

# The Sumerian term in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub><sup>\*</sup>

Marcos Such-Gutiérrez – Universidad Autónoma de Madrid

[The term in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub> is documented basically in the Ur III period and has been interpreted, on the basis of its etymology, as chaff, straw or straw/chaff referring to the product obtained after winnowing. However, the context, especially the administrative texts from the Ur III period, clearly shows that in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>, which means “thoroughly sifted straw residues”, refers to the after winnowing remaining chaff that must be cleaned before grinding. In addition to its meaning, the texts shed light on its uses (principally as fodder), the workers involved with it and the reed containers employed for its fluvial transportation.]

**Keywords:** chaff, flour, straw, administrative texts, Ur III period.

Lexicographical studies often focus on the etymology of a word leaving aside the context, which is always crucial to discerning the meaning of a word. An example is found in the term in-bu<sub>14</sub>(ZAR)-bu<sub>14</sub>(ZAR)/in-bu<sub>x</sub>(SU<sub>7</sub>)-bu<sub>x</sub>(SU<sub>7</sub>) that the lexical lists equate with *pā’um*<sup>1</sup> and has been translated, on the basis of etymology, as chaff,<sup>2</sup> straw,<sup>3</sup> or straw/chaff.<sup>4</sup> In addition to the lexical lists and the literary texts “Nanše A”,<sup>5</sup> “The class Reunion”<sup>6</sup> and three proverbs,<sup>7</sup> this word

\* The abbreviations utilized in this article can be found on the website [http://cdli.ox.ac.uk/wiki/abbreviations\\_for\\_assyriology](http://cdli.ox.ac.uk/wiki/abbreviations_for_assyriology). Further abbreviations are the following: Fs Owen = Kleinerman, A. and Sasson, J.M. (eds.) (2010), *Why Should Someone Who Knows Something Conceal it? Cuneiform Studies in Honor of David I. Owen on His 70th Birthday* (Bethesda); Princeton 2 = Sigrist, M. (2005), *Tablets from the Princeton Theological Seminary: Ur III Period. Part 2*, OPKF 18 (Philadelphia). Other abbreviations are the following: AS = Amar-Suen; E = ensi<sub>2</sub>; IS = Ibbi-Suen; obv. = obverse; par. = paragraph; Š = Šulgi; ŠS = Šū-Suen; T = Table; Ukg = Uru-KAgina. When the provenance of a text is not indicated, it comes from Umma.

1. See AHw II p. 874 *pā(m)* II “Spreu” and CAD P p. 471-472 *pā* B “chaff, husks (of grain plants), straw, stubble”.

2. Steinkeller 1979: 91 8 1, Heimpel 1981: 95-96 196, 214, Römer 1986: 39 Hülle 1, Alster 1997: 84 3.25, 115 4.43, 313 UET 6/2 279, 302 YBC 4677 5, Sharlach 2004: 33, Allred 2006: 109, 235, Allred 2008: 13, Owen 2013: 457 note 453, Allred 2014 reverse 3, Johnson/Geller 2015: 45, 144-145, Kogan/Krebernik 2020: 75 (P0110, Cohen 2023: 717 D.1 and ETCSLglossary in-bul-bul).

3. Lafont 1985: 39 - in-ZAR.ZAR — “‘balle de grain’, ‘menue paille’” —, Koslova 2000: 170 in-su<sub>7</sub>-su<sub>7</sub> “...-Stroh”, Steinkeller 2001 — “chopped straw” —, cp. Heimpel 2009: 191 5.3, Attinger 2019: 103-104 196, 214 and Attinger 2023: 744 in-bu<sub>5</sub>-bu<sub>5</sub>s. “balle de grain, menue paille”.

4. Civil 1994: 96 102 — “to blow away the straw/chaff”—, cp. Rubio 2006: 168 and Sallaberger 2013: 108, and ePSD (<http://oracc.org/epsd2/o0031096>) — “an agricultural product, chaff?, hay?, chopped straw?”—.

5. See Heimpel 1981: 94 196, 96 214, ETCSL c.4.14.1 196, 214 and lately Attinger 2019: 88-89 196, 214.

6. See Johnson/Geller 2015: 144 36.

is documented in Sumerian context during the 3rd millennium only in the III Dynasty of Ur (c. 2100-2000 BC) (see T I).

### 1. Writing and reading

The word *in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>* appears during the 3rd millennium as *in-bu<sub>14</sub>(ZAR)-bu<sub>14</sub>(ZAR)* (Lagaš and Urusagrig) and *in-bu<sub>x</sub>(SU<sub>7</sub>)-bu<sub>x</sub>(SU<sub>7</sub>)* (Drehem, Umma and in a text of unknown provenance) (see T I),<sup>8</sup> whereas, since the Old Babylonian period, it is written *in-bu<sub>5</sub>(BUL)-bu<sub>5</sub>(BUL)*.<sup>9</sup> This change is connected with the substitution of ZAR/SU<sub>7</sub> for BUL at the beginning of the 2nd millennium BC.<sup>10</sup> The reading /bu/ of the sign ZAR/SU<sub>7</sub> is confirmed by that of bu<sub>5</sub> for BUL according to the lexical lists that equate the verb bu<sub>5</sub> with *našāpu(m)*, “to blow away”,<sup>11</sup> *napāhu(m)*, “to blow”,<sup>12</sup> and *nesū* D, “to remove”.<sup>13</sup>

### 2. Meaning

Two aspects must be considered in order to establish the meaning of *in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>*: context and etymology. Concerning the context, the connection of *in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>* with flour is evident:

- a) Firstly, according to the “The class Reunion” it designates the residues, mainly of straw, that were cleaned before milling, since straw residues, such as the draffs in the brewing, are not edible:

MC 47 p. 144 36

kaš tuku tuḥ nu-tuku zi<sub>3</sub> tuku in-bu<sub>5</sub>-bu<sub>5</sub> nu-tuku  
“How can you have beer without the dregs? Flour without the chaff?”.<sup>14</sup>

7. See Alster 1997: 84-85 3.25, 301-302 YBC 4677 5, 313 UET 6/2 279 and ETCSL c.6.1.03 51, ETCSL c.6.1.19 Segment C [1] = ETCSL c.6.2.5 YBC 4677 9, ETCSL c.6.2.3 UET 6/2 279 2.

8. Note that the signs ZAR/SU<sub>7</sub> are often confused or mistransliterated in the text editions, see T I. Note that in the text passages collected in the table, the names of the signs that appear in the copies or transliterations have been placed in parentheses, but they are very likely errors for *in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>* as evidenced in the cases in which photos are available. Furthermore, cp. Civil 1994: 106 127.

9. Cp. Attinger 2023: 744 note 2539.

10. See Steinkeller 1979: 92 3, cp. Sallaberger 2013: 108.

11. See AHw II p. 758 *našāpu(m)* “weg-, durchblasen”, CAD N/II pp. 56-57 *našāpu* “1. to blow away, to winnow; [...]” and ePSD (<http://oracc.org/epsd2/o0025268>), cp. Steinkeller 1979: 92 2, Steinkeller 2001 note 1 — “= *napāšu*” is an error for “= *našāpu*” —, Sallaberger 1993: 220 note 1050 and Sallaberger 2013: 108.

12. AHw II p. 732-733 *napāḥu(m)* “anblasen, entzünden; aufgehen” and CAD N/I p. 263-270 *napāḥu* “1. to blow (something), to hiss, [...]”, cp. Steinkeller 1979: 92 2 and Sallaberger 1993: 220 note 1050.

13. See CAD N/II pp. 185-189 *nesū*, “[...] 3. *nussū* to remove, to deport, to take far away, [...]” and ePSD (<http://oracc.org/epsd2/o0025268>), cp. Civil 1994: 96 102, Steinkeller 2001 note 1 and Sallaberger 2013: 108.

14. Translation of Johnson/Geller 2015: 144 36. Note that tuḥ in the context of beer brewing means “draff”, see e.g. CAD T p. 452-454 *tuḥhū* “1. bran, 2. draff” and Sallaberger 2012: 322 5, i.e. a sort of dregs or sediment settled in the bottom of the beer. The fact that chaff is inedible by humans is reflected in “Nanše A” in which, according to Heimpel (1981: 94-96 196, 214, comments in 118 (17), cp. Alster 1997: 471 UET 6/2 279, the mother plucked the chaff from her son’s mouth. However, note the problems posed by Attinger (2019: 116 196) for this interpretation.

b) Secondly, a connection with flour is also obvious in the administrative texts in which in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub> appears along with flour (see T I 6, 9-10, 16, 18-19, 23-25, 28-29, 33, 37, 44-45, 47, 56, 59, 61, 64) and is obtained in the mill because overseers of the mill transferred it (see T I 49, 50)<sup>15</sup> or acted as *giri<sub>3</sub>*, “responsible/conveyor”, (see T I 47) (see note 15).

Concerning the etymology, in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub> is composed of two words, the noun in and the reduplicated verbal stem bu<sub>14</sub>/bu<sub>x</sub>.

1. Contrary to the assumed opinion,<sup>16</sup> in must be differentiated from in-u/nu(d), which is equated in the lexical lists with *tibnu(m)*, “straw”.<sup>17</sup> The correspondence in = *tibnu(m)* in the lexical lists is to be interpreted as a shortened form of in-u/nu(d), as documented in the administrative texts from the Ur III period.<sup>18</sup> This difference is supported by a group of texts from Lagaš that systematically record in rather than in-u/nu(d), in the expression in de<sub>2</sub>, “to pour” straw residues (of barley/emmer), referring to barley/emmer on the demesne (that is qualified as še giš e<sub>3</sub>-a, “stick coming out {in} the grain”, i.e. “measured grain (with) the stick”).<sup>19</sup> The expression

15. Although Lu<sub>2</sub>-dingir-ra appears without profession/title in T I 50, 47 — here acting as *giri<sub>3</sub>*, “responsible/conveyor” —, he must be identified with the namesake overseer of the mill, whose profession/title is documented at least between AS 6 / - (UTI 5 3496 r. I 10<sup>1</sup>) and ŠS 2 / iv (SAT 3 1285 r. 10).

16. See e.g. Steinkeller 2001 note 1, Kogan/Krebernik 2020: 75 (P0110 and Attinger 2023: 744 note 2539).

17. See AHw III pp. 1354-1355 *tibnu(m)*, “Stroh, Häcksel” and CAD T pp. 380-385 *tibnu* “straw” and cp. Steinkeller 2001, Heimpel 2009: 191 5.3, Attinger 2023: 746 in-nu-d, Cohen 2023: 716 in(nu) (s) Ia and ePSD (<http://oracc.org/epsd2/o0031184>).

