIŠ}^{\text{I}} \text{ka}_4\text{-ru-kur}$   
 (22') [ ]  $\text{GIŠ}^{\text{I}} \text{MA}^{\text{MEŠ}}$   
 (23') [ ]  $\text{r}^{\text{X-mi}^{\text{I}} \text{I-ia-na}^{\text{I}} \text{AŠ}^{\text{I}}}$  [ ]

### Translation

(01'-06') [x], [x l.] *karukur*, [x l.] *figs?*, [x] l. *dakuš*, [x l.] *pul*, [x l.] *irtaštiš*: (07') [this (is) the total, x] l. (of fruit) of Karmakka; this (is) the total deposited at Matannan?

(08'-14') [x] l. *karukur*, [x] l. *figs?*, [x] l. *mulberries*, [x] l. *apples*, [x] l. *kazla*, [x] l. *telte*, [x] ...:  
 (Reverse 15') [this (is) the total, x] l., (fruit) of Bakabana [ ].

(16'-18') [x l.] *pul*, [x l.] *telte*, [x l.] *karukur*: (19') [this (is) the total, x l., (of fruit)] of personnel connected with Zizziram?

(20'-22') [x l.] *pul*, [x l.] *karukur*, [x. l. *figs?*]: (23') [this (is) the total, x (fruit)] of PN (at) [GN].



## Comments

Baked.

(5.5)L x (5.5)W x 1.4Th

No preserved seal impressions.

(05', 16', 20') (GİŠ)pu-el<sup>(MEŠ)</sup> (a kind of fruit<sup>?</sup>, meaning unknown): cf. PF 2018:45, No. 11:06', 20' and No. 15:05', all C1/W, No. 28:12, 24, 34, 41, 47 (W), and, beside grain and flour, Fort. 1981-101:01, 11 (W).

(07') Erasure follows <sup>1</sup> KI+MIN<sup>1</sup>. AŠma-da-an (or: -na') to end of line on right edge. Cf. PF 0144 and Fort. 1388-101, both C1, recording *kazla* and *irtaštiš*, respectively, to be kept at a “paradise” (*partetaš*) and storage complex (*balum*), respectively, at Madana (Matannan<sup>?</sup>); Tuplin 1996, p. 180; Henkelman & Kleber 2007, p. 166-69; Henkelman 2020, p. 142-44.

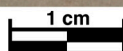
(19') -na on right edge. Cf. PF-NN 0024, C1, recording *tarmu*-cereal assigned to<sup>?</sup> Zizira, at Baktiš, 22nd year.

(20') Uninscribed space follows pu-el. [ ] ka<sub>4</sub><sup>?</sup>, written on the right edge at right angles to the main direction of script, probably ends a damaged continuation of line 23' or of a lost later line.





Fort. 1839-102 Obverse



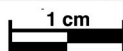
Fort. 1839-102  
Right Edge



Fort. 1839-102 Lower Edge



Fort. 1839-102 Reverse



Fort. 1839-102 Upper Edge

**Fig. 12.** No. 10 (Fort. 1839-102) Obverse, Right Edge, Lower Edge, Reverse, Upper Edge.





## 10. Fort. 1839-102 (Fig. 12)

### Obverse

- (01) 3 | <sup>GIŠ</sup>pit<sup>MEŠ</sup>  
 (02) 2 | <sup>GIŠ</sup>MA<sup>MEŠ</sup>  
 (03) <sup>HAL</sup>ba<sup>1</sup>-gi-iz-za hi-še <sup>1</sup>ug<sup>1</sup>-[gi] <sup>1</sup>da-ka<sup>1</sup>  
 (04) 2 | <sup>GIŠ</sup>pit<sup>MEŠ</sup> <sup>HAL</sup>ki-x-<sup>1</sup>x-x-x<sup>1</sup>  
 (05) 2 | <sup>GIŠ</sup>pit<sup>MEŠ</sup> <sup>HAL</sup>um<sup>1?</sup>-bu-uk-ka<sup>4</sup> <sup>1</sup>x x x<sup>1</sup>  
 (06) [ ] 4 | <sup>GIŠ</sup>pit<sup>MEŠ</sup> <sup>HAL</sup>nap<sup>?</sup>-pír-ra-da

### Lower Edge

- (07) <sup>1</sup>PAP<sup>1</sup> 4 <sup>HAL</sup>LÚ<sup>MEŠ</sup> <sup>AŠ</sup>pár-te-taš  
 (08) <sup>AŠ</sup>ra-ka<sup>4</sup>-an-ma <sup>HAL</sup>ti-<sup>1</sup>ri-ia šá-ra<sup>1</sup>-  
 (09) man-na <sup>HAL</sup>tan<sup>?</sup>-ma x <sup>HAL</sup>da-<sup>1</sup>x-x<sup>1</sup>-

### Reverse

- (10) na-ma  
 (11) 10+4 <sup>GIŠ</sup>pit<sup>MEŠ</sup>  
 (12) 10+3 <sup>GIŠ</sup>MA<sup>MEŠ</sup>  
 (13) 10+4 <sup>GIŠ</sup>da-ku-iš  
 (14) [ ]-ka<sup>4</sup>-<sup>1</sup>an<sup>?</sup>-x<sup>1</sup>-ra hi-še ug-<sup>1</sup>gi<sup>1</sup>  
 (15) [da]-ka<sup>4</sup> <sup>AŠ</sup>pár-te-taš <sup>AŠ</sup>mar-ku-<sup>1</sup>x<sup>1</sup>-

### Upper Edge

- (16) <sup>1</sup>x<sup>1</sup>-na-ma <sup>HAL</sup>da-ad-da-pár-na <sup>1</sup>šá<sup>1</sup>-  
 (17) ra-man-<sup>1</sup>na<sup>1</sup>

## Translation

- (01-03) 30 (l.) dates<sup>?</sup>, 20 l. figs<sup>?</sup>, assigned to<sup>?</sup> a man named Bagizza.  
 (04-06) 20 (l.) dates<sup>?</sup>, PN; 20 (l.) dates<sup>?</sup>, PN; 20 (l.) dates<sup>?</sup>, Umbukka<sup>?</sup> ... ; 40 (l.) dates<sup>?</sup> Nappirada<sup>?</sup>.  
 (Lower Edge 07-10) Total 4 men in the “paradise” at Rakkan, Tiriya overseeing, (and) in<sup>?</sup> ... .  
 (11-13) 140 (l.) dates<sup>?</sup>, 130 l. figs<sup>?</sup>, 140 (l.) dakuš, assigned to<sup>?</sup> PN<sub>2</sub>, in the “paradise” at Marku ..., Daddaparna overseeing.

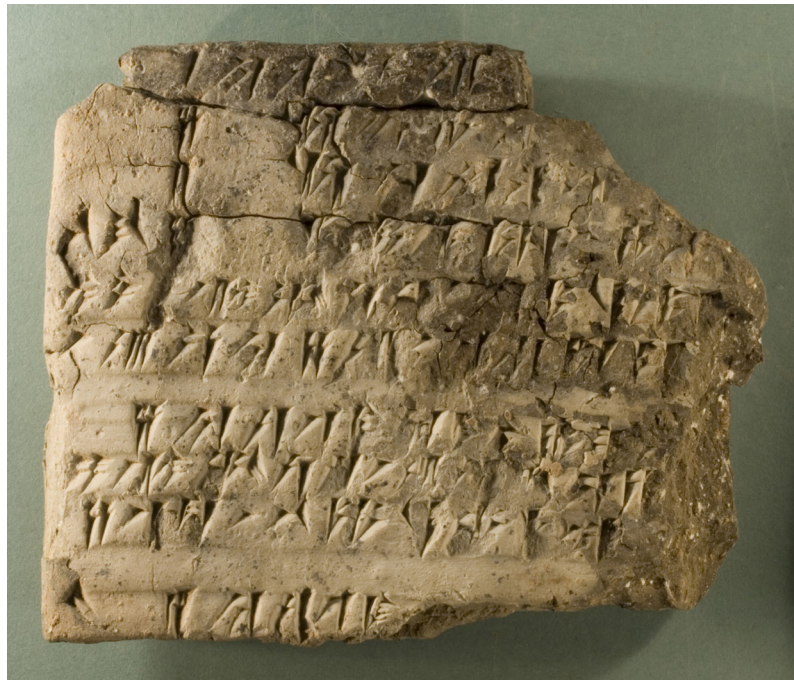


## Comments

6.1L x 3.0W x 1.7Th

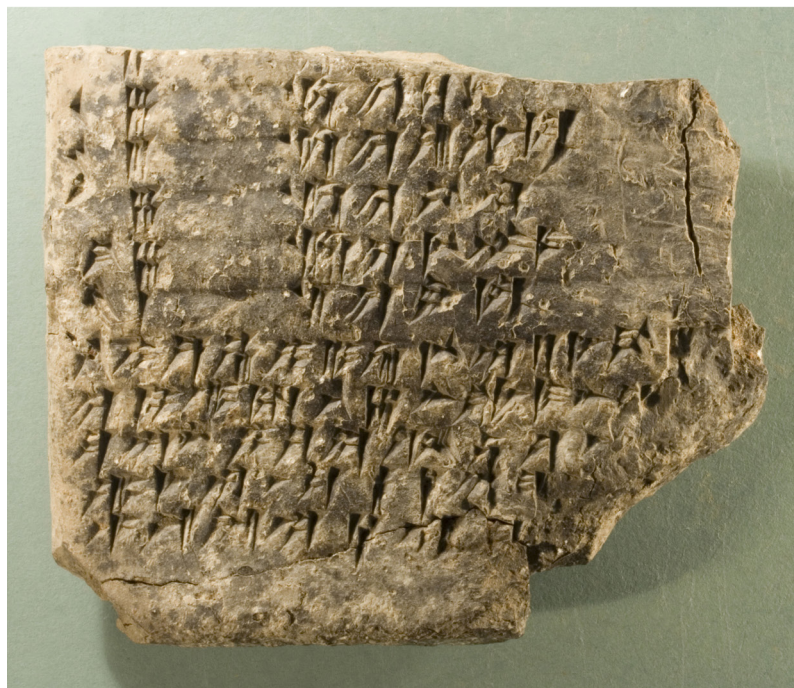
No seal impressions.

- (03) ba<sup>1</sup> partially erased? Cf. dates? [pit] from Bakizza PF 1988:12 (entry in tabular fruit account).
- (05) 'x x x' on right edge.
- (07f.) Cf. dates and figs 4 HAL<sup>L</sup>U<sup>MES</sup> uggi zikka GN PF-NN 0700:07f., above, p. 9; fruit from Tiriya at Rakkan, No. 31:03 (W).
- (16) Cf. Datapparna šaramanna in connection with fruit at Mandumattiš and Marku-..., No. 26:16' (W); fruit from Datapparna at Antarrantiš No. 31:06 (W); Dadaparna šaramanna at Harbazziyan, PF-NN 0700:10.



**Fort. 1389-101 Obverse**

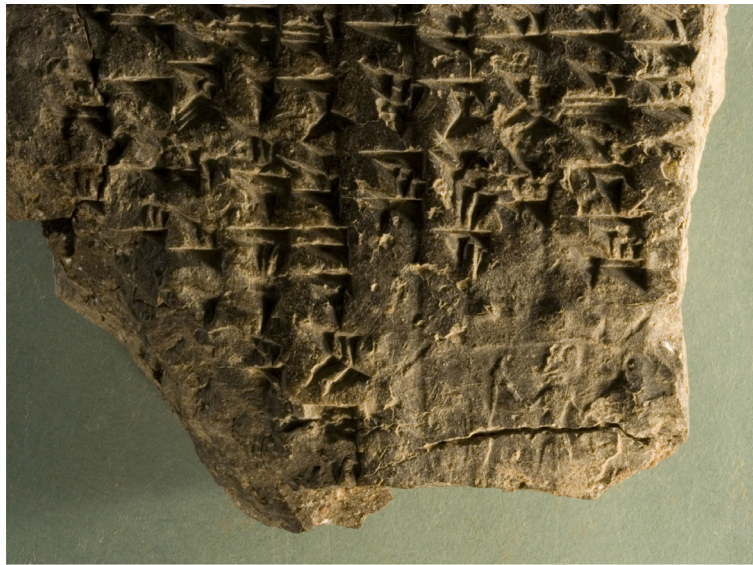
1 cm



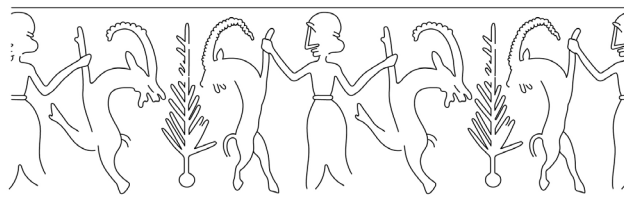
**Fort. 1389-101 Reverse**

*Fig. 13a.* No. 11 (Fort. 1389-101) Obverse, Reverse.





**Fort. 1389-101 Reverse**



**PFS 2183**



**Fort. 1389-101 Upper Edge**



*Fig. 13b. No. 11 seal impressions, Reverse & Upper Edge. PFS 2183 (drawing by Mark B. Garrison).*



## 11. Fort. 1389-101 (Fig. 13a-b)

### Obverse

- (01) [ 40]+1 <sup>Giš</sup>QA. <sup>r</sup>BAR<sup>MEŠ</sup> pit<sup>?MEŠ</sup>1 [ ]  
 (02) 5 KI+MIN <sup>r</sup>Giš<sup>ha?</sup>-su<sup>?1</sup>-[ur<sup>?</sup> ]  
 (03) 2 KI+MIN <sup>Giš</sup>du-ud-<sup>r</sup>da<sup>1</sup>-[um] [ ]  
 (04) PAP 40+<sup>r</sup>8 KI+MIN <sup>Giš</sup>mi-ik-tam<sup>6</sup> <sup>HAL</sup>x<sup>1</sup>-[ ]  
 (05) hi-še [ug]-gi zik-<sup>r</sup>ka<sub>4</sub>-ka<sub>4</sub> <sup>Aš</sup>be-ul<sup>1</sup> 10+9-<sup>r</sup>um-me<sup>1</sup>-[na]  
 (06) <sup>Aš</sup>ú-pír-iz-za-<sup>r</sup>iš<sup>1</sup> <sup>Aš</sup>r<sup>pár</sup>-te-taš-ma<sup>1</sup> [ ]  
 (07) (blank)  
 (08) 5 <sup>Giš</sup>QA.BAR<sup>MEŠ</sup> <sup>r</sup>pit<sup>MEŠ</sup> <sup>HAL</sup>ha<sup>?</sup>-x<sup>1</sup>-[ ]  
 (09) uk-gi zik-ka<sub>4</sub>-ka<sub>4</sub> <sup>Aš</sup>ú-<sup>r</sup>pír-ri<sup>1</sup>-iz-za-[iš] [ ]  
 (10) za-<sup>r</sup>bar<sup>?1</sup>-ma <sup>Aš</sup>be-ul 10+<sup>r</sup>9-um-me<sup>1</sup>-na [ ]  
 (11) (blank)  
 (12) 20+ 4 <sup>Giš</sup>QA.BAR<sup>MEŠ</sup> [ ]

### Reverse

- (01') <sup>r</sup>2<sup>1</sup> <sup>r</sup>KI+MIN<sup>1</sup> [ ]  
 (02') 10+6 KI+MIN <sup>Giš</sup>MA <sup>r</sup>MEŠ<sup>1</sup> [ ]  
 (03') 20+3 KI+MIN <sup>Giš</sup>zí-pi-el [ ]  
 (04') 6 KI+MIN <sup>Giš</sup>kaz<sub>0</sub>-la [ ]  
 (05') 40+6 KI+MIN <sup>Giš</sup>tar-mu<sup>MEŠ</sup> [ ]  
 (06') 20+1 KI+MIN<sup>1</sup> <sup>Giš</sup>pu-el [ ]  
 (07') PAP hi pír-ru-uk-ku ir kut-⟨tin<sup>?</sup>⟩-na 2 ME 50+x [ ]  
 (08') <sup>Giš</sup>mi-ik-tam<sup>6</sup> PAP 6 <sup>HAL</sup>LÚ<sup>MEŠ</sup> <sup>HAL</sup>x [ ]-  
 (09') ba-na-be uk-ka<sub>4</sub>-ap zik-ka<sub>4</sub>-ka<sub>4</sub> <sup>Aš</sup>[be-ul 10+9]-  
 (10') um-me-na <sup>Aš</sup>ba-a-šá-an<sup>?</sup>-<sup>r</sup>ba<sup>?1</sup> [ ]  
 (11') ti-iš-da-na šá-ra-<sup>r</sup>ma<sup>1</sup> [ ]

### Translation

(01-03) 410 l. dates<sup>?</sup>, 50 l. apples<sup>?</sup>, 20 l. mulberries: <sup>(04-06)</sup> total 480 l. fruit assigned to<sup>?</sup> [PN], 19th year, at Upirizzaš, in the “paradise.”

(08-10) 50 l. dates<sup>?</sup>, assigned to<sup>?</sup> [PN], at Upirizzaš, in the [...], 19th year.

(12) 240 l. [x ...]

(Reverse 01'-06') 20 l. [x], 160 l. figs<sup>?</sup>, 230 l. zipil, 60 l. kazla, 460 l. tarmu-cereal, 210 l. pul: <sup>(07'-11')</sup> this (is) the grand total, altogether 2,500+[x] fruit, assigned to<sup>?</sup> a total of 6 ...-men, [19]th [year], (at) Bašanba<sup>?</sup>, [PN] overseeing.





## Comments

(9.0)L x (7.5)W x 2.0Th

PFS 2183 Reverse, Upper Edge.

(06, 09) On the “paradise” at Upirizza(š), near Persepolis: Tuplin 1996, p. 179.

(03') *zipil* (meaning unknown): also in No. 17:13, and in the tree inventory Fort. 0119-101 passim (Henkelman & Stolper 2021, p. 187ff.).

(06') KI+MIN<sup>1</sup> written as 10+2.

(07') Cf. nine men “altogether received 3 l. in total” (PAP pír-ru-ku 3 QA<sup>MEŠ</sup> *dumaš*, PF-NN 0815:06-08), two persons “jointly received” cattle (PN *ak* PN<sub>2</sub> pír-<sup>1</sup>ru<sup>1</sup>-ku-ma *dušda* PF 0076:05-08) and No. 12:02<sup>1</sup>.

(08'f.) If the damaged word is compounded with Iranian \*pāna-, “protector,” might this be a transcribed Iranian equivalent to the *zippiš nuškip* of PF 2018:46f.? Cf. No. 2:03'f. with another probable transcribed Iranian word characterizing three producers.

(Reverse, Upper Edge) Impressions of PFS 2183 (Mikołajczak 2018, p. 482f.) have been identified until now only here and on No. 12.



Fort. 1262-102 Obverse

1 cm

Fort. 1262-102 Reverse

Fig. 14. No. 12 (Fort. 1262-102) Obverse, Reverse.



## 12. Fort. 1262-102 (Fig. 14)

Obverse

(Illegible traces of c. 21 lines)

Reverse

(01') [ ] <sup>GIŠ</sup> KI+MIN x x' [ ]

(02') [PAP] 'hi pír<sup>1</sup>-ru-uk-ku ir kut-tin-na [ ]

(03') [<sup>GIŠ</sup> mi<sup>1</sup>-ik-tam<sup>6</sup> <sup>HAL</sup> na-pa-pír-za-na 'šá-ra<sup>1</sup>-[ma ]

(04') [ ] [ ]

(05') [ ] +1 <sup>GIŠ</sup> QA.BAR<sup>MEŠ</sup> pít<sup>MEŠ</sup> <sup>HAL</sup> in-du-uk-'ka<sup>4</sup> ' [ ]

(06') [ ] <sup>GAŠ</sup> ti-ik-ra-nu-iš<sup>AŠ</sup> be-ul 10+9-um-[me-ma-na ]

(07') [ ] 'šá-ra<sup>1</sup>-ma

### Translation

(Reverse 01') [x] l. x (fruit): (02'-03') this (is) the grand [total], altogether [x] fruit, Napapirzana overseeing.

(04'-07') [x]+10 l. dates? [of?] Indukka, (at) Tikranuš, 19th year, [PN] overseeing.

### Comments

(8.1)L x (10.3)W x 2.1Th

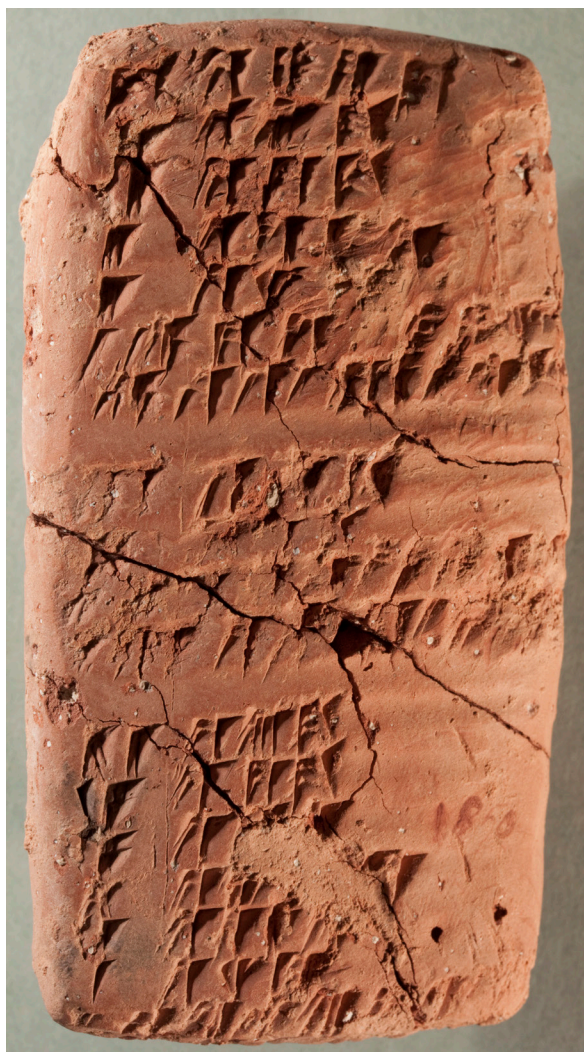
PFS 2183 reverse (3 impressions).

(03') Napapirzana (Napapartanna): see Henkelman & Stolper 2021, p. 184, comment on PFa 33:48f., 50.

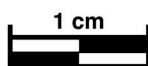
Uninscribed, unsealed space equivalent to about 1 line follows ruling after line 03'.

(06') Tikranuš: see Henkelman & Stolper 2021, p. 182, comment on PFa 33:25.

(Reverse) PFS 2183: see Mikołajczak 2018, p. 482f. and comment on No. 11 Reverse, Upper Edge.



Fort. 1850-102 Obverse



Fort. 1850-102 Right Edge



Fort. 1850-102 Lower Edge

*Fig. 15a.* No. 13 (Fort. 1850-102) Obverse, Right Edge, Lower Edge.





Fort. 1850-102 Reverse 

*Fig. 15b.* No. 13 (Fort. 1850-102) Reverse.

### 13. Fort. 1850-102 (Fig. 15a-b)

Obverse

- |         |  |
|---------|--|
| (01) 𐎶𐎶 | GIŠ <sup>1</sup> ha-su-ur  |
| (02) 𐎶𐎶 | GIŠ <sup>1</sup> pit <sup>MEŠ</sup>  |
| (03) 𐎶𐎵 | GIŠ <sup>1</sup> MA <sup>MEŠ</sup>   |
| (04) 𐎶  | GIŠ <sup>1</sup> da-𐎶ku <sup>1</sup> -iš   |
| (05) 𐎶  | 𐎶GIŠ <sup>1</sup> ? 𐎶𐎶 <sup>MEŠ</sup> ? 𐎶  |
| (06)    | HAL <sup>1</sup> ra-ma-taš <sup>?</sup> [hi]-še ug-gi [zik-kak-ka <sub>4</sub> <sup>AŠ</sup> ] |
| (07)    | ra-ka <sub>4</sub> -an HAL <sup>1</sup> kar-še <sup>1</sup> -na šá-ra-man-na                   |
| (08)    | (blank)  |



- Lower Edge

- Reverse

- ## Translation

- ## Achemenet Décembre 2021





(28-30) 700 (l.) apples, 520 (l.) dates?, 2 (l.) figs?:<sup>(31-32)</sup> (of?) Appaturma?, (at) Rakkan, Karšena? overseeing.

## Comments

4.0L x 7.5W x 1.7Th

No seal impressions.

(05, 19) <sup>GIŠ</sup><sub>SI</sub><sup>MEŠ</sup>: if correctly read, perhaps an abbreviation for šinzitiš (šinšitiš, zinzitiš); see Stolper n.d.

(07) -ra-man-na on right edge.

(07, 21, 32) Cf. *irmatam Karšenanama* No. 14:09f., and Kaššena (sic) *dama*, in connection with fruit revenue from Kaštiš and others at Rakkan No. 27:13, 17 and No. 29:06, 10, 13, 14, 21, 24, 25, 31. Traces of the damaged signs here do not support reading Kaš<sup>l</sup>-še-na; the signs are clear in No. 14.

(12) -ia on right edge.

(20) ʾzik-kak<sup>1</sup>-ka<sub>4</sub> on right edge. Kaštiš: PF 0217 (dates?, year 23), PF 0218 (figs?, year 23), PF-NN 0752 (*tarmu*, year 23), all C1, cf. Tuplin 2008, p. 377; fruit from Kaštiš at Rakkan, Kaššena *dama* No. 29:10, 24 (W, year 15); fruit revenue from Kaštiš *šalira* at Rakkan, Karšena *dama* No. 27:13 (W, year 20).

(25) Cf. grain rations for *kurtaš šukmaš-nuškip* Fort. 1953-101:01, 04 (V), PT 1963-12:05; <sup>HAL</sup><sub>LU</sub><sup>MEŠ</sup> šu-uk-ʾmaš<sup>21</sup> [...] Fort. 1959-101:30' (V). It is unlikely that all occurrences are erroneous spellings of šu-ip-maš, “lead” (Gershevitch apud Cameron 1965, p. 178f.; Hinz & Koch 1987, p. 1176 s.v. hh.šū-ib-maš.nu-iš-ki-ip; tacit in Tavernier 2007, p. 438 [4.4.8.6]). If Cameron’s other suggestion, an underlying Iranian variant \*čugwa-, is acceptable, comparison with the *zappan-nutip* at the “paradise” of Parsaraš at Persepolis (PF 1815, PF-NN 1280, PF-NN 1368, *zappan-nutip* at Persepolis, PF-NN 0948), perhaps “copper/bronze handlers” (Henkelman 2003, p. 104, 2004, cf. Tuplin 1996, p. 94) invites similar interpretation of the phrase *šukmaš nuškip* as “lead keepers.” If that phrase is abbreviated here, however, “lead (keepers) who are in Rakkan” (taking *appa* as animate plural), their connection to this context is not plain. A location, comparable to *partetaš*, *balum* or *baribara(š)* (and taking *appa* as inanimate singular), is expected, despite the determinative <sup>GIŠ</sup>. Comparable usages are GN <sup>GIŠ</sup>tin-taš-ma PF-NN 0331:07, PF-NN 2114:06f. (both C1) and perhaps *partetaš* <sup>GIŠ</sup>zap-pan-ul-la-ma No. 1:02', 05' (C1/W).

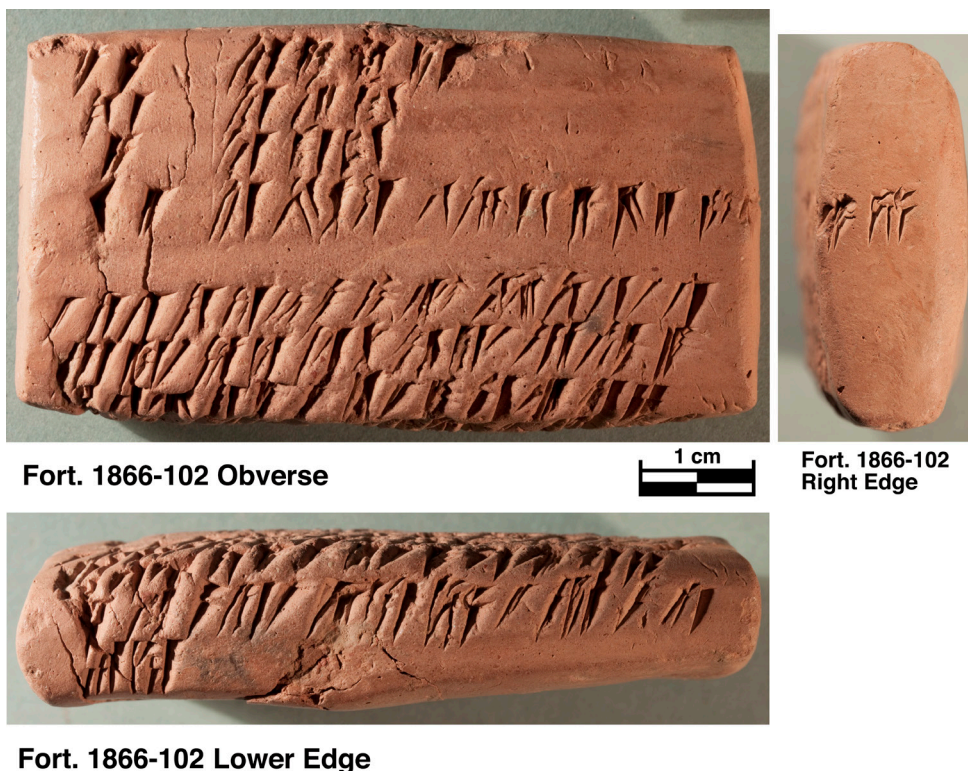


Fig. 16. No. 14 (Fort. 1866-102) Obverse, Right Edge, Lower Edge.

#### 14. Fort. 1866-102 (Fig. 16)

Obverse

- (01) 1 ME 4 | Giš<sup>1</sup>ha-su-ur
- (02) 50<sup>1</sup>+1 | Giš<sup>1</sup>pit<sup>1</sup>MEŠ
- (03) 5 | Giš<sup>1</sup>MA<sup>MEŠ</sup>
- (04) 20<sup>1</sup>+2 | Giš<sup>1</sup>kaz<sup>0</sup>-la PAP ir kut-<tin-na> 1 ME 80+2 mi-ik-tam<sub>6</sub>
- (05) (blank)
- (06) HAL<sup>1</sup>ba<sup>1?</sup>-ka<sup>4?</sup>-ba-ad-<da<sup>?</sup>> hi-še ug-gi zik-kak-ka<sub>4</sub> Aš<sup>1</sup>pár-
- (07) te-taš<sup>Aš</sup>ia-ma-da-nu-iš-ma<sup>Aš</sup>kar-ra-ku-
- (08) ʾšá<sup>1</sup>bar-ri-ba-ráš-ʾše-ma<sup>1</sup> HAL<sup>1</sup>ku-ut<sup>?</sup>-ri-iz-za

Lower Edge

- (09) šá-ra-man-na<sup>Aš</sup>ir-ma-tam<sub>6</sub> HAL<sup>1</sup>kar-še-na-
- (10) ʾna<sup>1</sup>-ma



## Translation

(01-04) 1,040 (l.) apples, 510 (l.) dates<sup>?</sup>, 50 (l.) figs<sup>?</sup>, 220 (l.) *kazla*: grand total 1,820 (l.) of fruit.

(06-10) Assigned to<sup>?</sup> a man named Bakabadda<sup>?</sup>, in the “paradise” at Yamadanuś, (and<sup>?</sup>) at Karakušan, in its *baribara*-building, Kutrizza overseeing, (at) the estate of Karšena.

## Comments

6.4L x 3.5W x 1.5Th

= Fort. 10212

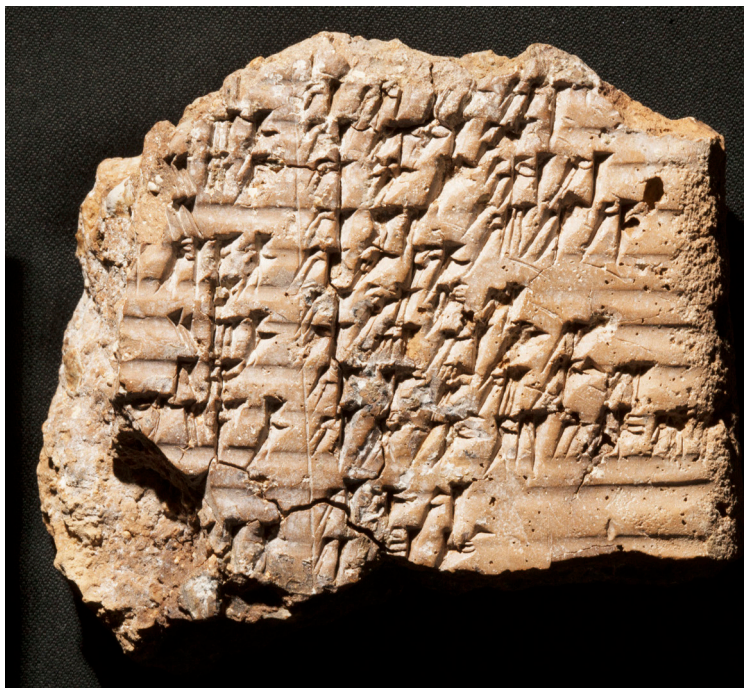
No seal impressions.

(02)  $\text{Giš}_{\text{pit}}^{\text{IMEŠ}}$  written like  $\text{Giš}_{\text{imEŠ}}$ .

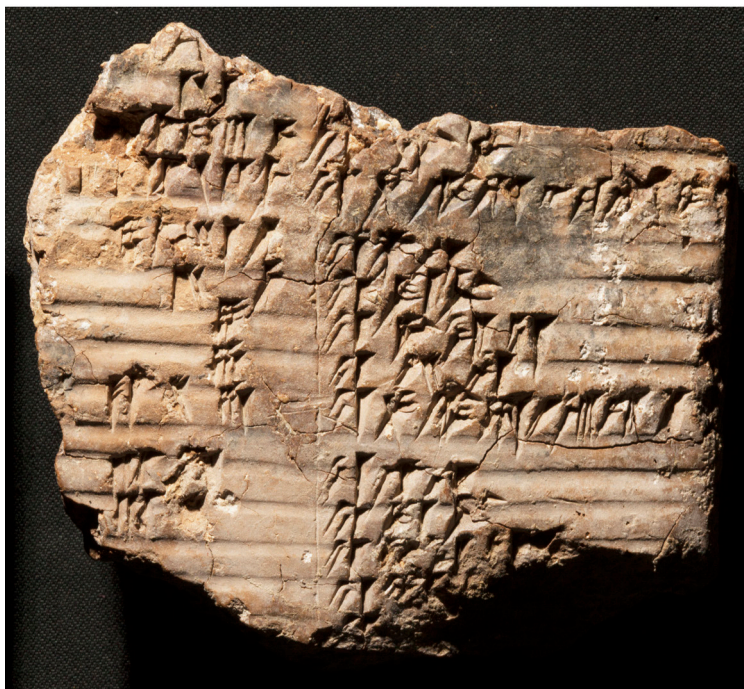
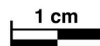
(04) -la: over erasure. -ik-tam<sub>6</sub> on right edge.

(06) Bakabadda at Yamadanuś: cf. No. 21:11''f. (C1/W<sup>?</sup>); No. 27:37 (W).

(09) Cf. Karšena<sup>?</sup> *saramanna* No. 13:07, 21, 32; on estates (*irmatam*) of *šaramanna*-officials, see Garrison & Henkelman 2020, p. 187; Henkelman 2018, p. 50.



Fort. 1881-102 Obverse?



Fort. 1881-102 Reverse?

*Fig. 17.* No. 15 (Fort. 1881-102) Obverse?, Reverse?.





## 15. Fort. 1881-102 (Fig. 17)

### Obverse<sup>2</sup>

(01')	[	]	Γ <sup>x</sup> <sup>1</sup>		Γ <sup>GIŠ</sup> te-el <sup>1</sup> -te
(02')	[	]	3½		Γ <sup>GIŠ</sup> du-ud-da
(03')	[	]	30+Γ <sup>6</sup> ½ <sup>1</sup>		Γ <sup>GIŠ</sup> šap <sup>o</sup> Γ <sup>MEŠ</sup> <sup>1</sup> te-na
(04')	[	]	Γ <sup>30</sup> <sup>1</sup>		Γ <sup>GIŠ</sup> KI+MIN <sup>1</sup> zī-ti-ka <sub>4</sub>
(05')	[	]	Γ <sup>ME</sup> <sup>1</sup> 60+Γ <sup>4</sup> ½ <sup>1</sup>		Γ <sup>GIŠ</sup> pu-el
(06')	[	]	Γ <sup>5</sup> <sup>1</sup>		Γ <sup>GIŠ</sup> da-ku-Γ <sup>iš</sup> <sup>1</sup>
(07')	[	]	20+3½		Γ <sup>GIŠ</sup> kán-na-Γ <sup>ak</sup> -ti <sup>1</sup>
(08')	[	]	70+Γ <sup>8</sup> <sup>1</sup>		Γ <sup>GIŠ</sup> ši-in-zī-ti-iš
(09')	[	PAP	Γ <sup>5</sup> Γ <sup>ME</sup> <sup>1</sup> 30+Γ <sup>4</sup> ½ <sup>1</sup>		Γ <sup>GIŠ</sup> mi-Γ <sup>ik</sup> <sup>1</sup> -tam <sub>6</sub> <sup>HAL</sup> ku <sup>1?</sup> -ia-na <sup>1</sup>
(10')	[	]			(blank)
(11')	[	]			Γ <sup>GIŠ</sup> pi-ut
(12')	[	]			Γ <sup>GIŠ</sup> MA <sup>MEŠ</sup>

### Reverse<sup>2</sup>

(01'')	[	]	Γ <sup>40</sup> Γ <sup>1</sup>	[	]
(02'')	[	]	70+1		Γ <sup>GIŠ</sup> [ ] Γ <sup>x</sup> x <sup>1</sup> [ ]
(03'')	[	]	Γ <sup>ME</sup> <sup>1</sup> 60+3½		Γ <sup>GIŠ</sup> [x]-Γ <sup>x</sup> Γ <sup>MEŠ</sup> ?
(04'')	[	]	Γ <sup>PAP</sup> x šī x Γ <sup>ME</sup> <sup>1</sup> 10+2½		Γ <sup>GIŠ</sup> mi-ik-tam <sub>6</sub> <sup>HAL</sup> ka <sub>4</sub> -Γ <sup>x</sup> <sup>1</sup> -uk-Γ <sup>x</sup> -x <sup>1</sup>
(05'')	[	]			(blank)
(06'')	[	]	8 ME 30+1Γ <sup>1</sup> ½ <sup>1</sup>		Γ <sup>GIŠ</sup> pi-ut
(07'')	[	]	Γ <sup>80</sup> <sup>1</sup> ½		Γ <sup>GIŠ</sup> MA <sup>MEŠ</sup>
(08'')	[	]	8		Γ <sup>GIŠ</sup> ha-su-ur
(09'')	[	]	6		Γ <sup>GIŠ</sup> kaz <sub>o</sub> -la
(10'')	[	]	Γ <sup>PAP</sup> <sup>1</sup> 9 ME 20+6		Γ <sup>GIŠ</sup> mi-ik-tam <sub>6</sub> <sup>HAL</sup> ú-iš-Γ <sup>x</sup> -x-x <sup>1</sup>
(11'')	[	]			(blank)
(12'')	[	]	2 ME Γ <sup>50</sup> <sup>1</sup>		Γ <sup>GIŠ</sup> pi-ut
(13'')	[	]	2 ME Γ <sup>80</sup> <sup>1</sup>		Γ <sup>GIŠ</sup> MA <sup>Γ<sup>MEŠ</sup><sup>1</sup></sup>
(14'')	[	]			Γ <sup>GIŠ</sup> ha-su-ur <sup>1</sup>
(15'')	[	]			Γ <sup>GIŠ</sup> te <sup>1</sup> -[el-te]
(16'')	[	]			Γ <sup>GIŠ</sup> [ ]

### Translation

(Obverse? 01'-08') [x] *telte*, [x+]35 (l.) mulberries<sup>2</sup>, [+ ] 365 (l.) fresh grapes<sup>2</sup>, [x+]30 (l.) dried grapes<sup>2</sup>, [x+]1,645 (l.) *pul*, 50 (l.) *dakuš*, 235 (l.) *kannakduš*, 780 (l.) oleaster: <sup>(09')</sup> [total x+]5,345<sup>2</sup> (l.) of fruit of Kuya<sup>2</sup>.





(11'-12') [x] dates?, [x] figs? ...