18. See e.g. BPOA 6 807: 5-6 (ŠS 3 / -) — in du<sub>3</sub>-a u<sub>3</sub> im ur<sub>3</sub>-ra, “[x] male workers) have piled straw and plastered clay” —, SAT 3 1302: 2 (ŠS 2 / -) — in-u du<sub>3</sub>-a u<sub>3</sub> im ur<sub>3</sub>-ra — and BPOA 7 1723: 1 (ŠS 3 / viii -) — 3 g<sup>i</sup>gur in-da, “measuring containers of straw” —, MVN 16 1331: 1 (ŠS 2 / i -) — 3 g<sup>i</sup>gur in-u-da —.

19. in-bi i<sub>3</sub>-de<sub>2</sub><sup>1</sup>, “whose straw residues are ‘poured’”: MVN 9 145: 2 (- / -); in-bi nu-de<sub>2</sub>, “whose straw residues are not ‘poured’”: ASJ 14 p. 242 Text 90 r. 7 (Š 47 / -), MVN 9 10: 4 (Š 47 / -) — in-na in-bi nu-de<sub>2</sub> —, OBTR 154 = CUSAS 16 87: 3 ([?] / -), MVN 9 119 r. 10' (- / -) — in nu-de<sub>2</sub> — OBTR 43 = CUSAS 16 17: 4 (- / -), MVN 9 145 r. '13' (- / -) and in de<sub>2</sub>-a, “straw residues have been ‘poured’”: ASJ 3 pp. 56-57 5: I 9 (Š 35 / i-xii -), MVN 7 108: 2 (Š 36 / v -), CT 1 pl. 2-3 94-10-15,3 r. II 20 (Š 37 / -), ASJ 13 p. 230 74: I 11 (Š 43 / -) — še in de<sub>2</sub>-a —, MVN 6 119: 6 (Š 4[4] / -), Nisaba 17 49 r. 2 (Š 45 / -), MVN 12 87: 1 (Š 46 / x -), ASJ 9 p. 334 Text 10 r. 2 (Š 47 / -), PPAC 5 928: 2<sup>1</sup> (Š 47 / -), CDLI P203826: 2 (Š 48 / -), CTPSM 1 79 r. 9 (- / i 13), ASJ 2 p. 11 24: 2 (- / -), CDLI P206320 r. 3' (- / -) OBTR 189 = CUSAS 16 18 r. 3 (- / -), MVN 11 56: 2, 6, 10, 13 (- / -). This “pouring” was done by workers on the (threshing floors of) fields: TMH NF 1/2 171: 1[6] (ŠS 5 / -), PPAC 5 1075: 1 ([] / ii -), PPAC 5 183 r. 5 (- / ii 29), CDLI P207536 r. 8 (- / iii 20) and TEL 222 r. 12 ([?] / -). The sense of de<sub>2</sub> in these passages is problematic and has been interpreted differently: “to winnow”, Civil (1994: 95-96 102), ePSD (<http://oracc.org/epsd2/o0025736>), and “to clean/to sift”, Steinkeller (2001). It has been recognized as having the same meaning as in the expressions še de<sub>2</sub> and ziz<sub>2</sub> de<sub>2</sub>, since all of these appear together in TMH NF 1/2 171: 14-1[6] and cannot mean “to winnow” because winnowing is mentioned earlier (obv. 12) in the form še mar, literally “to shovel barley”, even though Civil (1994: 96 102) interprets še mar and še/ziz<sub>2</sub>/in de<sub>2</sub> as two forms of winnowing. This fact, together with text passages in which de<sub>2</sub> clearly means “to pour”, since it is carried out for different persons, see e.g. CUSAS 20 89: 1-'7' (- / vii -), 373: 1-5 (- / -) — both of them old Akkadian; Adab — or outside the threshing floor, e.g. on a quay, CST 618: 3 (ŠS 7 / -), renders it difficult to confirm de<sub>2</sub> as “to winnow”. It is likely that de<sub>2</sub> means “to pour” indicating that the referred products were ready for further transporting/handling, cp. še de<sub>2</sub> as to pour down barley without measuring it in Sallaberger 2016: 246. However, the issue is far from being solved, since the “pouring” of grains often appears after threshing, i.e. še giš ra, “to beat (with) flails”, e.g. AAS 27 r. 1 (ŠS '6' / viii -) and Nik 2 140 r. 5 (ŠS 6 / viii -), and excepting TMH NF 1/2 171: 12, a verb for winnowing is unknown in the texts of the 3rd millennium. This raises the question of whether de<sub>2</sub> in connection to threshing floors could be used for winnowing as well, since the “poured” grain (ready for transporting/handling) had logically already been winnowed. For še giš e<sub>3</sub>-a as an expression referring to the preliminary measurement of the grain, see Civil 1994: 96-98 105. For še in locative case, see e.g. še-a giš e<sub>3</sub>-a in MVN 13 666 r. 9 (Š 46 / -) and Princeton 2 9 r. 38 (ŠS 1 / -). Further support for še giš e<sub>3</sub>-a as a grain measurement is

in  $de_2$  must have given origin to in(-nu)- $de_5$ (RI) = *iltu(m)*,<sup>20</sup> documented in lexical and literary texts, whose Akkadian form is documented in the Ur III period as *eš₃/iš-tum*,<sup>21</sup> which designated the straw residues, i.e. chopped straw/chaff, produced on the threshing floor after winnowing, thus appearing alongside straw<sup>22</sup> and being used as fodder<sup>23</sup> or for making baked bricks.<sup>24</sup>

Furthermore, one Lagaš text of this group mentions in-na, literally “in? the straw residues”, (in+locative case?) (see note 19) instead of in-u/nu-da, “in the straw”, which would be the expected form of in-u/nu(d) with the locative case.<sup>25</sup>

2. The second element of the name is the reduplicated verbal form of  $bu_{14}/bu_x$  indicating the verbal plurality, i.e. that the action represented by  $bu_{14}/bu_x$  was performed repeatedly or completely.<sup>26</sup> The meaning of  $bu_{14}/bu_x$  is to be connected with the reed object  $gi\bar{u}bu_{14}-bu_{14}/gi\bar{u}bu_x-bu_x$ , as shown by the same geographical distribution regarding the writing.  $gi\bar{u}bu_{14}-bu_{14}/gi\bar{u}bu_x-bu_x$  is documented at least from the Presargonic period (c. 2450-2340 BC) onwards and does not designate a winnowing fan as has been assumed,<sup>27</sup> but a basin for gathering the flour that falls through the sieve ( $\{gi\}ma-\{an-\}sim$ ). Therefore, it steadily appears, and often in the

found in two facts: a) royal scribes often came to Urusagrig to perform this activity in plots on the demesne (*še gana₂-gu₄ giš e₃-e₃-e-de₃ / giš e₃-a-še₃*) according to texts from Urusagrig, e.g. Nisaba 15/2 731 r. 46-47 (IS 2 / iti-*giš*[ap]lin 30), 806 r. 16-17 (IS 2 / iti-ezem-*Šulgi* 28) and b) *še giš e₃-a* appears in similar contexts to *še bal*, “to pour grain”, i.e. “to measure grain (with containers)”, e.g. Orient 55 p. 160 no. 6: 4-5 (AS 9 / -): *še giš e₃-a u₃ ma₂-a si-ga*, “(16 workers) have measured the grain (with) the stick and fill (it) in the ship”, BPOA 1 1278: 3 (SS 1 / iii -): *še bal-a ma₂-a si-ga*, “(2 workers) have measured the grain (with containers) (and) fill (it) in the ship”; Nik 2 159: 11 (Š 48 / -): *še giš e₃-a gur₇ im ur₃-ra*, “(80 workers) have measured the grain (with) the stick (and) plastered clay on the granary”, Orient 55 p. 160 no. 6 r. 2 (AS 9 / -): *še bal-a u₃ gur₇-a im ur₃-ra*, “(16 workers) have measured the grain (with) the stick and plastered clay on the granary”.

20. AHw I p. 373 *iltu* II “1) Häcksel” and CAD I/J p. 90 *iltu* B “1. chaff, husk, 2. awn”, cp. Steinkeller 2001.

21. See Steinkeller 2001, ePSD (<http://oracc.org/epsd2/o0027404>) — ITT 5 6905 is not Old Akkadian, but an Ur III text — and cp. Heimpel (2009: 191 5.3). Further attestations are MVN 17 61 r. I [18] (Š 44 / xi -) — Lagaš —, NATN 423: ‘1’ (AS 3 / v -) — Nippur —, RTC 307 r. II 3’ ([Š]S ‘8’ / ‘ii’ -) and probably ITT 2 892 r. II ‘1’ ([Š]S ‘8’ / [i]ji -) — both texts from Lagaš —.

22. AAICAB 1/4 Planche 318-319: II 32’, 35’, 37’, IV 27’-28’, VI 19’-‘20’, r. V 26-27 (Š 36 / ix -) and TCTI 2 3254: 1 (AS 7 / ix -) — Lagaš —.

23. CUSAS 40/2 628: 1-2 (SS 7 / -) — Urusagrig —. For the use of chopped straw/chaff as fodder, see e.g. Dalman 1933: 133-134 c-e.

24. TMH NF 1/2 312: 1-2 (AS 3 / iv -), cp. Steinkeller 2001 and Heimpel 2009: 191 5.3, and NATN 423: ‘1’-2 (AS 3 / v -) — both texts from Nippur —. For the use of chopped straw for making bricks, see Dalman 1933: 133-134 d and Moorey 1999: 305, cp. Heimpel 2009: 191 5.3.

25. in-u-da sa<sub>10</sub>, “(135 l of barley) paid for straw”: SAT 3 2136: 2 ([?] / [?]), cp. Wilcke 2007: 77 note 235; in-u-da im ur<sub>3</sub>-ra, “(1,555 porters/16 male workers) have plastered clay on the straw”, Nisaba 23 112 r. 2-3 (Š 42/AS 6 / -), Aleppo 196: ‘2’ (AS 2 / ix -), cp. Huber (2000: 479 (32). Note that *gur₇*, “granary”, normally occurs in locative with *im ur₃*, “to plaster clay”, see e.g. Huber 2000: 465-470 3. Note that Steinkeller (2001 note 3) mentions SAT 3 2136: 2, together with SAT 2 969: 1 (AS 6 / xii -) and SAT 3 1421: 3 (Š 4 / -), to demonstrate the existence of a product in-u/nu-da, which corresponds to that later documented in(-nu)- $de_5$ (RI) and is different from in-u/nu(d), “straw”, since in-u/nu-da cannot stand in genitive in the above mentioned texts. However, this assumption is not correct, since it is in locative in SAT 3 2136: 2, as Wilcke has shown (see above), and it must be in genitive in SAT 2 969: 1 and SAT 3 1421: 3, for which a photo is unfortunately not available: 2(AŠ?) / 3(AŠ?) *gur in-(nu-)u-da* (1;0.0 *gur-ta*), “2?/3? measuring containers of straw (each 300 l)”, referring to the well-known  $\{gi\}gur$  in-u/nu-da. Furthermore, cp. in-u (in absolute) and in-u-da (in genitive) in BPOA 7 2343: 4, 6, r. 14 (Š 40 / -) and CTNMC 35: 4, r. 9 (AS 4 / -).

26. For the reduplication of the stem as a means of verbal number and its different functions, see e.g. Edzard 2003: 79 12.5 and Jagersma 2010: 319-322 12.4.3.

27. See Sallaberger 2013: 107-108 Excurs, cp. ePSD (<http://oracc.org/epsd2/o0185567>).

same number, together with sieves.<sup>28</sup> The unique passage containing the verb bu<sub>14</sub>/bu<sub>x</sub> in the 3rd millennium, besides the product and the basin <sup>gi</sup>bu<sub>14</sub>-bu<sub>14</sub>/<sup>gi</sup>bu<sub>x</sub>-bu<sub>x</sub>, is to my knowledge the following lines in Ur-Baba's royal inscription:

RIME 3/1 pp. 18-19 Ur-Bau 5 II 7-8

sahar-bi za-gin <sub>7</sub> mu-bu <sub>14</sub> -bu <sub>14</sub>	"its earth I sifted like gems,
ku <sub>3</sub> -gin <sub>7</sub> izi i <sub>3</sub> -la <sub>2</sub>	I purified it as if it were silver". <sup>29</sup>

Ur-Baba's passage shows that bu<sub>14</sub>/bu<sub>x</sub> is a verb for sifting, so that <sup>gi</sup>bu<sub>14</sub>-bu<sub>14</sub>/<sup>gi</sup>bu<sub>x</sub>-bu<sub>x</sub> literally means "reed (basket) of the thoroughly sifted", and in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub> "thoroughly sifted straw residues", i.e. "chaff", referring, in contrast to *eš₃/iš-tum*, to the chaff (principally weed seeds, awn, stem pieces and husks) remaining after winnowing that should be cleaned before grinding.<sup>30</sup> Chaff should be differentiated from bran (*tuh*),<sup>31</sup> which is the protective outer layer of the grain of which it forms part. It is worth noting that the sense of bu<sub>14</sub>/bu<sub>x</sub> as "to sift",<sup>32</sup> is in agreement with the Akkadian equivalences *našāpu(m)*, "to blow away", *napāhu(m)*, "to blow", and *nesū* D, "to remove", (see notes 11-13), since the sieving activity involves blowing away and removing residues in order to separate them from the grain that must be left clean before milling.<sup>33</sup> Furthermore, it must be remembered that verbs appearing in connection with sieves, which are translated as "to sift", also involve actions/purposes of the sieve: *gi₄*,<sup>34</sup> "to return", *hal*,<sup>35</sup> "to divide",<sup>36</sup> and *hul*,<sup>37</sup> "to destroy".<sup>38</sup>

28. For <sup>gi</sup>bu<sub>14</sub>-bu<sub>14</sub>/<sup>gi</sup>bu<sub>x</sub> bu<sub>x</sub> as a basin for getting the products that fall through the sieve, see Martínez (2021: 13-22 3.2).

29. Translation of Edzard 1997: 19 ii 7-8, cp. Steinkeller 1979: 91-92 8 2.

30. It is noteworthy that a Spanish word for chaff is *tamo*, which is connected etymologically with *tamizar*, "to sift", and stems from Latin *tamisium*, "sieve".

31. *tuh* = *tuhhu(m)* is a general designation for any residue, see e.g. Such-Gutiérrez 2004: 307 12 and note 14 referring to the residual sediment in beer brewing. There are attestations of *tuh* in the Ur III period that clearly refer to bran, see e.g. Atiqot 4 pl. 4 r. III 9 (Š 48 / ix -) — Lagaš —, CDLJ 2015: 3 §2.34 r. 10 (ŠS 6 / i -) and CUSAS 3 1074: 3 (ŠS 6 / ix -) — GARšana —.

32. Note that the meaning of bu<sub>14</sub>/bu<sub>x</sub> as "to sift" is mentioned in ePSD (<http://oracc.org/epsd2/o0025268>).

33. See e.g. Dalman 1933: 276.

34. SAT 2 580: 1-2 (Š 48 / -) > TCL 5 5670 r. I 18-19 (AS 1 / ii -): 30 géme u₄-1-še₃ dabin-na <sup>gi</sup>ma-an-sim *gi₄-a*, "30 female worker(s) for 1 day that have 'returned' the sieves to the semolina", cp. Civil 2006: 129, and UTI 4 2406: 1-2 (ŠS 3 / -): 1 ma-an-sim zi<sub>3</sub>-gu zi<sub>3</sub>-da ma-an-sim *gi₄-gi₄-de₃*, "1 sieve (for) gu-flour in order to 'return' the sieve to the flour".

35. CM 26 pp. 206-207 43: 1-2 (ŠS 1 / -): 3 ma-an-sim *tuh us₂¹(RI)* na<sub>4</sub> *hal-de₃*, "3 sieves (for) 2<sup>nd</sup> quality draff in order to 'divide' (i.e. separate) pebbles", and BPOA 7 1960: 1-2 (ŠS 2 / -): 1 <sup>gi</sup>ma-an-sim dabir u<sub>3</sub> zi<sub>3</sub> *nig₂-dirī-ga hal-de₃*, "1 sieve (for) semolina and for (literally "in order to") 'divide' (i.e. separate) additional flour".

36. For *hal* as "to sieve", see ePSD (<http://oracc.org/epsd2/o0029858>).

37. Princeton 1 219: 1-2 (ŠS 3 / iv -): 2 <sup>gi</sup>ma-an-sim dabir zi<sub>3</sub> *nig₂-buru₁₄-ka-še₃ hul-de₃*, "2 sieves (for) semolina, for flour of 'harvest things' in order 'to destroy' (i.e. break) <>", cp. BPOA 1 1092: 1-2 (ŠS 1 / -): 5 ma-an-sim zi<sub>3</sub>-gu zi<sub>3</sub> *nig₂-buru₁₄-še₃*, "5 sieves (for) gu-flour, for flour (of) 'harvest things'".

38. It is noteworthy that the verb *sim*, which denotes *stricto sensu* "to sift", is to my knowledge only documented in the name of the sieve (<sup>(gi)</sup>ma- { an- } sim) and in the filter for the beer drinking straw (*sim gi ka₂ sur*), FAOS 15, 1/1 264: II 4 (Ukg E 1 / -), cp. Sallaberger 2013: 106 *Nik* 1 264. Furthermore, see the attestations of *sim*, "to sieve, to filter" in ePSD (<http://oracc.org/epsd2/o0038034>).

### 3. Information on *in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>* based on the Ur III texts

Excepting a few texts from Urusagrig, Drehem and of unknown provenance, *in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>* is exclusively documented in written sources from Lagaš and Umma (see T I). These texts shed light on its uses, the workers involved with it and the reed containers employed for its transport:

a) Summary texts from Lagaš (see T I 5, 13-14, 36) and Umma (see T I 48, 66) mention its issue, together with (kuš) <sup>(giš)</sup>nu-ur<sub>2</sub>-ma (also written <sup>giš</sup>UR<sub>2</sub>XKAL/A.HA), “pomegranate (skins)”, and *eš3-tum*, “chopped straw/chaff”, (as bala of the governor) (for Ur). The quantities of the listed (livestock and) products tend to be constant, probably due to the needs of the capital, as two texts dating to Š 48 and AS 1 (s. Tabelle I 5, 48) clearly show. Both texts mention, among other items, 170 l of pomegranate skins, 18,000 l of chaff and 12,900 l of chopped straw/chaff.<sup>39</sup> It may be assumed, according to the rubric in MVN 17 61 r. II 13-14 (see T I 5), that at least the chaff and the chopped straw/chaff served as animal fodder.<sup>40</sup> The consistent quantity of chaff is also found in four texts (one from Lagaš and three from Umma) that mention (as bala) either 36,000 l *nig<sub>2</sub> giš-kin-ti-še<sub>3</sub>*, “for the ‘things’ of the craftsmen(’s house)” at Ur (s. T I 3) or for *e<sub>2</sub>-ku<sub>3</sub>-dim<sub>2</sub> ur<sub>3</sub>-ra ki Lugal-ku<sub>3</sub>-zu*, “roofed” precious metal worker(’s) house (at) the place of Lugal-ku-zu”, (see T I 64), and 600 l *e<sub>2</sub>-ku<sub>3</sub>-dim<sub>2</sub>-še<sub>3</sub>*, “for the precious metal worker(’s) house”/*nig<sub>2</sub>-dab<sub>5</sub> giš-kin-ti*, “taken thing’ of the craftsmen(’s house)”, probably at Ur (see T I 51, 60). The use of the chaff in the last four texts mentioned must have been different, probably as fuel.<sup>41</sup> In connection with these withdrawals, some texts from Umma mention the shipment of chaff by 16/8 *guruš*, “male worker(s)”, for Ur (see T I 52, 55) and a trip from Lugal-ku-zu to Ur (see T I 53). One of these trips (T I 55) was made with *ma<sub>2</sub> gu<sub>4</sub> udu a<sub>2</sub>-ki-ti Uri<sub>5</sub>ki*, “ships (of) cattle (and) sheep (and) goats (for) the Akiti (feast) (of) Ur”, showing that the shipped chaff and reed were used as fodder. Other shipments/tranports of chaff made by different numbers of male workers are the following: 2 for Etana (see T I 57), 3 for Nippur (see T I 58) and 6-9 for an unspecified destination (see T I 45, 56, 59, 61). Even though the word *bala* is not mentioned referring to the chaff, we may assume that at least the transports to Ur were carried out because of the *bala* fund. The same occurs with the mention, without the annotation *bala*, of 60 l of chaff, together with different sorts of flour, in BPOA 6 1054: 1-4 (see T I 47) and of 30,000 l of chaff and 15,000 l of chopped

39. Similar quantities (120 l of pomegranate skins, 18,000 l of chaff and 12,000 l of chopped straw/chaff) appear in YOS 4 298 r. 32-34 (see T I 66). Note that Steinkeller (2001) uses the greater quantities of *in-bu<sub>14</sub>-bu<sub>14</sub>/in-bu<sub>x</sub>-bu<sub>x</sub>* than *eš3-tum* to support his thesis that the former is “chopped straw” and the latter “chaff”. However, the quantities, as shown by the similar quantities for all livestock and products listed in MVN 17 61 and Nisaba 24 8, cannot be due to their features but to other reasons such as the needs of Ur.