(Reverse? 01''-03'') [x+] 400? (l.) [ ... ], 710 (l.) [x], [x+]1,635 (l.) x: (04'') total x+11,125 (l.) of fruit of PN.

(06''-09'') 8,315 (l.) dates?, 805 (l.) figs?, 80 (l.) apples, 60 (l.) *kazla*: (10'') total 9,260 (l.) of fruit of Uš- ...

(12''-16'') 2,500 (l.) dates?, 2,800 (l.) figs?, [x] apples, [x] *telte*, ...

## Comments

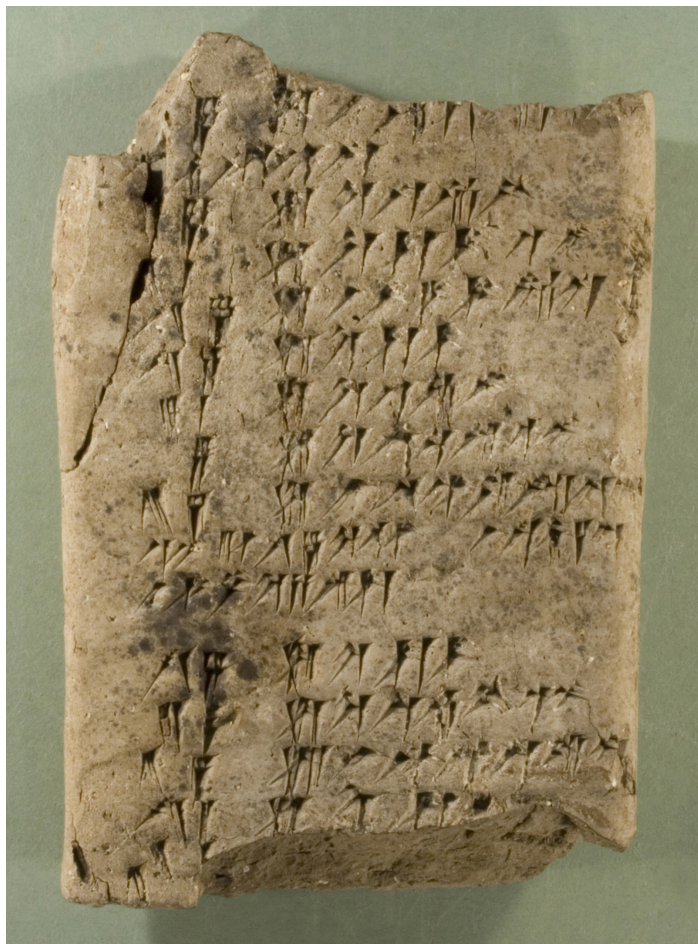
(7.7)L x (6.9)W x 2.1Th

No preserved seal impressions.

(03') *šap tena*: PF-NN 2180:08 (vs. *šap*<sub>0</sub> without qualification, lines 18, 27), No. 28:33; and <sup>GIŠ</sup>*šap*<sub>0</sub> <sup>MEŠ</sup> <sup>1</sup>te<sup>1</sup>-na<sup>1</sup> parallel to <sup>GIŠ</sup><sub>KI+MIN</sub> <sup>1</sup>zi<sup>1</sup>-[ti]-<sup>1</sup>ka<sub>4</sub><sup>1</sup> Fort. 0582-101:13f. (collated), all tabular fruit accounts.

(09') -<sup>1</sup>na<sup>1</sup> on right edge. Kuya: (if correctly read), cf. PF 0140 (C1, *tarmu*-cereal).

(04'', 10'') -<sup>1</sup>x-x<sup>1</sup> on right edge.

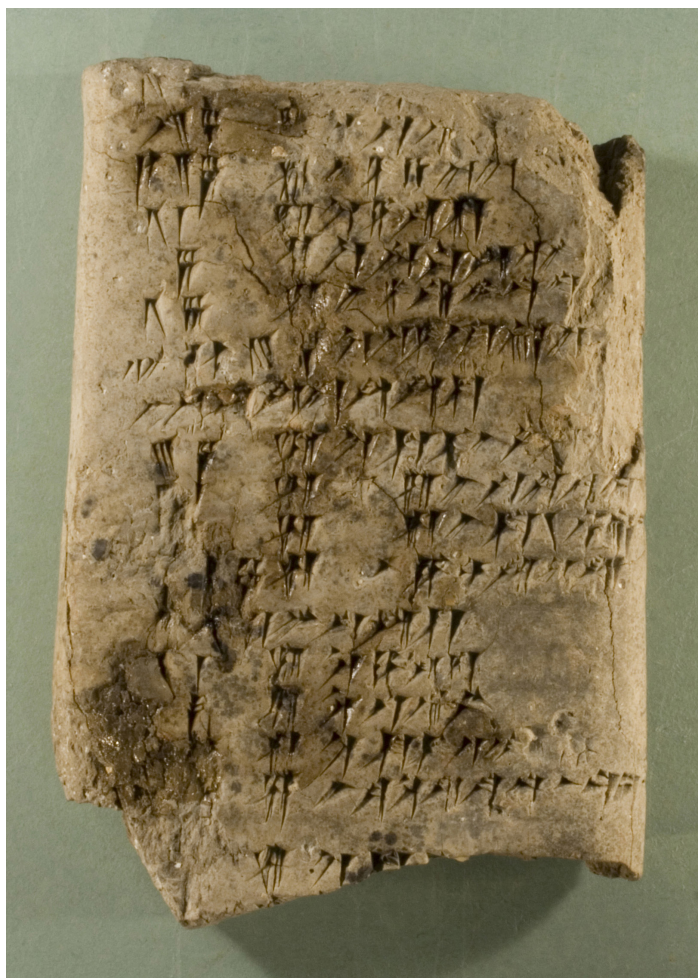


**Fort. 1338-101 Obverse**



**Fort. 1338-101 Lower Edge**

*Fig. 18a.* No. 16 (Fort. 1338-101) Obverse, Lower Edge.



Fort. 1338-101 Reverse



Fort. 1338-101  
Right Edge

*Fig. 18b.* No. 16 (Fort. 1338-101) Reverse, Right Edge.

## 16. Fort. 1338-101 (Fig. 18a-b)

Obverse

- (01') [ ]  
 (02') [ ]+7 KI+MIN <sup>Γ</sup>HALI? x x x x<sup>1</sup>  
 (03') <sup>Γ</sup>HAL<sup>1</sup>ir-te-na-na  
 (04') <sup>Γ</sup>30<sup>1</sup>+7 KI+MIN <sup>Giš</sup>ka<sub>4</sub>-ru-kur  
 (05') <sup>Γ</sup>20<sup>1</sup>+1 KI+MIN <sup>Giš</sup>MA<sup>MEŠ</sup> PAP hi  
 (06') 50+8 KI+MIN <sup>HAL</sup>mi<sup>2</sup>-ku-mi-ia-na  
 (07') 50+5 KI+MIN <sup>Giš</sup>MA<sup>MEŠ</sup>  
 (08') 30+1 KI+MIN <sup>Giš</sup>ka<sub>4</sub>-ru-kur  
 (09') 8 KI+MIN <sup>Giš</sup>du-ud-da PAP hi



- (10') 90+4 KI+MIN <sup>HAL</sup>bat-ti-iš-da-na-na  
 (11') PAP hi 3 ME 40+7 <sup>GIŠ</sup>BAR <sup>MEŠ</sup>AŠ ba-ir-šá-an  
 (12') <sup>HAL</sup>mi-še-iz-za da-ma  
 (13') (blank)  
 (14') 40+5 KI+MIN <sup>GIŠ</sup>MA <sup>MEŠ</sup>  
 (15') 30+9 KI+MIN <sup>GIŠ</sup>ka<sub>4</sub>-ru-kur PAP hi  
 (16') 80+4 KI+MIN <sup>HAL</sup>pi-ru-šu-iš-na  
 (17') 50+2 KI+MIN <sup>GIŠ</sup>MA <sup>Γ</sup>MEŠ x<sup>1</sup> [ ]  
 (18') 30+<sup>Γ</sup>1<sup>1</sup> [ PAP hi]  
 (19') 80+ [3 KI+MIN ]

#### Lower Edge

- (20') <sup>Γ</sup>20<sup>1?1</sup>+ [7<sup>?</sup> ]  
 (21') PAP [ ]  
 (22') <sup>Γ</sup>80<sup>1</sup>+6 [ ]

#### Reverse

- (23') <sup>Γ</sup>80<sup>1</sup> [ ]  
 (24') 50+4 <sup>Γ</sup>KI+MIN <sup>GIŠ</sup>ka<sub>4</sub>-ru-kur<sup>1</sup> [PAP hi]  
 (25') 2<sup>1</sup> ME 20+7 KI+MIN <sup>HAL</sup>ku-za-<sup>Γ</sup>na-na<sup>1</sup>  
 (26') 70+1 KI+MIN <sup>GIŠ</sup>ha-su-ur  
 (27') 5 KI+MIN <sup>GIŠ</sup>du-ud-da PAP hi  
 (28') 70+6 KI+MIN <sup>HAL</sup>ku-un-tak-ka<sub>4</sub>-na  
 (29') PAP hi <sup>Γ</sup>4<sup>1?1</sup> ME 90+7 <sup>GIŠ</sup>BAR <sup>MEŠ</sup>AŠ ba-ir-šá-an  
 (30') <sup>HAL</sup>pár<sup>?</sup>-na<sup>?</sup><sup>1</sup>-da-ad-da da-ma  
 (31') 30+5 KI+MIN <sup>GIŠ</sup>MA <sup>MEŠ</sup> <sup>HAL</sup>[ ]-<sup>Γ</sup>x<sup>1</sup>  
 (32') [x]+1 KI+MIN KI+MIN <sup>HAL</sup>ka<sub>4</sub>-du-<sup>Γ</sup>ka<sub>4</sub><sup>?</sup>-na<sup>1</sup>  
 (33') [ ] KI+MIN KI+MIN <sup>HAL</sup>ma-u-pír-tan-na-na  
 (34') [ ]+7 KI+MIN <sup>AŠ</sup>ha-pi-da-<sup>Γ</sup>na<sup>?</sup><sup>1</sup>-da [x] <sup>Γ</sup>x<sup>1</sup>  
 (35') <sup>Γ</sup>HAL x x<sup>1</sup>-ak-ka<sub>4</sub> da-ma  
 (36') 10+1 KI+MIN <sup>GIŠ</sup>ha-su-ur  
 (37') 9 KI+MIN <sup>GIŠ</sup>ka<sub>4</sub>-ru-kur  
 (38') [ ] KI+MIN <sup>GIŠ</sup>MA <sup>MEŠ</sup> PAP hi  
 (39') [ ] KI+MIN <sup>HAL</sup>su<sup>?</sup>-iz<sup>?</sup>-zí<sup>?</sup>-ba-na <sup>AŠ</sup>ka<sub>4</sub>-ap-ri-iš-ma ha da-ka<sub>4</sub>  
 (40') [ ] (blank)  
 (41') [ ] KI+MIN <sup>GIŠ</sup>MA <sup>Γ</sup>[<sup>MEŠ</sup> ]





## Translation

- (01'-03') [...], [total x]+70 l. (fruit) of PN<sup>?</sup>, Irtena (assigning<sup>?</sup>).  
 (04'-06') 370 l. *karukur*, 210 l. figs<sup>?</sup>: this total, 580 l. (fruit) of Mikumiya<sup>?</sup>.  
 (07'-10') 550 l. figs<sup>?</sup>, 320 l. *karukur*, 80 l. mulberries: this total, 940 l. (fruit) of Battišdana.  
 (11'-12') This (is) the total (fruit), 3,470 l., at Persepolis, Mišezza assigning.  
 (14'-16') 450 l. figs<sup>?</sup>, 390 l. *karukur*: this total, 840 l. (fruit) of Pirušuš.  
 (17'-19') 520 l. figs<sup>?</sup>, 310 [l. this total,], 8[30 l. (fruit) of PN].  
 (20'-21') 2[70<sup>?</sup> l. x]: total (fruit), [x l. of PN<sup>?</sup>].  
 (22'-25') 860 [l. x], 870 [l. x], 540 l. *karukur*: [this total,] 2,270 l. (fruit) of Kuzana.  
 (26'-28') 710 l. apples, 50 l. mulberries: this total, 760 l. (fruit) of Kuntakka.  
 (29'-30') This (is) the total, 4,970 l. (fruit) at Persepolis, Parnadadda<sup>?</sup> assigning.  
 (31') 350 l. figs<sup>?</sup>, [of PN].  
 (32') [x+]10 l. ditto (= figs<sup>?</sup>), of Kaduka.  
 (33') [x] l. ditto (= figs<sup>?</sup>), of Maupirtanna.  
 (34'-35') [Total x] l. (fruit) ... at Hapidanada<sup>?</sup>, [...]akka assigning.  
 (36'-38') 110 l. apples 90 l. *karukur*, [x] l. figs<sup>?</sup>: <sup>(39')</sup> this total, [x] l. (fruit) of Suzziba<sup>?</sup>, deposited at Kapriš.  
 (41') [x] l. figs<sup>?</sup> [ ... ]

## Comments

6.8L x (9.8)W x 1.9Th

No seal impressions.

- (12') Erasure follows da-ma.  
 (12', 30', 35') *dama* here occupies a position filled by *šarama(nna)* in other C1/W texts, indicating oversight of the listed commodities.  
 (28'-30') Cf. especially PF 0414, recording grain issued by Kuntukka that Parnadadda received for processing fruit products (*miktam mariyam ha huttašda*, lines 04-05).  
 (30') 'pár<sup>?</sup>-na<sup>?</sup>' over erasures.  
 (31') -'x' on right edge.  
 (32') -'ka<sup>?</sup>-na' on right edge.  
 (33') -tan-na-na on right edge.  
 (34') Or: <sup>AŠ</sup>ha-pi-da-'ad<sup>?</sup>'-da. [x] 'x' on right edge. If not a GN, perhaps for *hapidana-* (Ir. \*apidana, otherwise regularly transcribed as *hapi(n)danuš*, without determinative), “reservoir, reserve”, followed by [da]-'ka<sup>?</sup>', “deposited”?  
 (38') Erasure follows PAP hi.  
 (39') -ap-ri-iš-ma ha da-ka<sup>?</sup> on right edge.



Fort. 2029-103 Obverse



Fort. 2029-103 Reverse



Fort. 2029-103 Lower Edge



Fort. 2029-103 Upper Edge

**Fig. 19.** No. 17 (Fort. 2029-103) Obverse, Lower Edge, Reverse, Upper Edge.

### 17. Fort. 2029-103 (Fig. 19)

Obverse

- |      |          |   |
|------|----------|---|
| (01) | 30+4     | Giš <sup>1</sup> ha-su-ur   |
| (02) | 1        | Giš <sup>1</sup> r <sup>MA</sup> MEŠ <sup>1</sup>   |
| (03) | PAP 30+5 | Giš <sup>1</sup> r <sup>1</sup> me-ik <sup>1</sup> -da-um HAL <sup>1</sup> ša <sup>1</sup> -r <sup>1</sup> tan <sup>1</sup> -[ ]- |
| (04) |          | ru <sup>1</sup> ug-gi <sup>1</sup> r <sup>1</sup> zik <sup>1</sup> -ka <sub>4</sub> -ka <sub>4</sub>                              |
| (05) | 5        | Giš <sup>1</sup> du-ud-da-um HAL <sup>1</sup> mu <sup>1</sup> -tin <sup>1</sup> -r <sup>1</sup> x <sup>1</sup> -[ ]-              |
| (06) |          | pu <sup>1</sup> ug-gi <sup>1</sup> zik-ka <sub>4</sub> -ka <sub>4</sub>   |
| (07) | 7        | Giš <sup>1</sup> ha-su-ur   |
| (08) | 10+6     | Giš <sup>1</sup> du-ud-da-um  |
| (09) | 2        | Giš <sup>1</sup> ir-taš <sup>1</sup> -r <sup>1</sup> ti-iš <sup>1</sup>   |
| (10) | PAP 20+5 | Giš <sup>1</sup> r <sup>1</sup> me-ik-da-um HAL <sup>1</sup> x <sup>1</sup> -[ ]  |



- (11) ʀi<sup>1</sup>-ia ug-gi zik-ʀka<sup>1</sup>-[ka<sub>4</sub>]  
(12) 7                      Gišba-a-ia  
(13) 10+1                Gišzi'-ʀpi<sup>1</sup>-el [                ]

#### Lower Edge

- (14) PAP 10+8            Gišme-ik-da-ʀum<sup>1</sup> [                ]  
(15) HALa-an-ʀna<sup>1</sup>-ir ʀug-gi<sup>1</sup> [zik]-

#### Reverse

- (16) ka<sub>4</sub>-ka<sub>4</sub>  
(17) 1                      Gišʀka<sup>1</sup>-ru-kur HALman-ʀx<sup>1</sup>-[                ]  
(18) ʀug-gi zik<sup>1</sup>-[ka<sub>4</sub>-ka<sub>4</sub>]  
(19) ʀPAP 70<sup>1</sup>+9 ʀGiš[me-ik-da-um]  
(20) [                      ] ʀx<sup>1</sup> [                      ]  
(21) ʀAšx<sup>1</sup> [                      ]

#### Upper Edge

- (22) ʀAš<sup>1</sup>tup-pi HALbe-ul-da-ʀx<sup>1</sup> [tu-ba]-  
(23) ka<sub>4</sub>

### Translation

- (01-02) 340 (l.) apples, 10 (l.) figs<sup>?</sup>: (03-04) total 350 (l.) of fruit, assigned to<sup>?</sup> PN.  
(05-06) 50 (l.) mulberries assigned to<sup>?</sup> PN<sub>2</sub>.  
(07-09) 70 (l.) apples, 160 (l.) mulberries, 20 (l.) *irtaštiš*: total 250 (l.) of fruit assigned to<sup>?</sup> PN<sub>3</sub>.  
(12-13) 70 (l.) quince, 110 (l.) *zipel*<sup>?</sup>: (15-16) total 180 (l.) of fruit assigned to<sup>?</sup> Lannar<sup>?</sup>.  
(17-18) 10 (l.) *karukur* assigned to<sup>?</sup> PN<sub>4</sub>.  
(19-21) (Grand) total, 790 l. of [fruit ....] ʀGN<sup>1</sup>.  
(Upper Edge 22-23) (This) tablet pertains to Belda-x.

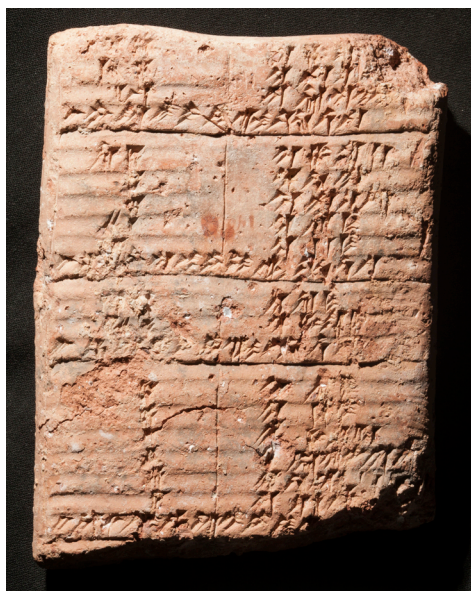
### Comments

6.3L x 8.0W x 1.9Th  
No seal impressions.

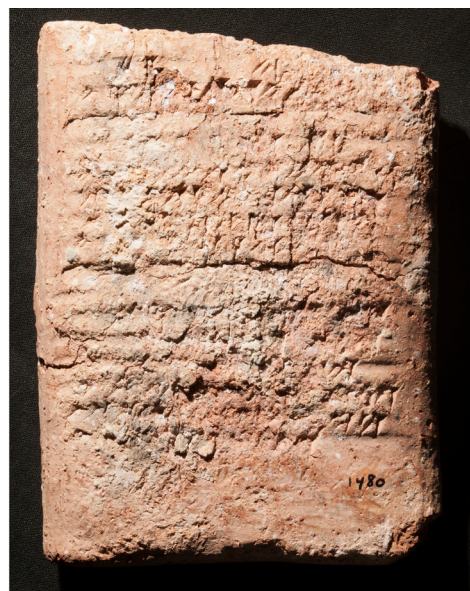
The fabric of the tablet and the large, broad ductus resemble those of PFa 33 and Fort. 0119-101. As in those texts, the numbers are not aligned vertically by place-value (10s over 10s, 1s over 1s); see also No. 18.



- (06) Erasure follows pu<sup>?</sup>.  
 (21) Most of the remainder of the reverse is damaged, apparently not inscribed.



Fort. 1480-101 Obverse



Fort. 1480-101 Reverse

Fig. 20. No. 18 (Fort. 1480-101) Obverse, Reverse.

## 18. Fort. 1480-101 (Fig. 20)

### Obverse

- |       |  |   |  |   |
|-------|--|---|--|---|
| (01)  |  | ṛ <sub>x</sub> ME x+x <sup>1</sup>  |  | ṛ <sup>Giš</sup> ha-su <sup>1</sup> -[ur]                       |
| (02)  |  | 90+5  |  | ṛ <sup>Giš</sup> du-ud <sup>1</sup> -[da]                       |
| (03)  |  | 2 QA  |  | ṛ <sup>Giš</sup> kán-na-ak-ṛ <sup>1</sup> du <sup>1</sup> -[iš] |
| (04)  |  | HAL <sup>1</sup> pu-da hi-še ug-gi zik-kak-ka <sub>4</sub>  |  |   |
| ----- |  |   |  |   |
| (05)  |  | 50+5  |  | ṛ <sup>Giš</sup> ha-su-ur                                       |
| (06)  |  | ṛ <sup>8?</sup>   |  | ṛ <sup>Giš</sup> kaz <sub>0</sub> -la                           |
| (07)  |  | 5   |  | ṛ <sup>Giš</sup> du-ud-ṛ <sup>1</sup> da <sup>1</sup>           |
| (08)  |  | 20+1  |  | ṛ <sup>Giš</sup> pit <sup>MEŠ</sup>                             |
| (09)  |  | ṛ <sup>2?</sup>   |  | ṛ <sup>Giš</sup> MA <sup>MEŠ</sup>                              |
| (10)  |  | HAL <sup>1</sup> ṛ <sup>1</sup> x-x <sup>1</sup> -na hi-še ug-ṛ <sup>1</sup> gi zik <sup>1</sup> -kak-ka <sub>4</sub> |  |   |
| ----- |  |   |  |   |
| (11)  |  | ṛ <sup>1</sup> 60+x <sup>1</sup>  |  | ṛ <sup>Giš</sup> pit <sup>MEŠ</sup>                             |
| (12)  |  | ṛ <sup>1</sup> 80+x <sup>1</sup>  |  | ṛ <sup>Giš</sup> ha-su-ṛ <sup>1</sup> ur <sup>1</sup>           |
| (13)  |  | HAL <sup>1</sup> e <sup>?</sup> -ṛ <sup>1</sup> x-x-x <sup>1</sup> ug-gi zik-kak-[ka <sub>4</sub> ]                   |  |   |
| ----- |  |   |  |   |





- (14) | 5 | Giš<sup>1</sup> pit<sup>MEŠ</sup><sup>1</sup>  
 (15) | 6 | Giš<sup>1</sup> MA<sup>MEŠ</sup><sup>1</sup>  
 (16) | 2 | Giš<sup>1</sup> ha-<sup>1</sup>su-ur<sup>1</sup>  
 (17) | 2 | Giš<sup>1</sup> kán-<sup>1</sup>na<sup>1</sup>-ak-du-<sup>1</sup>iš<sup>1</sup>  
 (18) | 6 | Giš<sup>1</sup> ka<sup>1</sup>z<sup>0</sup>-<sup>1</sup>la<sup>1</sup>  
 (19) | 4 | Giš<sup>1</sup> ba-a-<sup>1</sup>ia<sup>1</sup> [ ]  
 (20) | HAL<sup>1</sup> da<sup>2</sup>-me<sup>2</sup>-ik<sup>2</sup>-ru<sup>2</sup>-da hi-še ug-<sup>1</sup>gi<sup>1</sup> [zik-kak-ka<sub>4</sub>]

## Reverse

- (01') | <sup>1</sup>x+6<sup>2</sup><sup>1</sup> | [ ]  
 (02') | 20+2 | Giš<sup>1</sup> [ ]  
 (03') | HAL<sup>1</sup> x x x x x<sup>1</sup> hi-<sup>1</sup>še<sup>1</sup> [ug-gi zik-kak-ka<sub>4</sub>]  
 (04') | [ ] | [ ]  
 (05') | [ ] | <sup>1</sup>Giš<sup>1</sup> x<sup>1</sup> MEŠ<sup>1</sup>  
 (06') | HAL<sup>1</sup> x x x-ak<sup>2</sup><sup>1</sup>-ka<sub>4</sub><sup>2</sup> <sup>1</sup>hi-še ug-gi zik-kak<sup>1</sup>-[ka<sub>4</sub>]  
 (07')  
 (08')  
 (09')  
 (10')  
 (11')  
 (12')  
 (13') [ ] ug-gi] <sup>1</sup>zik<sup>1</sup>-kak-ka<sub>4</sub>  
 (14') AŠ<sup>1</sup> ti-<sup>1</sup>x<sup>1</sup> [ ]-na-ma  
 (15') HAL [ ] <sup>1</sup>x x<sup>1</sup>

## Translation

- (01-03) 1,000+[x] (l.) apples, 950 (l.) mulberries, 2 l. *kannakduš*:<sup>(04)</sup> assigned to<sup>2</sup> a man named Puda.  
 (05-09) 550 (l.) apples, 80<sup>2</sup> (l.) *kazla*, 50 (l.) mulberries, 210 l. dates<sup>2</sup>, 20<sup>2</sup> (l.) figs<sup>2</sup>:<sup>(10)</sup> assigned to<sup>2</sup> a man named PN.  
 (11-12) 600+[x] (l.) dates<sup>2</sup>, 800+[x] (l.) apples:<sup>(13)</sup> assigned to<sup>2</sup> PN<sub>2</sub>.  
 (14-19) 50 (l.) dates<sup>2</sup>, 60 (l.) figs<sup>2</sup>, 20 (l.) apples, 20 (l.) *kannakduš*, 60 (l.) *kazla*, 20 (l.) quince:  
 (20) assigned to<sup>2</sup> a man named PN<sub>3</sub>.  
 (Reverse 01'-02') 60<sup>2</sup>+ [x] (l.) [ ... ], 220 (l.) [ ... ]:<sup>(03')</sup> assigned to<sup>2</sup> a man named PN<sub>4</sub>.  
 (04'-05') [ ... ] [x] (l.) [x]:<sup>(06')</sup> assigned to<sup>2</sup> a man named PN<sub>5</sub>.  
 (13'-15') [ ... ]: assigned to<sup>2</sup> [a man named PN<sub>6</sub>] at [GN], in [the nth year<sup>2</sup>], PN [overseeing<sup>2</sup>].



## Comments

8.2L x (11.0)W x 2.4Th

No seal impressions.

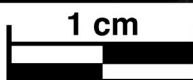
Thin incised or snapped vertical lines mark left and center boundaries; thick impressed horizontal rulings mark section boundaries.

Uninscribed, unruled, unsealed space equivalent to about 5 lines follows line 15'.

(07'-12') Illegible traces.



Fort. 1207-102 Obverse



Fort. 1207-102 Lower Edge

*Fig. 21.* No. 19 (Fort. 1207-102) Obverse, Lower Edge.



## 19. Fort. 1207-102 (Fig. 21)

### Obverse

- (01) [ ] ṛGiš<sup>1</sup>du-ud-da  
(02) [ ] ṛGiš<sup>1</sup>ha-su-ur  
(03) [ ] ṛGiš<sup>1</sup>kaz<sub>0</sub>-la  
(04) [ ] ṛGiš<sup>1</sup>pit<sup>MEŠ</sup>  
(05) [ ] ṛGiš<sup>1</sup>MA<sup>MEŠ</sup>  
(06) [ ] ṛug<sup>1</sup>-gi zik-kak-ka<sub>4</sub>

### Lower Edge

- (07) [ ]-ti-kar-ri-iš  
(08) [šá-ra]-man-na

### Translation

(01-05) [x] mulberries, [x] apples, [x] *kazla*, [x] figs?, [x] dates?: (06) [total] assigned to? [PN],  
(07-08) PN<sub>2</sub> overseeing.

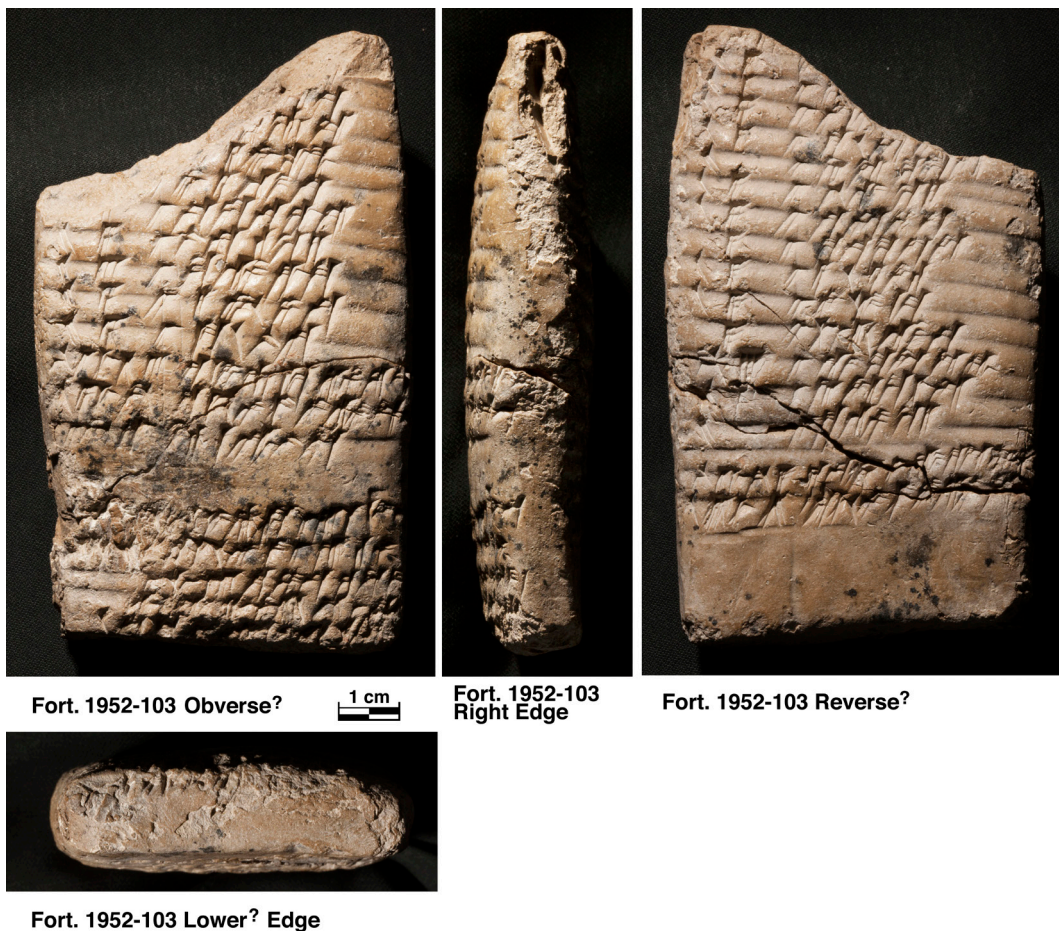
### Comments

(2.7)L x 2.6W x 1.4Th

No preserved seal impressions.



## C1/W-Related Documents



Fort. 1952-103 Obverse?

1 cm

Fort. 1952-103  
Right Edge

Fort. 1952-103 Reverse?

Fort. 1952-103 Lower? Edge

**Fig. 22.** No. 20 (Fort. 1952-103) Obverse<sup>2</sup>, Right Edge, Lower<sup>2</sup> Edge, Reverse<sup>2</sup>.

### 20. Fort. 1952-103 (Fig. 22)

Obverse<sup>2</sup>

(01') [	]	ṛx <sup>1</sup>
(02') [	]	ṛx <sup>1</sup> -na
(03') [	]	ṛx <sup>1</sup> -ru-iš
(04') [	]	-šá-ak-ka <sub>4</sub> <sup>!?</sup> -ra
(05') [	]	ṛ <sup>HAL</sup> ak-šá-ik-ka <sub>4</sub>
(06') [ ]+ṛx <sup>1</sup>		ṛ <sup>HAL</sup> ka <sub>4</sub> -ad-ka <sub>4</sub> -pi-iš
(07') 20+5		ṛ <sup>HAL</sup> man-na-a-iz-za
(08') 20+3		ṛ <sup>HAL</sup> ba-gi-ráb-ba
(09') 30+4		ṛ <sup>HAL</sup> za-kam-uk-ka <sub>4</sub>
(10') 30+4		ṛ <sup>HAL</sup> ma-u-man-na





- (11') PAP 2 ME 80+3 || <sup>Giš</sup>mi-ia-taš gi-um ʾha da<sup>1</sup>-[ka<sub>4</sub>]  
(12') ʾPAP<sup>1</sup> 4 ME 40 || <sup>Giš</sup>tar-mu<sup>MEŠ</sup> ug-gi da-ʾka<sub>4</sub><sup>1</sup>  
(13') HAL ʾx<sup>1</sup>-pi-ia šá-ra-man-na  
(14') (blank)  
(15') (blank)  
(16') [PAP] ʾx ME x <sup>Giš</sup>mi<sup>1</sup>-ia-taš HAL ú-šá<sup>2</sup>-a-i-ʾna<sup>1</sup>  
(17') ʾPAP x ME 30<sup>21</sup> [ ] <sup>Giš</sup>tar<sup>1</sup>-mu<sup>MEŠ</sup> HAL ú-za<sup>2</sup>-ak<sup>2</sup>  
(18') HAL š<sup>2</sup>i-ib-ba uk-ka<sub>4</sub>-e<sup>2</sup> da-ma  
(19') ʾx iš x man x da<sup>1</sup> AŠ ʾzi<sup>21</sup>-  
(20') u ʾx ma<sup>2</sup> x x x x x<sup>1</sup> [ ]

#### Lower<sup>2</sup> Edge

- (21') šá-ra-ʾman-na<sup>1</sup>

#### Reverse<sup>2</sup>

- (01'') ʾx x<sup>1</sup> [ ]  
(02'') ʾ10<sup>1</sup>+5 | ʾHAL x<sup>1</sup> [ ]  
(03'') 20+1 | HAL ʾx<sup>1</sup> [ ]  
(04'') 10+5 | HAL ʾx x<sup>1</sup> [ ]  
(05'') 10+5 | HAL ma-u-ʾda-ad<sup>21</sup>-[da<sup>2</sup>]  
(06'') 20 | HAL ir-da-ba-ʾad-da<sup>1</sup>  
(07'') 10+5 | HAL bat-ti-iz-za  
(08'') 10+6 | HAL ka<sub>4</sub>-du-uk-ka<sub>4</sub>  
(09'') 5 | HAL ba-ka<sub>4</sub>-ba-ad-da  
(10'') 10+7 | HAL šá-u-šá-ia  
(11'') 10+8 | HAL ak-ki-ma  
(12'') 7 | HAL nu-ri-ik-ka<sub>4</sub>  
(13'') 40+6 | HAL um-ba-da-da-ra  
(14'') ʾ30<sup>1</sup>+1 | HAL ir-da-ba-nu-iš  
(15'') 20 | ʾHAL ba<sup>1</sup>-gi-iz-za  
(16'') (blank)  
(17'') PAP 2 ME 50+7 <sup>Giš</sup>ka<sub>4</sub>-ir<sup>1</sup> HAL um-ba-da-ʾad<sup>2</sup>-da<sup>21</sup>  
(18'') PAP 6 ME 50 <sup>Giš</sup>tar-mu<sup>MEŠ</sup> ʾug-gi da-ka<sub>4</sub><sup>1</sup>



## Translation

(Obverse? 02<sup>1</sup>-10<sup>1</sup>) [x (l.)] PN, [x (l.)] PN<sub>2</sub>, [x (l.)] PN<sub>3</sub>, [x (l.)] Akšakka, [x] (l.) Kadkapiš, 250 (l.) Mannazza, 230 (l.) Bagirabba, 340 (l.) Zakamukka, 340 (l.) Maumanna: <sup>(11)</sup> total 2,830 (l.) of seed deposited there as *gim*; <sup>(12)</sup> total 4,400 (l.) of *tarmu*-cereal assigned to him?; <sup>(13)</sup> PN<sub>4</sub> overseeing.

<sup>(16)</sup> Total x (l.) seed of Ušaya?; <sup>(17<sup>1</sup>-18<sup>1</sup>)</sup> total x (l.) *tarmu*-cereal to be assigned to? Uzakka? (and?) Šibba <sup>(19<sup>1</sup>-21<sup>1</sup>)</sup> ... at GN, PN<sub>5</sub> overseeing.

(Reverse? 02<sup>1</sup>-15<sup>1</sup>) 150 (l.) PN<sub>6</sub>, 210 (l.) PN<sub>7</sub>, 150 (l.) PN<sub>8</sub>, 150 (l.) Mauda[dda?], 200 (l.) Irdabadda, 150 (l.) Battizza, 160 (l.) Kadukka, 50 (l.) Bakabadda, 170 (l.) Šaušaya, 180 (l.) Akkima, 70 (l.) Nurikka, 460 (l.) Umbadadara, 310 (l.) Irdabanuš, 200 (l.) Bagizza.

<sup>(17<sup>1</sup>-18<sup>1</sup>)</sup> Total 2,570 (l.) grain? (of?) Umbadadda?; total 6,500 (l.) *tarmu*-cereal, assigned to? him.

## Comments

6.2L x (10.1)W x 2.2Th

No seal impressions.

The tablet turns from Obverse? to Reverse? on the vertical, not horizontal, axis.

Unruled, uninscribed, unsealed space follows the last line of text on the Reverse?.

<sup>(11)</sup> ʾha da<sup>1</sup>-[ka<sub>4</sub>] on right edge.

<sup>(11<sup>1</sup>, 16<sup>1</sup>)</sup> Gišmi-ia-taš is apparently a variant transcription of Iranian \*v(i)yāduš, “seed,” otherwise more accurately transcribed as mi-ia-du-iš, without determinative Giš (Tavernier 2007, p. 413). If so, this passage is not compatible with the surmise that *gim* indicates an assessment against a standing crop.

All other occurrences until now are in calculations appended to grain journals, where *miyaduš* indicates a total from which amounts are reserved (*nutukka*, *pir nutukka*), implying that the balance was used. The word does not occur in known C1 documents dealing with *tarmu*-cereal.

<sup>(12<sup>1</sup>, 18<sup>1</sup>)</sup> If *uggi daka* is meant to indicate that each listed amount is “assigned to?” each listed person, a plural version of the phrase, *ukkap daka*, applied to the total of *tarmu*, is expected.

<sup>(16)</sup> Cf. HAL-ú-šá-a-ia PF-NN 1685:07 (C1, *tarmu*, at Matannan).

<sup>(17<sup>1</sup>-18<sup>1</sup>)</sup> *kar*, transcribing Iranian \*kāra-, “grain”, appears in many C1 texts dealing with *tarmu*-cereal in the phrase *kar huttira*, “*kar* handler.” It appears in a few C1 texts in the phrase *kar hube* (*kar hi*), “that *kar*,” referring to amounts of *tarmu* indicated at the beginnings of the texts (PF 0150, 0151, 0152, 0155, and replaced by *tarmu hube*, “that *tarmu*,” in PF 0154), implying that the category *kar*, “grain,” includes



*tarmu*, a kind of cereal. Here, however, if lines 17'' and 18'' enter a subtotal and a grand total, respectively, *tarmu* includes *kar*. If lines 11'-12', and 16'-17' also enter subtotals and grand totals, then *tarmu* also includes *miyataš*, “seed.” If so, then this text distinguishes between amounts of *tarmu* as “(harvested) grain (*kar*)” for storage and consumption, and as “seed (*miyataš*)” to be reserved.



Fort. 2263-103 Obverse?



Fort. 2263-103 Reverse?

Fort. 2263-103 Lower? Edge

Fig. 23. No. 21 (Fort. 2263-103) Obverse?, Lower?, Edge, Reverse?.

## 21. Fort. 2263-103 (Fig. 23)

Obverse?