40. For the chaff as fodder, see CAD P p. 471 *pû B b*), and for the chaff mixed with chopped straw as forage in Palestina, see Dalman 1933: 134 e. Furthermore, see Sharlach 2004: 33-34 Gomi-Sato 536.

41. The use as fuel seems also supported by the fact that Al-la, an animal fattener, received 36,000 l of chaff for the cook Mansum (tablet)/for the craftsmen(’s house) (envelope) at Ur in OMRO 68 p. 9 Tf. 2, 1 A 99/3.31 Nr. 7 (see T I 3). Only the use as fuel could explain its mention either for the kitchen or for the craftsmen’s house. Note, however, Römer (1986: 39 Hülle 1), cp. Römer 1988: 7 7, who assumes that this chaff, mixed with clay, could have been used for sealing doors. For this use, see also CAD P p. 472 *pû B c*). It is difficult to assume the use of the chaff mixed with clay for making vessels, attested e.g. in Palestina, cp. Dalman 1933: 134 e, because no potter featured among the eight artisans at the craftsmen’s house of Ur. For the eight different artisans active in the craftsmen’s house at Ur, see e.g. the bibliography in Such-Gutiérrez 2020: 12 note 47.

straw/chaff in SNAT 536 r. I 7-8 (see T I 65) that should be interpreted as payment for the bala fund. Sharlach assumes that the chaff and chopped straw/chaff in the last-mentioned text served as fodder for Ur and Nippur (see note 40).

b) A large group of texts from Lagas (see T I 4, 6-12, 15-35, 37-44) deal with the assignment of guruš, “male worker(s)”, mainly of 1 or 2, to the place of the scribe responsible for in-bu<sub>14</sub>-bu<sub>14</sub>.<sup>42</sup> This fact, in addition to its mention in the bala (see par. 3 a), shows the importance of the chaff. These work assignments concerning chaff took place in different months of the year (ii-viii and xi-xi<sup>2</sup>), principally in the third month. These texts show the connection of in-bu<sub>14</sub>-bu<sub>14</sub> with milling, since the texts also mention assignments related to flour, sometimes in conjunction with chaff (see T I 6, 9-10, 16, 18-19, 23-25, 28-29, 33, 37, 44), especially 1 male worker (at the place of the scribe of) zi<sub>3</sub> nig<sub>2</sub>-ar<sub>3</sub>-ra imgaga<sub>3</sub>,<sup>43</sup> “flour (and) groats of husked emmer”, or 4 male workers (for) zi<sub>3</sub> eša,<sup>44</sup> “flour (and) saskû-flour”. It is noteworthy that in one text the conscription of male workers for in-bu<sub>14</sub>-bu<sub>14</sub> took place in a field (see T I 34) showing that the cleaning before grinding could be made in the field instead of the mill. The mention of chaff next to straw in a text from Drehem (see T I 1) must be interpreted in this sense.<sup>45</sup>

c) Finally, the texts from Umma mention a variety of reed baskets that, on the basis of their high capacity or the explicit mention of ships, served for fluvial transportation of the chaff: <sup>gi</sup>gur (in-u-da), “reed measuring container (of straw)”, (with a capacity of 300 l) (see T I 51, 63), <sup>gi</sup>in-bu<sub>x</sub>-bu<sub>x</sub>, “reed (basket for) chaff”, with a capacity of 180 l (see T I 62) and <sup>gi</sup>kaskal (gal) (giri<sub>3</sub> du<sub>3</sub>-a), “(big) reed trip basket (with an attached container support)”, with a capacity of 240/120 l (see T I 54, 60).<sup>46</sup>

42. The texts are usually very laconic mentioning only 1 or 2 (male workers) in-bu<sub>14</sub>-bu<sub>14</sub>. The texts exceptionally mention that 1 male worker was assigned to the place/scribe of the chaff (see T I 4, 24<sup>2</sup>, 28-29, 33) or that 30 male workers carried chaff (see T I 39). Because of the usual small number mentioned in the texts, we can assume that they were also assigned to the place of the scribe responsible for the chaff. However, note Allred (2008: 13) who assumes that in cases where only the term in-bu<sub>14</sub>-bu<sub>14</sub> appears, the assignment is for carrying it. Only one text (see T I 34) specifies that the male worker was a muhaldim, “cook”. Nevertheless, it could be that in other instances where 20 male workers from the e<sub>2</sub>-muhaldim, “kitchen”, are mentioned in the first section concerning the available workers, Fs Owen p. 169 L.6429: ‘2’ (AS 8 / ‘v’ 10+[]) and ITT 2 3503: 2 (AS 8 / v 22), the 2 workers conscripted to the chaff (see T I 7-8) stemmed from the kitchen. For these texts from Lagas concerning labor assignments, see Allred 2008: 11-14 — with previous bibliography — and Allred 2014.

43. Only ASJ 18 p. 224 HSM 6434: 17 (- / i[i] 30) mentions 2 male workers. That the scope of the assignment was to work at the scribe’s place is shown by 1 dub-sar (zi<sub>3</sub> nig<sub>2</sub>-ar<sub>3</sub>-ra) imgaga<sub>3</sub>, “1 scribe of (flour {and} groats of) husked emmer”, in ASJ 18 p. 225 HSM 6435: 18 (- / iii 14), YOS 15 105 r. 30 (- / iii 29) and PPAC 5 1637: 22 (- / iv 26). It is noteworthy that the texts MVN 11 104 r. [1]9 (- / ii 1), MCS 3 p. 13 BM 102105 r. 5 (- / ii 2) and MVN 11 83 r. 18 (- / ii 7), which mention 1 zi<sub>3</sub> nig<sub>2</sub>-ar<sub>3</sub>-ra imgaga<sub>3</sub>, “1 (male worker for) flour (and) groats of husked emmer”, do not mention labor assignments for the chaff.

44. Only 5 male workers in Fs Owen pp. 168-169 L.5652 r. 18 ([?] / [?]) and ITT 2 970 r. 3 ([?] / [?]) and 2 male workers in HLC 3 Pl. 104 175 r. 4 ([?] / [?]).

45. It is likely that the mention of 23 sieves coated with bitumen for groats (ma-an-sim nig<sub>2</sub>-ar<sub>3</sub>-ra esir<sub>2</sub> su-ba) for the threshing floor in Nik 2 231: 1-r. 2 (ŠS 6 / -) served for this scope. Cp. the cleaning of the grain either in the field or at home/in the mill before grinding in Palestina in Dalman 1933 276.

46. Note that 2 <sup>gi</sup>gur-SU<sub>7</sub>.SU<sub>7</sub> in Princeton 2 469 r. 8 (ŠS 3 / -) is actually, according to the photo in CDLI P201468, 2 <sup>gi</sup><kid> ‘NIR’-ru-um. Furthermore, ki-la<sub>2</sub>-bi 2/3 sar, “its ‘weight’ (= area) (is) 24 m<sup>2</sup>”, in the following line (r. 9) makes no sense involving a container, whereas it is well attested when referring to reed mats for covering ships.

Table I: in-bu<sub>14</sub>(ZAR)-bu<sub>14</sub>(ZAR)/in-bu<sub>x</sub>(SU<sub>7</sub>)-bu<sub>x</sub>(SU<sub>7</sub>) in the Ur III period

## A) Drehem

1	MVN 1 114: 1-r. 4	AS 8 / viii -	83;1.0 in-'bu <sub>x</sub> ?-bu <sub>x</sub> <sup>47</sup> gur 23;0.0 in-nu gur mu šu-nir u <sub>4</sub> -sakar-7 gu <sub>2</sub> -la <sub>2</sub> -a-še <sub>3</sub> 'ki? A-kal? <sup>2</sup> -[la <sup>2</sup> ] 'x?-t[a] Lugal-'ku <sub>3</sub> ?-zu šu ba-ti giri <sub>3</sub> En-igi-i <sub>3</sub> -ib <sub>2</sub> -zu
2	TUT 121: III 15'-18', VI 13-17, r. XVI 1-6	Š 28 <sup>29</sup> / [v]iii-[]	6 ebih <sub>2</sub> mangaga(KAxSA) 10 eš <sub>2</sub> !(DARA <sub>f</sub> ) kikken <sub>2</sub> mangaga (KAxSA) []+ <sup>30</sup> 60 <sup>31</sup> +50;0.0 in-bu <sub>14</sub> gur [] sa <sup>32</sup> U.EN
3	OMRO 68 p. 9 Tf. 2, 1 A 99/3.31 Nr. 7 tablet: 1-r. 1	Š 42 / xi <sup>2</sup> <sup>33</sup> - <sup>48</sup>	šu+nigin <sub>2</sub> 908;0.0 in-bu <sub>14</sub> gur šu+nigin <sub>2</sub> 679;0.0 eš <sub>3</sub> -tum gur sag-nig <sub>2</sub> -gur <sub>11</sub> -ra-kam
4	MVN 2 287: 13'-r. 2, 9	Š 46 / [vii]i <sup>2</sup> -	nig <sub>2</sub> -ŠID-ak Ur-Šu-ga-lam-ma šabra [Lu]gal-an-dul <sub>3</sub> ensi <sub>2</sub> ([PA].TE.SI) [giri <sub>3</sub> ] Ur- <sup>d</sup> Ba-ba <sub>6</sub> 120;0.0 in-'bu <sub>14</sub> -bu <sub>14</sub> ' gur lugal 'Ma'-an-sum muhaldim 'Uri <sub>5</sub> <sup>ki</sup> -še <sub>3</sub> <sup>49</sup> ki Ur- <sup>d</sup> Suen-[ta] Al-la 'kurušda' <sup>2</sup> šu ba-ti /seal of [Al]-'la' kurušda'/ 1 (guruš) dub-sar ku <sub>6</sub> -SAR 1 ki in-'bu <sub>14</sub> -bu <sub>14</sub> ' 30 e <sub>2</sub> -ŠIM
5	MVN 17 61 r. I 16-II 1, 10-18 <sup>50</sup>	Š 48 / xi -	šu? <sup>2</sup> +nigin <sub>2</sub> ? [x guru]s <sup>2</sup> gub-ba 0;2.[5 kuš <sup>giš</sup> UR <sub>2</sub> xKAL] 60;0! <sup>1</sup> .0 [in-bu <sub>14</sub> -bu <sub>14</sub> gur] 43;0.0 [eš <sub>3</sub> -tum gur]

47. See the photo in CDLI P113147.

48. The date on the envelope is Š 44 / -.

 49. nig<sub>2</sub> giš-kin-ti-še<sub>3</sub>, kišib<sub>3</sub> Al-la kurušda, Uri<sub>5</sub><sup>ki</sup>-še<sub>3</sub> appears, on the contrary, on the envelope, OMRO 66 p. 64 Tf. 6 3 A 99/3.31 (Nr. 7): 2-4.

50. See the photo in BDTNS 035309. For the text, see Sharlach 2004: 72-76 MVN 17.61 (BM 12295).

			46 <sup>1</sup> dug-lu[gud <sub>2</sub> -da]
			.
			zi-ga kilib <sub>3</sub> -ba sa <sub>2</sub> -du <sub>11</sub> -dingir-re-ne sá-du <sub>11</sub> še-ba giri <sub>3</sub> -si <sub>3</sub> -ga GU.RU.RU ša <sub>3</sub> -gal gu <sub>4</sub> -niga udu-niga ša <sub>3</sub> -gal maš <sub>2</sub> -anše u <sub>3</sub> šah <sub>2</sub> mušen še-ba giri <sub>3</sub> -si <sub>3</sub> -ga ša <sub>3</sub> e <sub>2</sub> -gal ša <sub>3</sub> Uri <sub>5</sub> <sup>ki</sup> -ma iti-1-kam bala Ur- <sup>d</sup> Lamma ensi <sub>2</sub> Gir <sub>2</sub> -su <sup>ki</sup> 1 (guruš) zi <sub>3</sub> nig <sub>2</sub> -ar <sub>3</sub> -ra imgaga <sub>3</sub> 1 ku <sub>6</sub> -SAR 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 gu <sub>2</sub> TUL <sub>2</sub>
6	MVN 11 95 r. 28-31, 35-36	AS 1 / iii 26	.
7	Fs Owen p. 169 L.6429: 10-12, r. 26	AS 8 / <sup>'v'</sup> 10+[]	šu+nigin <sub>2</sub> 141 guruš zi-ga 1 (guruš) im IL <sub>2</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub> 4 sipa anše-si <sub>2</sub> -si <sub>2</sub>
8	ITT 2 3503: 10-12, r. 10	AS 8 / v 22	.
9	TCTI 2 2796: 15-r. 17, 27-28	AS 8 / <sup>'vi'</sup> []+'15'	šu+nigin <sub>2</sub> 130 guruš gub-ba [] (guruš) im IL <sub>2</sub> 2 in-bu <sub>14</sub> '(SUG)-bu <sub>14</sub> '(SUG) 4 sipa anše-si <sub>2</sub> -si <sub>2</sub>
10	TCTI 1 949 r. 15-17, 27-28	[AS] 8 / [vi]i 24 <sup>?</sup>	.
			šu+nigin <sub>2</sub> 130 guruš gub-ba 6 (guruš) gu <sub>2</sub> -GIR 2 in-bu <sub>14</sub> -bu <sub>14</sub> 4 zi <sub>3</sub> eša
			.
			šu+nigin <sub>2</sub> 111 guruš gub-ba šu+nigin <sub>2</sub> 1 guruš ba-uš <sub>2</sub> 6 (guruš) gu <sub>2</sub> -GIR 2 <sup>'</sup> in-bu <sub>14</sub> -bu <sub>14</sub> <sup>'</sup> 4 zi <sub>3</sub> eša
			.
			[šu+nigin <sub>2</sub> x gu]ruš gub-ba

11	ASJ 18 p. 228 HSM 6495 r. 2-4, 10	AS 9 / xi 6	[šu+nigin <sub>2</sub> x guruš] ba-BAD 5 (guruš) gišma-nu IL <sub>2</sub> 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 ku <sub>6</sub> -SAR
12	ASJ 18 p. 223 HSM 6425: 17- r. 2, 15-16	AS 9 / xi <sup>2</sup> 8	. šu+nigin <sub>2</sub> 66 guruš gub-ba 5 (guruš) gišma-nu IL <sub>2</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub> 6 gu <sub>2</sub> -GIR
13	RTC 307 r. II 1'-4', V 1, 6-7 <sup>51</sup> r. 2, 15-16	[Š]S '8' / 'ii' -	. šu+nigin <sub>2</sub> 119 guruš zi-ga 1; '4'.(x) [giš?]-nu-ur <sub>2</sub> -ma gur 180;0.0 'in? -[bu <sub>14</sub> ?-bu <sub>14</sub> ?] 'gur' 41;2.3 eš <sub>3</sub> -tum gur 8 eš <sub>2</sub> ma <sub>2</sub> -gid <sub>2</sub>
14	ITT 2 892 r. I 20'-II 2', r. V 1, 6-7 <sup>52</sup>	[Š]S '9' / [i]i -	. [zi-ga] kilib <sub>3</sub> -ba . . [bala? Ir <sub>11</sub> ?]-gu <sub>10</sub> [ensi <sub>2</sub> ? Gir <sub>2</sub> -su] <sup>ki</sup> 1;3.3 gišnu-ur <sub>2</sub> -ma gur [x;0.0 in?-bu <sub>14</sub> ?-bu <sub>14</sub> ? gur] 60;0.0 eš[ <sub>3</sub> ?-tum? gu]r? 2 eš <sub>2</sub> 'ma <sub>2</sub> -gid <sub>2</sub> '
15	MVN 11 88 r. 22-27	- / ii 9	. [zi-ga] kilib <sub>3</sub> -ba . . [bala? Ir <sub>11</sub> ?]-gu <sub>10</sub> [ensi <sub>2</sub> ? Gir <sub>2</sub> ]-su <sup>ki</sup> 4 (guruš) lu <sub>2</sub> -kin-gi <sub>4</sub> -a lugal-da nig <sub>2</sub> -gu <sub>2</sub> -na il <sub>2</sub> -la 1 in-bu <sub>14</sub> -bu <sub>14</sub> 3 tu-ra 1 gu <sub>2</sub> -TUL <sub>2</sub> šu+nigin <sub>2</sub> 84 guruš zi-ga

51. See the collation in Lafont-Yıldız 1989: 194 L. 734.

52. See the collation in Lafont-Yıldız 1989: 144 L. 892.

16	MVN 11 85 r. 21-24, 28-29	- / ii 10	1 (guruš) zi <sub>3</sub> nig <sub>2</sub> -ar <sub>3</sub> -ra imgaga <sub>3</sub> 1 gu <sub>2</sub> -TUL <sub>2</sub> 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 im IL <sub>2</sub> ki Ur- <sup>d</sup> Ba-ba <sub>6</sub>
17	ASJ 18 p. 224 HSM 6434 r. 2-4, 15-16	- / i[i] 30	šu+nigin <sub>2</sub> 114 guruš zi-ga 1 (guruš) gu <sub>2</sub> -TUL <sub>2</sub> 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 ki <sup>d</sup> Utu-GIR <sub>2</sub> -gunū-gal
18	TUT 173: 18-20, r. 8-9	- / iii 4	šu+nigin <sub>2</sub> 114 guruš zi-ga 1 (guruš) zi <sub>3</sub> nig <sub>2</sub> -ar <sub>2</sub> -ra imgaga <sub>3</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 gu <sub>2</sub> -TUL <sub>2</sub>
19	JCSSS 1 p. 14 Text 1: 17-19, r. 26-27	- / iii 6	šu+nigin <sub>2</sub> 95 guruš zi-ga 1 (guruš) zi <sub>3</sub> nig <sub>2</sub> -ar <sub>2</sub> -ra imgaga <sub>3</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 gu <sub>2</sub> -TUL <sub>2</sub>
20	MVN 17 69 r. 11-13, 20-21	- / iii 7	šu+nigin <sub>2</sub> 95 guruš zi-ga 1 (guruš) im IL <sub>2</sub> ki Ka <sub>5</sub> -a-gu <sub>10</sub> 1 in-bu <sub>14</sub> '(LAGABxHA)-bu <sub>14</sub> '(LAGABxHA) 1 gu <sub>2</sub> -TUL <sub>2</sub> '(ESIR <sub>2</sub> )
21	JCSSS 1 p. 15 Text 2: 10-12, r. 27-28	- / iii 9	šu+nigin <sub>2</sub> 189 guruš zi-ga 3 guruš sipa anše-si <sub>2</sub> -si <sub>2</sub> 2 guruš in-bu <sub>14</sub> -bu <sub>14</sub> 1 guruš gu <sub>2</sub> -TUL <sub>2</sub>
22	MVN 5 240: 18-r. 2, 11-12	- / iii 12	šu+nigin <sub>2</sub> 86 guruš zi-ga 1 (guruš) gu <sub>2</sub> -TUL <sub>2</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub>

			7 gu <sub>2</sub> -GIR esir <sub>2</sub> -ra
.	.	.	.
23	CT 7 pl. 47 BM 17775: 18-r. 2, 15-16	- / iii 13	šu+nigin <sub>2</sub> 112 guruš zi-ga 1 (guruš) ku <sub>6</sub> -SAR 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 zi <sub>3</sub> nig <sub>2</sub> -ar <sub>2</sub> -ra imgaga <sub>3</sub>
.	.	.	.
24	ASJ 18 pp. 225-226 HSM 6435: 20-22, r. 19	- / ii[i] 14	šu+nigin <sub>2</sub> 106 guruš zi-ga [1 (guruš) dub-sa] <sub>r</sub> ar-za-na [1 dub <sup>?</sup> -sar <sup>?</sup> ] in-bu <sub>14</sub> -bu <sub>14</sub> [2 im I] <sub>L2</sub> e <sub>2</sub> -kišib <sub>3</sub> -ba
.	.	.	.
25	MVN 11 107 r. 23-25, 34-35	- / iii 18	šu+nigin <sub>2</sub> 177 guruš gub-ba 1 (guruš) zi <sub>3</sub> nig <sub>2</sub> -ar <sub>2</sub> -ra imgaga <sub>3</sub> 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 im IL <sub>2</sub> ki Ka <sub>5</sub> -a-gu <sub>10</sub>
.	.	.	.
26	JCSSS 1 p. 16 Text 3: 17-r. 19, 35-36	- / iii 21	šu+nigin <sub>2</sub> 141 guruš zi-ga 1 (guruš) im IL <sub>2</sub> ki A-kal-la 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 gu <sub>2</sub> -TUL <sub>2</sub>
.	.	.	.
27	STA 30 r. 1-3, 14-15	- / iii 25	šu+nigin <sub>2</sub> 116 guruš zi-ga 1 gu <sub>2</sub> -TUL <sub>2</sub> 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 ki <sup>d</sup> Utu-GIR <sub>2</sub> -gunū-gal
.	.	.	.
28	YOS 15 105 r. 27-30, 48 <sup>53</sup>	- / iii 29	šu+nigin <sub>2</sub> 141 guruš zi-ga 1 (guruš) dub-sar i <sub>3</sub> zu <sub>2</sub> -lum 1 dub-sar in-bu <sub>14</sub> -bu <sub>14</sub> 1 [dub]-sar ar-za-na