(01')	1[		]
(02')		kur-mín <sup>HAL</sup> ha-x-x <sup>1</sup> -[	]
(03')	5	GIŠ <sup>1</sup> pi-ut	
(04')	1½	GIŠ <sup>1</sup> MA <sup>MEŠ</sup>	
(05')		kur-mín <sup>HAL</sup> at-ti-ia	



(06')	1	Giš <sup>MA</sup> MEŠ
(07')		kur-mín <sup>HAL</sup> mar-ma
(08')	1	Giš <sup>pi</sup> -ut
(09')	[	]   kur-mín <sup>HAL</sup> mar-me-tin-na
(10')	[	]   Giš <sup>pi</sup> -ut
(11')	[	kur]-mín <sup>HAL</sup> uk-ma-ráš-šá
(12')	[	Giš <sup>pi</sup> ]-ut

### Lower<sup>2</sup> Edge

(01'')	[	]
(02'')	[	] ʾx x <sup>1</sup>

### Reverse<sup>2</sup>

(01''')	[		]	ʾx <sup>1</sup>
(02''')	[	Giš <sup>MA</sup> MEŠ		
(03''')	[	kur]-mín <sup>HAL</sup> hi-da-man-na		
(04''')	[PAP] hi	ʾ	Aš <sup>u</sup> ? <sup>1</sup> -ba-iš-da	
(05''')			(blank)	
(06''')	20+5	Giš <sup>pi</sup> -ut		
(07''')	1	Giš <sup>du</sup> <sup>1</sup> -da-um		
(08''')	3	Giš <sup>MA</sup> MEŠ		
(09''')	1 ME	3	Giš <sup>ha</sup> -su-ir	
(10''')	3	Giš <sup>ir</sup> -taš-ti-iš		
(11''')		kur-mín <sup>HAL</sup> ba-ka <sub>4</sub> -ba-da		
(12''')	PAP hi		Aš <sup>ia</sup> -ma-da-nu-iš	
(13''')			(blank)	
(14''')	[	] ʾx <sup>1</sup> [		]

### Translation

(Obverse? 01') 10 (l.) [x]: (02') allocated by<sup>2</sup> PN.

(03'-04') 50 (l.) dates<sup>2</sup>; 15 (l.) figs<sup>2</sup>: (05') allocated by<sup>2</sup> Attiya.

(06') 10 (l.) figs<sup>2</sup>: (07') allocated by<sup>2</sup> Marma.

(08') 10 (l.) dates<sup>2</sup>: (09') allocated by<sup>2</sup> Marmetinna.

(10') [x (l.)] dates<sup>2</sup>: (11') allocated by<sup>2</sup> Ukmarašša.

(12') [x (l.) dates<sup>2</sup> [ ... ]

(Lower? Edge 01''-02'') [ ... ]





(Reverse? 01<sup>'''</sup>-02<sup>'''</sup>) [x (l.) dates<sup>?</sup>], [x (l.)] figs<sup>?</sup>: (03<sup>'''</sup>) allocated by<sup>?</sup> Hidamanna; (04<sup>'''</sup>) this (is) [the total] (of fruit at) Ubašda<sup>?</sup>.

(06<sup>'''</sup>-10<sup>'''</sup>) 250 (l.) dates<sup>?</sup>, 10 (l.) mulberries, 30 (l.) figs<sup>?</sup>, 1,030 (l.) apples, 30 (l.) irtaštiš: (11<sup>'''</sup>) allocated by<sup>?</sup> Bakabadda; (12<sup>'''</sup>) this (is) the total (of fruit at) Yamadanuš.

### Comments

6.2L x (7.3)W x 1.7Th

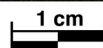
No preserved seal impressions.

(05<sup>'</sup>) Attiya: see comment on No. 8:09.

(11<sup>'''</sup>-12<sup>'''</sup>) Bakabadda at Yamadanuš: No. 14:06f. (C1/W), No. 27:37 (W).



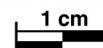
Fort. 0204-102 Obverse



Fort. 0204-102 Lower Edge



Fort. 0204-102 Reverse



Fort. 0204-102 Upper Edge

**Fig. 24.** No. 22 (Fort. 0204-102) Obverse, Lower Edge, Reverse, Upper Edge.



## 22. Fort. 0204-102 (Fig. 24)

### Obverse

- (01) [ ] '20 <sup>GIŠ</sup>pi-ut<sup>1</sup>  
 (02) [ ] '30 <sup>GIŠ</sup>du-ud-da  
 (03) [ ] '50<sup>2</sup> <sup>GIŠ</sup>za<sup>2</sup>1-[x]-da<sup>2</sup>1-kán  
 (04) [ ] 'x<sup>1</sup>+3 <sup>GIŠ</sup>MA<sup>MEŠ</sup>  
 (05) [ ] '20<sup>1</sup>+ [x] <sup>GIŠ</sup>da-ku-iš  
 (06) 50 '«<sup>GIŠ</sup>»<sup>1</sup>ŠE.BAR<sup>MEŠ</sup>  
 (07) PAP hi <sup>GIŠ</sup>mi-ik-tam<sup>6</sup><sup>MEŠ</sup> kur-mín <sup>HAL</sup>ka<sup>4</sup>-iš<sup>1</sup>-

### Lower Edge

- (08) še-na-na  
 (09) 1 ME 10 BAR ŠE.BAR<sup>MEŠ</sup>

### Reverse

- (10) 30 'BAR<sup>1</sup> ZÍD.DA<sup>MEŠ</sup>  
 (11) 30 BAR áš-šá-na<sup>MEŠ</sup>  
 (12) 30+2 'BAR<sup>1</sup> ha<sup>2</sup>-at-lu  
 (13) PAP 2 ME 2 BAR ŠE.BAR<sup>MEŠ</sup> kur-mín <sup>HAL</sup>hi-ki-da-na  
 (14) [ ] 6 BAR <sup>GIŠ</sup>MA<sup>MEŠ</sup>  
 (15) [ ] '4<sup>1</sup> BAR ŠE.GIG<sup>MEŠ</sup>  
 (16) [ ] 2 'BAR<sup>1</sup> ½ <sup>GIŠ</sup>mi-ik-'tam<sup>6</sup><sup>MEŠ</sup>1 ma-du<sup>2</sup>-uk<sup>1</sup>2-[ka<sup>4</sup>2]  
 (17) [PAP] hi <sup>GIŠ</sup>mi-ik-'tam<sup>6</sup><sup>MEŠ</sup> ma-ri-ia-um  
 (18) [kur]-mín <sup>HAL</sup>ma-u-'x-x-x<sup>1</sup>-na

### Upper Edge

- (19) [AN]'IT<sup>MEŠ</sup>1 [ ]-'ia-ti<sup>1</sup>-iš-na<sup>1</sup>  
 (20) [ ] be-ul [ ]-um-me-man-na PAP hi <sup>AŠ</sup>man-x-[x]-  
 (21) [ ]-ti-iš [ ] x

### Translation

- (01-06) 200 (l.) dates<sup>2</sup>, 300 (l.) mulberries, 500<sup>2</sup> (l.) ..., x+30 (l.) figs<sup>2</sup>, 200+[x] (l.) dakuš, 500 (l.) barley: (07-08) this (is) the total of fruit allocated by<sup>2</sup> Kaššena.  
 (09-12) 1,100 l. barley, 300 l. flour, 300 l. aššana, 320 l. hatlu<sup>2</sup>: (13) total 2,020 l. grain allocated by<sup>2</sup> Hikidda.  
 (14-16) 60 l. figs<sup>2</sup>, [(x)+] 40 l. wheat, [(x)+] 25 l. fruit-madukka: (17-18) this (is) [the total] of fruit (and) food<sup>2</sup> allocated by<sup>2</sup> PN.  
 (19-21) Month VII (or: IX), year .... This (is) the total at GN.



## Comments

7.1L x 4.3W x 1.4Th

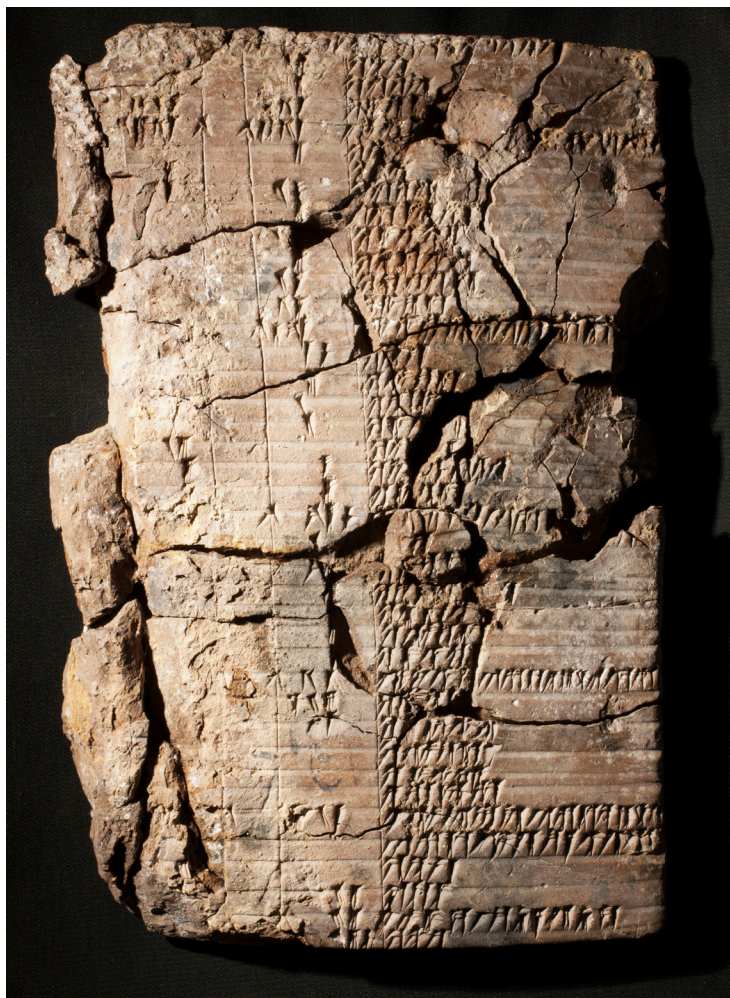
No seal impressions.

- (03) Perhaps a variant spelling of *daritkan/zaritkam* a golden, yellow-green or green fruit: see comment on No. 23:59, 65.
- (12) Evidently not a spelling of *atlu*, despite Hallock 1969, p. 671 (“prob[ably] a kind of food”); see Hinz & Koch 1987, p. 94 (“Ocker?, jedenfalls ein Farbstoff”), citing Hallock, p.c. (“evid[ently] not food, described as ‘ornamentation’ (OP *arjanam*)),” corresponding to Hallock’s marginal note in his working copy of Hallock 1969 (“ornamentation!—a semi-precious stone?”); Henkelman 2017c, p. 279 (a mineral substance used to make pigment).
- (13) <sup>HAL</sup> written as BE. Cf. balance of grain at Mandumattiš, for allocation by<sup>7</sup> Hikidda, PF-NN 2602.
- (16) *madukka* (*madukaš*): “honey,” a commodity and a personal name (Hinz & Koch 1987, p. 859 s. vv. *ma-du-kaš*, *ma-du-qa*, *hh.Ma-du-qa*, *ma-du-uk-qa*, *hh.ma-du-uk-qa*, despite Hallock 1969, p. 25, 722 (“pps. a condiment [salt?]”; here perhaps referring to a syrup or paste?
- (20f.) GN perhaps Mandumattiš (see Henkelman & Stolper 2021, p. 193, comment on Fort. 0119-101:76)?





## Tabular Fruit Accounts (W)



Fort. 1899-101 Obverse

1 cm



Fort. 1899-101  
Right Edge



Fort. 1899-101 Lower Edge

*Fig. 25a.* No. 23 (Fort. 1899-101) Obverse, Right Edge, Lower Edge.





**Fort. 1899-101 Reverse**

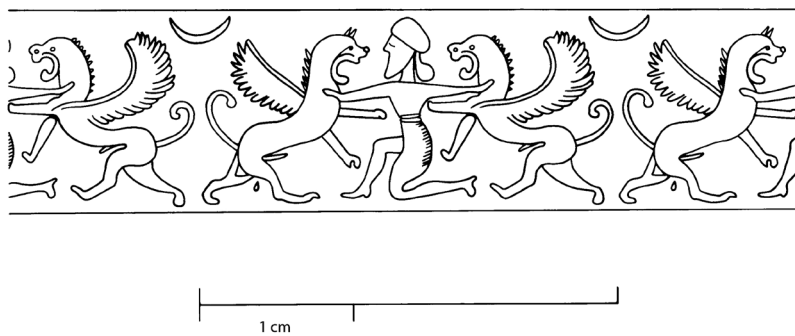


**Fort. 1899-101 Upper Edge**

*Fig. 25b.* No. 23 (Fort. 1899-101) Reverse, Upper Edge.



**Fig. 25c.** No. 23 Obverse, Aramaic epigraph  
(top: polarized light; bottom: polarized light, red filter).



**Fig. 25d.** PFS 0120 (drawing by Mark B. Garrison).



## 23. Fort. 1899-101 (Fig. 25a-d)

Obverse

(01)	[uk-ka <sub>4</sub> -ap da-ka <sub>4</sub> a-ak ul-la-ka <sub>4</sub> ] ʾa-ak pi-ir ul-la-ka <sub>4</sub> a-ak maz <sub>0</sub> <sup>1</sup> -zī-ʾka <sub>4</sub> <sup>1</sup>		
(02)	[ ]	[ ]	10+ʾ1 <sup>1</sup>   Giš <sup>1</sup> pi-ut
(03)	[ ]	ʾ6 <sup>1</sup>	ʾ2 <sup>1</sup>   Giš <sup>1</sup> du-ud-da
(04)	[ ]	ʾ1 ME 20 <sup>2</sup> +4 <sup>1</sup>	ʾ1 ME <sup>1</sup> 70+1   Giš <sup>1</sup> ha-su-ur
(05)	[PAP 3 ME 50+5 <sup>1</sup> ] [PAP 1 ME 70+1] [PAP 1 ME 80+4 <sup>1</sup> ]   HAL mar-ʾdu <sup>1</sup> -[ka <sub>4</sub> Aš <sup>1</sup> pár-te-taš pi-ip]-ʾši-na <sup>1</sup> Aš <sup>1</sup> ma-ʾte <sup>1</sup> -zī-iš		
(06)	[ 2 ]	[ ]	2   Giš <sup>1</sup> pi <sup>1</sup> -[ut]
(07)	[ 5 ]	[ 5 ]	Giš <sup>1</sup> kaz <sub>0</sub> -la <sup>1</sup>
(08)	[ 20+3 ]	[ 4 ]	10+9   Giš <sup>1</sup> du-ud-ʾda <sup>1</sup>
(09)	[ ]	[ ]	3   Giš <sup>1</sup> te-el-ʾte <sup>1</sup>
(10)	[ ]	[ ]	10+[5]   Giš <sup>1</sup> ku-ti-ʾiz-za <sup>1</sup>
(11)	[ ]	[ ]	ʾ3 <sup>1</sup>   Giš <sup>1</sup> ir-taš-ti-iš
(12)	[ ]	[ ]	20+4   Giš <sup>1</sup> kán-na-<ak>-du-iš
(13)	[ ]	[ ]	70+5   Giš <sup>1</sup> ha-su-ur
(14)	[ ]	[ ]	PAP 1 ME 40+1   HAL ha <sup>1</sup> -tur-ra-ʾad-da Aš <sup>1</sup> pár-te <sup>1</sup> -taš ʾpi-ip <sup>1</sup> -[ši-na Aš <sup>1</sup> ma-te-zī-iš]
(15)	[ ]	[ ]	1½   Giš <sup>1</sup> pi-ut
(16)	[ ]	[ ]	3   Giš <sup>1</sup> gi <sup>1</sup> -šu-ur
(17)	[ ]	[ ]	10   Giš <sup>1</sup> te-el <sup>1</sup> -[te]
(18)	[ ]	[ ]	20   Giš <sup>1</sup> ku-[ti-iz]-ʾza <sup>1</sup>
(19)	[ 10+3 ]	[ 10+3 ]	Giš <sup>1</sup> du <sup>1</sup> -[ud]-ʾda <sup>1</sup>
(20)	[ 10+5 ]	[ 6 ]	9   Giš <sup>1</sup> šap <sub>0</sub> <sup>?</sup> [ku <sup>?</sup> ]-ʾmar <sup>?</sup> -x <sup>1</sup> -ut <sup>?</sup> -ka <sub>4</sub> <sup>?</sup>
(21)	[ 7 ]	[ ʾ2 <sup>1</sup> ]	5   Giš <sup>1</sup> ha-su-ur





(22)	[		]		PAP	40+8½		<sup>HAL</sup> x-x-x <sup>1</sup> -ka <sup>4</sup> <sup>AŠ</sup> pár-te- <sup>1</sup> taš <sup>1</sup> [	]	<sup>1</sup> x x <sup>1</sup>
(23)	[		]			10		[ <sup>GIŠ</sup> pi]-ut		
(24)	[		]			<sup>1</sup> 40 <sup>1</sup> +	[x]	<sup>GIŠ</sup> ha-su-ur <sup>1</sup>		
(25)	[		]				[x]	<sup>GIŠ</sup> šapo <sup>?</sup> ku <sup>?</sup> -mar <sup>?</sup> <sup>1</sup> -[x-ut <sup>?</sup> ]- <sup>1</sup> ka <sup>4</sup>		
(26)	[		]				[x]	<sup>GIŠ</sup> ir- <sup>1</sup> taš-ti-iš <sup>1</sup>		
(27)	[		]				<sup>1</sup> 2 <sup>1</sup>	<sup>GIŠ</sup> gi-šu-ur		
(28)	[		]				<sup>1</sup> x <sup>1</sup>	<sup>GIŠ</sup> ku-ti-iz-za		
(29)	[		]		PAP	70+1		<sup>HAL</sup> za-ak <sup>?</sup> -ti- <sup>1</sup> iš <sup>?</sup> <sup>1</sup> <sup>AŠ</sup> pár-te-taš pi-ip-ši-na <sup>AŠ</sup> ma-te-zí-iš		
(30)	[		]			1 ME 20+6		<sup>GIŠ</sup> ha-su-ur <sup>1</sup>		
(31)	[		]			1		<sup>GIŠ</sup> ir-taš-ti-iš <sup>1</sup>		
(32)	[		]					<sup>GIŠ</sup> gi-su-ur		
(33)	[		]					<sup>GIŠ</sup> ku-ti-iz-za		
(34)	[		]					<sup>GIŠ</sup> te-el-te		
(35)	[		]		PAP	<sup>1</sup> PAP 1 ME <sup>1</sup> 20+8		<sup>HAL</sup> gi <sup>1</sup> -da-ad-da <sup>AŠ</sup> pár-te-taš pi-ip-ši-na <sup>AŠ</sup> ma-te-zí-iš		
(36)	[		]					<sup>AŠ</sup> pár-te-taš <sup>AŠ</sup> mi-iš-ba-šá-ti-iš <sup>AŠ</sup> ma-te-zí-iš		
(37)	[	]	<sup>1</sup> 20 <sup>1</sup> [	]				<sup>GIŠ</sup> pi-ut		
(38)	[		]			30+2		<sup>GIŠ</sup> MA <sup>MEŠ</sup>		
(39)	[		]		PAP		PAP	30+3		<sup>HAL</sup> hi <sup>?</sup> -ku-ma <sup>AŠ</sup> ba-ir-šá-iš ir-ma
(40)	[					]		10+6½		<sup>GIŠ</sup> pi-ut



## Lower Edge

(41)

[

|

|

|

]

10<sup>1</sup>+5

|

GIŠ<sup>MA</sup>MEŠ

(42)

[

]

ṚPAP<sup>1</sup>[

]

ṚPAP<sup>1</sup>

|

ṚPAP<sup>1</sup>

30+1½

|

HALuk<sup>?</sup>-ku<sup>!?</sup>-mi-ra

AŠ<sup>1</sup>ba-ir-šá-iš

ir-ma

(43)

[

]

|

|

|

20+9

|

GIŠ<sup>MA</sup>MEŠ

## Reverse

(44)	[	]				20		GIŠ	pi-ut
(45)	[PAP	60+8]		PAP	10 <sup>1</sup> +9		PAP	40+9	<sup>HAL</sup> lu <sup>?</sup> -iz-zí-iš <sup>AŠ</sup> ba-ir-šá-iš me-šá-an
(46)	[	]		6				GIŠ	du-ud-da
(47)	[	]						<sup>HAL</sup> i-ti-pu <sup>?</sup> -sa <sup>AŠ</sup> ba-ir-šá-an me-šá-an	
(48)	[	]	10 <sup>1</sup> +3		10+3			10	<sup>GIŠ</sup> pi-ut
(49)	[	]	20+2		7			10+5	<sup>GIŠ</sup> MA <sup>MEŠ</sup>
(50)	[PAP	]	40+5		10 <sup>1</sup> PAP	20		PAP	20+5   <sup>HAL</sup> 1kaz0 <sup>1</sup> -za-ak-1ka4 <sup>1</sup> AŠ1ba-ir-šá-an me-šá-an
(51)	[	]	20+1		7½			10+3½	<sup>GIŠ</sup> 1pi <sup>1</sup> -ut
(52)	[	]	20+2		1			20+1	<sup>GIŠ</sup> MA <sup>MEŠ</sup>
(53)	[PAP	]	40+3		10 <sup>1</sup> PAP	8½		PAP	30+4½   <sup>HAL</sup> nu <sup>?</sup> -1x <sup>1</sup> -te-na <sup>AŠ</sup> ba-ir-šá-an me-šá-an
(54)	[	]							<sup>GIŠ</sup> 1GIR <sup>1</sup> MEŠ hu-ut-ti-ip a-ak <sup>AŠ</sup> pár-te-taš
(55)	[	]							nu-1iš <sup>1</sup> -ki-ip <sup>HAL</sup> da-tap-1pár-na šá-ra <sup>1</sup> -ma
(56)	[	]	20+2					20+2	<sup>GIŠ</sup> pi <sup>1</sup> -ut
(57)	[	]	5					5	<sup>GIŠ</sup> 1MA <sup>MEŠ</sup>
(58)	[	]	2					2	<sup>GIŠ</sup> x]-1x-x-x <sup>1</sup>



- (59) [ ] 3 | 3 | [ ] <sup>GIŠ</sup>za-ri-ut-ka<sub>4</sub><sup>?</sup> [ ]
- (60) [PAP ] <sup>?</sup>30+2<sup>?</sup> | [PAP] 3 | <sup>?</sup>PAP<sup>?</sup> | <sup>?</sup>PAP<sup>?</sup> 20+9 | <sup>HAL</sup>pu-uk-šá <sup>HAL</sup>šá<sup>?</sup>-li<sup>?</sup>-ra <sup>?</sup>x<sup>?</sup> [ ]
- (61) [ ] | | | <sup>HAL</sup>ir-še-na šá-ra-ma [ ]
- (62) <sup>?</sup>PAP<sup>?</sup> hi <sup>GIŠ</sup>mi<sup>?</sup>-ik-tam<sub>6</sub> <sup>?</sup>uk<sup>?</sup>-[ka<sub>4</sub>]-<sup>?</sup>ap<sup>?</sup> da-<sup>?</sup>ka<sub>4</sub><sup>?</sup> a-ak ul-<sup>?</sup>la-ka<sub>4</sub> <sup>AŠ</sup>be<sup>?</sup>-ul <sup>?</sup>10<sup>?</sup>+x<sup>?</sup>-me-man<sup>?</sup>-[na ]
- (63) kur-mín <sup>HAL</sup>ha-tur-ra-<sup>?</sup>ad<sup>?</sup>-da <sup>HAL</sup>ab-be-KI+MIN hu-ut-ti-ra <sup>HAL</sup>ir-še-na<sup>?</sup> [šá-ra-ma ]
- (64) [<sup>GIŠ</sup>pi]-ut a-ak <sup>GIŠ</sup>MA<sup>MEŠ</sup> a-ak <sup>?</sup>GIŠkaz<sub>0</sub>-<la><sup>MEŠ</sup> a-ak <sup>GIŠ</sup>ha-su-<sup>?</sup>ur a-ak <sup>GIŠ</sup>du-ud-da a-ak <sup>GIŠ</sup>gi<sup>?</sup>-[šú<sup>?</sup>-ur<sup>?</sup> a-ak]
- (65) [<sup>GIŠ</sup>te]-el-te a-ak <sup>GIŠ</sup>ku-<sup>?</sup>ti<sup>?</sup>-iz-za a-ak <sup>GIŠ</sup>za-ri-ut-ka<sub>4</sub><sup>?</sup> [a]-<sup>?</sup>ak<sup>?</sup> <sup>GIŠ</sup>šap<sub>0</sub><sup>?</sup> ku<sup>?</sup>-mar<sup>?</sup>-<sup>?</sup>x-x-x<sup>?</sup>
- (66) [a-ak] <sup>GIŠ</sup>ir-taš-ti-iš a-ak <sup>GIŠ</sup>š<sup>?</sup>i<sup>?</sup>-x-ti-iš <sup>?</sup>PAP<sup>?</sup> ir kut-tan-<sup>?</sup>na <sup>GIŠ</sup>mi-ik-tam<sub>6</sub><sup>?</sup>
- (67) [ x ] <sup>?</sup>ME 80<sup>?</sup>+4 | 1 ME 80+6 | <sup>?</sup>40<sup>?</sup> | <sup>?</sup>3 ME 90+2<sup>?</sup> | <sup>?</sup>60+5<sup>?</sup> | <sup>?</sup>10<sup>?</sup>+6 | 10+2 | 2 | 10 | <sup>?</sup>x<sup>?</sup> [ ]
- (68) [ x ] <sup>?</sup>ME<sup>?</sup> 5 | 2 ME 10+6 | 1 ME 90+5 | 1 ME 30+9 | 80+<sup>?</sup>5<sup>?</sup> | <sup>?</sup>3<sup>?</sup> | 10+3 | 1 | 10+<sup>?</sup>x<sup>?</sup> | 10+<sup>?</sup>2<sup>?</sup> [ ]
- (69) <sup>?</sup>70<sup>?</sup>+1 | 40+4 | 4 | 6 ME 40+9 | 80+6 | 2 | 10 | 2 | <sup>?</sup>x<sup>?</sup> [ ]
- (70) <sup>?</sup>PAP hi<sup>?</sup> <sup>GIŠ</sup>mi-ik-tam<sub>6</sub> ha-du-iš <sup>AŠ</sup>kan-du-ma ul-<sup>?</sup>la-ka<sub>4</sub> <sup>AŠ</sup>ba-ir<sup>?</sup>-[šá-iš ]
- (71) [kur-mín <sup>HAL</sup>ha-tur-ra-ad]-<sup>?</sup>da ab<sup>?</sup>-be-KI+MIN hu-ut-ti-ra <sup>HAL</sup>ir-še-na šá-ra-<sup>?</sup>ma mu<sup>?</sup>-[ši-in hi ]

Upper Edge

- (72) [ be]- <sup>?</sup>ul 10<sup>?</sup>+x-um-me-man-na hu-ud-da-ka<sub>4</sub><sup>?</sup> <sup>AN</sup>IT<sup>MEŠ</sup> [ ] <sup>?</sup>x x x x<sup>?</sup>
- (73) [ ]- <sup>?</sup>um-me-man<sup>?</sup>-na <sup>AŠ</sup>ba-ir-šá-iš an-ka<sub>4</sub> hu-<sup>?</sup>ud<sup>?</sup>-da-ka<sub>4</sub><sup>?</sup>

Obverse

<sup>?</sup>nsh<sup>?</sup>



## Synopsis/Translation

(Column headings:) [(i) (assessed amounts<sup>?</sup>) assigned to<sup>?</sup> them (ii) and (amounts) delivered] (iia) and (amounts) delivered in addition (iii) and (amounts) withdrawn.

(02-04) Amounts of dates<sup>?</sup>, mulberries, apples.

(05) Totals: Marduka, (at) the new ["paradise"] (at) Matezziš.

(06-13) Amounts of dates<sup>?</sup>, *kazla*, mulberries, *telte*, plums, *irtaštiš*, *kannakduš*, apples.

(14) Totals: Haturradda (at) the new "paradise" [(at) Matezziš].

(15-22) Amounts of dates<sup>?</sup>, *giššur*, *telte*, plums, mulberries, (a kind of grape<sup>?</sup>), apples.

(22) [Totals:] PN (at) a "paradise" [at ...].

(23-28) Amounts of dates<sup>?</sup>, apples, (a kind of grape<sup>?</sup>), *irtaštiš*, *giššur*, plums.

(29) Totals: Zaktiš<sup>?</sup> (at) the new "paradise" (at) Matezziš.

(30-35) Amounts of apples, *irtaštiš*, *giššur*, plums, *telte*.

(35-36) Totals: Gidadda (at) the new "paradise" (at) Matezziš (and<sup>?</sup>) the "paradise" (called) Mišbašatiš (at) Matezziš.

(37-38) Amounts of dates<sup>?</sup>, figs<sup>?</sup>.

(39) Totals: Hikuma<sup>?</sup>, before<sup>?</sup> Pārsa.

(40-41) Amounts of dates<sup>?</sup>, figs<sup>?</sup>.

(42) Totals: Ukkumira<sup>?</sup>, before<sup>?</sup> Pārsa.

(43-44) Amounts of figs<sup>?</sup>, dates<sup>?</sup>.

(45) Totals: Luzziš<sup>?</sup>, behind<sup>?</sup> Pārsa.

(46) Amounts of mulberries.

(47) Itipusa<sup>?</sup>, behind<sup>?</sup> Pārsa.

(48-49) Amounts of dates<sup>?</sup>, figs<sup>?</sup>.

(50) Totals: Kazakka, behind<sup>?</sup> Pārsa.

(51-52) Amounts of dates<sup>?</sup>, figs<sup>?</sup>.

(53) Totals: PN, behind<sup>?</sup> Pārsa.

(54-55) (These are) orchard<sup>?</sup>-makers and "paradise"-tenders overseen by Datapparna.

(56-59) Amounts of dates<sup>?</sup>, figs<sup>?</sup>, ... , and *zaritka*.

(60-61) Totals: Pukša, a *šalira*<sup>?</sup> ..., overseen by Iršena.

(62-63) This is the total of (assessed<sup>?</sup>) fruit assigned to them<sup>?</sup> and delivered, year n; for allocation by Haturradda, food-handler, Iršena overseeing.

(64-66) (Column headings): (i) dates<sup>?</sup>, (ii) and figs<sup>?</sup>, (iii) and *kazla*, (iv) and apples, (v) and mulberries, (vi) and *giššur*, (vii) [and] *telte*, (viii) and plums, (ix) and *zaritka*, (x) and ... grapes<sup>?</sup>, (x) [and] *irtaštiš*, (xi) and ...: (xii) grand total of fruit.





(67-69) (Summary balanced account of totals)

(70-72) This (is) the total of fruit delivered as revenue to the storehouse at Pārsa ... [(for) allocation by Haturrad]da, food handler, Iršena supervising. [This] account was prepared in [month x], year n. <sup>(72-73)</sup> Month x, [year n ], when? it was made at Pārsa.

(Obverse) (Epigraph): Copied.

## Comments

(12.8) x 18.5 x 2.2 cm

PFS 0120 upper edge, right edge

No. 24, an account in the same format, written on a tablet of similar dimensions, sealed with the same seal, mentions many of the same people and places. It is marked and labeled on the left edge as the first tablet of a set (line 04''). This may be another tablet of the same set (Stolper 2021, n. 12). See also Henkelman 2021, p. 147.

(01) Restored after PF-NN 0575:01; cf. No. 25.

(05) -zī-iš on right edge. Cf. Marduka at the new “paradise” at Matezziš No. 24:60'.

(20, 25, 65) šap<sub>0</sub>? (perhaps PU, probably not UK): signs and traces do not support šap<sub>0</sub> zī-ti-ka<sub>4</sub> or šap<sub>0</sub><sup>MEŠ</sup> te-na.

(22) Traces do not favor <sup>HAL</sup>mi-šá-ak<sup>1</sup>-ka<sub>4</sub> (as in No. 24:74').

(29) -zī-iš on right edge. Cf. Zaktiš at the new “paradise” at Matezziš: No. 24:80'.

(31) 1 over erasure.

(33) gi-su(not: šu)-ur: sic.

(35) <sup>AŠ</sup>ma-te-zī-iš on right edge. Cf. Gidadda at the new “paradise” at Matezziš, No. 24:84'.

(36) <sup>AŠ</sup>! written as <sup>HAL</sup>?, as in Fort. 0119-101:64 (Henkelman & Stolper 2021, p. 188). -te-zī-iš on right edge. Mišbašatiš (also Mišbašiyatiš, PT 49:07, PT 59:07, “all prosperity”: see Tavernier 2007, p. 401 [4.3.256]; Henkelman & Stolper 2021, p. 193, comment on Fort. 0119-101:64.

(37-55) Cf. the lists of short entries with subtotal indicating locations and overseers in No. 30:01'-09' and 11'-27' and probably in No. 24:29'-45'.

(39, 42) Cf. PN ir-ma “(they came) toward, against PN” DB Elamite §§23-24, corresponding to Old Persian *patiš* PN, Akkadian *ana tarši* PN. Here, in (contrasting) parallel with me-šá-an “later, after” (lines 45, 47, 50, 53), the meaning appears to be locative rather than directional, “toward, i.e., before” Persepolis versus “after, i.e., behind” Persepolis.

(42) -ku<sup>l?</sup>- written as LU.



- (45, 47, 50, 53) Cf. *Anzan mešan(a)*, “later? Anzan” or “behind? Anzan” (<sup>AŠ</sup>an-za-an me-šá-an Fort. 1287-101:11', <sup>AŠ</sup>an-za-an me-šá-na Fort. 1292-101:14', Fort. 2316-103:15, <sup>AŠ</sup>an-za-an maš-šá-an-na Fort. 1298-101:20').
- (54) Cf. PN <sup>GIŠ</sup><sub>GIR</sub><sup>MEŠ</sup> *huttira* (producers listed in a fruit account) PF 2079:02-04; (rations on authorization from Datapparna for) PN <sup>GIŠ</sup><sub>GIR</sub><sup>MEŠ</sup> *huttira* PF-NN 2493:04; same PN <sup>GIŠ</sup><sub>GIR</sub><sup>MEŠ</sup> *huttira* Fort. 1372-101:09; <sup>GIŠ</sup><sub>GIR</sub><sup>MEŠ</sup> *hutti* ... *Datapparna šarama* Fort. 1355-101:04, Fort. 1900-005:08' (with mention of a *partetaš* in the following line in broken context). In the present context, the suggested interpretation as “vessel-makers, potters” (Henkelman & Stolper 2009, p. 280 n. 27) seems as inappropriate as “Mostmacher, Scherbetbereiter” (Hinz & Koch 1987, p. 480). This is probably <sup>KIRI</sup><sub>GIR</sub> (<sup>GIR</sup>), a pronunciation-spelling of <sup>KIRI</sup><sub>6</sub> (<sup>SAR</sup>), Akkadian *kirû*, “grove, orchard,” also spelled syllabically in *parteda* GN *hiše* <sup>AŠ</sup>*ki-ri-ma* GN<sub>2</sub> *hiše* “at the ‘paradise’ called GN, in the orchard? called GN<sub>2</sub>,” PF 0158:02-07 (Hinz & Koch 1987, p. 482, Tuplin 1996, p. 94, Stolper n.d.).
- (59, 65) *zaritka(m)*, also *daritkan* (PF 0644), a golden, yellow-green or green fruit: see Henkelman & Stolper 2021, p. 192, comment on Fort. 0119-101:42, 52; Henkelman 2021, p. 161f.
- (60) <sup>ŠÁ</sup>-li<sup>?</sup>-ra: cf. *Haturradda* (and others) <sup>ŠÁ</sup>-li-ra No. 27:05, 13, 17, 21, 26, No. 28:06, 09, 13, 18; see above, p. 11, and comment to No. 27:05 etc.
- (61, 63, 71) On *Iršena*, a *šaramanna* official (and sometimes *kurdabattiš*, “chief of workers”) in the region around Persepolis, associated with PFS 0075, and distinct from the like-named regional director in the Fahliyān region, associated with PFS 0004\*, see Garrison n.d., with Appendix VI; cf. No. 24:02'', 03'', No. 25:26, 29, 30, 32, 33, 40, No. 26:10', 44', 46', No. 27:32, 33, and perhaps No. 1:18'f.
- (63, 71) Cf. *Haturradda hiše abbebe huttira Baršaš Iršena šarama* PF 1940:07-08 and perhaps No. 25:40, and (fruit and wine received by) H., who processed fruit/fruit was processed (<sup>HAL</sup>ha-tur-ra-da *duša miktam huttaš/hutukka*, PF-NN 2345:03, 10).
- (63) Unruled, uninscribed, unsealed space equivalent to about 5 lines between lines 63 and 64, with column dividers carried through.
- (66) <sup>ŠI</sup>?: or <sup>NU</sup>?. Traces do not support <sup>ŠI</sup>!-<in>-<sup>ZI</sup>!-ti-iš, or a writing of *kannakduš*, entered in line 12 but apparently not accounted for elsewhere in this table.
- (67-69) Entries of the three lines presumably indicated amounts of each fruit assessed? and assigned? (*ukkap daka*), delivered (*ullaka*) and withdrawn (*mazzika*), corresponding to columns i, ii(+iia), and iii of the table of serial entries, lines 02-62.
- (69) Unruled, unsealed, uninscribed space equivalent to about 3 lines, column dividers carried through, between lines 69 and 70.
- (Obverse) Aramaic epigraph in ink, upside down with respect to cuneiform text, at lines 31-33. See Azzoni & Stolper 2015.



**Fort. 1927-101 Obverse**

1 cm



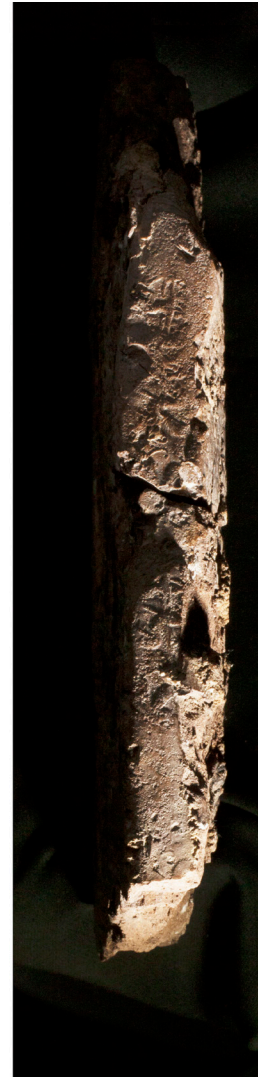
**Fort. 1927-101 Lower Edge**

*Fig. 26a.* No. 24 (Fort. 1927-101) Obverse, Lower Edge.

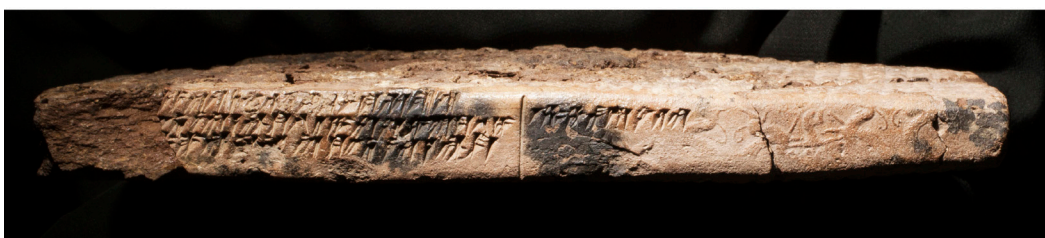




**Fort. 1927-101 Reverse**



**Fort. 1927-101  
Right Edge**



**Fort. 1927-101 Left Edge**

*Fig. 26b.* No. 24 (Fort. 1927-101) Reverse, Right Edge, Left Edge.