---

53. For the text, see Allred 2014.

			1 dub-sar zi <sub>3</sub> nig <sub>2</sub> -ar <sub>2</sub> -ra imgaga <sub>3</sub>
.	.	.	.
29	JCSSS 1 p. 17-18 Text 5: 13-15, 35	- / [i]ii []	šu+nigin <sub>2</sub> 188 guruš gub-ba 1 (guruš) dub-sar ar-za-na 1 dub-sar in-bu <sub>14</sub> -bu <sub>14</sub> 1 dub-sar ku <sub>6</sub> -SAR
.	.	.	.
30	CDLI P207923: 13-15, r. 7-8	- / iv 14	šu+nigin <sub>2</sub> 218 guruš gub-ba 8 (guruš) gu <sub>2</sub> -GIR esir <sub>2</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 i <sub>3</sub> zu <sub>2</sub> -lum
.	.	.	.
31	DAS 55: 13-15, r. 27-28	- / iv 18	šu+nigin <sub>2</sub> 90 guruš zi-ga 8 (guruš) gu <sub>2</sub> -GIR esir <sub>2</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 i <sub>3</sub> zu <sub>2</sub> -lum
.	.	.	.
32	PPAC 5 173 r. 1-3, r. 13-14	- / iv 25	šu+nigin <sub>2</sub> 90 guruš zi-ga 2 (guruš) ka e <sub>2</sub> -gal gub-ba 2 in-bu <sub>14</sub> -bu <sub>14</sub> 2 ki santana
.	.	.	.
33	PPAC 5 1637: 24-r. 1, 17	- / iv 26	šu+nigin <sub>2</sub> 90 guruš zi-ga 2 (guruš) dub-sar ar-za-na 1 dub-sar in-bu <sub>14</sub> -bu <sub>14</sub> 2 dub-sar giš-kin-ti
.	.	.	.
34	AAICAB 1/3 Bod. A 22 a r. 3-7, 10	- / v 12	šu+nigin <sub>2</sub> 120 guruš gub-ba [] (guruš) u <sub>2</sub> IL <sub>2</sub> anše [(x)]+`1` in-bu <sub>14</sub> -bu <sub>14</sub> šu+nigin <sub>2</sub> 20 `muḥaldim` ugula Na-du <sub>10</sub> [(x)] šu+nigin <sub>2</sub> 3 guruš ḥun-ga <sub>2</sub>
.	.	.	.
			a-ša <sub>3</sub> Inim-ma-AN.TUR

35	UDT 41 r. 15-17, 23	- / xi 5	5 (guruš) <sup>giš</sup> ma-nu IL <sub>2</sub> 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 ku <sub>6</sub> -SAR
36	ITT 5 6905: 4'-6'	[] / []	šu+nigin <sub>2</sub> 66 guruš gub-ba 3;1.5 kuš nu-ur <sub>2</sub> -ma gur 360;0.0 in-bu <sub>14</sub> -bu <sub>14</sub> gur 83;0.0 eš <sub>3</sub> -tum gur [rest lost]
37	ASJ 14 p. 334 No. 17 r. 4-6, 16-17	[?] / [?]	1 (guruš) zi <sub>3</sub> nig <sub>2</sub> -ar <sub>3</sub> -ra imgaga <sub>3</sub> 1 in-bu <sub>14</sub> -bu <sub>14</sub> 1 im IL <sub>2</sub> ki Ka <sub>5</sub> -a-gu <sub>10</sub>
38	Fs Owen pp. 168-169 L.5652: 14-r. 16, 26-27	[?] / [?]	šu+nigin <sub>2</sub> 140+[2 guruš] <sup>zi?</sup> -[ga?] 4 (guruš) sa <sub>2</sub> -du <sub>11</sub> nin 2 in-bu <sub>14</sub> -bu <sub>14</sub> 10 nig <sub>2</sub> -gu <sub>3</sub> -de <sub>2</sub> e <sub>2</sub> -gal
39	HLC 3 Pl. 104 175: 12'-r. 2	[?] / [?]	šu+nigin <sub>2</sub> 50+[x guruš zi?-ga?] 150 (guruš) <sup>giš</sup> ma-nu IL <sub>2</sub> 30 in-bu <sub>14</sub> -bu <sub>14</sub> IL <sub>2</sub> 30 ku <sub>6</sub> -SAR
40	HLC 3 Pl. 124 268 r. 3-6	[?] / [?]	1 (guruš) im IL <sub>2</sub> ki Ur- <sup>d</sup> Nanše 1 in-bu <sub>14</sub> '-bu <sub>14</sub> <sup>154</sup> 5 ma <sub>2</sub> geštin NINA <sup>ki</sup> -še <sub>3</sub> gid <sub>2</sub> -da giri <sub>3</sub> lu <sub>2</sub> -kin-gi <sub>4</sub> -a lugal
41	HLC 3 Pl. 131 322 r. <sup>1</sup> 7'-8'	[?] / [?]	1 (guruš) gu <sub>2</sub> -[TUL <sub>2</sub> /GIR (esir <sub>2</sub> -ra)] 1 i[n-bu <sub>14</sub> -bu <sub>14</sub> ] [rest lost]
42	ITT 2 970: 13-r. 1, 11-12	[?] / [?]	4 (guruš) sa <sub>2</sub> -du <sub>11</sub> nin 2 in-bu <sub>14</sub> '(SU <sub>7</sub> )-bu <sub>14</sub> '(SU <sub>7</sub> ) 10 nig <sub>2</sub> -gu <sub>3</sub> -de <sub>2</sub> e <sub>2</sub> -gal
43	MVN 22 56: 3'-5'	[?] / [?]	šu+nigin <sub>2</sub> 110 <sup>guruš</sup> [z]i?--[ga?] 1 (guruš) im IL <sub>2</sub> ki A-kal-la 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 gu <sub>2</sub> -TUL <sub>2</sub>

---

54. See the photo in CDLI P110142.

44	Nisaba 33 1041: 8'-10', r. 5-6	[?] / [?]	1 (guruš) zi <sub>3</sub> nig <sub>2</sub> -ar <sub>3</sub> -ra imgaga <sub>3</sub> 2 in-bu <sub>14</sub> -bu <sub>14</sub> 1 gu <sub>2</sub> -TUL <sub>2</sub>  .  . šu+nigin <sub>2</sub> 95 guruš zi-ga
C) Umma			
45	SET 269: 1-6	Š 45/AS 2 / xii -	6 guruš u <sub>4</sub> -1-še <sub>3</sub> in-bu <sub>x</sub> !(DUL)-bu <sub>x</sub> !(DUL) ma <sub>2</sub> -a si-ga 14 guruš u <sub>4</sub> -1-še <sub>3</sub> zi <sub>3</sub> ma <sub>2</sub> -a si-ga giri <sub>3</sub> Ur-ba /seal of Ur- <sup>d</sup> Li <sub>9</sub> -si <sub>4</sub> ensi <sub>2</sub> Umma <sup>ki</sup> /
46	SNAT 302 r. II 6-15	Š 48 / -	3 gu <sub>2</sub> sig <sub>4</sub> mun ku <sub>3</sub> -bi <> 120;0.0 in-bu <sub>x</sub> !(ZAR)-bu <sub>x</sub> !(ZAR) gur šu+nigin <sub>2</sub> 19 gin <sub>2</sub> 15 še ku <sub>3</sub> -babbar diri-[ga-am <sub>3</sub> ] la <sub>2</sub> -NI 12 [1/3 gin <sub>2</sub> 1/3 še ku <sub>3</sub> -babbar] diri la <sub>2</sub> -NI nig <sub>2</sub> -SID-a[k] Da-da-[ga]
47	BPOA 6 1054: 1-r. 1	AS 1 / -	[]+0;0.4 dabin gur [] zi <sub>3</sub> -gu gin gur 0;2.0 eša 0;1.0 in-bu <sub>x</sub> !(ZAR)-bu <sub>x</sub> !(ZAR) giri <sub>3</sub> Lu <sub>2</sub> -dingir-ra ki Ur- <sup>d</sup> Sara <sub>2</sub> -ta La-NI.MU šu ba-ti 0;2.5 kuš gišUR <sub>2</sub> XKAL
48	Nisaba 24 8 r. I 18-II 1, 15-16	AS 1 / -	60;0.0 in-bu <sub>x</sub> !(BUL)-bu <sub>x</sub> !(BUL) <sup>55</sup> gur 43;0.0 eš <sub>3</sub> -tum gur 46 dug-lugud <sub>2</sub> -da  .  [ U]ri <sub>5</sub> <sup>[ki]</sup> -ma
49	SAT 2 780: 1-4	AS 4 / -	La-NI.MU nig <sub>2</sub> -SID-a ba-na-an-zi /seal of LA-[NI] dub-[sar] <sup>56</sup> 60;0.0 in-bu <sub>x</sub> !(BUL)-bu <sub>x</sub> !(BUL) <sup>57</sup> gur ki ugula kikken-na-ke <sub>4</sub> -ne-ta Lu <sub>2</sub> -kal-la šu ba-ti

55. See the photo in BDTNS 057469.

56. LA-NI.MU sukkal appears in the transliteration of the 1st line. However, the photo in BDTNS 057469 shows only La-[NI]. Furthermore, see La-NI's three seals, in which only LA-NI appears in the 1st line, in Mayr 2005: 240 328.

57. See the photo in CDLI P143980.

50	AnOr 1 239: 1-3	AS 6 / vi -	0;1.0 in-bu <sub>x</sub> '(SU)-bu <sub>x</sub> '(SU) <sup>58</sup> ki Lu <sub>2</sub> -dingir-ra-ta kišib <sub>3</sub> Lu <sub>2</sub> -kal-la /seal of Lu <sub>2</sub> -kal-la dub-sar/
51	SAT 2 992: 1-r. 2	AS 6 / ix -	2 gi <sub>2</sub> gur 1;0.0 gur-ta in-bu <sub>x</sub> '(BUL)-bu <sub>x</sub> '(BUL) <sup>59</sup> e <sub>2</sub> -ku <sub>3</sub> -dim <sub>2</sub> -še <sub>3</sub> ki A-gu-ta Lu <sub>2</sub> -du <sub>10</sub> -ga šu ba-ti ša <sub>3</sub> bala-a /seal of Lu <sub>2</sub> -du <sub>10</sub> -ga/
52	BPOA 1 1263: 1-r. 7	AS 6 / -	16 guruš u <sub>4</sub> -2-še <sub>3</sub> Umma <sup>ki</sup> -ta kar-še <sub>3</sub> in-bu <sub>x</sub> '(ZAR)-bu <sub>x</sub> '(ZAR) ga <sub>6</sub> -ga <sub>2</sub> ma <sub>2</sub> -a si-ga x ugula Ir <sub>11</sub> -gu <sub>10</sub> kišib <sub>3</sub> nam-ša <sub>3</sub> -tam A-ra <sub>2</sub> Uri <sub>5</sub> <sup>ki</sup> -ma-še <sub>3</sub> /seal of [Ku-li] dub-sar/
53	Buffalo SNS 11/2 p. 138 8 = CDLI P107410: 1-r. 7	AS 6 / -	2 ma <sub>2</sub> 20;0.0 gur ma <sub>2</sub> -lah <sub>5</sub> -bi i <sub>3</sub> -ib <sub>2</sub> -u <sub>3</sub> a <sub>2</sub> -bi 0;0.3-ta u <sub>4</sub> -6-še <sub>3</sub> Lugal-ku <sub>3</sub> -zu-ta Uri <sub>5</sub> <sup>ki</sup> -ma-še <sub>3</sub> 2? <sup>dug</sup> sila <sub>3</sub> eš <sub>3</sub> -tum in-bu <sub>x</sub> -bu <sub>x</sub> u <sub>3</sub> gir gišgišimmar gi gišma-nu ma <sub>2</sub> bal-še <sub>3</sub> AK giri <sub>3</sub> Ur- <sup>d</sup> PA <sup>?</sup> .E.TIR kišib <sub>3</sub> nam-ša <sub>3</sub> -tam <> /seal of Ku-li dub-sar/
54	UTI 4 2685: 1-r. 4	AS 8 / vii -	3 gi <sup>g</sup> kaskal gal 0;4.0-ta esir <sub>2</sub> 'su'-ba ma <sub>2</sub> in-bu <sub>x</sub> '(ZAR)-bu <sub>x</sub> '(ZAR)-še <sub>3</sub> ki Ur- <sup>d</sup> Šul-pa-e <sub>3</sub> -ta kišib <sub>3</sub> Lu <sub>2</sub> -du <sub>10</sub> -ga /seal of Lu <sub>2</sub> -du <sub>10</sub> -ga dub-sar/
55	MVN 21 72: 1-r. 3	AS 9 / -	8 guruš u <sub>4</sub> -2-še <sub>3</sub> in-bu <sub>x</sub> -bu <sub>x</sub> ma <sub>2</sub> -a si-ga <<du <sub>3</sub> -a>> u <sub>3</sub> gi ma <sub>2</sub> du <sub>3</sub> -a u <sub>4</sub> -3-še <sub>3</sub> Lugal-ku <sub>3</sub> -zu-še <sub>3</sub> ma <sub>2</sub> diri-ga Lugal-ku <sub>3</sub> -zu-ta u <sub>4</sub> -1-še <sub>3</sub> Uri <sub>5</sub> <sup>ki</sup> ma <sub>2</sub> bal AK-a u <sub>4</sub> -4-še <sub>3</sub> ma <sub>2</sub> su <sub>3</sub> gid <sub>2</sub> -da ma <sub>2</sub> gu <sub>4</sub> udu a <sub>2</sub> -ki-ti Uri <sub>5</sub> <sup>ki</sup> ugula Ur-sag <sub>10</sub> kišib <sub>3</sub> UŠ-gu <sub>10</sub>

58. See the photo in CDLI P101230.

59. See the photo in CDLI P144192.

/seal of UŠ-gu<sub>10</sub> dub-sar/

56	ASJ 9 p. 245 21: 1-4, r. 14-15	ŠS 1 / -	45 guruš u <sub>4</sub> -1-še <sub>3</sub> [z]i <sub>3</sub> ga <sub>6</sub> -ga <sub>2</sub> [(x)]+15 guruš ninda ga <sub>6</sub> -ga <sub>2</sub> [x]+7 guruš in-bu <sub>x</sub> <sup>!</sup> -bu <sub>x</sub> <sup>!</sup> ga <sub>6</sub> <sup>!</sup> -ga <sub>2</sub>
57	BPOA 7 2296: 1-r. 11	ŠS 1 / -	[ug]ula Tab-ša-la [kiš]ib <sub>3</sub> Lu <sub>2</sub> -kal-la /seal of [L]u <sub>2</sub> -ka[l-la] dub-[sar]/ 2 guruš u <sub>4</sub> -4-še <sub>3</sub> in-bu <sub>x</sub> <sup>!</sup> (ZAR)- bu <sub>x</sub> <sup>!</sup> (ZAR) <sup>60</sup> ga <sub>6</sub> -ga <sub>2</sub> Umma <sup>ki</sup> -ta kar-še <sub>3</sub> u <sub>4</sub> -13-še <sub>3</sub> kar-ta E <sub>2</sub> -te-na-še <sub>3</sub> ma <sub>2</sub> gid <sub>2</sub> -da u <sub>3</sub> ma <sub>2</sub> gur-ra u <sub>3</sub> ma <sub>2</sub> ba-al-la ugula <sup>d</sup> Sara <sub>2</sub> -a-gu <sub>10</sub> kišib <sub>3</sub> Dingir-ra /seal of Dingir-ra dub-sar/
58	CDLI P469659: 4-r. 3	ŠS 1 / -	3 guruš u <sub>4</sub> -2-še <sub>3</sub> Nibrū <sup>ki</sup> -še <sub>3</sub> in-bu <sub>x</sub> -bu <sub>x</sub> il- la ugula Tab-ša-la kišib <sub>3</sub> Lu <sub>2</sub> -kal-la /seal of Lu <sub>2</sub> -kal-la dub-sar/
59	UTI 3 1802: 1-5, r. 12-14	ŠS 1 / -	19 guruš u <sub>4</sub> -1-še <sub>3</sub> zi <sub>3</sub> ga <sub>6</sub> -ga <sub>2</sub> 5 guruš ninda ga <sub>6</sub> -ga <sub>2</sub> 8 guruš in-bu <sub>x</sub> <sup>!</sup> (ZAR)-bu <sub>x</sub> <sup>!</sup> (ZAR) ga <sub>6</sub> -ga <sub>2</sub> 4 guruš imgaga <sub>3</sub> <sup>d</sup> Sara <sub>2</sub> -za-me ga <sub>6</sub> -g[a <sub>2</sub> ]
60	UTI 4 2330: 1-r. 8	ŠS 1 / -	ugula Ur-sag <sub>10</sub> kišib <sub>3</sub> Lu <sub>2</sub> -kal-la /seal of Lu <sub>2</sub> -kal-[la] dub-sar/ 5 <sup>gi</sup> kaskal 0;2.0-ta giri <sub>3</sub> du <sub>3</sub> -a in-bu <sub>x</sub> <sup>!</sup> (ZAR)-bu <sub>x</sub> <sup>!</sup> (ZAR) nig-dab <sub>5</sub> giš-kin-ti 'IL <sub>2</sub> <sup>!</sup> -de <sub>3</sub> ki A-gu-ta kišib <sub>3</sub> Lu <sub>2</sub> -he <sub>2</sub> -gal <sub>2</sub> ša <sub>3</sub> bala-a /seal of Lu <sub>2</sub> -he <sub>2</sub> -[gal <sub>2</sub> ] dub-[sar]/

---

60. See the photo in CDLI P290447.

61	Princeton 1 350: 1-4, r. 4-5	'Š'S <sup>!61</sup> 1 / -	41 guruš u <sub>4</sub> -1-še <sub>3</sub> zi <sub>3</sub> ga <sub>6</sub> -ga <sub>2</sub> 18 guruš ninda ga <sub>6</sub> -ga <sub>2</sub> 9 guruš in-'bu <sub>x</sub> -bu <sub>x</sub> ga <sub>6</sub> -ga <sub>2</sub> <sup>62</sup> 5 guruš nig <sub>2</sub> -ar <sub>3</sub> -ra Lugal-nig <sub>2</sub> -lagar-e ga <sub>6</sub> -ga <sub>2</sub>
62	UTI 4 2798: 1-r. 6	ŠS 2 / vii -	ugula dŠara <sub>2</sub> -a-gu <sub>10</sub> kišib <sub>3</sub> Lu <sub>2</sub> -kal-la /seal of Lu <sub>2</sub> -kal-la dub-sar/ 2 gi <sub>1</sub> in-bu <sub>x</sub> !(ZAR)-bu <sub>x</sub> !(ZAR) 0;3.0-ta 4 gi <sub>1</sub> gur-nag 0;0.1-ta ki Šeš-kal-la-ta kišib <sub>3</sub> Lu <sub>2</sub> -sag <sub>9</sub> -'ga' ša <sub>3</sub> bala /seal of Lu <sub>2</sub> -[ša <sub>6</sub> -ga] dub-[sar]/
63	Nisaba 31-2 95: 1-r. 2	ŠS 8 / -	5 gi <sub>1</sub> gur in-u-da ki A-gu-ta in-bu <sub>x</sub> !(SU)-bu <sub>x</sub> !(SU) ga-ga-de <sub>3</sub> kišib <sub>3</sub> Ab-ba-ge-na /seal of [Ab-ba-ge-na] [dub-sar]/
64	UTI 5 3274: 22'-r. 3, 11-13, 19	[] / []	0;1'.0 naga KUM 120;0.0 in-bu <sub>x</sub> !(ZAR)-bu <sub>x</sub> !(ZAR) gur 0;0.2 dabin 5 sila <sub>3</sub> zi <sub>3</sub> gu <sub>2</sub> -gal
65	SNAT 536 r. I 3-8, 10-12, 14 <sup>63</sup>	- / -	e <sub>2</sub> -ku <sub>3</sub> -dim <sub>3</sub> ur <sub>3</sub> -ra ki Lugal-ku <sub>3</sub> -zu giri <sub>3</sub> Ur-d <sup>d</sup> Dumu-zi-da
			[kišib <sub>3</sub> Ur-Šu-g]a-lam-ma ma <sub>2</sub> in-u-da-bi 1-am <sub>3</sub> ma <sub>2</sub> -lah <sub>5</sub> -bi 1-am <sub>3</sub> 1 ma <sub>2</sub> -la <sub>2</sub> -a gištir 1 ma <sub>2</sub> -la <sub>2</sub> -a giškiri <sub>6</sub> 100;0.0 in-bu <sub>x</sub> !(ZAR)-bu <sub>x</sub> !(ZAR) <sup>64</sup> <gur> 50;0.0 eš <sub>3</sub> -tum gur

61. <sup>d</sup>Šu<sup>-d</sup>Suen must be reconstructed because of the small place according to the photo in CDLI P127039 and the parallel texts in T I 56, 59 dating to ŠS 1.