## 24. Fort. 1927-101 (Fig. 26a-b)

Obverse

(01 <sup>1</sup> )	[PAP		PAP	]		PAP		PAP	10		[	]
(02 <sup>1</sup> )	[			]	ʾx <sup>1</sup>						[	]
(03 <sup>1</sup> )	[			]	ʾ20 <sup>1</sup>				20		[	]
(04 <sup>1</sup> )	[			]					ʾx <sup>1</sup>		[	]
(05 <sup>1</sup> )	[			]	ʾx <sup>1</sup>				[			]
(06 <sup>1</sup> )	[			]	ʾx <sup>1</sup>				[			]
(07 <sup>1</sup> )		ʾx <sup>1</sup>					[					]
(08 <sup>1</sup> )		ʾx <sup>1</sup>					[					]
(09 <sup>1</sup> )	PAP	ʾ2 ME 70+6 <sup>1</sup>		PAP	ʾx x <sup>1</sup>		[					]
(10 <sup>1</sup> )		2			[							]
(11 <sup>1</sup> )		ʾx <sup>1</sup>			[							]
(12 <sup>1</sup> )		ʾ10 <sup>1</sup>			]	[						]
(13 <sup>1</sup> )		10+			]	[						]
(14 <sup>1</sup> )		5			]	[						]
(15 <sup>1</sup> )		30+1			ʾx+x <sup>1</sup>		[					]
(16 <sup>1</sup> )	PAP	60+ʾ7 <sup>1</sup>		PAP	ʾ60+7 <sup>1</sup>		[					]
(17 <sup>1</sup> )		20+ʾ8 <sup>1</sup>			[x]		[					]
(18 <sup>1</sup> )		ʾx <sup>1</sup>										]
(19 <sup>1</sup> )	1 ME	[										]



(20')		ᵀ20¹[								
(21')		ᵀx¹[								ᵀx¹
(22')	PAP	1 ME ᵀx¹		ᵀPAP ¹[						ᵀx x x x x x x x x x x¹
(23')		1 ME 70+ᵀ2¹		[						ᵀx x¹
(24')					[					<sup>GIŠ</sup> ir]-ᵀtaš¹-ti-ᵀiš¹
(25')		10+ᵀ9¹			[			]		[ <sup>GIŠ</sup> ]ᵀku-ti-iz-za¹
(26')		ᵀ10+4¹			[			]	[	<sup>GIŠ</sup> ]ᵀha-su-ur¹
(27')					[			]	[	<sup>GIŠ</sup> ši¹-iz¹]-ᵀzi¹-ti-iš
(28')	PAP	2¹ ME 5		PAP ᵀx¹[		ᵀPAP		PAP x¹[		<sup>HAL</sup> x]-ᵀx-ra¹-ad-da <sup>AS</sup> pár-te-taš ᵀpi¹-[ip¹-ši-na¹
(29')		2 ME 10+1		ᵀ2¹[ME 10+1					[	
(30')		1 ME 20+9		ᵀ1 ME ¹[20+9]					<sup>GIŠ</sup> [	]
(31')	PAP	3 ME ᵀ40¹		[PAP 3 ME 40]		ᵀPAP¹		< PAP >		ᵀx x¹[
(32')		[		]	ᵀ40+8¹				<sup>AS?</sup> ᵀx¹[	]
(33')		20+3			10+7				6   <sup>GIŠ</sup> ᵀMA¹[ <sup>MEŠ</sup>	]
(34')		30+3			ᵀ30¹+3				<sup>GIŠ</sup> pi-[ut	]
(35')	PAP	50+6		PAP	50		PAP		PAP	6   <sup>HAL</sup> kazo¹-]
(36')		20			ᵀ20¹				<sup>GIŠ</sup> ᵀx¹[	]
(37')		30+2			20+4				8   <sup>GIŠ</sup> [	]
(38')	PAP	50+2		PAP	40+4		PAP		PAP	8  [
(39')		20+2			1				20+1	
(40')		30+1			10				ᵀ20¹+1	[



### Lower Edge

(41') PAP	[50+3	PAP	10+1]	PAP	PAP	ṛ40+2¹   [	]
(42')	20+[6		ṛ20¹+6			[	]
(43')	30+ṛ5¹		ṛ20¹			10+5   ṛGIŠ¹[	]
(44') ṛPAP¹	60+1	PAP	ṛ40+6¹	PAP	PAP	ṛ10+5¹   ṛHAL¹[	]

### Reverse

(45') PAP hi						ṛx¹ [	]
(46')	20+3		20+3			GIŠṛx¹-[	]
(47')	4		4			GIŠMA <sup>MEŠ</sup> [	]
(48')	10+5		10			5   GIŠha-su-ur [	]
(49')	2		2			GIŠdu-ud-ṛda¹ [	]
(50')	5		ṛ5¹			GIŠkazo-ṛla¹ [	]
(51')	6		ṛ5¹			1   GIŠṛx x¹ [	]
(52')	3		ṛ2¹			1   GIŠṛx x¹ [	]
(53') PAP	50+8	PAP	[50+1]	PAP	PAP	ṛ7¹   HALṛx¹ [	] ṛAŠma-te¹-zí-iš
(54') PAP hi		[	]			ha-ṛdu¹-[iš be-ul x+x um]-ṛme¹-man-na	
(55')	ṛ30+5¹		[20+4]			10+1   GIŠpi-ut	
(56')	2 ME 20		ṛ1 ME¹[90]			30   GIŠkazo-la	
(57')	50+5		[50]+3			2   GIŠdu-ṛud-da¹	
(58')	60+2		60			2   GIŠṛha¹-su-ur	
(59')	3		ṛ3¹			GIŠṛgi¹-šu-ur	



(60') PAP	3 ME 70+5	PAP	1 ME 1 30	PAP	PAP	40+5	<sup>HAL</sup> mar-du <sup>1</sup> -ka <sup>4</sup> <sup>AŠ</sup> pár-te-taš <sup>1</sup> pi <sup>1</sup> -[ip]- <sup>1</sup> ši-na <sup>AŠ</sup> ma-te-zí-iš
(61')	2					2	<sup>GIŠ</sup> pi-ut
(62')	5		3			2	[ <sup>GIŠ</sup> ]kaz <sub>0</sub> -la
(63')	40+5		[10]			30+5	<sup>GIŠ</sup> du <sup>1</sup> -ud-da
(64')	80+5		40			40+5	<sup>GIŠ</sup> ha-su-ur
(65')	5 <sup>1</sup>		3			2 <sup>1</sup>	<sup>GIŠ</sup> te-el-te
(66')	5		1			[4]	<sup>GIŠ</sup> ir-taš-ti-iš
(67') PAP	1 ME 40+7	PAP	50+7	PAP	PAP	90 <sup>1</sup>	<sup>HAL</sup> ha <sup>1</sup> -tur-ra-da <sup>AŠ</sup> pár-te-taš <sup>1</sup> [pi-ip-ši-na <sup>AŠ</sup> ma-te-zí-iš]
(68')	1					1	[ <sup>GIŠ</sup> ]pi-ut
(69')	3					3	<sup>GIŠ</sup> kaz <sub>0</sub> <sup>1</sup> -la
(70')	20+1		10+5			6	<sup>GIŠ</sup> du- <sup>1</sup> ud-da <sup>1</sup>
(71')	10+1		10+1				<sup>GIŠ</sup> šap <sub>0</sub> <sup>MEŠ</sup> te-na <sup>1</sup>
(72')	10+5					10+5	<sup>GIŠ</sup> te-el-te
(73')	10+5		10+3			2	<sup>GIŠ</sup> ha-su-ur
(74') PAP	60+9	PAP	40+2	PAP	PAP	20+7	<sup>HAL</sup> mi-iš-šá-ak-ka <sup>4</sup> <sup>AŠ</sup> pár-te-taš pi-ip-ši-na <sup>AŠ</sup> ma-[te]- <sup>1</sup> zí-iš <sup>1</sup>
(75')	20		10			10	<sup>GIŠ</sup> pi-ut
(76')	60+2		[ ]			60+2	<sup>GIŠ</sup> ha-su-ur
(77')	30+3		[ ]			30+3	<sup>GIŠ</sup> ku-[ti]-iz-za
(78')	9		[ ]			9	<sup>GIŠ</sup> ši- <sup>1</sup> iz <sup>1</sup> -[zí]- <sup>1</sup> ti <sup>1</sup> -iš
(79')	3		[ ]			3	<sup>GIŠ</sup> ir-taš-ti-iš
(80') PAP	1 ME 20+7	[PAP	10	PAP]	PAP	1 ME 10+7	<sup>HAL</sup> za-ak-ti-iš <sup>AŠ</sup> pár-te-taš pi-ip-ši-na <sup>AŠ</sup> ma-te-zí-iš





(81')	「X <sup>1</sup>	[	]		30		GIŠ	ha-su-ur									
(82')	[		]				GIŠ	ir-taš-ti-iš									
(83')	[		]		「5 <sup>1</sup>		GIŠ	te-el-te									
(84')	[PAP		PAP	x]+5		PAP		PAP	30+5		HAL	gi-da-ad-da	AŠ	pár-te-taš	pi-ip-ši-na	AŠ	ma-te-[zí-iš]
(85')	[		x]+1			30 <sup>1</sup> +2		GIŠ	pi-ut								
(86')	[		x]+6			1		GIŠ	MA <sup>MEŠ</sup>								
(87')	[		]	「X <sup>1</sup>				GIŠ	du-ud-da								
(88')	[PAP		PAP	]		PAP		PAP	30+3		HAL	mi-「su <sup>?</sup> -x <sup>1</sup> -[	]				
(89')	[		]			10+3		GIŠ	pi-ut	[	]						
(90')	[		]	「X <sup>1</sup>			10		「GIŠ	MA <sup>?</sup> 「 <sup>MEŠ</sup>	]						

Left Edge

(01'')	[	]	ul-la-ka <sub>4</sub>	a-ak	maz <sub>0</sub> -zí-ka <sub>4</sub>	Aš	ma-te-zí-iš
(02'')	[	]	HAL	ir-še-na	šá-ra-ma	PAP 2	ha-du-iš ha-tu-ma be-ul
(03'')	[	HAL	ha <sup>?</sup> ]	-tur-ra-	「ad-da <sup>1</sup>	da-ma	HAL ir-še-na šá-ra-ma
(04'')		tup-pi	hi	ap-pu-ka <sub>4</sub> -na			



## Synopsis/Translation

- (01') (Conclusion of list of fruit). Totals: [PN, at GN.]
- (02'-08') (Amounts of seven kinds of fruit).
- (09') Totals: [PN, at GN.]
- (10'-15') (Amounts of six kinds of fruit)
- (16') Totals: [PN, at GN].
- (17'-21') (Amounts of five kinds of fruit)
- (22') Totals: 'PN, at GN.<sup>1</sup>
- (23'-27') Amounts of ..., *irtaštiš*, plums, apples, oleaster<sup>2</sup>.
- (28') Totals: [...]radda<sup>2</sup>, at the new<sup>2</sup> "paradise," [at Matezziš<sup>2</sup>].
- (29'-30') (Amounts of two kinds of fruit).
- (31') Totals: [PN, at GN].
- (32'-34') Amounts of ..., figs<sup>2</sup>, and dates<sup>2</sup>.
- (35') Totals: Kaz<sup>2</sup>..., [at GN].
- (36'-37') (Amounts of two kinds of fruit.)
- (38') Totals: [PN, at GN.]
- (39'-40') (Amounts of two kinds of fruit.)
- (41') Totals: [PN, at GN.]
- (42'-43') (Amounts of two kinds of fruit.)
- (44') Totals: [PN, at GN].
- (Reverse 45') This (is) the total of [ ... ].
- (46'-52') Amounts of ..., ..., figs<sup>2</sup>, apples, mulberries, *kazla*, ... , ... .
- (53') Totals: [PN, at ...], at Matezziš.
- (54') This is the total revenue for year [x+x].
- (55'-59') Amounts of dates<sup>2</sup>, *kazla*, mulberries, apples, *giššur*.
- (60') Totals: Marduka, at the new "paradise," at Matezziš.
- (61'-66') Amounts of dates<sup>2</sup>, *kazla*, mulberries, apples, *telte*, *irtaštiš*.
- (67') Totals: Haturradda, at the [new] "paradise," [at Matezziš].
- (68'-73') Amounts of dates<sup>2</sup>, *kazla*, mulberries, fresh<sup>2</sup> grapes, *telte*, apples.
- (74') Totals: Miššakka, at the new "paradise," at Matezziš.
- (75'-79') Amounts of dates<sup>2</sup>, apples, plums, oleaster, *irtaštiš*.
- (80') Totals: Zaktiš, at the new "paradise," at Matezziš.
- (81'-83') Amounts of apples, *irtaštiš*, *telte*.



- (84') Totals: Gidadda, at the new “paradise,” at Matezziš.
- (85'-87') Amounts of dates<sup>?</sup>, figs<sup>?</sup>, mulberries.
- (88') Totals: Misu<sup>?</sup>..., [at ... ].
- (89'-90') Amounts of dates<sup>?</sup>, figs<sup>?</sup>, ...
- (01'') [(Assessed amounts<sup>?</sup>) assigned<sup>?</sup> to them, and (amounts) delivered, and (amounts)] delivered [in addition], and (amounts) withdrawn.
- (02''-03'') [For allocation by PN,] Iršena overseeing, during a total of two harvests<sup>?</sup>, years [n and n+1], Haturradda assigning, Iršena overseeing.
- (04'') This is the first tablet.

### Comments

12.5L x (17.9W) x 2.1 Th  
PFS 0120 left edge, right edge

The column headings are lost, but line 01'' implies that the headings were (i) *ukkap daka*, (ii) *ullaka* (ia) *pir ullaka* (iii) *mazzika*, and the arithmetic relationship of entries is as elsewhere in fruit accounts: i = ii+(ia)+iii.

- (23'-27') Alignment of columns and empty entries in col. i uncertain.
- (27', 78') See comments on No. 4:07, 28.
- (29'-45') Probably a set of five short entries with a subtotal that is included in the annual subtotal in line 54' (as in No. 23:37-55).
- (60') Cf. Marduka at the new “paradise” at Matezziš, No. 23:05.
- (67') Restored after No. 23:14.
- (71') Erasure in col. ia.
- (72') Erasure in col. ia.
- (74') 60+9, 40+2: sic; 66, 39 required. Cf. Miššakka “account holder” (*uggi daka*), royal mulberries, at Pirrašetaš PF-NN 1418:07f. (C1).
- (80') Cf. Zaktiš at the new “paradise” at Matezziš, No. 23:29. -zí-iš on right edge.
- (82') Erasure in col. iii.
- (84') Cf. Gidadda at the new “paradise” at Matezziš, No. 23:35.
- (Left Edge) One deep transverse stroke across edge separates lines 01''-03'' on the left from line 04'' on the right (see Stolper 2021).
- (02'') ha-du-iš: sic; be-ul expected.
- (02'', 03'') Iršena: see comment to No. 23:61, 63, 71.
- (04'') Partially written over the seal impression.



**Fort. 1999-101 Obverse**

1 cm



**Fort. 1999-101 Lower Edge**



**Fort. 1999-101 Reverse**

1 cm



**Right  
Edge**



**Fort. 1999-101 Upper Edge**

**Fig. 27.** No. 25 (Fort. 1999-101) Obverse, Lower Edge, Reverse, Right Edge, Upper Edge.





## 25. Fort. 1999-101 (Fig. 27)

Obverse

(01)	[uk-ka <sub>4</sub> -ap da-ka <sub>4</sub> ] ʾa-ak ul-la-ka <sub>4</sub> ʾ[a-ak pi]-ʾir ʾa-ak maz <sub>0</sub> -zí-ka <sub>4</sub>		
(02)	[	]	50+2   ʾGIŠ ʾ[piʔ-utʔ] HAL ha-tur-ra-ad-da AŠ ba-lu-um-ma
(03)	[	]	20+9   ʾGIŠ ʾKI+MIN ʾ[HAL x x]-iš-šá AŠ KI+MIN
(04)	[	] ʾ5 ʾ	30   ʾGIŠ KI+MIN ʾHAL baʔ-ka <sub>4</sub> ʾ-gi-ia AŠ KI+MIN
(05)	[	] [	2   ʾGIŠ KI+MIN HAL tur-ʾbaʔ ʾ-a-la AŠ KI+MIN
(06)	[	]	
(07)	[ 1 ME 50]+ʾ4 ʾ	1 ME ʾ10 ʾ	40+4   ʾGIŠ du-ud-da
(08)	[ 20]+ʾ3 ʾ	10+3	10   ʾGIŠ ha-su-ur
(09)	[	] ʾ4 ʾ	4   ʾGIŠ te-el-[te]
(10)	[PAP 1 ME 80+1 ]	PAP 1 ME 20+7	PAP   [PAP] 50+4   HAL gi-ʾda-ad-da ʾAŠ pár-te-taš-ʾma ʾ
(11)	[ 20+1 ]	10+3	ʾ8 ʾ   ʾGIŠ kaz <sub>0</sub> -ʾla ʾ
(12)	[ 10]+5	10	ʾ5 ʾ   ʾGIŠ ha-su-ur
(13)	[ ] 6	5	ʾ1 ʾ   ʾGIŠ šap <sub>0</sub> MEŠ te-na
(14)	4	2	2   ʾGIŠ za-ri-ut-ka <sub>4</sub> -um
(15)	[PAP] ʾ40 ʾ+5	PAP 30	PAP   PAP 10+5   HAL kam-pi-ia [AŠ pár]-te-taš-ma
(16)	[	] ʾ30+4 ʾ	20+1   ʾGIŠ du-ud-da-um
(17)	[	]	1   ʾGIŠ ha-su-ur
(18)	[	]	2   ʾGIŠ šap <sub>0</sub> MEŠ te-na

Lower Edge

(19)	[	] ʾx ʾ		ʾGIŠ za-ri-ut-ka <sub>4</sub> -um
(20)	[	]		2   ʾGIŠ kaz <sub>0</sub> -la



## Reverse

- (21) [PAP | PAP ] ʿx xʿ | PAP | PAP 20+6 | HAL zí-iš-ma Aš pá-r-ʿte-tašʿ
- (22) [PAP? GIŠ] ʿmiʿ-ik-tam<sub>6</sub> hi Aš mi-iš-du-ba-iš HAL ir-še-na šá-ra-man-ʿnaʿ
- (23) [PAP?] ʿGIŠʿ pi-ut GIŠ kaz<sub>0</sub>-la GIŠ du-ud-da GIŠ ha-su-ur GIŠ te-ʿelʿ-te GIŠ šap<sub>0</sub> MEŠ GIŠ za-ʿri-ut-ka<sub>4</sub>-umʿ
- (24) 49 | 10+5 | 1 ME 40+4 | 30+4 | 4 | 6 | 10+5 | PAP 2 ME 60+ʿ7ʿ | GIŠ mi-ik-tam<sub>6</sub> ha-du-iš be-ul 20+2-na
- (25) | | | | | | | |
- (26) 60 | GIŠ du-ud-da Aš hal-mi HAL ir-še-na-na li-ka<sub>4</sub> 1 ME [HAL] ʿkurʿ-taš pí-r-ra-sa-na-iš gal ma-ki-ip
- (27) | Aš mi-iš-du-ba-iš HAL ir-še-ʿna šáʿ-ra-ma zip-pi-ma ʿdu-išʿ-da AN ITI MEŠ 6-na
- (28) | AN ha-du-kán-na-iš-ʿmar kuʿ-iš ʿAN karʿ-ba-ši-ia-iš be-ul 20+2-ʿnaʿ [un-ra 1] ʿQA du-iš-daʿ
- (29) [2 ME] ʿ70ʿ+5 | GIŠ ha-su-ur Aš hal-mi HAL ir-še-na-na li-ka<sub>4</sub> 50+5 HAL kur-taš pí-r-ra-sa-na-[iš] gal ma-ki-ip
- (30) [ ] | Aš mi-iš-du-ba-iš HAL KI+MIN ša-ra-ma zip-pi du-iš-da AN ITI MEŠ 5-na AN ba-gi-
- (31) [ ] | ia-ti-iš-mar ku-iš AN sa-mi-man-taš be-ul 20+2-na un-ra 1 QA du-iš-da
- (32) [ ] | GIŠ ha-su-ur Aš hal-mi HAL ir-še-na-na li-ʿka<sub>4</sub>ʿ [x]+10 HAL kur-taš tur-mi-ra-ip gal ma-ki-ip
- (33) [ ] | Aš mi]-ʿišʿ-du-ba-iš HAL KI+MIN šá-ra-man-[na] ʿzipʿ-pi-ma du-iš-ʿdaʿ AN ITI MEŠ 10-na
- (34) | AN ha-du]-ʿkánʿ-na-iš-mar ku-iš AN ha-[na]-ma-kaš be-ul [20]+2-na un-ra 1 QA duʿ-šá
- (35) [ ] | Aš hal-mi] ʿHAL x-xʿ-da-ad-da-ʿnaʿ [li]-ʿka<sub>4</sub>ʿ HAL mi-kán-ʿnaʿ hi-še du-iš-da MUŠEN MEŠ
- (36) [ ] | Aš] ʿmi-išʿ-du-ba-iš [hal-sa]-ʿka<sub>4</sub>ʿ ma-ki-iš-da AN ITI MEŠ 3-na ʿAN ka<sub>4</sub>ʿ-ir-ba-ši-ia-iš AN ba-ʿgiʿ-[ia-ti]-iš be-ul 20+2-
- (37) [ ] | ] ʿx x xʿ da ʿxʿ [ x] ME 50 MUŠEN MEŠ na-zir<sub>0</sub>-na 30-ip-na 1 GIŠ? BAR!ʿ? ma-ki-iš-da
- (38) [ ] | ] ʿx daʿ? 10+4ʿ ʿxʿ [ ]-iš kuʿ-iz-za HAL ha-tar-ra-da du-šá

## Upper Edge

- (39) [ ] ʿx maʿ [ ] PAP 80 GIŠ du-ud-da PAP 70+5
- (40) [ ] ʿkurʿ? 1-[mínʿ ʿHAL] ʿabʿ-beʿ-ki+MIN hu-ti-ra HAL ir-še-na šá-ra-ma



## Synopsis/Translation

- (01) [(i) (Assessed amounts)<sup>?</sup> assigned to<sup>?</sup> them (i.e., the persons named in column v)]  
(ii) and delivered (iia) [and] (delivered) in addition (iii) and withdrawn.
- (02-05) Amounts of [dates<sup>?</sup>]: Haturradda, PN, Bakagiya<sup>?</sup>, and Turbala, at the storage complex.
- (07-09) Amounts of mulberries, apples, *telte*.
- (10) Totals: Gidadda, at the “paradise.”
- (11-14) Amounts of *kazla*, apples, fresh grapes<sup>?</sup>, *zaritkam*.
- (15) Totals: Kampiya, at the “paradise.”
- (16-20) Amounts of mulberries, apples, fresh grapes<sup>?</sup>, *zaritkam*, *kazla*.
- (21) Totals: Zišma, (at) the “paradise.”
- (22) [Total<sup>?</sup>]: fruit (produced at) Mišdubaš, Iršena overseeing.
- (23-24) [Totals<sup>?</sup>]: (i) dates<sup>?</sup> (ii) *kazla* (iii) mulberries (iv) apples (v) *telte* (vi) grapes<sup>?</sup> (vii) *zaritkam*. (Grand) total: fruit, revenue of year 22.
- (26-28) 60 (*irtiba* = 1,800 l.) of mulberries, a sealed order from Iršena having been delivered, 100 ration-consuming workers at Mišdubaš, polishers overseen by Iršena, received as (supplementary) *zippi* rations for six months, from month I through month VI, year 22; each received 1 l. (daily) (Category M).
- (29-31) 275 (*irtiba* = 8,250 l.) of apples, a sealed order from Iršena having been delivered, 55 ration-consuming workers at Mišdubaš, polishers overseen by Iršena, received as (supplementary) *zippi* rations during 5 months, from month VII through month XI, year 22; each received 1 l. (daily) (Category M).
- (32-34) [x (*irtiba*)] of apples, a sealed order from Iršena having been delivered, [x]+10 ration-consuming workers at Mišdubaš, Lycians overseen by Iršena, received as (supplementary) *zippi* rations during 10 months, from month I through month X, year 22; each received 1 l. (daily) (Category M).
- (35-37) [x (*irtiba*) of (fruit), a sealed order from PN] having been delivered, a person named Mikanna received; poultry ... maintained at Mišdubaš consumed it, during 2 months, months VI and VII, year 22 ... ; [x+]150 birds, each 30 consumed 10<sup>?</sup> l. per day. (Category S1).
- (38) [ ... ] carried; Hatarradda received it.
- (39-40) Totals of [apples?, ...,] mulberries, [ ... ]; allocations by [Haturradda<sup>?</sup>], food handler, Iršena overseeing.



## Comments

10.6 x 7.3 x 1.7 cm

No preserved seals.

Cf. especially Fort. 1421-101 (Stolper 2021, No. 3), combining a journal of outlays of fruit at Mišdubaš and a tabular summary balanced account of fruit at Mišdubaš.

(02) <sup>Giš</sup>[pi<sup>?</sup>-ut<sup>?</sup>]: restored after line 23 (i). -ma on right edge.

(13, 23) *šap tena*: see comment on No. 28:33.

(22) Cf. royal quince (*bayam sunkina*) at Mišdubaš (written mi-iš-tam<sub>5</sub>-ba-iš), Karkiš overseeing, PF-NN 2576; storage complex (*balum*) and “paradise” (*partetaš*) at Mišdubaš; Mišdubaš, with Tukraš, Dauteš (= Dautiyaš), and Ululiš<sup>?</sup>, four “villages,” Fort. 1420-102, Fort. 1551-101 (both Category M). In the vicinity of Persepolis (Henkelman & Stolper 2021, p. 173, 191, comments to Fort. 0119-101:12 and 23).

(23) -ri-ut-ka<sub>4</sub>-um on right edge.

(24) be-ul 20+2-na on right edge. The amounts tabulated here as “revenue” (*haduš*) are, as usual, totals of the amounts entered above as “delivered” (*ullaka*).

(26) -ip on right edge.

(26-28, 29-31) Cf. fruit as *zippi* payments for polishers under Iršena at Mišdubaš, Fort. 1421-101:04-07 (Stolper 2021, No. 3); fruit for polishers under Iršena at Murkazziš, PF-NN 0520:07'-08'; grain rations for polishers under Iršena at Rakkan, PF 1946:01-12. Iršena: see comment on No. 23:61, 63, 71.

(28) 'du-iš-da<sup>1</sup> on right edge.

(29) -ip on right edge.

(32-34) Cf. fruit for Lycian workers under Iršena at Murkazziš, PF-NN 0520:09'-11'; at Rakkan, PF 1946:13-14.

(34) du-ša on right edge.

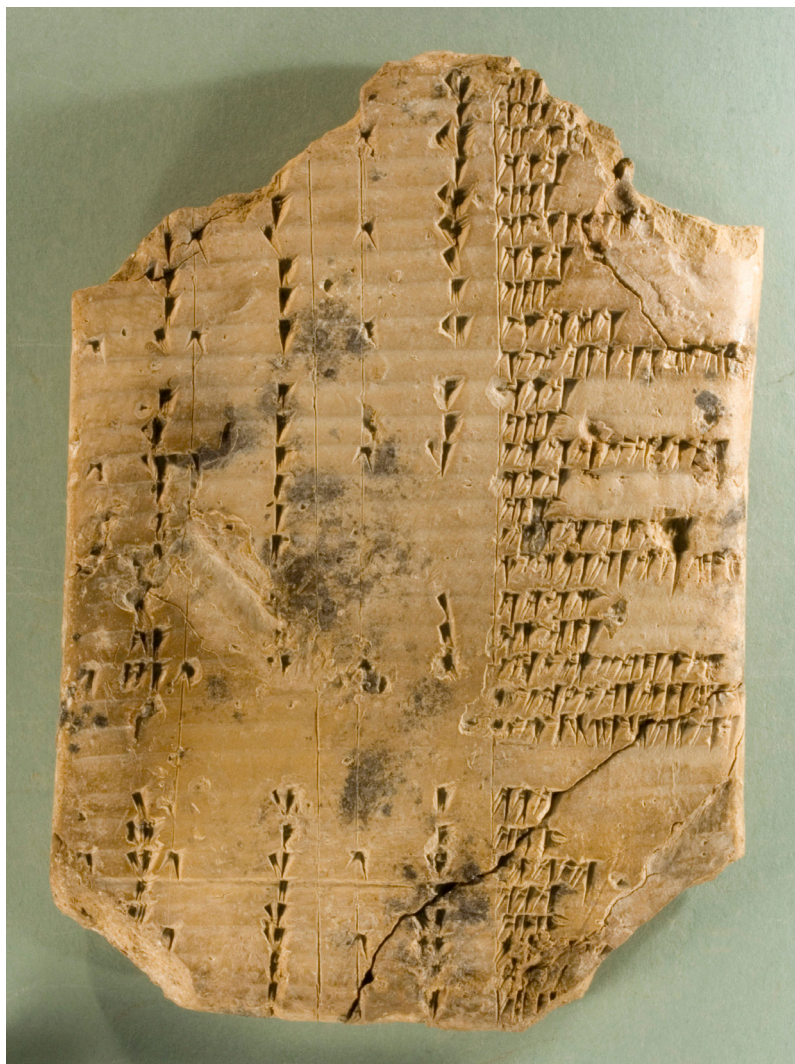
(35-37) Cf. dates<sup>?</sup> (*pit*) as supplementary rations for poultry (<sup>MUŠEN</sup>MEŠ *zippanna*) Fort. 0000-111:07"-08"; see Henkelman 2021, p. 159, who calls attention to dates as fodder for poultry in Achaemenid Sippar (Janković 2004, p. 41, 62, 76-78). Mikanna: cf. Miyakanna (No. 26:09').

(36) 3(sic)-na: evidently error for 2-na. Remainder of line on right edge.

(37) ma-ki-iš-da on right edge.

(40) -ma on right edge. Cf. *kurman Haturradda abbebe huttira*, PF 1940:07, No. 23:63, 71.





**Fort. 0232-101 Obverse**



**Fort. 0232-101  
Right Edge**



**Fort. 0232-101 Lower Edge**

*Fig. 28a.* No. 26 (Fort. 0232-101) Obverse, Right Edge, Lower Edge.



**Fort. 0232-101 Reverse**



*Fig. 28b.* No. 26 (Fort. 0232-101) Reverse.



## 26. Fort. 0232-101 (Fig. 28a-b)

Obverse

(01')	[					]	10+7		GIŠ <sup>MA</sup> MEŠ	
(02')	[					]	1		GIŠ <sup>da-ku-ṛiš<sup>1</sup></sup>	[
(03')	[				]		PAP 30+8		GIŠ <sup>mi-ik-[tam<sub>6</sub></sup>	]
(04')	[	4			ṛ3 <sup>1</sup>		1		GIŠ <sup>pi-ut</sup>	
(05')	[	30]	ṛ5 <sup>1</sup>		7		20+8		GIŠ <sup>MA</sup> MEŠ	
(06')	[PAP]	30+9		PAP 10			PAP 20+9		GIŠ <sup>mi-ik-ṛtam<sub>6</sub> HAL<sup>ú-uk<sup>?</sup></sup></sup>	[
(07')	[	20+4			4 <sup>1</sup>		20		GIŠ <sup>pi-ut</sup>	
(08')		6			3		3		GIŠ <sup>MA</sup> MEŠ	
(09')	PAP	30		PAP	7		PAP 20+3		HAL <sup>mi<sup>?</sup>-ia-kán-na</sup>	
(10')									PAP hi <sup>AŠ<sup>uk-ba-rak<sub>0</sub>-ka<sub>4</sub>-an</sup></sup> ṛHAL <sup>ir-še-na<sup>1</sup></sup> šá-ra-ma <sup>AŠ<sup>be-ul 10+8-na</sup></sup>	
(11')		6			2		4		GIŠ <sup>pi-ut</sup>	
(12')		10+1			4		7		GIŠ <sup>MA</sup> MEŠ	
(13')	PAP	10+7		PAP	6		PAP 10+1		HAL <sup>iš<sup>?</sup>-kam<sup>?</sup>-ṛia<sup>?</sup></sup>	AŠ <sup>man-du-ṛma<sup>?</sup>-ti-iš</sup>
(14')		1			1				GIŠ <sup>pi-ut</sup>	
(15')		1			1				GIŠ <sup>MA</sup> MEŠ	
(16')	ṛPAP <sup>1</sup>	2		[PAP]	2				HAL <sup>kar-ki-iš</sup>	AŠ <sup>mar-ku-ṛx-x<sup>1</sup></sup>
(17')									PAP hi <sup>ṛHAL<sup>da-tap-pár<sup>1</sup>-na</sup></sup> šá-ra-ma <sup>AŠ<sup>be-ul 10+8-na</sup></sup>	
(18')		20			[ 10 ]		10		GIŠ <sup>du-da-um</sup>	
(19')		40+5			ṛ20+5 <sup>1</sup>		20		GIŠ <sup>ha-su-ur</sup>	
(20')	PAP	60+5		PAP	ṛ30 <sup>1</sup> +5		PAP 30		HAL <sup>tu-uk-ra</sup>	AŠ <sup>man-du-ma-ti-iš</sup>
(21')									ṛPAP hi <sup>ṛHAL<sup>ap-pu-uk-ka<sub>4</sub></sup></sup> šá-ra-ma <sup>AŠ<sup>be-ul 10+8-na</sup></sup>	
(22')									ṛGIŠ <sup>mi<sup>1</sup>-ik-tam<sub>6</sub></sup>	be-ul 10+8-na ha du-ka <sub>4</sub>





(23')			(blank)				
(24')	20		10+4			6	<sup>GIŠ</sup> pi-ut
(25')	10+5		7			8	<sup>GIŠ</sup> MA <sup>MEŠ</sup>
(26')	PAP 30+5		PAP 20+1			PAP 10 <sup>1</sup> +4	<sup>HAL</sup> x-x <sup>1</sup> -du <sup>2</sup> -man-na
(27')	5		2			3 <sup>1</sup>	<sup>GIŠ</sup> pi-ut
(28')	[ 40]+3		10+1			30 <sup>1</sup> +2	<sup>GIŠ</sup> MA <sup>MEŠ</sup>
(29')	[PAP 40]+8		PAP 10+3			PAP 30+5	<sup>GIŠ</sup> x x <sup>1</sup> [ ]
(30')	[		] 7			x	<sup>GIŠ</sup> [pi-ut]
(31')	[ 4]		2			2	<sup>GIŠ</sup> MA <sup>MEŠ</sup> 1 [ ]

#### Lower Edge

(32')	[PAP		PAP]	9			PAP [x]+7	<sup>HAL</sup> [	]
(33')	[		]						PAP hi [ ]
(34')	[		]	3			6 <sup>1</sup>	<sup>GIŠ</sup> pi-[ut]	

#### Reverse

(35')	[ 40+5 ]		20+5			20	<sup>GIŠ</sup> MA <sup>[MEŠ]</sup>	
(36')	[PAP] 60 <sup>1</sup> +3		PAP 20+8			PAP 30+5	<sup>HAL</sup> da-zí-[	]
(37')								PAP hi <sup>HAL</sup> da-tap <sup>2</sup> -pír <sup>7</sup> 1-[na <sup>2</sup> šá <sup>2</sup> -ra <sup>2</sup> -ma <sup>2</sup> ]
(38')	20		10			10	<sup>GIŠ</sup> du-ud-da-um	
(39')	40+4		20+5			10+9	<sup>GIŠ</sup> ha-su-ur	
(40')	PAP 60+4		PAP 30+5			PAP [20]+ 9 <sup>1</sup>	<sup>HAL</sup> na-pír <sup>2</sup> -ra <sup>2</sup> -da <sup>AS</sup> man- <sup>1</sup> du-ma-ti <sup>1</sup> -[iš]	
(41')								PAP hi <sup>HAL</sup> ap-pu-<uk>-ka <sub>4</sub> šá-ra-ma <sup>AS</sup> KI+MIN <sup>1</sup> be <sup>2</sup> -ul <sup>7</sup> 1 [10+9-na]
(42')	PAP hi <sup>GIŠ</sup> mi- <sup>1</sup> ik-tam <sub>6</sub> <sup>1</sup> ha-du-iš		ha du-ka <sub>4</sub> <sup>AS</sup> be-ul			10+9-na		





- (43') ʾPAP hi <sup>GIS</sup>mi-ik-tam<sub>6</sub><sup>1</sup> ha-du-iš ha du-ka<sub>4</sub> <sup>AŠ</sup>be-ul 2 ha-tu-ma <sup>AŠ</sup>be-ul 10+8-na a-ak <sup>AŠ</sup>be-ul  
(44') ʾ10+9<sup>1</sup>-na <sup>AŠ</sup>uk-ba-rak<sub>0</sub>-ka<sub>4</sub>-an a-ak <sup>AŠ</sup>man-du-ma-ti-iš <sup>HAL</sup>ir-še-na a-ak <sup>HAL</sup>da-tap-pár-na a-ak  
(45') [<sup>HAL</sup>ap-pu]-ʾuk<sup>1</sup>-ka<sub>4</sub> šá-ra-ma <sup>GIS</sup>mi-ik-tam<sub>6</sub> hi <sup>HAL</sup>kaz<sub>0</sub>-zí-na hi-še <sup>AŠ</sup>ab-be-KI+MIN hu-ut-ti-  
(46') [ra ]-ʾti<sup>?</sup>-iš<sup>?</sup><sup>1</sup> <sup>HAL</sup>ir-še-na šá-ra-ma hu-pír-ri du-iš-da ap-pa<sup>?</sup> šá-rak<sub>0</sub>  
(47') [uk<sup>?</sup>-ka<sub>4</sub><sup>?</sup>-ap<sup>?</sup> ] ʾda<sup>?</sup><sup>1</sup>-ka<sub>4</sub> hu-be <sup>HAL</sup>ma-ʾti<sup>1</sup>-ip su-da-um-ba



## Synopsis/Translation

The lost column headings were presumably (i) *ukkap daka*, “(assessments?) assigned to them,” (ii) *ha duka*, “received,” (iia) *pir ha duka*, “received additionally,” (iii) *mazzika*, “withdrawn.” Numerical entries reflect the common arithmetic relation  $i = ii + iia + iii$ .

(01'-03') Amounts of figs? and *dakuš*, totals of fruit: [PN].

(04'-06') Amounts of dates? and figs?, totals of fruit: PN.

(07'-09') Amounts of dates? and figs?, totals: Miyakanna.

(10') This (is) the total at Ukbarakkan, Iršena overseeing, year 18.

(11'-13') Amounts of dates? and figs?, totals: Iškamiya? at Mandumattiš.

(14'-16') Amounts of dates? and figs?, totals: Karkiš at GN.

(17') Total, Datapparna overseeing, year 18.

(18'-20') Amounts of mulberries and apples, totals: Tukra at Mandumattiš.

(21') Total, Appukka overseeing, year 18.

(22') Fruit received, year 18.

(24'-26') Amounts of dates? and figs?, totals: PN.

(27'-29') Amounts of dates? and figs?, totals: [PN?].

(30'-32') Amounts of dates? and figs?, totals: [PN].

(33') This (is) the total [at GN?, PN overseeing?].

(34'-36') Amounts of dates? and figs?, totals: PN.

(37') This (is) the total, Datapparna? [overseeing].

(38'-40') Amounts of mulberries and apples, totals: Napirrada? at Mandumattiš.

(41') This (is) the total, Appukka overseeing, [year 19].

(42') Total of fruit received as revenue, year 19.

(43'-45') This is the total of fruit received as revenue during two years, year 18 and year 19, at Ukbarakkan and Mandumattiš, Iršena and Datapparna and Appukka overseeing. (45'-46') Kazzina, a food handler [at Manduma]ttiš?, Iršena overseeing, received this fruit.

(46'-47') Collectors seek those [to whom?] (assessments?) were assigned? another time.

## Comments

9.0 x (12.8) x 1.6 cm

No preserved seals.

(10') <sup>Aš</sup>be-ul 10+8-na on right edge.

(10', 44', 46') Iršena: see comment on No. 23:61, 63, 71.



- (17') Cf. Datapparna šaramanna in connection with fruit at Mandumattiš and a “paradise” at Marku..., No. 10:16 (C1/W).
- (21') 10+8-na on right edge.
- (21', 41', 45') Appukka šarama, at Mandumattiš, No. 6:24.
- (42'-43') Unruled, uninscribed, unsealed space equivalent to about 14 lines (with column dividers carried through) separates lines 42' and 43'.
- (44') Cf. total of fruit of three or more people at Ukbarakka, No. 3:10" (C1/W).
- (47') On Elamite *matira* (plural *matip*) and the transcribed Iranian synonym *bazikara*, see, for now, Tuplin 2008:331-35. For *bazikara* (Aramaic *bzkr*) in connection with fruit (*mgd'*) in PFAT 783, see Azzoni 2021. Fort. 0120-101, a tabular account of grain, concludes a list of nine entries connected with several places and persons with a total “received as revenue at Pārsa ‘among’ collectors” (*haduš ha duka* <sup>HAL</sup>*ma-ti-ip hatuma Barašan*, line 40), and re-collation confirms that a comparable phrase appears at the end of a similar tabulation in Fort. 0590-101:08'-09' (= Stolper 2019, p. 461-62): <sup>Ṛ</sup>*KI+MIN ha' duka* <sup>AŠ</sup>*GN-ma* <sup>HAL</sup>*ma-Ṛti'-ip hatuma*, “(grain) received at GN ‘among’ collectors.”

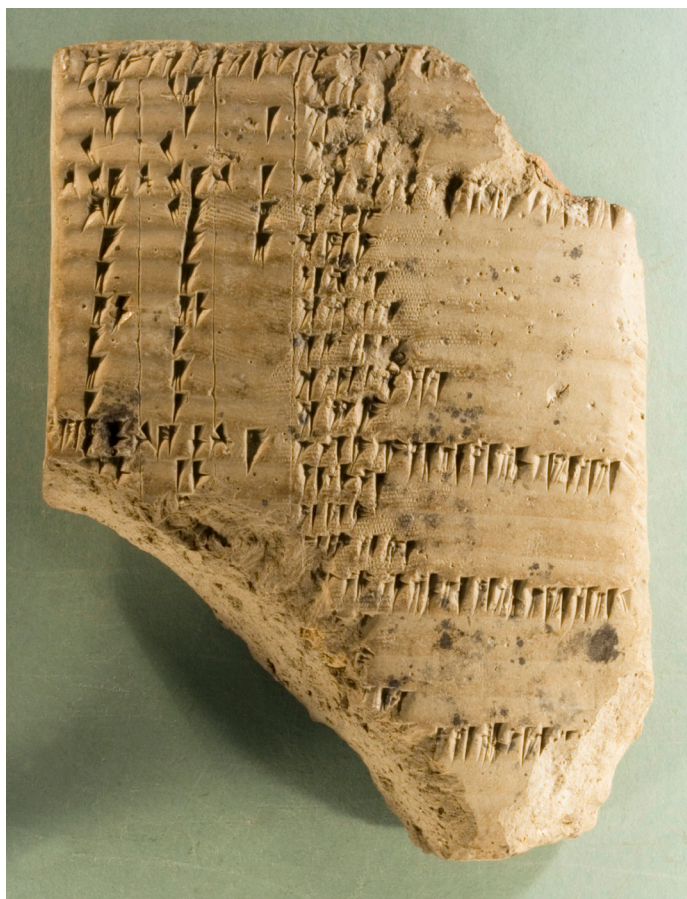
*hatuma* after terms for persons, i.e., not with locative or temporal nuance: Hallock 1969, p. 695; here evidently instrumental distributive, “by (several) collectors.”

The form *sudamba* (parsed *suda-n-b-a*, Conj. III animate plural), hitherto unattested, is a counterpart of Conj. III<sub>m</sub> forms in comparable relative clauses (<sup>HAL</sup><sub>L</sub><sup>U</sup><sup>MEŠ</sup> *sudamanpi*, “what the men request” PF 1856:11f.; *numi* <sup>ZÍD</sup><sub>DA</sub><sup>MEŠ</sup> *appa anka sudmanba*, “as you requested flour (for ration recipients, they have issued x)” PF-NN 0351:12f. Although in PF-NN 0460:07-11 (Category C6) a group that includes *matip* and *kar huttip* are said to have withdrawn grain and then “made *sut*” (*mazzišda meni ... sut huttaš*), the idiomatic sense of that verb phrase, indicating an exchange, or requested exchange, of commodities, is not appropriate to the form and use of the cognate verb here (cf. Tuplin 2008, p. 332, 375).

The general implication of the phrase here seems clear, namely, that further payments remain to be collected in addition to the amounts tabulated in this account. Given the uncertain reconstruction of the broken passage, the specific nuance is tantalizing: if the reading is correct, it alludes not to missing amounts but to unrecorded payers, so does *appa?* ... *sudamba* “seeking those who” are obligated to pay refer not only to collecting the payments but assessing and charging them to the payers? And if so, in the light of the assessment hypothesis considered here, does Elamite *matip* identify the assessors (Akkadian *ēmidū*)? And in that case, does the Iranian counterpart *bazikara* (\**bājikara*-) have a simple etymological sense, “share-maker,” without necessary reference to “taxes” in the ordinary sense?



(47') Unruled, uninscribed, unsealed space (with column dividers carried through) equivalent to at least 4 lines follows.



**Fort. 0442-101 Obverse**



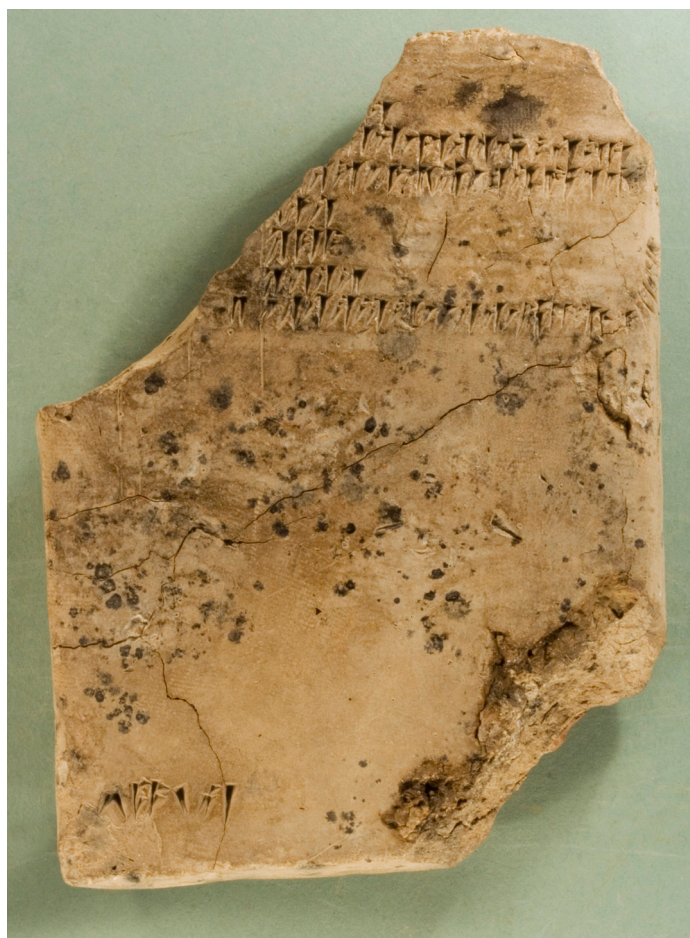
**Fort. 0442-101  
Right Edge**



**Fort. 0442-101 Lower Edge**

*Fig. 29a.* No. 27 (Fort. 0442-101) Obverse, Right Edge, Lower Edge.





**Fort. 0442-101 Reverse**



*Fig. 29b.* No. 27 (Fort. 0442-101) Reverse.



## 27. Fort. 0442-101 (Fig. 29a-b)

Obverse

- (01) uk-ku <sup>r</sup>ap<sup>1</sup> da-ka<sub>4</sub> a-ak ul-la-ka<sub>4</sub> a-[ak maz<sub>0</sub>-zí-ka<sub>4</sub>]
- (02) 10+3 | 10+3 | | <sup>r</sup>Giš<sup>1</sup>pi-ut<sup>1</sup>
- (03) 2 | 1 | 1 | <sup>r</sup>Giš<sup>1</sup>MA<sup>1</sup>[<sup>MEŠ</sup>]
- (04) 20 | 20 | | <sup>r</sup>Giš<sup>1</sup>ha-su<sup>1</sup>-[ur]
- (05) PAP 30+5 | PAP 30+4 | PAP 1 | <sup>HAL</sup>ba<sup>?</sup>-<sup>r</sup>ad<sup>?</sup>-da<sup>?</sup> <sup>HAL</sup>šá-li-ra <sup>AŠ</sup>rak<sub>0</sub>-ka<sub>4</sub>-an<sup>1</sup>
- (06) 40+2 | 30+8 | 4 | <sup>Giš</sup>pi-ut<sup>1</sup>
- (07) 7 | 4 | 3 | <sup>Giš</sup>MA<sup>MEŠ</sup>
- (08) 2 | 2 | | <sup>Giš</sup>kaz<sub>0</sub>-la
- (09) 2½ | 2½ | | <sup>Giš</sup>du-ud-da<sup>1</sup>
- (10) 9 | 9 | | <sup>Giš</sup>ha-<sup>r</sup>su-ur<sup>1</sup>
- (11) 3 | 3 | | <sup>Giš</sup>te-el-te
- (12) 1 | 1 | | <sup>Giš</sup>pit<sup>MEŠ</sup>
- (13) PAP 60+7½ | PAP 60 ½ | PAP 7 | <sup>HAL</sup>ka<sub>4</sub>-áš-ti-iš <sup>HAL</sup>šá-li-ra <sup>AŠ</sup>rak<sub>0</sub>-ka<sub>4</sub>-an <sup>HAL</sup>kaš-še-na da-ma
- (14) [ ] <sup>r</sup>x+x<sup>1</sup> ½ | 1½ | | <sup>Giš</sup>pi-ut
- (15) [ ] <sup>r</sup>10+x<sup>1</sup> [ ] | <sup>Giš</sup>MA<sup>MEŠ</sup>
- (16) [ ] | <sup>r</sup>Giš<sup>1</sup>ha-su-ur
- (17) [ ] | <sup>r</sup>HAL<sup>?</sup>tup-pi-ra <sup>HAL</sup>šá-li-ra <sup>AŠ</sup>rak<sub>0</sub>-ka<sub>4</sub>-an <sup>HAL</sup>kaš-še-na da-ma
- (18) [ ] | <sup>Giš</sup><sup>r</sup>pi-ut<sup>1</sup>
- (19) [ ] | <sup>Giš</sup>MA<sup>MEŠ</sup>
- (20) [ ] | <sup>Giš</sup>ha-su]-ur
- (21) [ ] <sup>HAL</sup>šá-li-ra <sup>AŠ</sup>rak<sub>0</sub>-<sup>r</sup>ka<sub>4</sub>-an<sup>1</sup> [ ] -uk-ku <sup>HAL</sup>KI+MIN KI+MIN



(22) [ ]  
 (23) [ ]  
 (24) [ ]

### Lower Edge

(25) [ ] [ ]  
 (26) [ ] <sup>HAL</sup>šá-<sup>l</sup>li-[<sup>ra</sup> <sup>Aš</sup>rak<sub>o</sub>-ka<sub>4</sub>-an <sup>HAL</sup>]kaš-še-na da-ma  
 (27) [ ] da du<sup>?</sup> <sup>l</sup>x<sup>l</sup> [ ] KI+MIN

### Reverse

(28) [ ]  
 (29) [ ]  
 (30) [ ]  
 (31) [ ] <sup>l</sup>x<sup>l</sup>  
 (32) [ ]-<sup>l</sup>x<sup>l</sup>-na <sup>Aš</sup>rak<sub>o</sub>-ka<sub>4</sub>-an <sup>HAL</sup>ir-še-na da-ma  
 (33) [ ]-<sup>l</sup>x<sup>l</sup>-da <sup>HAL</sup>ti-ri-ia <sup>Aš</sup>ba-ra-áš-šá-an <sup>HAL</sup>ir-še-na <sup>l</sup>da<sup>l</sup>-[ma]  
 (34) [ ] <sup>GIŠ</sup>]pi-ut  
 (35) [ ] <sup>GIŠ</sup>MA<sup>MEŠ</sup>  
 (36) [ ] <sup>GIŠ</sup>du-ud-da  
 (37) [ ] 2 | <sup>HAL</sup>ba-ka<sub>4</sub>-ba-ad-da <sup>HAL</sup>kur-ka<sub>4</sub>-na <sup>Aš</sup>ia-ma-da-nu-iš<sup>!</sup>? <sup>HAL</sup>ma-ra-za

(38) be-ul 20-na



## Synopsis/Translation

- (01) (Column headings) (i) (assessed<sup>?</sup> amounts) assigned<sup>?</sup> to them, (ii) and (amounts) delivered, (iii) and (amounts) [withdrawn]
- (02-04) Amounts of dates<sup>?</sup>, figs<sup>?</sup>, apples.
- (05) Totals: Badda<sup>?</sup>, a *šalira* (at) Rakkan.
- (07-11) Amounts of dates<sup>?</sup>, figs<sup>?</sup>, *kazla*, mulberries, apples, *telte*; <sup>(12)</sup> (minimum) amounts of dates<sup>?</sup>.
- (13) Totals: Kaštiš, a *šalira* (at) Rakkan; Kaššena overseeing.
- (14-16) [Amounts of] dates<sup>?</sup>, figs<sup>?</sup>, apples.
- (17) [Totals:] Tuppira, a *šalira* (at) Rakkan; Kaššena overseeing.
- (18-20) [Amounts of] dates<sup>?</sup>, [figs<sup>?</sup>], apples.
- (21) [Totals: PN], a *šalira* (at) Rakkan [and GN<sup>?</sup>], ditto (= Kaššena) ditto (= overseeing).
- (22-25) [Amounts of four kinds of fruit].
- (26) [Totals: PN], a *šalira* [(at) Rakkan and GN<sup>?</sup>], Kaššena overseeing.
- (27) [Broken], ditto (= overseeing<sup>?</sup>).
- (28-31) [Amounts of four kinds of fruit<sup>?</sup>].
- (32) [Totals: PN], (at) Rakkan, Iršena overseeing.
- (33) [Amounts of one kind of fruit<sup>?</sup>: PN<sup>?</sup>] (and<sup>?</sup>) Tiriya, (at) Baraššan, Iršena overseeing.
- (34-36) Amounts of dates<sup>?</sup>, figs<sup>?</sup>, mulberries.
- (27) [Totals]: Bakabadda (and<sup>?</sup>) Kurkana, at Yamadanuš, Maraza (overseeing).
- (38) Year 20.

## Comments

8.4L x 11.4W x 2.2Th

No seal impressions

(05, 13, 17, 21, 26) Cf. PN šá-li-ra (without HAL) No. 28:06, 09, 13, 18, No. 23:60<sup>?</sup> and HAL<sup>x</sup>šá-li-ma No. 29:01 (column heading). Perhaps not an irregular spelling of *šalur*, indicating high social (and perhaps administrative) status, otherwise regularly šá-lu-ir, but an otherwise unattested agent-noun indicating professional or administrative activity; see above, p. 11.

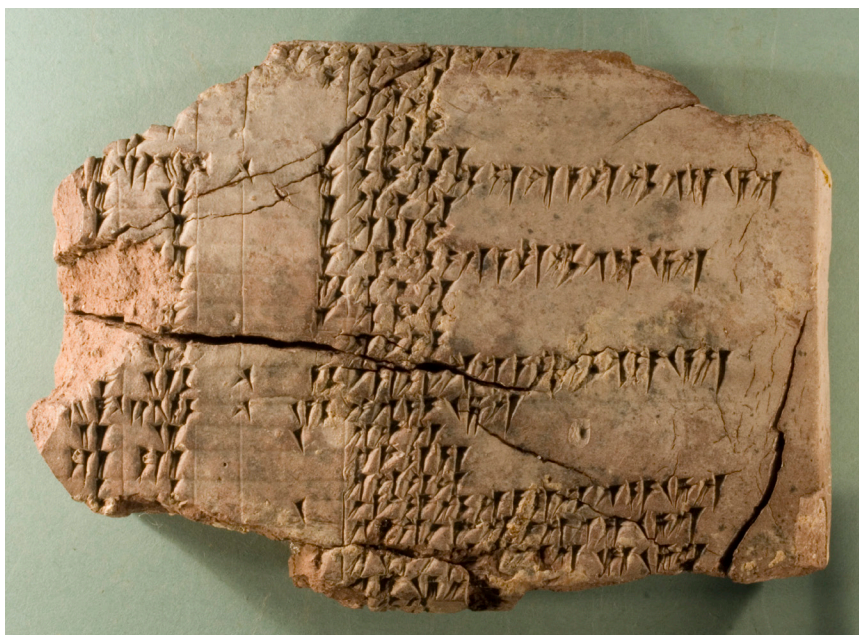
(05) Badda<sup>?</sup> at Rakkan: No. 29:06.

(06) -ut written MEŠ.

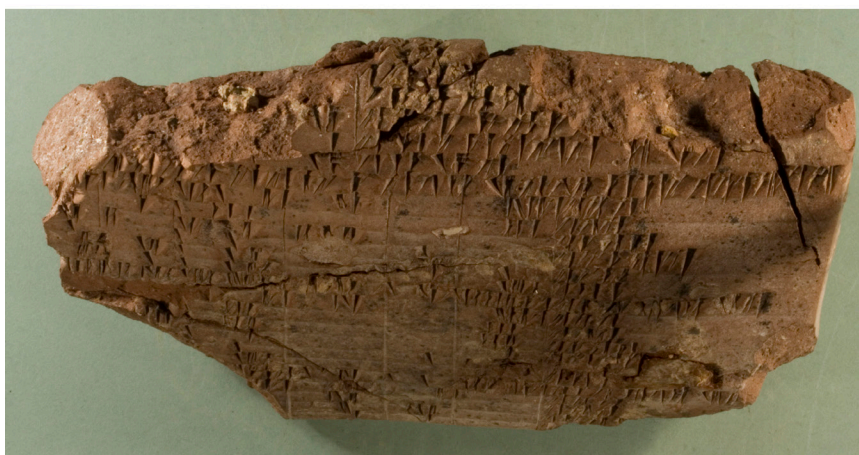




- (12) Most other spellings occurrences of the spelling pit (É) for the usual pi-ut are in C1/W texts; see comment on No. 11:08 and Stolper n.d.
- (13) Kaštiš at Rakkan, Kaššena *dama*: No. 29:10, 24 (W); cf. PF 0217, PF 0218 (both C1, fruit), PF-NN 0752 (C1, *tarmu*; see Tuplin 2008, p. 377); at Rakkan, Karšena (sic) overseeing (*šaramanna*), No. 13:20 (C1/W).  
In columns i and ii, expected totals are 66½, 60½; the totals as entered omit the second entry of dates? (*pit*).  
<sup>HAL</sup>kaš-še-na da-ma on right edge
- (13, 17, 26) Kaššena *dama* at Rakkan: No. 29:06, 10, 14; cf. PF 1945:08 (delivery of grain to Rakkan), cf. 15 (to Antarrantiš), 18 (grain stored at Matezzikaš).
- (17) Tuppira, “scribe,” not otherwise found as PN (but cf. <sup>HAL</sup>ti-pi-ráp, PF-NN 2010:03).  
<sup>HAL</sup>kaš-še-na da-ma on right edge.
- (21) [ ]-uk-ku <sup>HAL</sup>KI+MIN KI+MIN on right edge.
- (26) [ <sup>HAL</sup>]kaš-še-na da-ma on right edge.
- (27) [ ] KI+MIN on right edge.
- (32) da-ma on right edge.
- (33) -áš- written as KU. -na ʿda<sup>1</sup>-[ma] on right edge. Cf. fruit for workers at Rakkan, Iršena overseeing (*šaramanna*), PF-NN 2486:21', 40', 42' (V), and comment on No. 23:61, 63, 71.
- (37) <sup>HAL</sup>ma-ra-za on right edge. <sup>HAL</sup>kurkana: sic, despite fruit of Kurka supplied by Bakabadda (*miktam* <sup>AŠ</sup>kur-ka<sub>4</sub>-na *kurman* *Bakabaddana*), PF 1926 (U). Cf. fruit assigned to<sup>7</sup> Bakabadda at Yamadanuš No. 14:07, fruit supplied by (*kurman*) Bakabadda at Yamadanuš No. 21:12'.
- (38) Written at lower left corner of reverse. Unruled, unsealed, uninscribed space, equivalent to about 15 lines, separates lines 37 and 38.



**Fort. 1988-102 Obverse**



**Fort. 1988-102 Lower Edge**

*Fig. 30a.* No. 28 (Fort. 1988-102) Obverse, Lower Edge.



**Fort. 1988-102 Reverse**

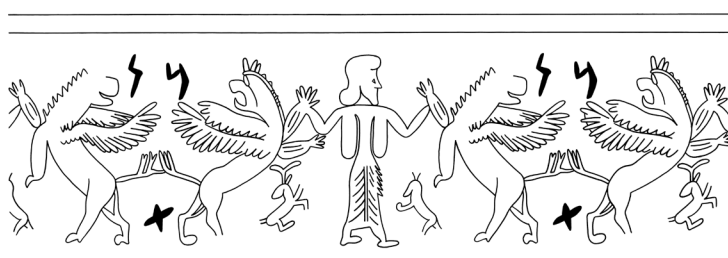


**Right  
Edge**



**Fort. 1988-102 Upper Edge**

*Fig. 30b.* No. 28 (Fort. 1988-102) Reverse, Upper Edge, Right Edge.



**PFS 1633\***

*Fig. 30c.* PFS 1633\* (drawing by Mark B. Garrison).





## 28. Fort. 1988-102 (Fig. 30a-c)

Obverse

(01)	[uk-ka <sub>4</sub> -ap da-ka <sub>4</sub> a-ak ul-la]- <sup>r</sup> ka <sub>4</sub> pi-ir <sup>1</sup> a-ak maz <sub>0</sub> -zí-ka <sub>4</sub>			
(02)	[	]		5   <sup>GIŠ</sup> pi-ut
(03)	[	]		<sup>GIŠ</sup> kaz <sub>0</sub> -la
(04)	[	] 2		<sup>GIŠ</sup> MA <sup>MEŠ</sup>
(05)	[	]   <sup>r</sup> 1 ME <sup>1</sup>		1   <sup>GIŠ</sup> ha-su-ur
(06)	[	PAP 1 ME] <sup>r</sup> 40+3 <sup>1</sup>   PAP 1 ME 30+7	PAP   PAP	6   <sup>HAL</sup> ha-tur-ra-ad-da šá-li-ra be-ul 10+5-na
(07)	[	] 10+3	10+1	2   <sup>GIŠ</sup> pi-ut
(08)	[	] 4	2	2   <sup>GIŠ</sup> MA <sup>MEŠ</sup>
(09)	[	] <sup>r</sup> 10 <sup>1</sup> +3		4   <sup>HAL</sup> mi-ra-man-na šá-li-ra be-ul 10+5-na
(10)	[	x+] <sup>1</sup> / <sub>2</sub>		2 <sup>1</sup> / <sub>2</sub>   <sup>GIŠ</sup> pi-ut
(11)	[	] 6		2   <sup>GIŠ</sup> MA <sup>MEŠ</sup>
(12)	[	] <sup>r</sup> 10+5 <sup>1</sup> / <sub>2</sub>		<sup>r</sup> GIŠ <sup>1</sup> pu-el <sup>1</sup>
(13)	[	] <sup>r</sup> 20+7 <sup>1</sup>   20+2 <sup>1</sup> / <sub>2</sub>	PAP 4 <sup>1</sup> / <sub>2</sub>	<sup>HAL</sup> ma- <sup>r</sup> du <sup>?</sup> -du <sup>?</sup> <sup>1</sup> -na šá-li-ra be-ul 10+5-na
(14)	[	PAP 1 ME] 80+7   PAP 1 ME 70+2 <sup>1</sup> / <sub>2</sub>	PAP 10+4 <sup>1</sup> / <sub>2</sub>	hi be-ul 10+5-na
(15)	[	] 20+2	10+2	10   <sup>GIŠ</sup> pi-ut
(16)	[	] 60+2	60+2	<sup>GIŠ</sup> ha-su-ur
(17)	[	] 1	1	<sup>GIŠ</sup> du-ud-da
(18)	[	]		10   <sup>HAL</sup> ha-tur-ra-da šá-li-ra be-ul 10+6-na
(19)	[	]		<sup>GIŠ</sup> <sup>r</sup> pi <sup>1</sup> -ut <sup>HAL</sup> mi-ra-man-na be-ul 10+6-na
(20)	[	]	]	<sup>r</sup> GIŠ <sup>1</sup> KI+MIN <sup>1</sup> <sup>HAL</sup> <sup>r</sup> ma-du <sup>?</sup> -du <sup>?</sup> <sup>1</sup> -na KI+MIN 10+6-na
(21)	[	]		]   be-ul 10+6- <sup>r</sup> na <sup>1</sup> [ ]



## Lower Edge

(22)	[	]]	<sup>r</sup> GIŠ <sup>1</sup> pi-ut	[	]
(23)	[		<sup>GIŠ</sup> ]] <sup>r</sup> kaz <sub>0</sub> <sup>1</sup> -la	[	]
(24)	[	]]	<sup>r</sup> GIŠ <sup>1</sup> pu-el <sup>1</sup>	[	]

## Reverse

(25)	[	1	]	<sup>HAL</sup> ha-tur-ra-da	[	]														
(26)	[	]	10+5		<sup>GIŠ</sup> pi-ut <sup>HAL</sup> mi-ra- <sup>r</sup> man <sup>1</sup> -[na	]														
(27)	[	]	1		<sup>GIŠ</sup> KI+MIN <sup>HAL</sup> ma-du <sup>?</sup> -du <sup>?</sup> -na	KI+MIN <sup>r</sup> 10+7-na <sup>1</sup>														
(28)	[	]	<sup>r</sup> PAP <sup>1</sup> 10+7		be-ul 10+7-na															
(29)	[am-ma mi-ši-na hal-mi <sup>HAL</sup> ] <sup>r</sup> ir-du-mar <sup>1</sup> -ti-ia-na a-ak ha-du-<iš> be-ul 10+5-na PAP am-ma ma-ak-ka <sub>4</sub> maz <sub>0</sub> -zí-ka <sub>4</sub> <da-ka <sub>4</sub> >																			
(30)	[	60+6		7 QA		40+3½		PAP 1 ME 10		2 QA		20+9				80+1		2 QA		<sup>GIŠ</sup> pi-ut
(31)	[	50+]	<sup>r</sup> 7 <sup>1</sup>			4		PAP	60+1								60+1		<sup>GIŠ</sup> kaz <sub>0</sub> -la	
(32)	[	]	20+5		1 ME			PAP 1 ME	<sup>r</sup> 20 <sup>1</sup> +5		1 ME 20+5								<sup>GIŠ</sup> ha-su-ur	
(33)	[	]	10					PAP	<sup>r</sup> 10 <sup>1</sup>				10						<sup>GIŠ</sup> šap <sub>0</sub> <sup>MEŠ</sup> te-na	
(34)	[	]	2			10+5		PAP	10+7				4				10		<sup>GIŠ</sup> pu-el	
(35)	[	]	3½			10		PAP	10+3½								10+3 ½		<sup>GIŠ</sup> MA <sup>MEŠ</sup>	
(36)	[1 ME] 60+4 2 QA 1 ME 70+2½							PAP 3 ME 30+6	<sup>r</sup> 7 QA <sup>1</sup>	<sup>r</sup> 1 ME 50 <sup>1</sup> +4		PAP 10+4		PAP 1 ME 60+8 <sup>1</sup>	7 QA		<sup>GIŠ</sup> mi-ik-tam <sub>5</sub> be-ul 10+5-na			
(37)	[	]			<sup>r</sup> PAP 1 ME	2 QA			70+1								20+9	2 QA		<sup>GIŠ</sup> pi-ut
(38)	[	]				60+1											60+1		<sup>GIŠ</sup> kaz <sub>0</sub> -la	
(39)	[				<sup>r</sup> 60 <sup>1</sup>		PAP	60+2									60+2		<sup>GIŠ</sup> ha-su-ur	
(40)	[				<sup>r</sup> 1 <sup>1</sup>		PAP	1									1		<sup>GIŠ</sup> du-ud-da	
(41)	[					10							10		[				<sup>r</sup> <sup>GIŠ</sup> pu-el <sup>1</sup>	
(42)	[					10+3½											<sup>r</sup> 10+3 <sup>1</sup> ½		<sup>r</sup> <sup>GIŠ</sup> MA <sup>MEŠ</sup> <sup>1</sup>	





(43) [	2 ME]	「40 <sup>1</sup> +7 7 QA   PAP	70+1   PAP	10   PAP 1 ME 「60+6 <sup>1</sup> 7 QA	Giš	mi-ik-tam <sub>5</sub> be-ul 10+6-「na <sup>1</sup>
(44) [	50+]	「2 <sup>1</sup> 2 QA	「50+2 <sup>1</sup>	2 QA		Giš pi-ut
(45) [		]	70+5			Giš kaz <sub>0</sub> -la
(46) [		]	20	40+2		Giš ha-su-「ur <sup>1</sup>
(47) [		]	1	1		Giš ru <sup>1</sup> -[el]
(48) [		]	10+3½			Giš [du-ud-da]

#### Upper Edge

(49) [		] QA   PAP 1 ME 60+1½   PAP 40+3 2 QA   PAP		Giš	[mi-ik-tam <sub>6</sub> be-ul 10+7-na]
(50) [		] -「x <sup>1</sup> -ak-ka <sub>4</sub> šá-ra-ma mu-ši-in be-ul 10+7-「na <sup>1</sup> [			]



### Synopsis/Translation

- (01) (Column headings) [(i) (assessed<sup>2</sup> amounts) assigned<sup>2</sup> to them, (ii) and (amounts) delivered, (iia) (amounts) delivered] in addition, (iii) and (amounts) withdrawn.
- (02-05) Amounts of dates<sup>2</sup>, *kazla*, figs<sup>2</sup>, apples.
- (06) Totals: Haturradda, a *šalira*, year 15.
- (07-08) Amounts of dates<sup>2</sup>, figs<sup>2</sup>.
- (09) [Totals]: Miramanna, a *šalira*, year 15.
- (10-12) Amounts of dates<sup>2</sup>, figs<sup>2</sup>, *pul*.
- (13) Totals: Maduduna<sup>2</sup>, a *šalira*, year 15.
- (14) [(Sub)-totals]: this (is the total for) year 15.
- (15-17) Amounts of dates<sup>2</sup>, apples, mulberries.
- (18) [Totals:] Haturradda, a *šalira*, year 16.
- (19) Amounts of dates<sup>2</sup>: Miramanna, year 16.
- (20) Amounts of dates<sup>2</sup>: Maduduna<sup>2</sup>, year 16.
- (21) [(Sub)-totals]: year 16.
- (22-24) Amounts of dates<sup>2</sup>, *kazla*, *pul*.
- (25) [Totals:] Haturradda, [year 17].
- (26) Amounts of dates<sup>2</sup>: Mira[man]na, year 17].
- (27) Amounts of dates<sup>2</sup>: Maduduna, year 17.
- (28) [(Sub)-totals]: year 17.
- (29) (Column headings:) [(i) previously on hand, on authorization] from Irdumartiya, (ii) and revenue for year 16, (iii) total on hand, (iv) consumed, (v) withdrawn, <(vi) balance carried forward>
- (30-35) Amounts of dates<sup>2</sup>, *kazla*, apples, fresh grapes<sup>2</sup>, *pul*, figs<sup>2</sup>.
- (36) (Sub)-totals: fruit, year 15.
- (37-42) Amounts of dates<sup>2</sup>, *kazla*, apples, mulberries, *pul*, figs<sup>2</sup>.
- (43) (Sub)-totals: fruit, year 16.
- (44-48) Amounts of dates<sup>2</sup>, *kazla*, apples, *pul*, [mulberries].
- (49) (Sub)-totals: [fruit, year 17].
- (50) [GN, (for) allocation by PN], PN<sub>2</sub> overseeing. Account of year 17 [ ... ].



## Comments

(11.8)L x 8.4W x 2.0Th

PFS 1633\* right edge

(06) *pir* (ullaka?): cf. column headings (i) *nutika* (ii) *ha duka pi-ir* (iii) *ak mazzika*: PF-NN 0574:01 (tabular grain account).

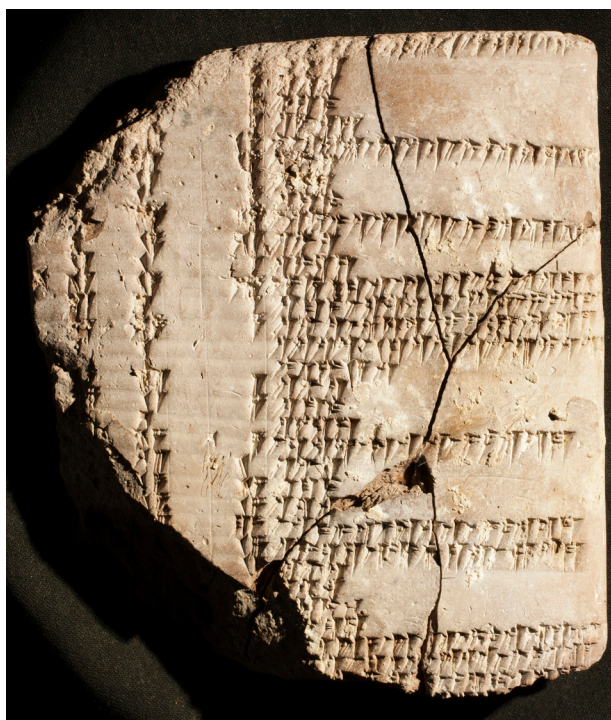
(06, 09, 13, 18) PN <sup>HAL</sup>šá-li-ra: see above, p. 11 and comments on No. 27:13, 17, 21, 26.

(06, 18, 25): *Haturradda*: see Henkelman & Stolper 2021, p. 190ff., comments to Fort. 0119-101:12, 23, 55 and above p. 12-13.

(13, 20, 27) *Maduduna*?: cf. *Maduduma*? PFa 33:20.

(33) *šap tena*: in tabular fruit accounts, PF-NN 2180:08, Fort. 1421-101:54 (= Stolper 2021, No. 3), Fort. 0582-101:13, No. 25:13, 18; in C1/W, No. 15:03'. Describing wine, *tena* is in contrasting parallelism with *šawur*, e.g., PF-NN 0699:11f., No. 38:20, hence “mild, süß” (Hinz & Koch 1987, p. 317); said of the fruit *šap*, perhaps “grapes” (Hinz & Koch 1987, p. 1132, s.v. <sup>GIŠ</sup>šap<sub>6</sub>) it is in contrasting parallelism (explicit in Fort. 0582-101:13f., tacit elsewhere) with *zitika*, perhaps “dried” (Hallock 1969, p. 776, Hinz & Koch 1987, p. 1305), hence perhaps “fresh.” Cf. also <sup>GIŠ</sup>ti-ip te-na No. 30:10", 25", 30". Not clear to me is the phrase *šutur daka šašika marda tena*, “balance (of wine) on deposit, remainder (as?) fresh seed?” Fort. 1290-101:26, cf. *ibid.* 17 and cf. *šutur daka marda nutukka* “balance (of grain) on deposit, reserved as seed?” PF 0242:02f., PF 0243:01f., PF 1955:23, PF 1959:08, etc.

(Right Edge) On PFS 1633\* see Mikołajczak 2018, p. 426-30; Chandler 2021.



Fort. 1898-101 Obverse

1 cm



Fort. 1898-101  
Right Edge



Fort. 1898-101 Reverse

1 cm

**Fig. 31.** No. 29 (Fort. 1898-101) Obverse, Right Edge, Reverse.



## 29. Fort. 1898-101 (Fig. 31)

Obverse

(01)	[uk-ka <sub>4</sub> -ap da-ka <sub>4</sub> a-ak ul-la-ka <sub>4</sub> a-ak pi-ir ul-la-ka <sub>4</sub> a-ak] ʾmazo-zí-ka <sub>4</sub> ʾHALʾšáʾ-li-ma be-ʾul 10+5-naʾ		
(02)	[	]	ʾ5?   GIŠ pi-utʾ
(03)	[	]	ʾ6   GIŠ kaz <sub>0</sub> -laʾ
(04)	[	]	2   GIŠ MA <sup>MEŠ</sup>
(05)	[	]	3   GIŠ ha-su-ur
(06)	[	]	ʾx+xʾ   10+ʾ5ʾ   hi ʾHALʾba-adʾʾ1-daʾ AŠ rak <sub>0</sub> -ka <sub>4</sub> -an ʾHALkaš-še-na da-ma be-ul 10+ʾ5-naʾ
(07)	[	80+1]	ʾ60+3   10+8   ʾGIŠ pi-utʾ
(08)	[	]	10+ʾxʾ   ʾ3ʾ   ʾGIŠ kaz <sub>0</sub> -laʾ
(09)	[	]	10   ʾ6ʾ   GIŠ MA <sup>MEŠ</sup>
(10)	[	]	ʾ20+xʾ   20+ʾ7ʾ   ʾHALka <sub>4</sub> -ášʾʾ1-ti-iš AŠ rak <sub>0</sub> -ka <sub>4</sub> -an ʾHALkaš-še-na da-ma be-ʾul 10ʾ+5-na
(11)	ʾ70ʾ	10+8	50+2   GIŠ pi-ut
(12)	10+2	10	2   GIŠ ha-su-ur
(13)	PAP 80+2	20+8	ʾ50+4ʾ   ʾHALha-sa-ir-ma-na AŠ rak <sub>0</sub> -ka <sub>4</sub> -an ʾHALkaš-ʾšeʾʾ1-na da-ma be-ul 10+5-na
(14)	60+1	ʾ60ʾ	1   GIŠ MA <sup>MEŠ</sup> ʾHALab-ba-ka <sub>4</sub> -ma AŠ rak <sub>0</sub> -ka <sub>4</sub> -<an> ʾHALkaš-še-na da-ma
(15)	ʾ50+2ʾ	ʾ40+8ʾ	4   GIŠ pi-ut ʾHALru-ma-da ʾHALuk-ba-ma-ia da-ma
(16)	[	ʾ10ʾ   10	GIŠ du-ud-da ʾHALu-ma-da-ad-da ʾHALman-ú-uk-ka <sub>4</sub> da-ma
(17)	[	]	hi be-ul 10+5-na
(18)	[	ʾ30ʾ+3	2   GIŠ pi-ut
(19)	[	10]+ʾ6ʾ   10+1	5   GIŠ MA <sup>MEŠ</sup>
(20)	[	]	40     GIŠ ha-su-ur
(21)	[PAP 90+1]	80+4	PAP 7   ʾHALma-li-ia AŠ rak <sub>0</sub> -ka <sub>4</sub> -an ʾHALkaš-še-na da-ma
(22)	[	60+3   40+3	20   GIŠ pi-ut





- (23) [ 50+2 ] 10+8 | | 30+4 | <sup>GIŠ</sup>MA<sup>MEŠ</sup>
- (24) [ 6 ] 40<sup>1</sup>+5 | | 10+5 | <sup>GIŠ</sup>kaz<sub>0</sub>-la
- (25) [ PAP 1 ME 70+5 1 ] 10<sup>1</sup>+6 | 60+9 | <sup>HAL</sup>ka<sub>4</sub>-áš-ti-iš <sup>AŠ</sup>rak<sub>0</sub>-ka<sub>4</sub>-an <sup>HAL</sup>kaš-še-na da-ma
- (26) [ | 10+6 | <sup>GIŠ</sup>ha-su-ur <sup>HAL</sup>ha-sa-ir-ma-na <sup>HAL</sup>KI+MIN da-ma
- (27) [ ] 10+[x ] <sup>GIŠ</sup>pi-ut
- (28) [ ] <sup>GIŠ</sup>kaz<sub>0</sub>-la
- (29) [ | <sup>GIŠ</sup>MA<sup>MEŠ</sup>
- (30) [ | <sup>GIŠ</sup>ha]-su-ur
- (31) [ ] -1<sup>x</sup>-rak<sub>0</sub>-šá <sup>AŠ</sup>rak<sub>0</sub>-1<sup>ka</sup><sub>4</sub>-an <sup>HAL</sup>kaš-še-na da-ma be-ul 10+6-na
- (32) [ ] 1<sup>x</sup> <sup>HAL</sup>ma-pár-1<sup>na</sup> <sup>AŠ</sup>rak<sub>0</sub>-ka<sub>4</sub>-an <sup>HAL</sup>kaš-še-na da-ma
- (33) [ ] 1<sup>x</sup> x x x <sup>1</sup> <sup>HAL</sup>man-ú-uk-ka<sub>4</sub> 1<sup>da</sup>-ma



## Synopsis/Translation

<sup>(01)</sup> (Column headings:) [(i) (assessed amounts?) assigned to? them (ii) and (amounts) delivered (iia) and (amounts) delivered in addition] (iii) and (amounts) withdrawn: *šalima*-persons?, year 15.

<sup>(02-05)</sup> Amounts of dates?, *kazla*, figs?, and apples.

<sup>(06)</sup> Totals: this (fruit), Badda?, (at) Rakkan, Kaššena overseeing, year 15.

<sup>(07-09)</sup> Amounts of dates?, *kazla*, and figs?.

<sup>(10)</sup> Totals: Kaštiš, (at) Rakkan, Kaššena overseeing, year 15.

<sup>(11-12)</sup> Amounts of dates? and apples.

<sup>(13)</sup> Totals: Hasarmana, (at) Rakkan, Kaššena overseeing, year 15.

<sup>(14)</sup> Amounts of figs?: Abbakama, (at) Rakkan, Kaššena overseeing.

<sup>(15)</sup> Amounts of dates?: Rumada, Ukbamaya overseeing.

<sup>(16)</sup> Amounts of mulberries: Umadadda, Manukka overseeing.

<sup>(17)</sup> This (pertains to) year 15.

<sup>(18-20)</sup> Amounts of dates?, figs?, and apples.

<sup>(21)</sup> Totals: Maliya, (at) Rakkan, Kaššena overseeing.

<sup>(22-24)</sup> Amounts of dates?, figs? and *kazla*.

<sup>(25)</sup> Kaštiš, (at) Rakkan, Kaššena overseeing.