62. ga<sub>2</sub> in obv. 3 is clear according to the photo in CDLI P127039.

63. For the text, see Sharlach 2004: 31-34 Gomi-Sato 536.

64. See the photo in CDLI P130296.

			šu+nigin <sub>2</sub> 160 1/2 guruš šu+nigin <sub>2</sub> 120 geme <sub>2</sub> šu+nigin <sub>2</sub> 20 ma <sub>2</sub>
66	YOS 4 298 r. 32-35, r. 43	- / -	ša <sub>3</sub> Umma <sup>ki</sup> 0;2.0 kuš gišUR <sub>2</sub> XA? HA? 60;0.0 in-bu <sub>x</sub> -bu <sub>x</sub> gur 40;0.0 eš <sub>3</sub> -tum gur Uriš <sup>ki</sup> -še <sub>3</sub> de <sub>6</sub> -a
67	Nisaba 15/2 1055: 1-r. 7	- / -	im gu-la g[e?-ne <sub>2</sub> ?]-da[m?] D) Urusagrig 20;0.0 IN.BU <sub>14</sub> .BU <sub>14</sub> GUR <i>Nu-ḥi-ilum UGULA A-ḥu-a-ḥi</i> <i>a-na 3 u<sub>4</sub>-me ip-ta-dam</i> <i>ni-iš LUGAL it-ma</i> BALA 25 BA.ZAL /seal of <i>Nu-ḥi-ilum/</i>
68	AAICAB 1/3 Bod. S 266: 1-r. 1	- / -	a-na Da- <sup>”</sup> x <sup>”</sup> IN. <sup>”</sup> BU <sub>x</sub> <sup>”</sup> .BU <sub>x</sub> KA.A.NA. <sup>”</sup> x <sup>”</sup> DE <sub>2</sub> ?.[(x)] HE <sub>2</sub> .NA.AB.SUM.MU E) Unknown provenance

#### 4. *Bibliography*

- ALLRED, L.
- 2006 *Cooks and Kitchens: Centralized Food Production in Late Third Millennium Mesopotamia* (PhD Johns Hopkins University).
- 2008 “Labor Assignments from the City of Girsu”, in: P. Michalowski (ed.), *On the Third Dynasty of Ur. Studies in Honor of Marcel Sigrist*, Boston pp. 11-19.
- 2014 “Girsu Labor Assignments Revisited”, CDLN 2014:12.
- ALSTER, B.
- 1997 *Proverbs of Ancient Sumer. The World’s Earliest Proverb Collections, Volume I-II*, Bethesda.
- ATTINGER, P.
- “2019 Nasše A”, in G. Chambon, M. Guichard and A.-I. Langlois (eds.), *De l’Argile au numérique. Mélanges assyriologiques en l’honneur de Dominique Charpin*. (PIPOAC 3), Leuven-Paris-Bristol, CT, pp. 79-123.
- 2023 *Glossaire sumérien-français principalement des textes littéraires paléobabyloniens* (Deuxième édition, revue et augmentée), Wiesbaden.
- CIVIL, M.
- 1994 *The Farmer’s Instructions. A Sumerian Agricultural Manual* (AuOrS 5), Sabadell.
- 2006 “The Song of the Millstone”, in: G. del Olmo Lete, Ll. Feliu and A. Millet Albà (eds.), *Šapal tibnim mû illakū. Studies Presented to Joaquín Sanmartín on the Occasion of His 65th Birthday* (AuOrS 22), Sabadell, pp. 121-138.
- COHEN, M.E.
- 2023 *An Annotated Sumerian Dictionary*, University Park.
- DALMAN, G.
- 1933 *Arbeit und Sitte in Palästina. Band III. Von der Ernte zum Mehl. Ernten, Dreschen, Worfeln, Sieben, Verwahren, Mahlen*, Tübingen.
- EDZARD, D.O.
- 1997 *Gudea and His Dynasty* (RIME 3/1), Toronto-Buffalo-London.
- 2003 *Sumerian Grammar* (Handbook of Oriental Studies. Section 1, Near and Middle East 71), Leiden-Boston.
- HEIMPEL, W.
- 1981 “The Nanshe Hymn”, JCS 33, 65-139.
- 2009 *Workers and Construction Work at Garšana* (CUSAS 5), Bethesda.
- HUBER, CHR.
- 2000 “*guru₇-a im Ùr-ra REVISITED*”, in: S. Graziani (ed.), *Studi sul Vicino Oriente Antico dedicati alla memoria di Luigi Cagni* (Istituto Universitario Orientale, Dipartimento di Studi Orientali, Series Minor LXI Volume I), Napoli, 463-495.
- JAGERSMA, A.H.
- 2010 *A descriptive grammar of Sumerian* (PhD, Leiden).
- JOHNSON, J.C. - M.J. GELLER, M.J.
2015. *The Class Reunion — An Annotated Translation and Commentary on the Sumerian Dialogue Two Scribes* (CM 47), Leiden.
- KOGAN, L. - KREBERNIK, M.
- 2020 *Etymological Dictionary of Akkadian. Volume 1/1: Roots beginning with P and B. Preface, Introduction and Dictionary*, Boston-Berlin.

- KOSLOVA, N.V.
- 2000 *Neusumerische Verwaltungstexte aus Umma aus der Sammlung der Ermitage zu St. Petersburg - Russland* (MVN 21), Roma.
- LAFONT, B.
- 1985 *Documents administratifs sumériens provenant du site de Tello et conservés au Musée du Louvre* (Éditions Recherche sur les Civilisations << Mémoire n° 61 >>), Paris.
- LAFONT, B. - YILDIZ, F.
- 1989 *Tablettes cunéiformes de Tello au Musée d'Istanbul datant de l'époque de la III<sup>e</sup> Dynastie d'Ur I (ITT II/I, 617-1038). Istanbul Arkeoloji Müzeleri'ndeki Tello tabletleri "III. Ur Devrine ait"* (Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 65), Leiden.
- MARTÍNEZ VALERO, S.
- 2021 *El objeto de caña <sup>gi</sup>SU7.SU7 en las tablillas económicas de la III Dinastía de Ur (c. 2112-2004 a.C.): Estudio e identificación* (Final degree project, Madrid).
- MOOREY, P.R.S.
- 1999 *Ancient Mesopotamia Materials and Industries. The Archaeological Evidence* (Winona Lake).
- OWEN, D.I.
- 2013 *Cuneiform Texts Primarily from Iri-Sagrig / Al- Šarrāki and the History of the Ur III Period. Volume II. Texts* (Nisaba 15/2), Bethesda.
- RÖMER, W.H.PH.
1986. “Keilschrifttexte im Leidener Staatlichen Altertumsmuseum II. Einige Urkunden aus der Ur III-Zeit”, OMRO 66, pp. 31-76.
- 1988 “Addenda zu einigen der in OMRO 66, 1986, 31 ff. veröffentlichten und bearbeiteten Ur III-Texte im Leidener Staatlichen Altertumsmuseum”, OMRO 68, pp. 7-12.
- RUBIO, G.
- 2006 “Šulgi and the Death of Sumerian”, in: P. Michalowski - N. Veldhuis (eds.), *Approaches to Sumerian Literatur. Studies in Honour of Stip (H. L. J. Vanstiphout)* (CM 35), Leiden-Boston, pp. 167-179.
- SALLABERGER, W.
- 1993 *Der kultische Kalender der Ur III-Zeit* (UAVA 7/1). Berlin-New York.
- 2012 “Bierbrauen in Versen: Eine neue Edition und Interpretation der Ninkasi-Hymne”, in: C. Mittermayer - S. Ecklin (eds.), *Altorientalische Studien zu Ehren von Pascal Attinger: mu-ni u<sub>4</sub> ul-li<sub>2</sub>-a-aš ga<sub>2</sub>-ga<sub>2</sub>-de<sub>3</sub>* (OBO 256), Fribourg-Göttingen, pp. 291-328.
- 2013 “Der Trinkhalm für Bier: Ein Präsargonischer Textbeleg”, RA 107, pp. 105-110.
- 2016 “Getreide messen”, in: P. Corò - E. Devecchi - N. De Zorzi - M. Maiocchi (eds.), *Libiamo ne' lieti calici. Ancient Near Eastern Studies Presented to Lucio Milano on the Occasion of his 65th Birthday by Pupils, Colleagues and Friends* (AOAT 436), Münster, pp. 237-248.
- SHARLACH, T.M.
- 2004 *Provincial Taxation and the Ur III State* (CM 26), Leiden-Boston.
- STEINKELLER, P.
- 1979 “More Evidence for the Reading bul<sub>x</sub> of LAGABxSUM”, RA 73, pp. 91-92.
- 2001 “AB-tum = èš-tum/iltu”, NABU 2001/35.

SUCH-GUTIÉRREZ, M.

2004 "Eine neue Abrechnung aus Umma und die zwei Bedeutungen von 'šim-ḥi-a'", in H. Waetzoldt (ed.), *Von Sumer nach Ebla und zurück. Festschrift Giovanni Pettinato zum 27. September 1999 gewidmet von Freunden, Kollegen und Schülern* (HSAO 9), Heidelberg, pp. 305-312.

2020 "Der Beruf su-si-(ig) im 3. Jahrtausend", JCS 72, pp. 3-21.

WILCKE, Cl.

2007 *Early Ancient Near Eastern Law. A History of Its Beginnings. The Early Dynastic and Sargonic Periods*, Winona Lake.