<sup>(26)</sup> Amounts of apples: Hasarmana, ditto (= Kaššena) overseeing.

<sup>(27-30)</sup> [Amounts of] dates?, *kazla*, figs?, and apples.

<sup>(31)</sup> [Totals] PN, (at) Rakkan. Kaššena overseeing, year 16.

<sup>(32)</sup> [Amounts of fruit]: Maparna?, (at) Rakkan, Kaššena overseeing.

<sup>(33)</sup> [Amounts of fruit]: PN, Manukka overseeing.

(Lower Edge) (Destroyed.)

(Reverse) Mostly illegible.

Remains of about 10 lines, with a single column of text on the right, apparently set off against a single column of numbers, hence perhaps a serial list of outlays, followed by one blank line.

Two lines of continuous text follow, apparently column headings, then six lines of a multi-column balanced summary account of figs?, dates?, *kazla*, apples, and two other items.

One or two continuous lines follow, presumably identifying the pertinent years, place, and storehouse personnel.

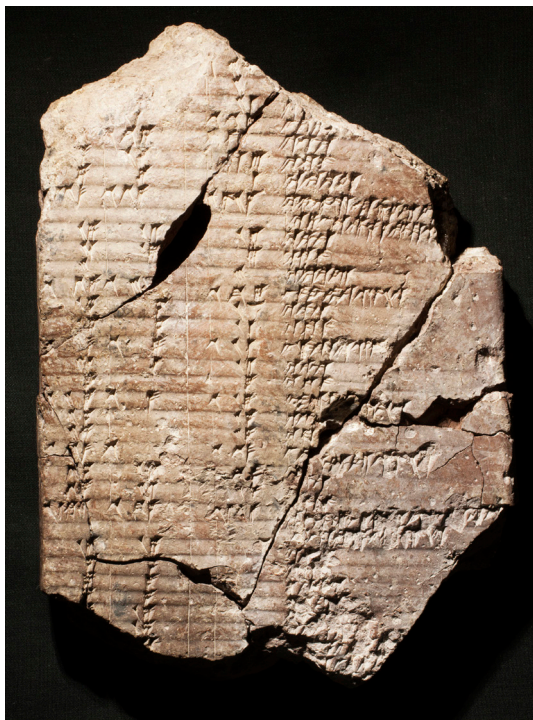


## Comments

11.0L x (12.7)W x 2.4Th

No preserved seal impressions.

- (01) ʾ10+5-na<sup>1</sup> on right edge. <sup>HAL</sup>šá-li-ma (sic; not: -ip): cf. PN (<sup>HAL</sup>)šá-li-ra No. 27:05, 13, 17, 21, 26, No. 28:06, 09, 13, 18, No. 23:60<sup>?</sup>, and see comment on No. 23:61, 63, 71. and above, p. 11.
- (06) -ʾ5-na<sup>1</sup> on right edge. Cf. Badda<sup>?</sup>, šalira, at Rakkan No. 27:05.
- (06, 10, 14) Kaššena dama, at Rakkan: see No. 27:13, 17, 26.
- (13) -ul 10+5-na on right edge.
- (14) -ma on right edge.
- (15) Cf. balance (šutur daka) of five kinds of fruit at Marpa, allocation of (kurman) Rumanda, PF-NN 1962 (C2, year 20).
- (16) -ma on right edge.
- (29) Erasure follows [<sup>GIŠ</sup>]MA<sup>MEŠ</sup>.
- (31) 10+6-na on right edge.



Fort. 2043-101 Obverse?



Fort. 2043-101 Reverse?



Fort. 2043-101  
Right Edge

*Fig. 32.* No. 30 (Fort. 2043-101) Obverse<sup>?</sup>, Reverse<sup>?</sup>, Right Edge.



Obverse?

(01') [						]	[				]						
(02') [						]		<sup>r</sup> PAP <sup>1</sup>	30+	<sup>r</sup> 3 <sup>1</sup>	[		]				
(03') [						]			20	[			]				
(04') [						]			20+1		<sup>r</sup> GIŠ <sup>1</sup>	[		]			
(05') [						]	<sup>r</sup> X <sup>1</sup> +1 <sup>1</sup>			PAP	40+	<sup>r</sup> 1 <sup>1</sup>	<sup>HAL</sup> <sup>r</sup> ba <sup>?</sup>	x x <sup>1</sup>	[		]
(06') [		1 ME		5]			40+5				60		<sup>GIŠ</sup> pi-ut				
(07') [			80]	+8			20+5				60+3		<sup>GIŠ</sup> MA <sup>MEŠ</sup>				
(08') [					6			5				1		<sup>GIŠ</sup> du-ud-da			
(09') [PAP 1]	<sup>r</sup> ME <sup>1</sup>	90+9		PAP			70+5			PAP 1 ME	20+4		<sup>GIŠ</sup> mi-ik-tam <sub>5</sub>	<sup>AŠ</sup> ba-ir-šá-iš	kur-[mín		]
(10')														iz-za	<sup>HAL</sup> ma-ra-za	šá-ra-ma	be-[ul 20-na]
(11')			20+5				10+2	[		]		10+3		<sup>GIŠ</sup> pi-ut			
(12')			20+1				10+8				3		<sup>GIŠ</sup> MA <sup>MEŠ</sup>				
(13')			30								30		<sup>GIŠ</sup> du-ud-da				
(14') PAP			70+6		PAP		30			PAP	40+6		<sup>HAL</sup> áš-pu-uk-ka <sub>4</sub>	be-ul	20-na		
(15')			10+4				4				10		<sup>GIŠ</sup> pi-ut				
(16')			<sup>r</sup> 10+5 <sup>1</sup>				4				10+1		<sup>GIŠ</sup> MA <sup>MEŠ</sup>				
(17') <sup>r</sup> PAP <sup>1</sup>			[20]+9		PAP		8			PAP	20+1		<sup>HAL</sup> ki-te- <sup>r</sup> na <sup>1</sup>	be- <sup>r</sup> ul <sup>1</sup>	[20-na]		
(18')			20+1				<sup>r</sup> 9 <sup>1</sup>				10+2		<sup>GIŠ</sup> pi-ut				
(19')			<sup>r</sup> 7 <sup>1</sup>								7		<sup>GIŠ</sup> MA <sup>MEŠ</sup>				
(20') PAP			20+8		PAP		9			PAP	10+8		<sup>HAL</sup> hi <sup>?</sup> -iš <sup>?</sup> - <sup>r</sup> x-x <sup>1</sup>	[be]- <sup>r</sup> ul <sup>1</sup>	20- <sup>r</sup> na <sup>1</sup>		
(21')			20+4								20+4		<sup>GIŠ</sup> pi- <sup>r</sup> ut <sup>1</sup>				
(22')			30+5								30+5		<sup>GIŠ</sup> MA <sup>[MEŠ]</sup>				





(23 <sup>1</sup> )	PAP	50+9	PAP			PAP	50+9		HAL	ka <sup>4</sup> ? <sup>1</sup> -[x]- <sup>1</sup> š <sup>1</sup> -iš <sup>1</sup> -da	be-ul <sup>1</sup> 20- <sup>1</sup> na <sup>1</sup>
(24 <sup>1</sup> )		80+4			20+5			1	50+9 <sup>1</sup>		Giš <sup>1</sup> pi <sup>1</sup> -ut
(25 <sup>1</sup> )		70+8			20+2			1	50+6 <sup>1</sup>		[Giš <sup>1</sup> ] MA <sup>1</sup> MEŠ <sup>1</sup>
(26 <sup>1</sup> )	PAP	1 ME 60+2	PAP	40+7			PAP 1 ME 10+5		Giš <sup>1</sup>	me-ik-tam <sup>6</sup>	! AŠ <sup>1</sup> ba <sup>2</sup> -ir <sup>2</sup> -šá <sup>2</sup> -iš <sup>2</sup> kur-mín <sup>1</sup>
		HAL	x x x <sup>1</sup> -								
(27 <sup>1</sup> )									na <sup>1</sup>	HAL	ma-ra-za šá-ra-ma be-ul 20-na <sup>1</sup>
(28 <sup>1</sup> )		10+ <sup>1</sup> 5 <sup>1</sup>			10+5				Giš <sup>1</sup>	pi <sup>1</sup> -ut <sup>1</sup>	
(29 <sup>1</sup> )		4			4 <sup>1</sup>				Giš <sup>1</sup>	MA <sup>1</sup> MEŠ <sup>1</sup>	
(30 <sup>1</sup> )		8			8 <sup>1</sup>				Giš <sup>1</sup>	du-ud-da <sup>1</sup>	
(31 <sup>1</sup> )		5 <sup>1</sup>			5				Giš <sup>1</sup>	ha-su-ur <sup>1</sup>	
(32 <sup>1</sup> )	[	10+5]			10+5				[		]
(33 <sup>1</sup> )	[	10+5]			10+5				x x x x x <sup>1</sup>	[	]
(34 <sup>1</sup> )	[		]	x <sup>1</sup>			[		šá <sup>2</sup> -na <sup>2</sup>	[	]
(35 <sup>1</sup> )	[								x	HAL	x x [
(36 <sup>1</sup> )	[								x	HAL?	x x <sup>1</sup> [

# Reverse?

(01'') [																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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(09'')	½	½	[ ]	[ <sup>Giš</sup> ]r <sup>1</sup> da <sup>1</sup> -ku-iš
(10'')	20+2	10+8	[ 4]	[ <sup>Giš</sup> ]r <sup>1</sup> ti <sup>1</sup> -ip te-na
(11'')	20	10+7		r <sup>3</sup> 1 [ <sup>Giš</sup> du <sup>?</sup> ]-r <sup>1</sup> ud <sup>?</sup> -da <sup>?</sup> 1
(12'')	10+2	10		r <sup>2</sup> 1 [ <sup>Giš</sup> ] [ ]
(13'') [PAP]	r <sup>1</sup> 50 <sup>1</sup> +9   PAP	50	PAP	9   <sup>HAL</sup> x x <sup>1</sup> [ be-ul] 20-na
(14'')	3	1		2   <sup>Giš</sup> pi-ut
(15'')	5	4		1   <sup>Giš</sup> r <sup>1</sup> gi-šu-ur <sup>1</sup>
(16'')	30+r <sup>1</sup> 2 <sup>1</sup>	r <sup>1</sup> 30+2 <sup>1</sup>		<sup>Giš</sup> ha-su-ur
(17'')	50+1	40+7		4   <sup>Giš</sup> r <sup>1</sup> du-ud <sup>1</sup> -da
(18'')	2	1	1	<sup>Giš</sup> te-el-te
(19'')	r <sup>1</sup> 2 <sup>1</sup>	2		<sup>Giš</sup> ir-taš-ti-iš
(20'') PAP	90+r <sup>1</sup> 5 <sup>1</sup>   PAP	r <sup>1</sup> 80+7 <sup>1</sup>	PAP	8   <sup>HAL</sup> ha-da-ra-da be-ul 20-na
(21'')	1 ME 60+1	1 ME 60+1		<sup>Giš</sup> r <sup>1</sup> ha-su-ur <sup>1</sup>
(22'')	2		2	<sup>Giš</sup> te <sup>?</sup> -el <sup>?</sup> -te <sup>?</sup> 1
(23'')	10+2	[ ]	r <sup>1</sup> 10 <sup>1</sup> +2	<sup>Giš</sup> ir <sup>1</sup> -taš-ti-iš
(24'')	1	[ ]	1	<sup>Giš</sup> gi-šu-ur
(25'')	7	[ ]	7	<sup>Giš</sup> ti <sup>1</sup> -ip te-na
(26'')	3	3	[ ]	<sup>Giš</sup> du-ud-da
(27'') [PAP 1] ME 80+6	PAP <1 ME> 60+4	[PAP] 20+2	<sup>HAL</sup>	gi-da-r <sup>1</sup> ad <sup>1</sup> -da be-ul 20-na
(28'') [ ]	20+3	«PAP» 10+3½	«PAP» 9½	<sup>Giš</sup> pi-ut

# Reverse?

(01''')	80 <sup>?</sup> +8 <sup>?</sup>	<sup>Giš</sup> pi-ut
(02''')	1 ME 4	<sup>Giš</sup> kaz <sub>0</sub> -la
(03''')	[ ]	<sup>Giš</sup> r <sup>1</sup> du <sup>1</sup> -ud-da



(04''') [ 10+2 <sup>Giš</sup>MA <sup>MEŠ</sup>  
(05''') [ ] 70 <sup>Giš</sup>ha-su<sup>1</sup>-ur

### Right Edge

(06''') [ ] <sup>Giš</sup>1[ ]  
(07''') [ ] <sup>Giš</sup>x<sup>1</sup>-[x]-<sup>1</sup>x<sup>1</sup>  
(08''') [ ] <sup>Giš</sup>za<sup>2</sup><sup>1</sup>-[ri<sup>2</sup>-ut<sup>2</sup>]-<sup>1</sup>ka<sup>4</sup><sup>1</sup>  
(09''') [ <sup>Giš</sup> ]<sup>1</sup>te-el<sup>1</sup>-te  
(10''') [ <sup>Giš</sup> ]ir-taš-ti-iš

### Synopsis/Translation

- (01') [Amounts of fruit].  
(02') Totals: [PN, at GN].  
(03'-04') [Amounts of two kinds of fruit].  
(05') Totals: [PN, at GN].  
(06'-08') Amounts of dates<sup>2</sup>, figs<sup>2</sup> and mulberries.  
(09'-10') Totals: fruit at Pārsa, (for<sup>2</sup>) allocation by [PN], Maraza overseeing, [year 20].  
(11'-13') Amounts of dates<sup>2</sup>, figs<sup>2</sup>, mulberries.  
(14') Totals: Ašpukka, year 20.  
(15'-16') Amounts of dates<sup>2</sup>, figs<sup>2</sup>.  
(17') Totals: Kitenā, year 20.  
(18'-19') Amounts of dates<sup>2</sup>, figs<sup>2</sup>.  
(20') Totals: PN, year 20.  
(21'-22') Amounts of dates<sup>2</sup>, figs<sup>2</sup>.  
(23') Totals: PN, year 20.  
(24'-25') Amounts of dates<sup>2</sup>, figs<sup>2</sup>.  
(26'-27') Totals: fruit at Pārsa<sup>2</sup>, (for<sup>2</sup>) PN to allocate, Maraza overseeing, year 20.  
(28'-33') Amounts of dates<sup>2</sup>, figs<sup>2</sup>, mulberries, apples, ... , ....  
(34'-36') (Destroyed.)  
(Reverse? 01''-05'') Amounts of [dates<sup>2</sup>, figs<sup>2</sup>], apples, *telte*.  
(06'') Totals: (a man) named Pukša, year 20.  
(07''-12'') Amounts of dates<sup>2</sup>, *telte*, *dakuš*, *tip tena*, mulberries<sup>2</sup>, ... .  
(13'') Totals: [PN, year] 20.  
(14''-19'') Amounts of dates<sup>2</sup>, *giššur*, apples, mulberries, *telte*, *irtaštiš*.



(20") Totals: Hadarada, year 20.

(21"-26") Amounts of apples, *telte*<sup>?</sup>, *irtaštiš*, *giššur*, *tip tena*, mulberries.

(27") Totals: Gidadda, year 20.

(28"-34") Amounts of dates<sup>?</sup>, apples, *tip tena*, *giššur*, *irtaštiš*, *zaritka* ... .

(35"-38") (Destroyed.)

(Reverse?-Right Edge 01""-10'') Amounts of dates<sup>?</sup>, *kazla*, mulberries, figs<sup>?</sup>, apples, ... , ... , *zaritka*<sup>?</sup>,  
*telte*, *irtaštiš*.

### Comments

12.3 x (17.2) x 2.9 cm

No preserved seals.

(20') 10+8 (sic): error for 10+9 (erroneous entry included in sum, line 25').

(24'-27') Grand totals of the entries (11'-14')+(15'-17')+(18'-20')+(21'-23'), but omitting a line to account for the mulberries entered in line 13'.

(10", 25", 30") <sup>GIŠ</sup>ti-ip te-na clear in 30" (not: ti-el<sup>l</sup>-te-na); conceivably a variant writing of šap<sub>o</sub>(<sup>MEŠ</sup>) te-na?

(20") Considering mentions of Pukša (line 06") and Gidadda (line 27"), ha-da-ra-da may be an error for Haturrada (Iranian \*Ātrrāta-) rather than a representation of Iranian \*Hātarāda- (Tavernier 2007, p. 197 [4.2.718]).

(01""-10'') On Reverse<sup>?</sup> and Right Edge at right angle to main text. See Fisher & Stolper 2015, p. 8 Fig. 4.



**Fort. 1333-101 Obverse**



**Fort. 1333-101  
Right Edge**



**Fort. 1333-101 Lower Edge**



**Fort. 1333-101 Reverse**



**Fort. 1333-101 Reverse**

*Fig. 33. No. 31 (Fort. 1333-101) Obverse, Right Edge, Lower Edge, Reverse.*





### 31. Fort. 1333-101 (Fig. 33)

Obverse

(01) [Giš<sup>1</sup>pi-ut] Giš<sup>1</sup>kaz<sub>0</sub>-la Giš<sup>1</sup>du-ud<sup>1</sup>-da Giš<sup>1</sup>ha-su-ur

(02) [PAP ir] ʾkut<sup>1</sup>-tan-na Giš<sup>1</sup>mi-ik-tam<sub>6</sub>

(03) [ 20 | ] | 20+2 | | PAP 40+2 | Aš<sup>1</sup>rak<sub>0</sub>-ʾka<sub>4</sub>-an HAL<sup>1</sup>ti-ri-ia<sup>1</sup>-ik-ka<sub>4</sub>-mar

(04) [ 2½ | ] | | PAP 2½ | Aš<sup>1</sup>ha-ʾda<sup>?</sup>-ráš<sup>?</sup> HAL<sup>1</sup>ba<sup>?</sup>-ku<sup>?</sup>-[x]-KI+MIN-mar

(05) [ 10+2 | ] 3 | 3 | ʾg<sup>1</sup> | PAP 20+7 | Aš<sup>1</sup>an-ʾtar-ra-an<sup>1</sup>-ti-iš

(06) | | | | HAL<sup>1</sup>da<sup>1</sup>-[tap]-pár-na-ʾmar<sup>1</sup>

Lower Edge

(07) [PAP 30]+4 | PAP 3 | PAP 20+50 | PAP 9 | PAP 70+ʾ1½<sup>1</sup> Giš<sup>1</sup>mi<sup>1</sup>-ik-tam<sub>6</sub> ʾx<sup>1</sup> [ ]

(08) [ ] ʾx<sup>1</sup> HAL<sup>1</sup>hu-be-ik-ka<sub>4</sub>-mar HAL<sup>1</sup>ha-ʾtur<sup>1</sup>-ra-ad-da

Reverse

(09) [ug]-gi zik-ʾka<sub>4</sub> be<sup>1</sup>-ul 10+8-me-man-na

### Translation

(01-02) (i) [dates<sup>?</sup>], (ii) *kazla*, (iii) mulberries (iv) apples: (v) grand total of fruit:

(03) (i) [200 l.], (ii) —, (iii) 220 l. (iv) —: total 420 l. at Rakkan, from Tiriya.

(04) (i) [25 l.], (ii) —, (iii) —, (iv) —: total 25 l. at Hadaraš<sup>?</sup>, from PN.

(05-06) (i) [120 l.], (ii) 30 l., (iii) 30 l., (iv) 90 l.: total 270 l. at Antarrantiš, from Datapparna.

(07-09) (i) [Total 3]40 l., (ii) total 30 l., (iv) total 25 l.: total 715 l. of fruit [delivered<sup>?</sup>] from those people, assigned<sup>?</sup> to Haturrada, year 18.



(7.2)L x 3.3W x 1.2Th

(01) -ud!- written as BA.

(03) -ka<sub>4</sub>-mar on right edge. Tiriya at Antarrantiš: No. 10:08.

(04) -KI+MIN-mar on right edge.

<sup>(05-06)</sup> Cf. grain from Dattaparna, food handler (*abbebe huttira*) at Antarantiš Fort. 2170-101:42'(V, = Stolper 2021, No. 7).

(07) First column apparent error for  $[30]_{+4\frac{1}{2}}$ .

(08)  $\ulcorner \text{HAL} \urcorner$  over erasure.

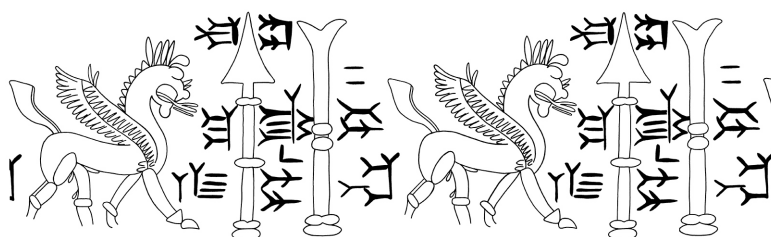
<sup>(9)</sup> Haturradda: Henkelman & Stolper 2021, p. 190f., comments to Fort. 0119-101:12, 23, 55, and above, p. 11.



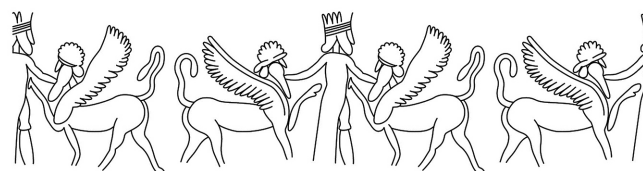
## Appendix: Pomace, Shoots, and Seeds, Old and New Wine



*Fig. 34a.* No. 32 (Fort. 0283-101) Obverse, Lower Edge, Right Edge, Reverse, Upper Edge, Left Edge.



**PFS 0027\***



**PFS 1155**

**Fig. 34b.** PFS 0027\* (drawing by Mark B. Garrison), PFS 1155 (drawing by Tytus Mikołajczak and Mark B. Garrison).

### 32. Fort. 0283-101 (Fig. 34a-b)

Obverse

(01)	[		] 'x du-iš-da 2 <sup>AN</sup> la-an <sup>1</sup> [na	]
(02)	[		<sup>AN</sup> ma-ri-ráš-'na x x x x <sup>1</sup> [	]
(03)	10	[	du]-i <sup>1</sup> š-da 10+4 'x x x <sup>1</sup> [	]
(04)			'x ANŠE <sup>1</sup> .KUR.'RA <sup>MES<sup>1</sup></sup> be-ir maz <sub>0</sub> -te <sup>2</sup> -'ka <sub>4</sub> <sup>21</sup> [	]
(05)	3		<sup>HALF</sup> áš-ba <sup>1</sup> -ku-iš 'du <sup>1</sup> -i <sup>1</sup> š 80 <sup>2</sup> <sup>HAL</sup> kur <sup>1</sup> [taš	]
(06)			rak <sub>0</sub> -ka <sub>4</sub> ap du-nu-[i <sup>1</sup> š] [ ] 'x x x <sup>1</sup> [ ] 'x x <sup>1</sup>	
(07)	2		<sup>HAL</sup> ka <sub>4</sub> -rak <sub>0</sub> -ka <sub>4</sub> du-šá 'x x x x <sup>1</sup> ma x x x	
(08)	6 1 QA		<sup>HAL</sup> ú-iš-šu-iš-na-ak-'ka <sub>4</sub> -na <sup>1</sup> [a-ak] <sup>HAL</sup> ak-ka <sub>4</sub> -ia-	
(09)			še' du-iš-šá 60+1 «QA» <sup>SAL</sup> kur-taš <sup>AŠ</sup> [ku-un]-tur-ru-iš-	
(10)			na ha sa-ti-iš-da un-ra 1 QA ap 'du-nu <sup>1</sup> -iš-da	
(11)	1		<sup>HALF</sup> ú-iš <sup>1</sup> -šu-iš-na-ak-ka <sub>4</sub> -na a-ak <sup>HALF</sup> ak <sup>1</sup> -[ka <sub>4</sub> -ia-še]	
(12)			du-iš-šá 1 <sup>SAL</sup> <sup>MES</sup> ra-'ti <sup>1</sup> -ra GURUŠ <sup>MES</sup> ku-'ši <sup>1</sup> -[i <sup>1</sup> š	]
(13)			'hi du <sup>1</sup> -nu-iš-da	[ ]
(14)			<sup>HAL</sup> hi-ú-ut <sup>2</sup> -ra du-šá <sup>HAL</sup> šá-lu-ip ap du-nu-iš-[da] [ ]	



(15)	ʾ30 <sup>1</sup> +2	bat-ti-še-za-na ʾ10+2 <sup>1</sup> AŠ muz <sub>0</sub> -zí-na hu-ʾut <sup>1</sup> -tuk-ka <sub>4</sub> 3 un-[ra 50 ku]-
(16)		iz 2 un-ra 40 ku-iz 7 un-ra 20 30 ku-iz [ ]
(17)	5	HAL áš-ba-ku-iš du-šá ANŠE.KUR.RA <sup>MEŠ</sup> [ ]
(18)	10+6	HAL hi-ú-ʾut <sup>?</sup> -ra du <sup>1</sup> -šá <sup>SAL</sup> kur-taš [ ]-
(19)		ut-ti-iš-na HAL za-mi-ip [ ]
(20)	6 ʾ2 QA <sup>1</sup>	HAL ti-ri-ʾia du <sup>1</sup> -[šá] [ ]
(21)		[ ] [ ]

#### Lower Edge

(22)	20 [ ]
(23)	[ ]

#### Reverse

(24)	2 ME ʾ70 <sup>1</sup> +7	GIŠ an-na-an <sup>?</sup> ha du-ka <sub>4</sub> AŠ be-ul 20-um-me-ma [ ]
(25)	20+ʾ7 7 QA	hi ri-te ni-ma-ak <sup>1</sup> [ ]
(26)	2 ME 40+9 3 QA	GIŠ GEŠTIN <sup>MEŠ</sup> šá-ši-ka <sub>4</sub> ni-ma-ʾak <sup>1</sup> [ ]
(27)	5 ʾME 20 <sup>1</sup> +3	mi-ši-na AŠ be-ul 10+9-um-me-ma [da-ka <sub>4</sub> ]
(28)	20+3 7 QA	AŠ pír-ri-ti-ma-ut-ti-iš HAL ma-ku-uk-ka <sub>4</sub> -[mar ]
(29) PAP	7 ME 80+6	ʾam <sup>1</sup> -ma ni-ma-ak ir kut-tin-na hi [šà-ma ]
(30)	1 ʾME <sup>1</sup> 8 6 QA	ki-ut-ka <sub>4</sub> a-ak <ap-pa am-ma> [ ]
(31)	6 ʾME 70 <sup>1</sup> +3 2 QA	šu-tur da-ka <sub>4</sub> AŠ pi-lu-ma 4 ME 20 ʾx x <sup>1</sup> [ ]
(32) PAP	ʾ4 <sup>1</sup> 2 QA <sup>1</sup>	maz <sub>0</sub> -zí-ka <sub>4</sub> AŠ pi-lu-ma PAP hi GIŠ GEŠTIN <sup>MEŠ</sup> AŠ ku-un-tur]-
(33)		ru-iš AŠ pír-ri-ti-ma-ut-ti-iš-na ʾkur <sup>1</sup> -mín <sup>1</sup> [HAL da-ad]-
(34)	ʾda-mi <sup>1</sup> -ut-ra-na	HAL da-ad-da-na AN ha-tur-ma-ak-šá <sup>HAL</sup> an-mak <sub>0</sub> <sup>?</sup> -ka <sub>4</sub> <sup>?</sup> <sup>1</sup> -
(35)	na AŠ e-ti-ʾra-«na» <sup>1</sup>	PAP hi mu-iš-ši-in AŠ be-ul 20-um-me-ʾman <sup>1</sup> -[na] ʾia-ʾni <sup>1</sup> AŠ <sup>1</sup>





- (36) ʔbe-ul 20<sup>1</sup>+1-um-me-ma <sup>AN</sup>ITI<sup>MEŠ</sup> tu-ru-ma-ir 5 na-ʔan<sup>1</sup> pí-ʔka<sub>4</sub> <sup>HAL</sup>[ú]-ʔiš-šu-iš-na<sup>1</sup>-  
 (37) ʔka<sub>4</sub>-na<sup>1</sup> a-ak <sup>HAL</sup>ma-nu-ka<sub>4</sub> e-iš-da 30+6 30+3 ʔ60+6 sa-mar 60<sup>1</sup>+2 ʔsa-mar<sup>1</sup>  
 (38) 60+5 40 sa-mar 30+2 sa-mar 30 sa-mar 30+2 30+1 sa-mar ʔ60<sup>1</sup> sa-mar nu-ú-na PAP 10+ʔ1<sup>1</sup>  
 (39) <sup>AŠ</sup>muzo-zí [PAP<sup>?</sup>] 4 ME 80+7 <sup>GIŠ</sup>GEŠTIN<sup>MEŠ</sup> mi-ši-na 40+9 6 QA 40+5 40+7 3 QA ʔ50<sup>1</sup>+5 40<sup>2</sup>+3<sup>1</sup>?  
 (40) 20+1 nu-ʔú-na<sup>1</sup> PAP ʔ6<sup>1</sup> [<sup>AŠ</sup>]ʔmuzo<sup>1</sup>-zí PAP 2 ME 60 9 QA <sup>GIŠ</sup>GEŠTIN<sup>MEŠ</sup> pi-ip-ši-ʔna<sup>?</sup> PAP 10+7<sup>1</sup> <sup>AŠ</sup>muzo-  
 (41) zí PAP 7 ME 40+7 9 ʔQA<sup>1</sup> [<sup>GIŠ</sup>]ʔGEŠTIN<sup>MEŠ</sup> ri-ut hi-da-ka<sub>4</sub> šu-ʔtur<sup>1</sup> [da-ka<sub>4</sub>] pi-ip-ši-[na]  
 (42) <sup>HAL?</sup>x- x-zí<sup>?</sup>-iš-mar<sup>?</sup> da-ka<sub>4</sub><sup>1</sup> [ ]  
 (43) 3 1 ʔBAR<sup>1</sup> 1 QA <sup>GIŠ</sup>pi-za-ʔan 1 2 BAR 20-kur<sup>1</sup> <sup>GIŠ</sup>hu-ʔir<sup>1</sup> [PAP hi <sup>AŠ</sup>]ʔbe<sup>1</sup>-ul 10+9<sup>1</sup>-[na<sup>?</sup>]  
 (44) 9 8 QA <sup>GIŠ</sup>KI+MIN [4 1 BAR 9] ʔQA <sup>GIŠ</sup>KI+MIN<sup>1</sup> [PAP hi] <sup>AŠ</sup>KI+MIN 20-KI+MIN [ ]  
 (45) PAP hi šà-ma 2 <sup>GIŠ</sup>ʔGEŠTIN<sup>?</sup> [<sup>MEŠ</sup> ] ʔx x x<sup>1</sup> da-a-e-mar ʔx<sup>1</sup> [ ]

Upper Edge

- (46) 1-na ma-ba



## Synopsis/Translation

- (01-02) [x (l.), PN, a priest<sup>?</sup>] received (for) 2 *lan*-offerings, [for DN and] Mariraš ... (Category K1)
- (03-04) 100 (l.) [PN received and gave it to x] *ber* horses ... (Category S?)
- (05-06) 30 (l.) Ašbakuš received. He gave it to 80<sup>?</sup> workers ... (Category L?)
- (07) 20 (l.) Karakka received ...
- (08-10) 61 (l.) Uššušnakana and his colleagues received. They gave it as *sat* to 61 female workers at Kunturruš. They gave them 1 l. each. (Category M)
- (11-13) 10 (l.) Uššušnakana and his colleagues received. They gave it to one nursing woman (who) bore a male (child). (Category N)
- (14) <x> (l.) Hihutra<sup>?</sup> received. He gave it to free men. (Category Q?)
- (15-16) 320 (l.) for a *battiška*-payment made for 12 vats. 3 held 500 (l.) each, 2 held 400 (l.) each, 7 held 200 (or) 300 (l.) each. (Category C3)
- (17) 50 (l.) Ašbakuš received [and gave it to] horses [ ... ]. (Category S)
- (18-19) 160 (l.) Hihutra<sup>?</sup> received. [He gave it (as supplementary rations) to] female workers, hard laborers<sup>?</sup> at GN. (Category M)
- (20) 62 (l.) Tiriya received [ ... ].
- (21-23) (Broken)
- (24-32) 2,770 (l.) [of *annan* was received, year 20].  
277 (l.) this was a tenth of it.  
2,493 (l.) of wine was left.  
5,230 (l.) carry-over from year 19 [was on deposit].  
237 (l.) [from] Makukka at Pirritimattiš.
- Total 7,860 (l.) was on hand, all together. Included in it being:  
1,086 (l.) expended and <on hand>  
6,732 (l.) balance on deposit in the *pilu*. 4,200 ʾx<sup>1</sup> [ ....].
- Total 42 (l.) was withdrawn at the *pilu*.
- (32-37) This (is) the total of wine at [(the place) Kuntur]ruš of (the district) Pirritimattiš, (for) allocation by Dattamitra, Dattana being the *haturmakša*, Anmakka<sup>?</sup> being the *etira*. This is the entire account for year 20. Afterward, in year 21, month II, day 5 elapsed, Uššušnakana and Manukka checked<sup>?</sup> (it).
- (37-39) 360 (l.), 330 (l.) 660 (l.) sour, 620 (l.) sour, 650 (l.), 400 (l.) sour, 320 (l.) sour, 300 (l.) sour, 320 (l.), 310 (l.) sour, 600<sup>l</sup> (l.) *nuna* sour, a total of 11 vats, total 4,870 (l.) of old wine.
- (39-41) 496 (l.), 450 (l.), 473 (l.) 550<sup>l</sup> (l.) 430<sup>l</sup> (l.), 210 (l.) *nuna*, a total of 6 vats; total 2,609 (l.) of new wine a total of 17 vats.
- (41) (Grand) total 7,479 (l.) of wine, with the tithe, balance [on deposit].



(41-42) New (wine) from PN<sup>2</sup> on deposit.

(43-46) 101 (dry l.) of *pizan*

50½ (dry l.) of *hur*: [this is the total] for year 19.

278 (dry l.) of ditto (= *pizan*) [139 (dry l.) of ditto (= *hur*): [this is the total] for ditto (= year) 20.

This total includes 20<sup>2</sup> (l.) of wine<sup>2</sup>[...] from other<sup>2</sup> [ ....] one, they say.

## Comments

10.8L x 8.2W x 2.1Th

PFS 0027\* upper edge, left edge

PFS 1155 right edge

Category V

(01-02) Perhaps citing Umbaba, *šatin*, as in Fort. 1402-101:01-02 Fort. 1409-101:01-02, Fort. 1854-102:01-02 (all with PFS 0027\* and PFS 1155), PF 1956:01-02 (PFS 0027\*, PFS 0108\*), PF-NN 2372:01-02 (PFS 0027\*), Fort. 08960:01-02 (Arfaee 2008, p. 260f.)

(07) Last sign written on right edge.

(08) The impression of PFS 1155 on the left edge of the Fort. 1402-101 (V, grain, year 20) is accompanied by a caption “seal of Uššušnakana” (*halmi U.-na*). Uššušnakana appears, mostly along with impressions of PFS 1155, not only as a compiler of journals (Category V), but also as an issuer of rations to women workers and post-partum women (Categories M and N); see Mikołajczak 2018, p. 168-185 on his activities, connections, locations, and dates, p. 408-410 on PFS 1155.

(09) še written as AŠ.

(14) No amount entered in left column.

(14, 18) Cf. hi-hu-ut-ra PF 1467:02, PF-NN 1878:02 (both Q). Less likely: hi-ú-ka<sub>4</sub>-ra.

(17) Cf. Fort. 1409-101:03; Fort. 1854-102:18.

(27) 5 ʾ<sub>ME</sub> 20<sup>1</sup>+3 followed by erasure.

(28) Cf. (wine) <sup>AŠ</sup>pír-ri-ti-ma-ti-iš <sup>HAL</sup>ma-kam-ka<sub>4</sub>-mar Fort. 0560-101:08, 19 (W, year 20)

(29) 7 <sub>ME</sub> 80+6 (error for 796) followed by erasure.

(30) Erasure follows 1 ʾ<sub>ME</sub><sup>1</sup>.

(31) 4 <sub>ME</sub> 20 ʾ<sub>x</sub> x<sup>1</sup>: in small, shallow script, evidently written after main text.

(32-34) Near-duplicate Fort. 0560-101:23-26 (W, wine, year 20, collated.)

(32) ʾ<sub>4</sub><sup>1</sup> Written as 7.

(32-33) <sup>AŠ</sup>Kunturruš <sup>AŠ</sup>Pirridamantiš-na/<sup>AŠ</sup>Pirritimatiš-na Fort. 0560-101:04, 23f.; cf. PF 2084, with parallel entries citing Kunturruš (03, 05), Pirritimatiš (04), and “Kunturruš of Attiya,” <sup>AŠ</sup>Kunturruš <sup>AŠ</sup>Attiya-na (09).

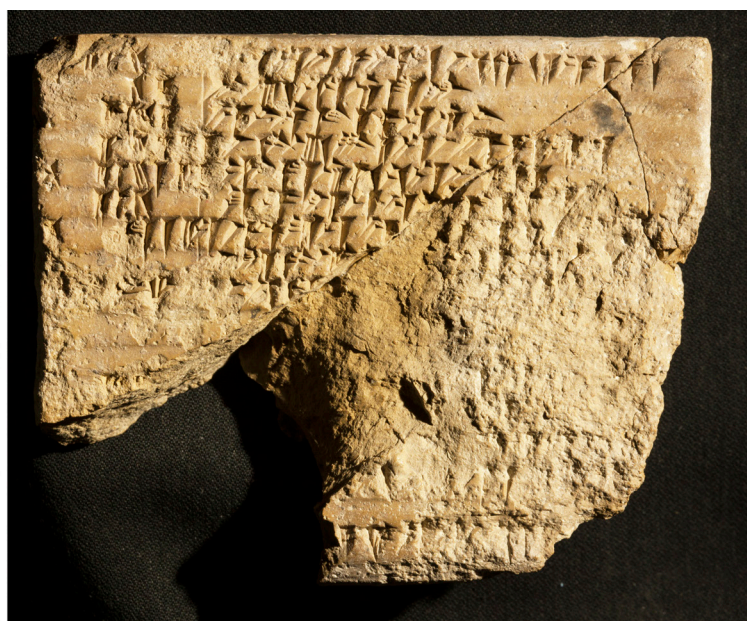
(36) Mikołajczak 2018, p. 181-184 surveys joint activities of Manukka and Uššušnakana, producing or verifying records.



- (38, 40) *nuna*: cf. (vats holding 450, 480, 495 [l.]) 𐎠𐎡𐎢𐎣𐎤 No. 33:33; 15 nu-ú-na (in list totaled as “new vats,” *muzzi pipšina*) No. 35:27; 40 nú-ú-na (in list totaled as “old” *mišina* [wine/vats]) Fort. 1255-102:21; 50 nu-ú-na (followed by “old?”, *muš*! [text: *zir*<sub>o</sub>]-ši-na) PF 0546:02, 05.
- (40) End: 10+7<sup>l</sup> Written as 10+8.
- (41-42) pi-ip-ši-[na] and text of following line in small, shallow script, evidently written after main text.
- (43-44) Restored after No. 33:36-38.



Fort. 1688-102  
Left Edge



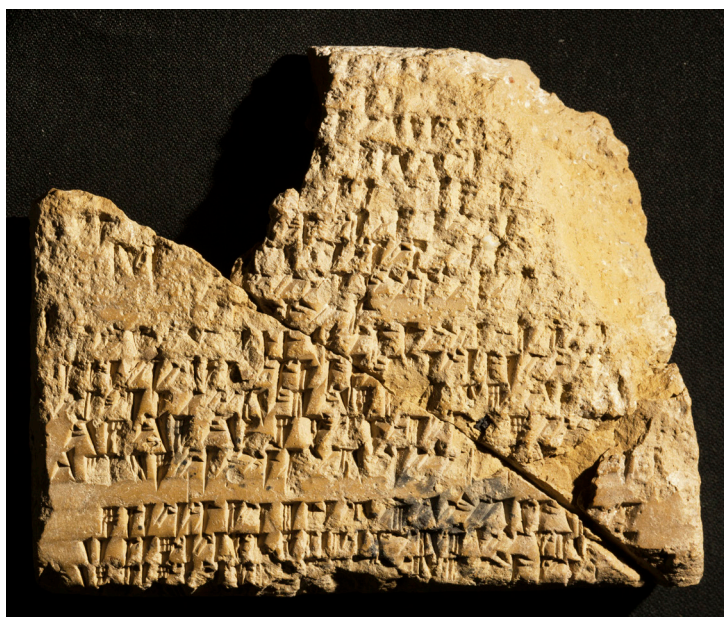
Fort. 1688-102 Obverse



Fort. 1688-102 Lower Edge

**Fig. 35a.** No. 33 (Fort. 1688-102) Obverse, Lower Edge, Left Edge.





Fort. 1688-102 Reverse



Fort. 1688-102 Right Edge



Fort. 1688-102 Upper Edge

**Fig. 35b.** No. 33 (Fort. 1688-102) Reverse, Upper Edge, Right Edge.

### 33. Fort. 1688-102 (Fig. 35a-b)

Obverse

- (01) [ ] 2<sup>1</sup> ME 20 | [<sup>GIŠ</sup>]an-na<sup>1</sup>-an ha du-ka<sub>4</sub> <sup>AŠ</sup>be-ul 10+8-um-me-ma  
 (02) 20+2 | ʾhi<sup>1</sup> ri-ut ni-ma-ak  
 (03) ʾ1 ME 90+8<sup>1</sup> | <sup>GIŠ</sup>GEŠTIN<sup>MEŠ</sup> šá-ši-ka<sub>4</sub> ni-mak<sub>0</sub>  
 (04) 1 ME ʾ30+3 2 QA<sup>1</sup> <sup>HAL</sup>mi-ri-in-za-na <sup>AŠ</sup>hal-me-ma da-ka<sub>4</sub>  
 (05) PAP 3 ME 30+1 2 ʾQA<sup>1</sup> am-ma ir kut-tin-na hi ʾšà-ma<sup>1</sup>  
 (06) 2 ME 70 | šu-tur da-ka<sub>4</sub> <sup>GIŠ</sup>GEŠTIN<sup>MEŠ</sup> šá-ši-ka<sub>4</sub><sup>1</sup>  
 (07) ʾPAP<sup>1</sup> 60+1 2 QA maz<sub>0</sub>-zí-ka<sub>4</sub> <sup>GIŠ</sup>[GEŠTIN] <sup>MEŠ</sup>AŠ x x x x<sup>1</sup> [kur-mín]  
 (08) | <sup>HAL</sup>da-mi-ʾik<sup>1</sup>-[ka<sub>4</sub>-na ] ʾx x x<sup>1</sup>[ ]  
 (09) [PAP hi] ʾmu<sup>1</sup>-ši-[in] <sup>AŠ</sup>be-ʾul<sup>1</sup> [10+8-um-me-man-na] ʾx x x<sup>1</sup>[ ]  
 (10) [ ]  
 (11) [ ]





- Lower Edge

- Reverse

- Upper Edge

- ## Synopsis/Translation

- (01-09) 2,200 (l.) of *annan* was received, year 18.  
220 (l.) this was a tenth (of it).  
1,980 (l.) wine was left.  
1,332 (l.) was deposited on (the basis of) a sealed order from Mirinzana.



Total: 3,312 (l.) on hand all together. Included in it is:

2,700 (l.) balance (carried forward) on deposit. The remaining wine,

Total: 612 (l.) was withdrawn.

Wine at GN, [for allocation by] Damikka ...

This is the whole account for the [18th] year ...

(10-21) (Destroyed)

(22-29) [ x (l.) wine] was left.

[ x (l.) carry]-over from year 18<sup>?</sup> [was on deposit.]

[Total x (l.) was on hand] all together. Included in it is

[ x (l.) expend]ed, and what is still on hand.

[x+]1,000 (l.) balance on deposit. Wine ... [ ]

[ ] 710 (l.) withdrawn.

Wine [at GN], for allocation by Damikka, [PN being *hatarmakša*<sup>?</sup>, PN<sub>2</sub> being] *etira*.

(30-32) This is the (whole) account for year 19. Afterward in year 20. month IV, PN checked<sup>?</sup> it.

(32-33) 1 vat contains<sup>?</sup> 480 (l.), one<sup>?</sup> (each<sup>?</sup>) contains 360 (l.), 490 (l.), 400+ (l.) [... ..] 450 (l.), 480 (l.), 495<sup>??</sup> (l.), *nuna*: total 8 vats.

(34) Total 3,370 (l.) of wine, including the tithe, balance on deposit.

(36-38) 220 (dry l.) of *pizan* 110 (dry l.) of *hur*: this is the total for year 18<sup>?</sup>.

347 (dry l.) of ditto (= *pizan*) 173.5 (dry l.) of *hur*: this is the total for year 19<sup>?</sup>.

[Total] 567 (dry l.) of ditto (= *pizan*) 283.5 (dry l.) of *hur* were issued<sup>?</sup> for this<sup>?</sup> (wine<sup>?</sup>).

(39) ... was ...

## Comments

8.3L x 6.8W x 1.6Th

PFS 0027\* left edge, right edge

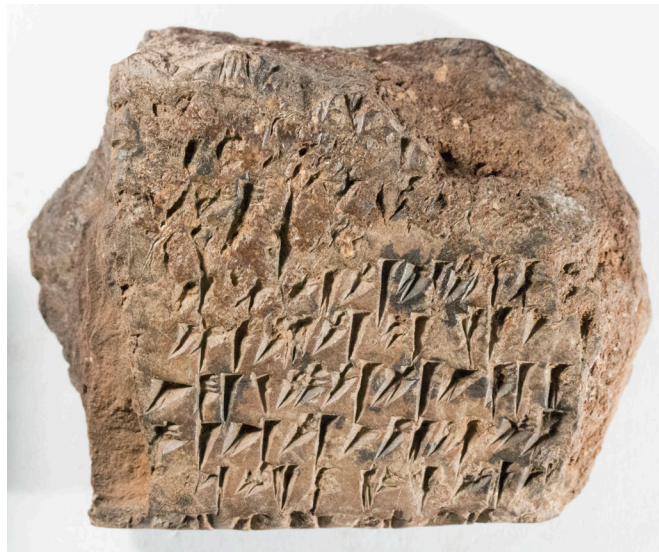
Category W

(07-09, 27-29) Cf. PF-NN 1019:13-14 (V, wine at Nukurruš, *kurman* Damikka, year 20), PF-NN 2349:24 (V, wine from Damikka, at Nukurruš, year 20)

(32, 33) Cf. 8<sup>l</sup> *muzzina huttukka* 1 40 ku-iz 7 *unra* 20 30 ku-iz PF 1954:04; and similar passages in No. 32:15f. and No. 35:10-12.

(34) ME<sup>l</sup> Written as PI.

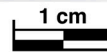
(39) Traces do not encourage, e.g., bat<sup>l</sup>-ti<sup>l</sup>-<sup>l</sup>zik-ka<sub>4</sub>-še<sup>l</sup>.



**Fort. 1932-105 Obverse**



**Fort. 1932-105 Lower Edge**



**Fort. 1932-105 Reverse**

**Fig. 36.** No. 34 (Fort. 1932-105) Obverse, Lower Edge, Reverse.



### 34. Fort. 1932-105 (Fig. 36)

#### Obverse

(01')	[	]	ri <sup>1</sup>	[	]
(02')	[	]	x x x x <sup>1</sup>	[	]
(03')	[	]	x x x x <sup>1</sup>	[	]
(04')	[	]	x x x x x x <sup>1</sup>	[	]
(05')	[	]	x x x <sup>1</sup>	[	]
(06')	[	]	šu-tur da <sup>1</sup> -ka <sub>4</sub> <sup>GIŠ</sup> GEŠTIN <sup>MEŠ</sup> <sup>1</sup>	[	]
(07')	[	]	maz <sub>0</sub> -zí-ka <sub>4</sub> <sup>GIŠ</sup> KI+MIN <sup>AŠ</sup> x <sup>1</sup>	[	]
(08')	[	kur-mín	<sup>HAL</sup> ma-u-uk-ka <sub>4</sub> -na <sup>HAL</sup> ma- <sup>1</sup> ku <sup>1</sup> -[iš <sup>HAL</sup> ha-tar]-		
(09')	[	mak <sub>0</sub> -šá <sup>HAL</sup> áš <sup>1</sup> -šá-an-ka <sub>4</sub> <sup>AŠ</sup> e-ti-ra	[		
(10')	[		<sup>AN</sup> ITI <sup>MEŠ</sup> ha-ši-ia- <sup>1</sup> ti <sup>1</sup> -[iš-na		

#### Lower Edge

(11')	[	- <sup>1</sup> x <sup>1</sup> -ti <sup>?</sup> -ma e-iš- <sup>1</sup> da <sup>1</sup>	[		
(12')	[		(blank)	[	

#### Reverse

(13')	[	]	+3 170 <sup>1</sup> +1 20+6 1 QA 60 50 1x x <sup>1</sup> [	]	
(14')	[	]	40+2 50+4 50+2 60 PAP 10+6 [AŠmuz <sub>0</sub> -zí mi]-		
(15')	[	ši-na	]	160 <sup>1</sup> +8 20+5 70+2 70+1 50+5 50+1 1x <sup>1</sup> [	]
(16')	[	]	1QA <sup>1</sup> 20+5 20+6 4 QA 30+2 30 30+5 50 [	]	
(17')	[	]	5 QA 70+8 4 QA 20+1 20+2 6 QA 10+2 3 QA [	]	
(18')	[	PAP x AŠmuz <sub>0</sub> ]-zí pi-ip-ši-na	PAP 1 ši 9 ME 2 [	]	
(19')	[	]	QA šu-tur da-ka <sub>4</sub> mi-ši-na «da» a-ak 1pi <sup>1</sup> -ip-[ši-na]		
(20')	[	]	1x <sup>1</sup> GIŠpi-za-an da-na-ka <sub>4</sub> -iš-[e hi-da-ka <sub>4</sub>	]	
(21')	[	]	1x <sup>1</sup> šu-tur da-ka <sub>4</sub> mi-ši-na [	]	
(22')	[	]	da [	]	

#### Comments

(6.3)L x (5.1)W x 1.5Th

No preserved seal impressions.

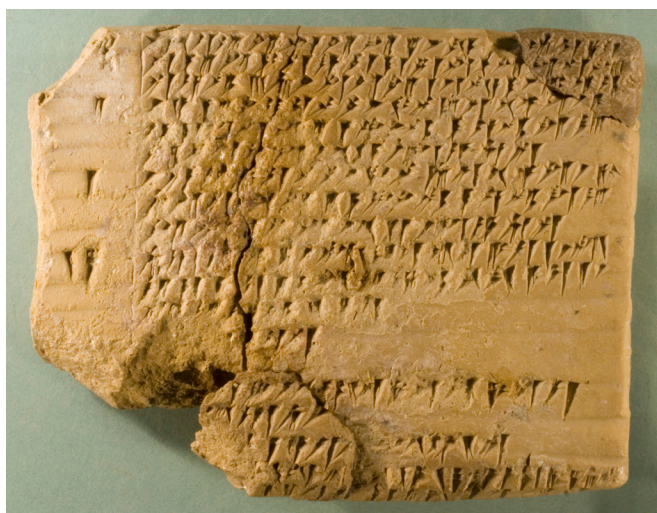
Category V?

(08'-09') Restored after Fort. 1919B-101:11"-13" (V, wine, at Aškamanda, year 23).

(19') Unruled, unsealed, uninscribed space equivalent to about 3 lines separates lines 19' and 20'.

(20') Cf. No. 35:35f.





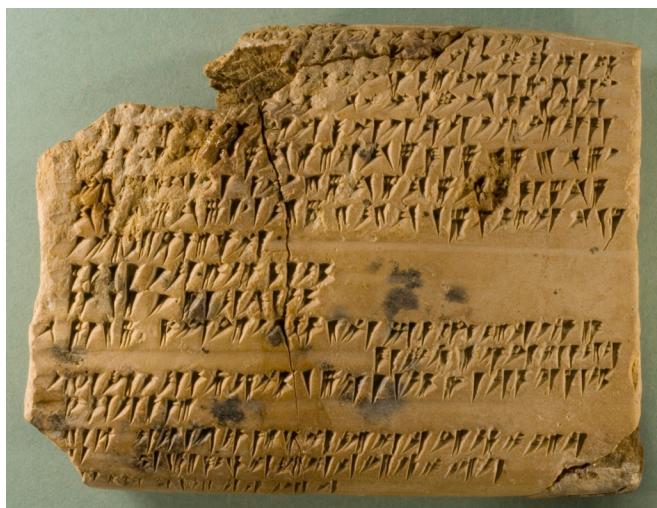
**Fort. 2049-101 Obverse**



**Right  
Edge**



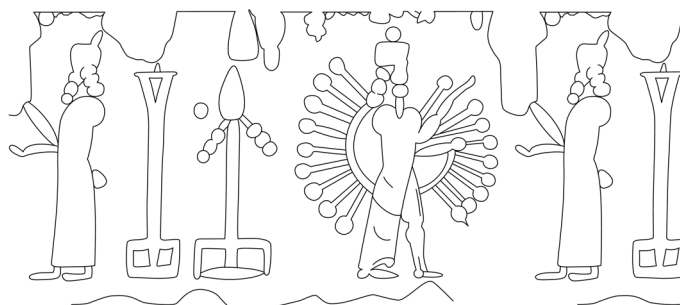
**Fort. 2049-101 Lower Edge**



**Fort. 2049-101 Reverse**

*Fig. 37a. No. 35 (Fort. 2049-101) Obverse, Lower Edge, Right Edge, Reverse.*





**PFS 1591**

*Fig. 37b. PFS 1591 (drawing by Mark B. Garrison).*

### 35. Fort. 2049-101 (Fig. 37a-b)

#### Obverse

- (01) [ ] 4 | <sup>HAL</sup>tar-ka<sub>4</sub>-ú-iš du-iš-da 4 <sup>HAL</sup>LÚ<sup>ΓMEŠ</sup>1[<sup>HAL</sup>]ru-iz-za-ba-
- (02) [ ] | na-ip da-mi-na gal-li-ma ap du-nu-iš-da na-zir<sub>o</sub>-
- (03) [ ] | na un-ra 30-ir-mak<sub>o</sub> du-iš-da 1 <sup>AN</sup>ITI<sup>MEŠ</sup> <sup>HAL</sup>EŠŠANA-ik-mar 'x x x'
- (04) [ ] 2 | <sup>HAL</sup>šī-<sup>Γ</sup>ip-pu-uk<sup>1</sup>-ka<sub>4</sub> hi-še <sup>HAL</sup>mi-še-sa-na-bat-ti-iš <sup>AŠ</sup>ku-
- (05) [ ] | 'x-ma-x du-iš 3 <sup>1</sup>ANŠE.KUR.RA<sup>MEŠ</sup> pír-ra-da-zí-
- (06) [ ] | 'iš x x x x <sup>AŠ</sup>be-ul kap<sub>o</sub><sup>1</sup>-pi-tan-na
- (07) [ ] 2 | <sup>HAL</sup>ra<sup>?</sup>-x-uk<sup>?</sup>-ka<sub>4</sub> hi-še<sup>1</sup> <sup>HAL</sup>mi-še-sa-na-bat-ti-iš <sup>AŠ</sup>ha-
- (08) [ ] | 'ir-iš-na du-iš 3 <sup>1</sup>ANŠE.KUR.RA<sup>MEŠ</sup> pír-ra-da-zí-
- (09) [ ] | iš 'x x x x <sup>AŠ</sup>be-ul<sup>1</sup> kap<sub>o</sub>-pi-tan-na
- (10) [ ] 10+8 | ir 'te<sup>?</sup>-x-x 6 <sup>1</sup>AŠ muz<sub>o</sub>-zí-na<sup>?</sup> hu-ut-tuk-ka<sub>4</sub> 1 <sup>AŠ</sup>muz<sub>o</sub>-
- (11) [ ] | 'zí 60 ku-iz 3 <sup>AŠ</sup>muz<sub>o</sub>-zí un-ra<sup>1</sup> 40 50 ku-iz 2 <sup>AŠ</sup>
- (12) [ ] | 'muz<sub>o</sub>-zí un-ra 30 ku-iz<sup>1</sup>
- (13) [ ] | 'PAP<sup>1</sup>[26] 'ki<sup>1</sup>-ut-ka<sub>4</sub>
- (14) [ ] | -'x<sup>1</sup>-in <sup>AŠ</sup>be-ul 20-'na ha-du-iš<sup>1</sup> ha 'du<sup>1</sup>-ka<sub>4</sub>
- (15) [ ] | hi ] ri-te ni-'mak<sub>o</sub><sup>1</sup>
- (16) [ ] <sup>GIŠ</sup>GEŠTIN<sup>ΓMEŠ</sup>1 šá-ši-ka<sub>4</sub> [ni-mak<sub>o</sub>] <sup>AŠ</sup>be-ul 20-na
- (17) [ ] | mi-ši-'na<sup>1</sup> [<sup>AŠ</sup>] 'be<sup>1</sup>-ul 10+9-'um<sup>1</sup>-me-ma ha šá-ir-'ra-ka<sub>4</sub><sup>1</sup>

#### Lower Edge

- (18) [ ] | šá-ši-ka<sub>4</sub> 'am<sup>1</sup>-ma ir kut-'tan<sup>1</sup>-na hi šà-ma
- (19) [ ] | 'ki-ut-ka<sub>4</sub><sup>1</sup>



## Reverse

- (20) [ ] 'x ha-áš<sup>?</sup>-šá<sup>?</sup>-ka<sub>4</sub><sup>?</sup> pi-lu-<sup>?</sup>ma<sup>?</sup> ma-zí-ka<sub>4</sub>
- (21) [ ] 'maz<sub>0</sub><sup>?</sup>-zí<sup>?</sup>-ka<sub>4</sub><sup>?</sup> ma<sup>?</sup>-zí<sup>?</sup>-ka<sub>4</sub><sup>?</sup> uk-ba-te-ia
- (22) [kur-mín ]-<sup>?</sup>na<sup>?</sup> kur-ši-ip-da<sup>?</sup> ha-tar-ma-ak-
- (23) [šá] 'x x x<sup>HAL</sup> e-ti-ra<sup>?</sup> PAP 'hi<sup>?</sup> mu-ši-in<sup>?</sup> be-ul 20-na<sup>?</sup>
- (24) [ITI<sup>MEŠ</sup>] 'ha-ši-ia-ti-iš<sup>?</sup>-na 9 na-an pí-r-ka<sub>4</sub><sup>?</sup> ú-iš-šu-ma
- (25) 'ha-áš-šá-iš-da<sup>?</sup> 50+7 40+5 3 QA 40+7 60+7 30+5 30 PAP 6<sup>?</sup>
- (26) muz<sub>0</sub>-<sup>?</sup>zí mi-ši-na<sup>?</sup> a-ak 30+5 40+5 40+5 50+<sup>?</sup>7<sup>?</sup> 60+4 40+5
- (27) 40+8<sup>?</sup> '40<sup>?</sup>+6 40<sup>?</sup>+6 2 QA 50+5 20 50 40 10+5 nu-ú-na PAP 10+4
- (28) <sup>?</sup>mu<sub>0</sub>-zí pi-ip-ši-na
- (29) 4 ME 10+4<sup>?</sup> ba-lu-um-ma-mar
- (30) 2 ME 10+2<sup>?</sup> taš-šu-íp-mar
- (31) PAP 6 ME 20+6 ha-du-iš<sup>?</sup> be-ul 20-na ap-pa maz<sub>0</sub>-zí-ka<sub>4</sub><sup>?</sup> pi-lu-
- (32) ma in-ni ki-ti-iš ap-pa su-ut
- (33) hu-ud-da-man-ba me-ni un-ra 10+6<sup>?</sup> šá-u-mar-ráš 1 šu<sup>?</sup> šá-u-mar-
- (34) ráš-<sup>?</sup>ma<sup>?</sup> ka<sub>4</sub>-<sup>?</sup>za<sup>?</sup>-ip
- (35) [ ] 40+1 1 BAR<sup>?</sup> pi-za-an pi-ip-ši-na da-na-ka<sub>4</sub>-iš-e hi-da-ka<sub>4</sub>
- (36) [ ] '20<sup>?</sup>+1<sup>?</sup> KI+MIN mi-ši-na da-na-ka<sub>4</sub>-iš-e hi-da-ka<sub>4</sub>
- (37) [PAP] '60+2 1 BAR<sup>?</sup> KI+MIN šu-tur da-ka<sub>4</sub>

## Translation/Synopsis

- (01-03) 40 (l.) Tarkawiš received. He gave it as rations to 4 “day-keepers.” Each received 1/30 (*marriš*) daily (for) 1 month. They came<sup>?</sup> from the king. (Category Q?)
- (04-06) 20 (l.) a man named Šippukka, a ..., received at GN. 3 express horses ... for an entire year. (Category S1)
- (07-09) 20 (l.) a man named PN, a ..., received at Harišna. 3 express horses ... for an entire year. (Category S1)
- (10-12) 180 (l.) for a payment<sup>?</sup> made for 6 vats. 1 vat held 600 (l.), 3 vats held 400 (or) 500 (l.) each, 2 vats held 300 (l.) each. (Category C3)
- (13) Total [260 (l.) (of wine) expended.
- (14-21) [x (l.)] ..., year 20, received as revenue.  
 [x (l.)] This is a tenth of it.  
 [x. (l.) of wine] was left over, year 20.  
 [x (l.) ] carried over, 19th year.  
 [x (l.) ] left over, on hand, all together. This includes:  
 [x (l.) ] expended.  
 [x (l.) ] was checked<sup>?</sup> in the *pilu* at Mazikka.  
 [x (l.) ] was withdrawn at Mazzika (by<sup>?</sup>) Ukbateya.



(22-23) [Allocation by PN], Kuršipda being *hatarmakša*, PN being *etira*.<sup>(23-25)</sup> This is the entire account for year 20. In month IX, 9 days elapsed, Uššuma checked<sup>?</sup> it.

(25-28) 570 (l.), 453 (l.), 470 (l.) 670 (l.), 350 (l.), 300 (l.): total, 6 old vats and 350 (l.), 450 (l.) 450 (l.), 570<sup>?</sup> (l.), 640 (l.) 450 (l.), 480<sup>?</sup> (l.), 460<sup>?</sup> (l.), 462 (l.), 550 (l.) 200 (l.), 500 (l.) 400 (l.), 150 (l.), *nuna*: total, 14 new vats.

(29-31) 4,140 (l.) from the *balum* storehouse.  
2,210 (l.) from officials<sup>?</sup>.

Total: 6,260 (l.) revenue of year 20.

(31-34) What was withdrawn at the storehouse they did not expend<sup>?</sup> to make an exchange. Then they were struck<sup>?</sup> 16 *šaumarraš* (and) 1/3 *šaumarraš* each.

(35-37) 1,240 (dry l.) new *pizan* with its grains<sup>?</sup>.  
610 (dry l.) old ditto (= *pizan*) with its grains<sup>?</sup>.

Total: 1,870 (dry l.) ditto (= *pizan*) balance on deposit.

## Comments

9.0L x 7.2W x 1.7Th

PFS 1591 right edge

Category V

(01-03) In the parallel passage PF-NN 2265:07, collation from PTM images confirms [<sup>HAL</sup> LÚ<sup>MEŠ</sup> ru-iz-za<sup>1</sup>-ba-na-ip da-man-nu. The ghost word \**ezzabanap*, interpreted as a transcription of Iranian \**hēza-pāna*-, “[wine]-barrel keeper” (Hinz & Koch 1987:393, 458, Tavernier 2007:426 [4.4.7.65]) is to be deleted. Parallel passages—60 (l. of grain, received by) Tarkawiš, given as rations to 4 “day keepers” (<sup>HAL</sup>na-an nu-iš-ki-ip)” Fort. 1307-102:30; 50 (l. of grain) received by [Tarka]wiš, a month’s rations for 5 “day keepers” (<sup>HAL</sup>LÚ<sup>MEŠ</sup> AN<sup>1</sup>na-an nu-iš-ki-ip)” Fort. 1949-101:04—confirm that *ruzzabanap* here transcribes Iranian \**rauca-pāna*-, with Elamite animate plural (cf. Hinz & Koch 1987:969 s.v. d.na-an.hh.nu-iš-ki-ra).

*damina* (and the corresponding da-man-nu in PF-NN 2265:07): cf. *taššup appa* da-mi-nu *idaka* DB El. §28 ii 70, corresponding to OP *anušiya*-, “following” Akkadian *libbi kīnu* “loyal”; and 12 AN<sup>1</sup>IT<sup>1</sup>MEŠ<sup>1</sup> da<sup>1</sup>-mi-na PF-NN 2288:20 (otherwise normally written da-mi; see Hinz & Koch 1987, p. 277, translating as “erst, vorder”).

(03) ʾx x x<sup>1</sup> on right edge.

(04) <sup>HAL</sup>!; tablet AŠ.

(04, 07) *mišesanabattiš*: all signs are clear. Cf. me-sa-na-bat-ti-iš Fort. 0222-102:05', 08', 11' Fort. 2043-102:10, 12 (all Category S entries in journals), and me<sup>2</sup>-sa-bat-ti-iš Fort. 1300-101:01, 22, 12' (W, animal inventory), vs. pa-sa-na-bat-ti-iš PF 1942:11, 15, PF

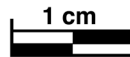


1947:78, 81, 83, 86, Fort. 1405-102:10, 14 (all Category S entries in journals; Hinz & Koch 1987, p. 162, Tavernier 2007, p. 420 (4.4.7.35).

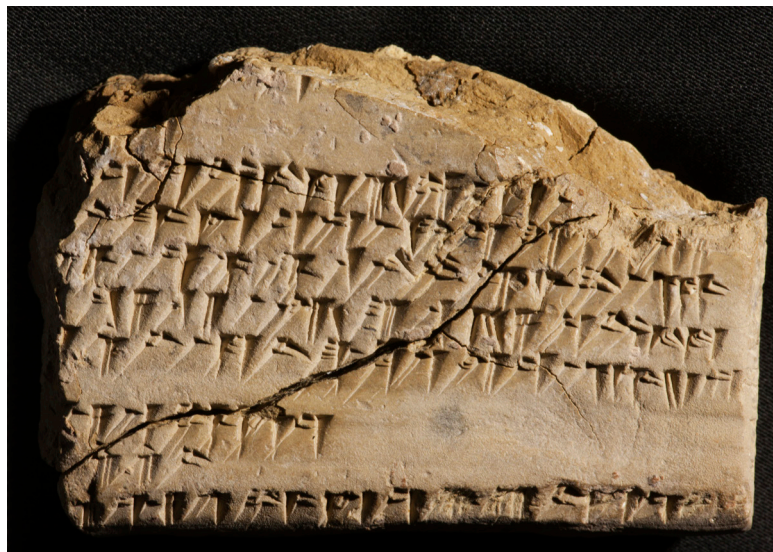
- (10-12) Cf. <sup>Aš</sup>muzzi 'ir te<sup>1</sup>-um-be ha (h)utukka PF-NN 2365:12-15, but traces here do not favor 'te<sup>2</sup>-um<sup>2</sup>-be<sup>2</sup>'. Parallel passages (e.g., PF 1954:04, PF-NN 1019:03, No. 32:15) point to a counterpart of the phrase *battišezana # muzzina huttuka*, “a *battiše-ka*-payment was made for n vats,” with an Elamite phrase instead of a transcribed Iranian word, conceivably reduced to ir 'te<sup>2</sup>-ib<sup>12</sup>-ba<sup>12</sup>' ... *huttukka*, “(payment) done before him”?
- (14) Not [G<sup>1</sup>an]-'na<sup>1</sup>-an as in abundant parallel passages; possibly [G<sup>1</sup>in]-'na<sup>1</sup>-in.
- (20) 'x ha-áš<sup>2</sup>-šá<sup>2</sup>-ka<sup>4</sup>?': traces are not compatible with expected 'šu-tur da-ka<sup>4</sup>'.
- (21-23) Cf. PF-NN 2273:12-14 (W, years 15-17, wine at Mišikka [= Mazikka], *kurman Ukbate<ya>na, Kuršipda haturmakša Kurišna etira*); Fort. 1201-101:03'-05' (V, year 23, grain at Mazikka, [*kurmin ...*]-ukkana, *Kuršipda hatur[makša PN] etira*); grain <sup>Aš</sup>Mazikka <sup>HAL</sup>Appiukka-mar PF-NN 0762:26 (V, year 21); grain from <sup>HAL</sup>ap-pi-ia-u-ka<sup>4</sup> at Mazikka, Fort. 1964-102:05; grain brought to Mazikka, received by <sup>HAL</sup>ap-ú<sup>2</sup>-uk-ka<sup>4</sup> ibid. 18 (W).
- (24f.) Cf. PF 0252:09f. (C2), PF 1988:34.
- (27) nu-ú-na: see comment on No. 32:38, 40.
- (31-34) Cf. PF-NN 2358:16-18, cited by Tamerus 2016, p. 280, who translates “They did not keep (it) to make an exchange(-request) (for) what had been withdrawn at the storehouse (*kanti-ma*). Then (by? for?) each 22 *šaumarraš* (and) 1/3 of a *šaumarraš* (?) were struck.” The accompanying discussion (ibid., p. 282-287) includes remarks on the syntactic problems of animate *kazap* in place of the usual inanimate *harak*, and the fractional expression with postposition *-ma*. I have not improved or clarified this rendering, but for the present I prefer to retain the interpretation of *kitiš* and *kitka* as forms of the same verbal stem, indicating expenditure.



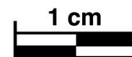
Fort. 0499-101 Obverse



Fort. 0499-101  
Right Edge



Fort. 0499-101 Reverse



Fort. 0499-101 Upper Edge

**Fig. 38.** No. 36 (Fort. 0499-101) Obverse, Right Edge, Reverse, Upper Edge.





### 36. Fort. 0499-101 (Fig. 38)

#### Obverse

- (01) [ | ]-x-tur-ra pír-ra-ma-ud-da du-iš  
 (02) [ | ] <sup>AN</sup>GAL <sup>MEŠ</sup> 7 <sup>AŠ</sup>KUR <sup>MEŠ</sup> <sup>AN</sup>ti-ik-ra-na  
 (03) [ | ]-x-ak-ka<sub>4</sub> <sup>HAL</sup>ma-u-pár-ma a-ak <sup>HAL</sup>ráš?-áš-pi-  
 (04) [ | ]-da <sup>HAL</sup>ba-ka<sub>4</sub>-ba-na du-iš  
 (05) [ | <sup>HAL</sup>zí-iš]-šá-u-ú-iš gal-li-ma du-iš  
 (06) [ | ]-na <sup>HAL</sup>ma-u-pár-<sup>r</sup>ma x x<sup>1</sup> <sup>HAL</sup>uk-ba-<sup>r</sup>ia-u<sup>1</sup>-[na] <sup>r</sup>du<sup>1</sup>-iš  
 (07) [ | bat-ti-še]-iz-za-na <sup>r</sup>20+2 <sup>AŠ</sup>muz<sub>0</sub>-zí-na hu-ut<sup>1</sup>-[tuk-ka<sub>4</sub> ]  
 (08) [ | ] <sup>r</sup>x<sup>1</sup> 40 ku-iz x 50<sup>2</sup> ku<sup>2</sup><sup>1</sup>-[iz ]  
 (09) [ | ] <sup>r</sup>x x x x<sup>1</sup> [ ]

#### Reverse

- (01') [ ] x [ ]  
 (02') [ ] x [ ]  
 (03') [ ] x <sup>GIŠ</sup>GEŠTIN <sup>MEŠ</sup>ma-ri-ia-<sup>r</sup>x x x<sup>1</sup> [ ]  
 (04') [ kur-mín <sup>HAL</sup>]<sup>r</sup>ha<sup>2</sup><sup>1</sup>-tur-rak<sub>0</sub>-ka<sub>4</sub>-na <sup>HAL</sup>mi-iš-da-<sup>r</sup>x x <sup>HAL</sup>ha<sup>1</sup>-[tar-mak<sub>0</sub>]-  
 (05') [šá ] x x <sup>AŠ</sup>e-ti-ra PAP hi mu-iš-ši-in <sup>AŠ</sup>be-ul  
 (06') [ ] 40+5 PAP 2 <sup>AŠ</sup>muz<sub>0</sub>-zí PAP 80+5 <sup>GIŠ</sup>GEŠTIN <sup>MEŠ</sup>ma-  
 (07') [ ] x ni-mak<sub>0</sub> <sup>AŠ</sup>ma-kur-<sup>r</sup>ráb-ba<sup>1</sup>-an da-ka<sub>4</sub> <sup>AŠ</sup>be-ul 20+1-na-ma  
 (08') [ ] (blank)  
 (09') [ ] <sup>r</sup>pi<sup>1</sup>-za-an <sup>r</sup>i pa-rak<sub>0</sub><sup>1</sup>-ka<sub>4</sub>  
 (10') [ ] <sup>r</sup>x<sup>1</sup> ni-mak<sub>0</sub>  
 (11') [ ]-<sup>r</sup>ir<sup>2</sup><sup>1</sup> pi<sup>2</sup>-za-an i pa-rak<sub>0</sub>-ka<sub>4</sub> <sup>r</sup>x x<sup>1</sup> kur-<sup>r</sup>rak<sub>0</sub><sup>1</sup>-ka<sub>4</sub> <sup>r</sup>x<sup>1</sup>

#### Right Edge

- (01'') [ ]-<sup>r</sup>ia-um<sup>2</sup> x<sup>1</sup>-bar-ra-zí<sup>2</sup> PAP<sup>2</sup> hu-ut-  
 (02'') [ ] <sup>r</sup>x x ma<sup>1</sup>-ti<sup>2</sup>-e<sup>2</sup>-na uk-ku  
 (03'') [ ] x ni-mak<sub>0</sub>

#### Comments

(6.1)L x (4.2)W x 1.6Th

PFS 0027\* upper edge

Category V

(01-02) Category K1.

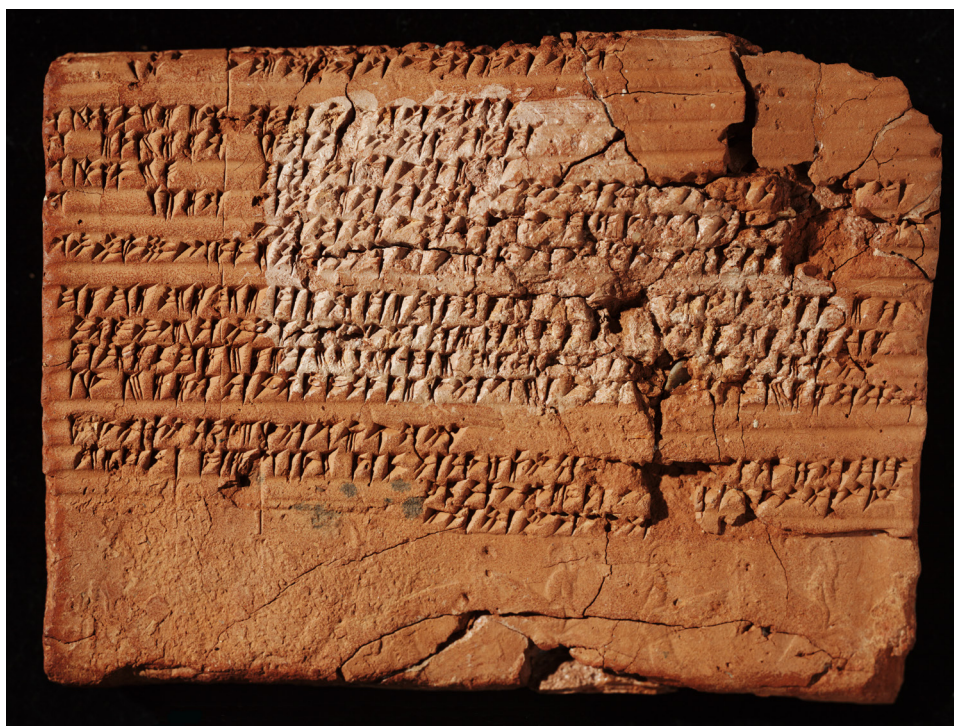
(02) -na on right edge.

(03) <sup>r</sup>du<sup>1</sup>-iš on right edge.

(03, 06) ma-u-par-ma: sic (not -na, or -ra).



- (05) Category H.  
 (06) ʿx xʿ: traces do not support ʿa-akʿ.  
 (07') Category C3. -ma on right edge.  
 (01"-03") Conclusions of lines that begin on lost portion of obverse?



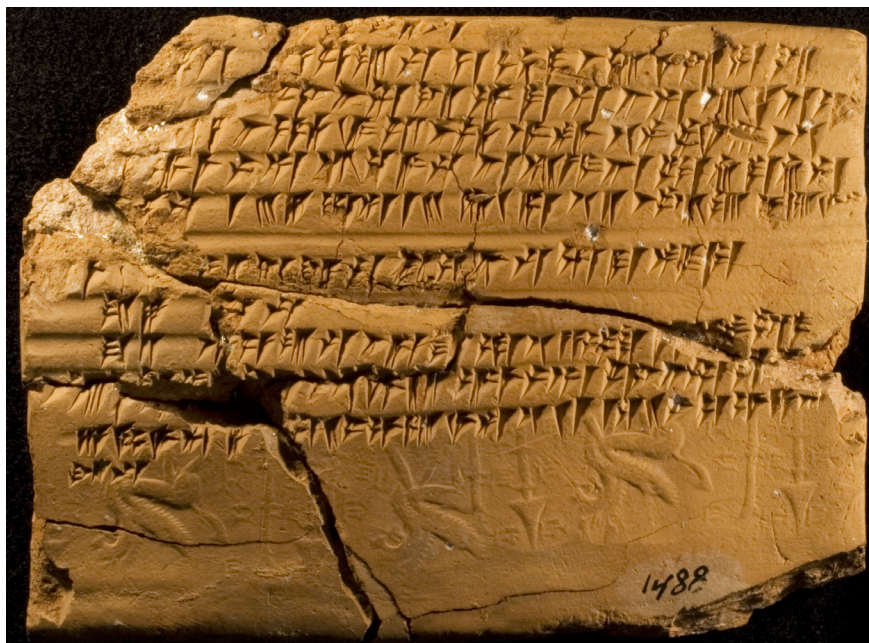
PF-NN 2265 Reverse



Fig. 39. No. 37 (PF-NN 2265) Reverse.

### 37. PF-NN 2265:33-40 (Fig. 39)

- (33) 48 45 58 53 65 50 62 49 40+ʿ7ʿ 26ʿ PAP 10ʿ [ʿAšmuzo]-zı mi-ši-na 5 ME 3 Giš  
 (34) GEŠTIN<sup>MEŠ</sup> hi ri-ut hi-da-ʿka<sub>4</sub> mi<sup>1</sup>-ši-na 46 60 30 77ʿ 40ʿ[+x x]+ʿ1ʿ 40ʿ(+ ) 4 57 57 47  
 (35) 60 55½ 48 38 3 QA 30 ʿ30+1ʿ 22 60 30 54 50+ʿ5ʿ PAP 21 ʿAšʿ[muzo]-ʿzıʿ pi-ip-ši-ʿna<sup>1</sup>  
 (36) 1 ši 95 8 QA Giš GEŠTIN<sup>MEŠ</sup> «MEŠ» pi-ip-ši-na PAP 31 ʿAšʿmuzo<sup>1</sup>-zı 1] ʿši 5 ME<sup>1</sup> 98 8 QA Giš GEŠTIN<sup>MEŠ</sup> 1  
 (one blank line)  
 (37) ʿmi-ši<sup>1</sup>-na a-ʿak<sup>1</sup> pi-ip-ši-na PAP ir kut-tin-na  
 (38) 52 1 BAR ½ 68 PAP 1 ME 20 1 BAR ½ Giš pi-za a-ak Giš da-na<sup>1</sup>-[ka<sub>4</sub>]-ʿiš Giš pi-za-na šu-tur  
 (39) da-ka<sub>4</sub> ʿAšʿpi<sup>1</sup>-lu-ʿma<sup>1</sup> ʿAšʿbe-ul 20ʿ<sup>1</sup>-me-man-na kur-mín  
 (40) HAL ka<sub>4</sub>-ap-pu-ʿud-daʿ<sup>2</sup>-na<sup>1</sup>



PF-NN 2362 Reverse



Fig. 40. No. 38 (PF-NN 2362) Reverse.

### 38. PF-NN 2362:20-26 (Fig. 40)

- (20) ... 1 35 ʾte<sup>1</sup>-na 1 30 sa-u-ur PAP 2 <sup>Aš</sup>muz<sub>0</sub>-zí ʾpi<sup>1</sup>-ip-ši-na  
(one blank line)
- (21) 1 ME ʾše<sup>1</sup>.BAR<sup>MEŠ</sup> ap<sup>1</sup> da-ka<sub>4</sub> <sup>Aš</sup>ut-tar ka<sub>4</sub>-te-ma hi šà-ma
- (22) 58 ʾdu<sup>1</sup>-ka<sub>4</sub>
- (23) 42 maz<sub>0</sub>-zí-ka<sub>4</sub> <sup>HAL</sup>taš-šu-íb-be ha-tu-ʾma PAP<sup>1</sup> hi še.BAR<sup>MEŠ</sup>
- (24) <sup>Aš</sup>ú-ʾnu-da-ad-da<sup>1</sup> <sup>Aš</sup>be-ʾul<sup>1</sup> 22-um-me-man-na kur-mán <sup>HAL</sup>ap-ʾda-um<sup>1</sup>-[ma-na]
- (25) 6 mi-ši-na ʾ5 1<sup>1</sup> QA 20-kur pi-ip-ši-na PAP 11 1 QA 20-kur <sup>GIŠ</sup>pi-za-ʾna<sup>1</sup>
- (26) da-ka<sub>4</sub>



## Indexes

### Geographical Names

Akku...?

<sup>Aš</sup>ak<sup>2</sup>-ku<sup>2</sup>-x-x-x<sup>1</sup> No. 3:09' (C1/W)

Akkuban

<sup>Aš</sup>ha-ku-ba-an ([*partetaš*]) No. 1:05' (C1/W)

Antarrantiš

<sup>Aš</sup>an-<sup>Γ</sup>tar-ra-an<sup>1</sup>-ti-iš No. 31:05 (W)

Appištapdan

<sup>Aš</sup>ap-pi-iš-<sup>Γ</sup>da<sup>1</sup>-[...] No. 2:04' (C1/W); [<sup>Aš</sup>]ap-pi-iš-tap-da (*partetaš*) No. 1:14' (C1/W);

<sup>Aš</sup>ha-pi-iš-da-ap-da-<sup>Γ</sup>an<sup>1</sup> No. 3:16' (C1/W)

Barašba

<sup>Aš</sup>ba-ra-<sup>á</sup>š-<sup>Γ</sup>ba<sup>1</sup> (*partetaš*) No. 8:07 (C1/W); <sup>Aš</sup>ba-ra-iš-ba ([*partetaš*]) No. 6:04 (C1/W),

No. 7:07' (C1/W)

Baraššan

See Parša

Hadaraš?

<sup>Aš</sup>ha-<sup>Γ</sup>da<sup>2</sup>-ráš<sup>2</sup><sup>1</sup> No. 31:04 (W)

Hakudda

<sup>Γ</sup><sup>Aš</sup>ha-ku-ud-da No. 1:07' (C1/W)

Hapidanada?

<sup>Aš</sup>ha-pi-da-<sup>Γ</sup>na<sup>2</sup><sup>1</sup>-da No. 16:34' (C1/W)

Harišna

<sup>Aš</sup>ha-<sup>Γ</sup>ir-iš-na<sup>1</sup> No. 35:07f. (V)

Hazidda

<sup>Aš</sup>ha-iz-zí-ud-da No. 5:08" f. (C1/W)

Hisuš

<sup>Aš</sup>hi-su-iš (*partetaš*) No. 1:16' (C1/W)

Kapriš

<sup>Aš</sup>ka<sub>4</sub>-ap-ri-iš No. 16:39' (C1/W)

Karrakušan

<sup>Aš</sup>kar-ra-ku-<sup>Γ</sup>šá<sup>1</sup> No. 14:07f. (C1/W)

Ku...

<sup>Aš</sup>ku-<sup>Γ</sup>x-ma-x<sup>1</sup> No. 35:04f. (V)

Kunturruš

<sup>Aš</sup>[ku-un]-tur-ru-iš No. 32:09, 32f. (V)



Madan

See Matannan?

Makurrabban

<sup>Aš</sup>ma-kur-<sup>r</sup>áb-ba<sup>l</sup>-an No. 36:07' (V)

Mandama?

<sup>Aš</sup>man<sup>2</sup>-da-ma No. 3:11' (C1/W)

Mandumattiš

<sup>Aš</sup>man-du-ma-ti-iš No. 26:13', 20', 44' (W)

Marku...

<sup>Aš</sup>mar-ku-<sup>r</sup>x-x<sup>l</sup>-na (*partetaš*) No. 10:15f. (C1/W); <sup>Aš</sup>mar-ku-<sup>r</sup>x-x<sup>l</sup> No. 26:16' (W)

Matannan?

<sup>Aš</sup>ma-da-an No. 9:07' (C1/W)

Matezziš

<sup>Aš</sup>ma-te-zí-iš (*partetaš*) No. 23:05, [14], 29, 35, 36, (W), No. 24:53', 60', [67'], 74', 80', 84', 01" (W)

Mazikka

[<sup>Aš</sup>]maz<sup>0</sup>-<sup>r</sup>zik-kaš<sup>7</sup> No. 33:39 (V)

Mišbašatiš

<sup>Aš</sup>mi-iš-ba-šá-ti-iš (= *partetaš* name) No. 23:36 (W)

Mišdubaš

<sup>Aš</sup>mi-iš-du-ba-iš No. 25:22 (*partetaš*), 27, 30, 33, 36 (W)

Nu..?

<sup>Aš</sup>nu<sup>2</sup>-x-[...] No. 6:19 (C1/W)

Parša

<sup>Aš</sup>ba-ir-šá-an No. 16:11', 29' (C1/W), No. 23:47, 50, 53 (W); <sup>Aš</sup>ba-ir-šá-iš No. 23:39, 42, 45, 70, 73 (W), No. 30:09', 26'<sup>1</sup> (W); <sup>Aš</sup>ba-ra-áš<sup>l</sup>-šá-an No. 27:33 (W)

Pirnakuš

<sup>Aš</sup>pír-nu-ku-iš No. 5:08' (C1/W)

Pirrimašda

<sup>r</sup><sup>Aš</sup>pír<sup>l</sup>-ri-ma-iš-da No. 5:03"f. (C1/W)

Pirritimattiš

<sup>Aš</sup>pír-ri-ti-ma-ut-ti-iš No. 32:28, 33 (V)

Rakkan

<sup>Aš</sup>ra-ka<sub>4</sub>-an (*partetaš*) No. 13:06f., 21, 26, 31 (C1/W), (*partetaš*) No. 10:08 (C1/W); <sup>Aš</sup>rak<sub>0</sub>-ka<sub>4</sub>-an No. 27:05, 13, 17, 21, 32 (W), No. 29:06, 10, 13, 21, 25, 31, 32 (W), No. 31:03 (W); <sup>Aš</sup>rak<sub>0</sub>-ka<sub>4</sub>-<an> No. 29:14 (W)

Tikra

(<sup>Aš</sup><sub>KUR</sub><sup>MEŠ</sup>) <sup>AN</sup>ti-ik-ra-na No. 36:02 (V)





Tikranuš

<sup>Γ</sup>Α<sup>Š</sup>ṭi-ik-ra-nu-iš No. 12:06' (C1/W)

Ubašda?

<sup>Γ</sup>Α<sup>Š</sup>ú<sup>?</sup>ṭi-ba-iš-da No. 21:04''' (C1/W?)

Ukbarakkan

<sup>Α</sup>Šuk-ba-rak<sub>0</sub>-ka<sub>4</sub> No. 3:10" (C1/W); <sup>Α</sup>Šuk-ba-rak<sub>0</sub>-ka<sub>4</sub>-an No. 26:10', 44' (W)

Upirizzaš

<sup>Α</sup>Šú-pír-iz-za-<sup>Γ</sup>iš<sup>Γ</sup> (*partetaš*) No. 11:06 (C1/W); <sup>Α</sup>Šú-<sup>Γ</sup>pír-ri<sup>Γ</sup>-iz-za-[iš] No. 11:09 (C1/W)

Yamadanuš

<sup>Α</sup>Šia-ma-da-nu-iš (*partetaš*) No. 14:07 (C1/W), No. 21:120''' (C1/W?); <sup>Α</sup>Šia-ma-da-nu-iš<sup>?</sup> No. 27:37 (W)

## Personal Names

Abbakama

<sup>HAL</sup>ab-ba-ka<sub>4</sub>-ma ("account holder") No. 29:14 (W)

Akkamanuš

<sup>HAL</sup>ak-ka<sub>4</sub>-man-nu-iš ("account holder") No. 3:02" (C1/W)

Akkima

<sup>HAL</sup>ak-ki-ma ("account holder?") No. 20:11" (C1/W?)

Akšakka

<sup>Γ</sup>HAL<sup>Γ</sup>ak-šá-ik-ka<sub>4</sub> ("account holder?") No. 20:05' (C1/W?)

Anmakkana?

<sup>Γ</sup>HAL<sup>Γ</sup>an-mak<sub>0</sub><sup>?</sup>-ka<sub>4</sub><sup>?</sup>ṭi-na (*etira*) No. 32:34f. (V)

Appukka

<sup>HAL</sup>ap-pu-<uk>-ka<sub>4</sub> (*šarama(nna)*) No. 26:41'; <sup>HAL</sup>ap-pu-uk-ka<sub>4</sub> (*šarama(nna)*) No. 6:24 (C1/W), No. 26:21', 45' (W)

Apputurma?

<sup>HAL</sup>ap<sup>?</sup>ṭi-pu<sup>Γ</sup>-tur-ma ("account holder") No. 13:31 (C1/W)

Ašbakuš

<sup>HAL</sup>Γ<sup>Γ</sup>áš<sup>Γ</sup>-ba-ku-iš No. 32:05 (V)

Ašpukka

<sup>HAL</sup>áš-pu-uk-ka<sub>4</sub> ("account holder") No. 30:14' (W)

Aššanka

[<sup>HAL</sup>Γ<sup>Γ</sup>áš<sup>Γ</sup>-šá-an-ka<sub>4</sub> (*etira*) No. 34:09' (V?)

Attiya

<sup>HAL</sup>at-ti-ia ("account holder") No. 8:09 (C1/W), (*kurman*) No. 21:05' (C1/W?)

Badda?

<sup>HAL</sup>ba-ad<sup>?</sup>-da<sup>?</sup> ("account holder") No. 27:05 (W), No. 29:06 (W)



Bagirabba

<sup>HAL</sup>ba-gi-ráb-ba (“account holder?”) No. 20:08' (C1/W?)

Bagizza

<sup>HAL</sup>ba<sup>l</sup>-gi-iz-za (“account holder”) No. 10:03 (C1/W); <sup>HAL</sup>ba-gi-iz-za (“account holder?”) No. 20:15" (C1/W?)

Baka...

<sup>HAL</sup>ba-ka<sub>4</sub>-[...] (“account holder”) No. 3:19', <sup>HAL</sup>ba-ka<sub>4</sub>-<sup>Γ</sup>x-x-x<sup>1</sup> ibid. 12" (C1/W)

Bakabadda

<sup>HAL</sup>ba-ka<sub>4</sub>-ba-ad-da (“account holder”) No. 27:37 (W), (“account holder?”) No. 20:09" (C1/W?); <sup>HAL</sup>ba-ka<sub>4</sub>-ba-da (*kurman*) No. 21:11'" (C1/W?)

Bakabana

<sup>HAL</sup>ba-<sup>Γ</sup>ka<sub>4</sub>-ba-na<sup>1</sup> (“account holder”) No. 9:15' (C1/W); No. 36:04 (V)

Bakagiya?

<sup>ΓHAL</sup>ba<sup>2</sup>-ka<sub>4</sub><sup>1</sup>-gi-ia (“account holder”) No. 25:04 (W)

Bakka

<sup>HAL</sup>ba-<sup>Γ</sup>ak<sup>1</sup>-ka<sub>4</sub>-a (“account holder”) No. 3:13" (C1/W)

Baku...?

<sup>ΓHAL</sup>ba<sup>2</sup>-ku<sup>2</sup><sup>1</sup>-[x] No. 31:04 (W)

Bapiruš

<sup>HAL</sup>ba-pi-ru-iš (“account holder”) No. 6:13 (C1/W), <sup>HAL</sup>ba-<sup>Γ</sup>ip<sup>1</sup><sup>2</sup>-ru-iš (“account holder”) No. 7:06 (C1/W)

Battišdana

<sup>HAL</sup>bat-ti-iš-da-na (“account holder”) No. 16:10' (C1/W)

Battizza

<sup>HAL</sup>bat-ti-iz-za (“account holder?”) No. 20:07" (C1/W?)

Belda...

<sup>HAL</sup>be-ul-da-<sup>Γ</sup>x<sup>1</sup> (*šarama(nna)?*) No. 17:22 (C1/W)

Da...nama?

<sup>HAL</sup>da-<sup>Γ</sup>x-x<sup>1</sup>-na-ma No. 10:09f. (C1/W)

Daddamitra

[<sup>HAL</sup>da-ad]-<sup>Γ</sup>da-mi<sup>1</sup>-ut-ra-na (*kurman*) No. 32:33f. (V)

Daddana

<sup>HAL</sup>da-ad-da-na (*hatarmakša*) No. 32:34

Damamadda?

<sup>HAL</sup><sup>Γ</sup>da<sup>2</sup>-ma-a-ma<sup>2</sup>-x<sup>1</sup>-da (“account holder”) No. 1:13 (C1/W)

Damekruda

<sup>HAL</sup>da<sup>2</sup>-me<sup>2</sup>-ik<sup>2</sup>-ru<sup>2</sup>-da (“account holder”) No. 18:20 (C1/W)

Damikka

<sup>HAL</sup>da-mi-<sup>Γ</sup>ik-ka<sub>4</sub><sup>1</sup> (*kurman*) No. 33:08, 28 (W)



#### Datapparna

<sup>HAL</sup>da-tap-pár<sup>1</sup>-na (*šarama(nna)*) No. 26:17' (W), No. 31:06 (W); <sup>HAL</sup>da-ad-da-pár-na (*šarama(nna)*) No. 10:16 (C1/W)

#### Datukka

<sup>HAL</sup>da-a-tuk-ka<sub>4</sub> ("account holder") No. 6:04 (C1/W), No. 7:06' (C1/W); <sup>HAL</sup>da-at-tuk-ka<sub>4</sub> ("account holder") No. 8:06 (C1/W)

#### Dazi...

<sup>HAL</sup>da-zí-[...] ("account holder") No. 26:36' (W)

#### Gidadda

<sup>HAL</sup>gi-da-ad-da ("account holder") No. 4:10 (C1/W), No. 23:35 (W), No. 24:84' (W), No. 25:10 (W), No. 30:27" (W)

#### Ha...

<sup>HAL</sup>ha-x-x-x<sup>1</sup>-[...] (*kurman*) Fort. 2263-101:02 (C1/W?); <sup>HAL</sup>ha<sup>2</sup>-x<sup>1</sup>-[...] ("account holder") No. 4:21 (C1/W)

#### Hatarradda

<sup>HAL</sup>ha-da-ra-da ("account holder") No. 30:20" (W); <sup>HAL</sup>ha-tar-ra-da No. 25:38 (W); cf. Haturradda

#### Haturradda

<sup>HAL</sup>ha<sup>1</sup>-tur-ra-da ("account holder") No. 3:11" (C1/W), No. 24:67' (W), No. 28:25 (W); <sup>HAL</sup>ha-tur-ra-ad-da ("account holder") No. 3:04' (C1/W), No. 23:14 (W), No. 25:02 (W), (*kurman*, *abbebe huttira*) No. 23:63, 71 (W), (*šalira*) No. 28:19; [<sup>HAL</sup>ha<sup>2</sup>]-tur-ra-<sup>1</sup>ad-da<sup>1</sup> (*dama*) No. 24:03" (W), No. 31:08 (W); <sup>HAL</sup>ha-tur-ra-ud-da ("account holder") No. 5:04' (C1/W)

#### Haturrakka<sup>2</sup>

[<sup>HAL</sup>]ha<sup>2</sup><sup>1</sup>-tur-rak<sub>0</sub>-ka<sub>4</sub> (*kurman*) No. 36:04' (V)

#### Hidamanna

<sup>HAL</sup>hi-da-man-na (*kurman*) No. 21:03'" (C1/W?)

#### Hi(h)utra<sup>2</sup>

<sup>HAL</sup>hi-ú-<sup>1</sup>ut<sup>2</sup>-ra<sup>1</sup> No. 32:14 (V); cf. Ihutra

#### Hikida

<sup>HAL</sup>hi-ki-da (*kurman*) No. 22:13 (C1/W?)

#### Hikuma<sup>2</sup>

<sup>HAL</sup>hi<sup>2</sup>-ku-ma ("account holder") No. 23:39 (W)

#### Hiš...<sup>2</sup>

<sup>HAL</sup>hi<sup>2</sup>-iš<sup>2</sup>-x-x<sup>1</sup> ("account holder") No. 30:20' (W)

#### Ihutra

<sup>HAL</sup>i-hu-ut-ra ("account holder") No. 5:07' (C1/W); cf. Hi(h)utra



Indukka

<sup>HAL</sup>in-du-uk-<sup>Γ</sup>ka<sub>4</sub><sup>1</sup> (“account holder”) No. 12:05' (C1/W)

Irdabadda

<sup>HAL</sup>ir-da-ba-<sup>Γ</sup>ad-da<sup>1</sup> (“account holder?”) No. 20:06" (C1/W)

Irdabanuš

<sup>HAL</sup>ir-da-ba-nu-iš (“account holder?”) No. 20:14" (C1/W?)

Irdumartiya

[<sup>HAL</sup>]<sup>Γ</sup>ir-du-mar<sup>1</sup>-ti-ia (*halmi*) No. 28:29 (W)

Iršena

<sup>HAL</sup>ir-še-na (*šarama(nna)*) No. 1:[18'<sup>12</sup>] (C1/W), No. 23:61, 63, 71 (W), No. 24:02", 03" (W), No. 25:40 (W), No. 26:10', 44', 46' (W), (*dama*) No. 27:32, 33 (W), (*halmi*) No. 25:26, 29, 32 (W), (*tuppi tubaka*) No. 1:19' (C1/W); <sup>HAL</sup>KI+MIN (*šarama(nna)*) No. 25:30, 33 (W)

Irtena

<sup>HAL</sup>ir-te-na (“account holder”) No. 16:03' (C1/W)

Iškamiya<sup>?</sup>

<sup>HAL</sup>iš<sup>?</sup>-kam<sup>?</sup>-<sup>Γ</sup>ia<sup>?</sup><sup>1</sup> (“account holder”) No. 26:10' (W)

Iškanda<sup>?</sup> (or: Išpidda?)

<sup>HAL</sup>iš<sup>?</sup>-kán-da (“account holder”) No. 1:04", 09"<sup>?</sup> (C1/W)

Itipusa<sup>?</sup>

<sup>HAL</sup>i-ti-pu<sup>?</sup>-sa (“account holder”) No. 23:47 (W)

Ka...<sup>?</sup>

<sup>HAL</sup>ka<sub>4</sub><sup>?</sup>-<sup>Γ</sup>x-x-x<sup>1</sup> (“account holder”) No. 15:04" (C1/W)

Kadkapiš

<sup>HAL</sup>ka<sub>4</sub>-ad-ka<sub>4</sub>-pi-iš (“account holder?”) No. 20:06' (C1/W?)

Kadukka

<sup>HAL</sup>ka<sub>4</sub>-du-<sup>Γ</sup>ka<sub>4</sub><sup>?</sup><sup>1</sup> (“account holder”) No. 16:32' (C1/W); <sup>HAL</sup>ka<sub>4</sub>-du-uk-ka<sub>4</sub> (“account holder?”) No. 20:08" (C1/W?)

Kampiya

<sup>HAL</sup>kam-pi-ia (“account holder”) No. 25:15 (W)

Karakka

<sup>HAL</sup>ka<sub>4</sub>-rak<sub>0</sub>-ka<sub>4</sub> No. 32:07 (V)

Karbeš

<sup>HAL</sup>kar-be-iš (*šarama(nna)*) No. 7:07' (C1/W)

Karkiš

<sup>HAL</sup>kar-ki-iš (“account holder”) No. 26:16' (W)

Karmakka

<sup>HAL</sup>kar-ma-ak-ka<sub>4</sub> (“account holder”) No. 9:07' (C1/W)



Karšena

<sup>HAL</sup>kar-še-na (*šarama(nna)*) No. 13:07, 21, 32 (C1/W); (*irmatam*) No. 14:09f. (C1/W);  
cf. Kaššena

Kassudda

<sup>HAL</sup>kas-su-ud-da (“account holder”) No. 1:13' (C1/W)

Kassukka

<sup>HAL</sup>kas-su-uk-ka<sub>4</sub> (“account holder”) No. 3:13' (C1/W)

Kaššena

<sup>HAL</sup>kaš-še-na (*dama*) No. 27:13, 17, 25 (W), No. 29:06, 10, 13, 14, 21, 25, 31, 32 (W),  
<sup>HAL</sup>KI+MIN (*dama*) No. 27:21 (W), No. 29:26 (W); <sup>HAL</sup>ka<sub>4</sub>-i<sup>š</sup>-še-na (*kurman*) No. 22:07f.  
(C1/W?); cf. Karšena.

Kaštiš

<sup>HAL</sup>ka<sub>4</sub>-áš-ti-iš (*šalira*, “account holder”) No. 27:13 (W), No. 29:10, 25 (W); <sup>HAL</sup>ka<sub>4</sub>-i<sup>š</sup>-  
ti-iš (“account holder”) No. 13:20 (C1/W)

Kaz...?

<sup>HAL</sup>kaz<sub>0</sub><sup>?</sup>-[...] (“account holder”) No. 24:35' (W)

Kazzakka

<sup>HAL</sup>ka<sub>0</sub><sup>1</sup>-za-ak-ka<sub>4</sub><sup>1</sup> (“account holder”) No. 23:50 (W)

Kazzina

<sup>HAL</sup>kaz<sub>0</sub>-zí-na (*abbebe huttira*) No. 26:45' (W)

Ki...

<sup>HAL</sup>ki-x-x-x-x<sup>1</sup> (“account holder”) No. 10:04 (C1/W)

Kitena

<sup>HAL</sup>ki-te-na<sup>1</sup> (“account holder”) No. 30:17' (W)

Kulayana

<sup>HAL</sup>ku-la-ia-na (“account holder”) No. 1:04' (C1/W)

Kuntakka

<sup>HAL</sup>ku-un-tak-ka<sub>4</sub> (“account holder”) No. 16:28' (C1/W)

Kurkana

<sup>HAL</sup>kur-ka<sub>4</sub>-na No. 27:37 (W)

Kuršipda

<sup>HAL</sup>kur-ši-ip-da (*hatarmakša*) No. 35:22 (V)

Kutrizza?

<sup>HAL</sup>ku-ut<sup>?</sup>-ri-iz-za (*šarama(nna)*) No. 14:08 (C1/W)

Kuya?

<sup>HAL</sup>ku<sup>1?</sup>-ia<sup>1</sup> (“account holder”) No. 15:09' (C1/W)

Lannar?

<sup>HAL</sup>la-an-na<sup>?</sup>-ir (“account holder”) No. 17:15 (C1/W)





Luzziš?

<sup>HAL</sup>lu<sup>2</sup>-iz-zí-iš (“account holder”) No. 23:45 (W)

Maduduna?

<sup>HAL</sup>ma-du<sup>2</sup>-du<sup>2</sup>-na (*šalira*, “account holder”) No. 28:13, 20, 27 (W)

Makukka

<sup>HAL</sup>ma-ku-uk-ka<sub>4</sub>-[mar] No. 32:27 (V)

Maliya

<sup>HAL</sup>ma-li-ia (“account holder”) No. 29:21 (W)

Man...

<sup>HAL</sup>man-<sup>Γ</sup>x<sup>1</sup>-[...] (“account holder”) No. 17:17 (C1/W)

Mannazza

<sup>HAL</sup>man-na-a-iz-za (“account holder?”) No. 20:07' (C1/W?)

Manparra

<sup>HAL</sup>man-pár-ra (“account holder”) No. 5:08" (C1/W)

Manukka

<sup>HAL</sup>man-ú-uk-ka<sub>4</sub> (*dama*) No. 29:16, 33 (W); <sup>HAL</sup>ma-nu-ka<sub>4</sub> No. 32:37 (V)

Manušša

<sup>HAL</sup>ma-nu-iš-šá (“account holder”) No. 6:23 (C1/W)

Maparna

<sup>HAL</sup>ma-pár-<sup>Γ</sup>na<sup>1</sup> (“account holder”) No. 29:32 (W)

Maraza

<sup>HAL</sup>ma-ra-za (“account holder”) No. 3:15" (C1/W), (*šarama(nna)*) No. 30:10', 27' (W),  
No. 27:37 (W)

Marduka

<sup>HAL</sup>mar-du-ka<sub>4</sub> (“account holder”) No. 23:05 (W), No. 24:60' (W)

Marma

<sup>HAL</sup>mar-ma (*kurman*) No. 21:07' (C1/W?)

Marmetinna

<sup>HAL</sup>mar-me-tin-na (*kurman*) No. 21:09' (C1/W)

Maršena

<sup>HAL</sup>mar-še-na (“account holder”) No. 3:11' (C1/W)

Mau...

<sup>ΓHAL?</sup>ma-u-<sup>Γ</sup>x-x-x<sup>1</sup> (*kurman*) No. 22:18 (C1/W)

Maudadda?

<sup>HAL</sup>ma-u-<sup>Γ</sup>da-ad<sup>?</sup><sup>1</sup>-[da<sup>?</sup>] (“account holder?”) No. 20:05" (C1/W?)

Maukka

<sup>HAL</sup>ma-u-uk-ka<sub>4</sub>-na No. 34:08' (V?)

Maumanna

<sup>HAL</sup>ma-u-man-na (“account holder?”) No. 20:10" (C1/W?)



Mauparma

<sup>HAL</sup>ma-u-pár-ma No. 36:03, 06 (V)

Maupirtanna

<sup>HAL</sup>ma-u-pír-tan-na (“account holder”) No. 16:33' (C1/W)

Mikanna

<sup>HAL</sup>mi-kán-na No. 25:35 (W); cf. Miyakanna.

Mikumiya?

<sup>HAL</sup>mi<sup>?</sup>-ku-mi-ia (“account holder”) No. 16:06' (C1/W)

Miramanna

<sup>HAL</sup>mi-ra-man-[na] (*šalira*, “account holder”) No. 28:09, 20, 26 (W)

Mirazanna

<sup>HAL</sup>mi-ra-za-an-na (“account holder”) No. 5:03" (C1/W)

Mirinzana

<sup>HAL</sup>mi-ri-in-za-na No. 33:04 (W)

Mišda...

<sup>HAL</sup>mi-iš-da-<sup>r</sup>x-x<sup>1</sup> (*hatarmakša*) No. 36:04' (V)

Mišezza

<sup>HAL</sup>mi-še-iz-za (*dama*) No. 16:12' (C1/W)

Miššakka

<sup>HAL</sup>mi-iš-šá-ak-ka<sub>4</sub> (“account holder”) No. 24:74' (W)

Misu...?

<sup>HAL</sup>mi-<sup>r</sup>su<sup>2</sup>-x<sup>1</sup>-[...] (“account holder”) No. 24:88' (W)

Miyakanna?

<sup>HAL</sup>mi<sup>?</sup>-ia-kán-na (“account holder”) No. 26:09' (W); cf. Mikanna

Mizza...

<sup>HAL</sup>mi-iz-za-<sup>r</sup>x<sup>1</sup>-[...] (“account holder”) No. 4:31 (C1/W)

Mutin...pu?

<sup>HAL</sup>mu<sup>2</sup>-tin<sup>2</sup>-<sup>r</sup>x<sup>1</sup>-[x]-pu<sup>2</sup> (“account holder”) No. 17:05f. (C1/W)

Napapirzana

<sup>HAL</sup>na-pa-pír-za-na No. 12:03' (*šarama(nna)*) (C1/W)

Nappirrada?

<sup>HAL</sup>nap<sup>2</sup>-pír-ra-da (“account holder”) No. 10:06 (C1/W); <sup>HAL</sup>na-pír<sup>2</sup>-ra<sup>2</sup>-da (“account holder”) No. 26:40' (W)

Nariyamana

<sup>HAL</sup>na-ri-ia-<sup>r</sup>ma<sup>1</sup>-na (“account holder”) No. 10:06 (C1/W)

Nu...tena

<sup>HAL</sup>nu-<sup>r</sup>x<sup>1</sup>-te-na (“account holder”) No. 23:53 (W)

Nurikka

<sup>HAL</sup>nu-ri-ik-ka<sub>4</sub> (“account holder?”) No. 20:12" (C1/W?)



Parnadadda<sup>?</sup>

<sup>HAL</sup>pa<sup>r</sup>-na<sup>?</sup>l-da-ad-da (*dama*) No. 16:30' (C1/W)

Pirmayauda

<sup>HAL</sup>pi<sup>r</sup>-ma-ia-u-da (“account holder”) No. 3:10" (C1/W)

Pirušuš

<sup>HAL</sup>pi-ru-šu-iš (“account holder”) No. 16:16' (C1/W)

Puda

<sup>HAL</sup>pu-da (“account holder”) No. 18:04 (C1/W)

Pukša

<sup>HAL</sup>pu-uk-ša (“account holder”) No. 4:44 (C1/W), (*šalira*, “account holder”) No. 23:60 (W), No. 30:06" (W)

Ra<sup>?</sup>...

<sup>HAL</sup>ra<sup>?</sup>-x-uk<sup>?</sup>-ka<sup>?</sup>l (*mišesanabattiš*) No. 35:07 (V)

Radadda<sup>?</sup> (or: Rašda<sup>?</sup>)

<sup>HAL</sup>ra<sup>?</sup>-da-ud<sup>?</sup>l-da (*šarama(nna)*) No. 7:10' (C1/W)

Ramataš<sup>?</sup>

<sup>HAL</sup>ra-ma-taš<sup>?</sup> (“account holder”) No. 13:06 (C1/W)

Rašpi...<sup>?</sup>

<sup>HAL</sup>raš<sup>?</sup>pi-... No. 36:03f. (V)

Rumada

<sup>HAL</sup>ru-ma-da (“account holder”) No. 29:15 (W)

Šabaka<sup>?</sup>

<sup>HAL</sup>ša-ba-ka<sup>?</sup> (“account holder”) No. 13:24 (C1/W)

Šatan...ru<sup>?</sup>

<sup>HAL</sup>ša-<sup>r</sup>tan<sup>?</sup>l-...-ru<sup>?</sup> (“account holder”) No. 17:03f. (C1/W)

Šaušaya

<sup>HAL</sup>ša-u-ša-ia (“account holder?”) No. 20:10" (C1/W?)

Šedda

<sup>HAL</sup>še-ud-da (“account holder”) No. 3:09', 17" (C1/W)

Šibba

<sup>HAL</sup>ši-ib-ba (“account holder?”) No. 20:18' (C1/W?)

Šippukka

<sup>HAL</sup>ši-<sup>r</sup>ip-pu-uk<sup>?</sup>l-ka<sup>?</sup> (*mišesanabattiš*) No. 35:04 (V)

Šuzziba<sup>?</sup>

<sup>HAL</sup>šu<sup>?</sup>-iz<sup>?</sup>-zi<sup>?</sup>-ba (“account holder”) No. 16:39' (C1/W)

Takmabarma

<sup>HAL</sup>tak-ma-ba-ir-ma (“account holder”) No. 6:10 (C1/W)



Tanma...?

<sup>HAL</sup>tan<sup>2</sup>-ma(-)x No. 10:09 (C1/W)

Tarkawiš

<sup>HAL</sup>tar-ka<sub>4</sub>-ú-iš No. 35:01 (V)

Tiriya

<sup>HAL</sup>ti-ri-ia (“account holder”) No. 27:33 (W), (*šarama(nna)*) No. 10:08 (C1/W), No. 31:03 (W)

Tukra

<sup>HAL</sup>tu-uk-ra (“account holder”) No. 26:20' (W)

Tuppira

<sup>HAL?</sup>tup-pi-ra (*šalira*, “account holder”) No. 27:17 (W)

Turbala?

<sup>HAL</sup>tur-<sup>HAL?</sup>ba<sup>2</sup>-a-la (“account holder”) No. 25:05 (W)

Turbena?

<sup>HAL</sup>tur-be<sup>2</sup>-na (“account holder”) No. 3:14" (C1/W)

Turpiš

<sup>HAL</sup>tur-pi-iš (“account holder”) No. 6:17 (C1/W), No. 7:11<sup>2</sup> (C1/W)

Ugiššaka?

<sup>HAL</sup>ú-gi-<sup>HAL?</sup>iš<sup>2</sup>-šá-ka<sub>4</sub> (“account holder”) No. 1:09 (C1/W)

Ukbamaya

<sup>HAL</sup>uk-ba-ma-ia (*dama*) No. 29:15 (W)

Ukbateya

<sup>HAL</sup>uk-ba-te-ia No. 35:21 (V)

Ukbayauna

<sup>HAL</sup>uk-ba-<sup>HAL?</sup>ia-u<sup>1</sup>-[na] No. 36:06 (V)

Ukkumira?

<sup>HAL</sup>uk<sup>2</sup>-ku<sup>1?</sup>-mi-ra (“account holder”) No. 23:42 (W)

Ukmarašša

<sup>HAL</sup>uk-ma-ráš-šá (*kurman*) No. 21:11' (C1/W?)

Umadadda

<sup>HAL</sup>u-ma-da-ad-da (“account holder”) No. 29:16 (W)

Umbadadara

<sup>HAL</sup>um-ba-da-da-ra (“account holder?”) No. 20:13" (C1/W?)

Umbukka?

<sup>HAL</sup>um<sup>1?</sup>-bu-uk-ka<sub>4</sub> (“account holder”) No. 10:05 (C1/W)

Unukama

<sup>HAL</sup>ú-nu-ka<sub>4</sub>-ma (“account holder”) No. 6:14 (C1/W)

Uš... (or: Ziš...?)

<sup>HAL</sup>ú-iš-<sup>HAL?</sup>x-x-x<sup>1</sup> (“account holder”) No. 15:10" (C1/W)



Ušda...?

<sup>HAL</sup>ú<sup>?</sup>-iš-da-x-x (“account holder”) No. 3:07” (C1/W)

Uššaya

<sup>HAL</sup>ú-šá-ia (“account holder”) No. 3:15’ (C1/W); <sup>HAL</sup>ú-šá<sup>?</sup>-i (“account holder?”) No. 20:16’ (C1/W?); <sup>HAL</sup>ú<sup>1</sup>-iš-šá-ia (“account holder”) No. 1:11’ (C1/W)

Uššušnakkana

<sup>HAL</sup>ú-iš-šu-iš-na-ak-ka<sub>4</sub>-na No. 32:08, 11, 36f. (V)

Uzak?

<sup>HAL</sup>ú-za<sup>?</sup>-ak (“account holder?”) No. 20:17’ (C1/W?)

Yašnakka

<sup>HAL</sup>ia-iš<sup>!</sup>-na-ak-ka<sub>4</sub> (“account holder”) No. 1:15’ (C1/W)

Zakamukka

<sup>HAL</sup>za-kam-uk-ka<sub>4</sub> (“account holder?”) No. 20:09’ (C1/W?)

Zaktiš

<sup>HAL</sup>za-ak-ti-iš (“account holder”) No. 24:80’ (W), No. 23:29’ (W)

Zanušša

<sup>HAL</sup>za-nu-iš-ša No. 1:12’ (C1/W)

Zišma

<sup>HAL</sup>zī-iš-ma (“account holder”) No. 25:21 (W)

Ziššawiš

[<sup>HAL</sup>zī-iš]-šá-u-ú-iš No. 36:05 (V)

...akka

<sup>HAL</sup>x-x-x-ak<sup>?</sup><sup>1</sup>-ka<sub>4</sub><sup>?</sup> (“account holder”) No. 18:06’ (C1/W); [...] -<sup>HAL</sup>x<sup>1</sup>-ak-ka<sub>4</sub> (šarama(nna)) No. 28:50 (W)

...dadda

<sup>HAL</sup>x-x<sup>1</sup>-da-ad-da (halmi) No. 25:35 (W)

...dana?

[...] -<sup>HAL</sup>da<sup>?</sup><sup>1</sup>-na (šarama(nna)) No. 8:03’ (C1/W)

...dumanna?

[<sup>HAL</sup>x-x<sup>1</sup>-du<sup>?</sup>-man-na (“account holder”) No. 26:26’ (W)

...iššša

[...] -iš-šá (“account holder”) No. 25:03 (W)

...ka

<sup>HAL</sup>x-x-x<sup>1</sup>-ka<sub>4</sub> (“account holder”) No. 23:22 (W)

...kan...ra?

[...] -ka<sub>4</sub> -<sup>HAL</sup>an<sup>?</sup>-x<sup>1</sup>-ra (“account holder”) No. 10:14 (C1/W)

...ku...

<sup>HAL</sup>x-x<sup>1</sup>-ku-<sup>HAL</sup>x<sup>1</sup> (“account holder”) No. 6:19 (C1/W)





...maya?

<sup>HAL</sup>Γ<sub>x-x-ma<sup>?</sup>l-ia No. 13:12 (C1/W)</sub>

...na

<sup>HAL</sup>Γ<sub>x-x<sup>l</sup>-na (“account holder?”) No. 18:20 (C1/W); [...] -<sup>Γ</sup>x<sup>l</sup>-na (“account holder?”)  
No. 20:02' (C1/W?)</sub>

...piya

<sup>HAL</sup>Γ<sub>x<sup>l</sup>-pi-ia (*šarama(nna)* No. 20:13' (C1/W?))</sub>

...radda?

[...] -<sup>Γ</sup>x-ra<sup>?</sup>l-ad-da (“account holder”) No. 24:28' (W)

...rakša

[...] -<sup>Γ</sup>x<sup>l</sup>-rak<sub>o</sub>-šá (“account holder”) No. 29:31 (C1/W)

...riya

<sup>HAL</sup>Γ<sub>x<sup>l</sup>-[...] -ri-ia (“account holder”) No. 17:10f. (C1/W)</sub>

...ruš

[...] -<sup>Γ</sup>x<sup>l</sup>-ru-iš (“account holder?”) No. 20:03' (C1/W?)

...šakkara?

[...] -šá-ak-ka<sub>4</sub><sup>?</sup>-ra (“account holder?”) No. 20:04' (C1/W?)

...tikarriš

[...] -ti-kar-ri-iš (*šarama(nna)*) No. 19:07 (C1/W)

...tišdana

[...] -ti-iš-da-na (*šarama(nna)*) No. 11:11' (C1/W)

...turra

[...] -x-tur-ra (*pirramadda*) No. 36:01 (V)

...ziš?

<sup>HAL</sup>Γ<sub>x-x-zl<sup>?</sup>-iš<sup>l</sup></sub> No. 32:42 (V)

## Concordance

Fort. 00X1-101	No. 3
Fort. 0204-102	No. 22
Fort. 0232-101	No. 26
Fort. 0283-101	No. 32
Fort. 0442-101	No. 27
Fort. 0499-101	No. 36
Fort. 1207-102	No. 19
Fort. 1216-103	No. 9
Fort. 1262-102	No. 12
Fort. 1323-102	No. 8
Fort. 1333-101	No. 31
Fort. 1334-102	No. 1



Fort. 1338-101	No. 16
Fort. 1362-101	No. 4
Fort. 1389-101	No. 11
Fort. 1480-101	No. 18
Fort. 1688-102	No. 33
Fort. 1760-101	No. 2
Fort. 1839-102	No. 10
Fort. 1850-102	No. 13
Fort. 1866-102	No. 14
Fort. 1881-101	No. 5
Fort. 1881-102	No. 15
Fort. 1898-101	No. 29
Fort. 1899-101	No. 23
Fort. 1920B-101	No. 7
Fort. 1927-101	No. 24

## Abbreviations

CAD	I. J. Gelb, A.L. Oppenheim, E. Reiner, M. Roth (eds.), <i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> . Glückstadt and Chicago, 1956-2010
CUSAS 28 ##	text published in Pearce & Wunsch 2014
Fort.	in citations of the form Fort. 0000-000, unpublished Persepolis Fortification tablets and texts recorded by the Persepolis Fortification Archive Project <sup>38</sup> ; in citations of the form Fort. 00000, texts in Arfaee 2008 unless otherwise identified
GN	geographical name
PF	text published in Hallock 1969
PFa	text published in Hallock 1978
PFA	Persepolis Fortification Archive
PFAT	Persepolis Fortification Aramaic Text/Tablet
PF-NN	texts cited from draft editions by Richard T. Hallock, collated and corrected by Wouter F. M. Henkelman <sup>39</sup>
PFS	Persepolis Fortification Seal, cited according to Garrison and Root 1998, with updates by Mark B. Garrison

<sup>38</sup> The first four digits indicate the box from which the tablet came (see Hallock 1969, p. 1, Jones & Stolper 2008, p. 37ff.) and the last three digits are an arbitrary identification number reflecting the order in which the tablets were cataloged or read.

<sup>39</sup> Cited according to the numbers Hallock assigned, reflecting the order in which he transcribed the texts.



PN	personal name
PT	text published in Cameron 1948
PT 1963-##	text published in Cameron 1965

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