

Σηκώματα: Measures of Wine, Not Jars

In my article on σηκώματα (*BASP* 35 [1998] 153-8) I attempted to demonstrate that the term in Egyptian wine industry denoted "standard" measures of wine expressed in *xestai/sextarii*. The σηκώμα in physical terms was a measuring jar of some kind that was used to decant measures of wine from storage jars or wine presses into other containers. As a measure, *qua* measure, of a specific number of sextarii, σηκώματα are not to be equated with jars (e.g., knidia) that served as containers for wine or of other substances.

I note that in a recent article by N. Kruit and K.A. Worp in *APF* 45.1 (1999) 116, with part of the same information repeated in 46.1 (2000) 106, the list of "various jars with their capacities of sext." such as ἀγγεῖον and κνίδον, includes σηκώμα as a jar with a capacity of 4 to 8 sext. Also included as a jar is the term μέτρον. Viewing σηκώμα as a jar raises the question of the distinction between an amount placed in a container and the capacity of the container. The two can be the same provided that we know the capacity of the container, and that is rare, very rare.¹

In light of Kruit and Worp's article I would like to restate my opinion and to put added emphasis on the use of the term σηκώμα in the late Roman documents as an aggregate measure of wine, much as we often use the word "gallons" without reference to any specific container. We can observe this in P.Mich. inv. no. 4291 (*ZPE* 100 [1994] 272), a contract in which a vintner states that for 246 sekomata he has received in full (l. 5) "τιμὴν ... οἴνου πενταξεκταίων. The price in this instance is in terms of 5-sextarii meas-

¹ That rare case would be the tetrachoa in P.Oxy. L. 3595. See my article "The Value of the Maximian Kotyla in P.Oxy. L. 3595 and PSI XII 1252," *ZPE* 131 (2000) 167-9.

ures for a total of 246 of those measures, which would amount to 1,230 sextarii of wine. The buyer, a wine-merchant, was to provide the empty jars which could be of varying capacities.

I still maintain that the term *κήκωμα* associated with a number of *xestai*—usually 5, 6, or 8—is a measure of a stated amount of wine, not the maximum amount that a container can accommodate. In effect the term *κήκωμα* in the late documents is the equivalent of *μέτρον* with an added nuance that it is a set of "standard" measure of *xestai*. The phrases *γεουχικά κηκώματα* in *P.Oxy.* XVI 1896.19, 20, 28, and *τῷ γεουχικῷ κηκῶ[ματ]ι* in *P.Oxy.* XLIX 3512.12 emphasize that the landowners' standard *xestai*-measure was to be used. In the latter document, the number of *xestai* in that measure was not spelled out, indicating that the purchaser of 63 *xestai* of wine knew the number in the landowner's measure.

In certain instances the number of *xestai* per *κήκωμα* is not stated. This would be the case when payments were made to individuals for services rendered. It is likely that a decanting measure in the form of a jar was used to measure out a small number of *xestai* of wine from a storage jar (*πίθος*) or from the catch-basin (*ὑπολήνιον*) of a treading floor (*ληνός*) and poured into a jar which the individual brought, as can be observed in *P.Laur.* IV 185, an account that lists eighteen such distributions in terms of 1 to 35 *κηκώματα*, and in *P.Harr.* I 100 where out of twelve *ἀναλώματα*, two or three *κηκώματα* are distributed to individuals.

When we come to formal contracts, in which wine was being purchased in large amounts, the situation changes. *P.Oxy.* XVI 1896 is an agreement by eight men on the Apion estate to supply 3,000 8-sextarii estate-measures of wine (l. 19, οἴνου γεουχικά κηκώματα ὀκτάξεστα τρισχίλια) plus arrears and to deliver them to Apion's cellar. The editor translates this as "three thousand jars of wine of the estate, each containing eight *sextarii* ..." Are we to conceive of 3,000 jars lined up, each to receive 8-sextarii of wine ca. 4.4 liters which would then be conveyed to Apion's cellar? What these eight men agreed to supply was an aggregate number of measures,

namely 3,000 8-sextarii estate-measures or a total of 24,000 sextarii (ca. 13,200 liters).

That in *κηκόματα* we are dealing with aggregate measures of wine, and not jars, is made very clear in another Oxyrhynchus contract, *P.Col.* VIII 245, a loan of money to be repaid in wine. A vintner acknowledges the receipt of 10 1/3 solidi of which he will repay 7 solidi before the vintage (ll. 9-10) "at the rate of 100 5-sextarii *sekomata* per one solidus," *κατὰ ἑκατὸν κηκόμ(ατα) πενταξ(εστιαῖα) τοῦ ἐνὸς νομισμ(ατίου)*. The amount of wine covering the balance of 3 1/3 solidi would be determined "at the then known price at the vintage of Mesore of the present ninth indiction, from wine of the pressing of the tenth indiction...." The lender was obligated to furnish the empty jars (*κοῦφα*) in which the wine would be "bottled."

It should be noted that, with few exceptions such as those noted above (*P.Laur.* IV 84 and *P.Harr.* I 100), almost all the documents dealing with *κηκόματα* of wine are for large amounts, ranging from 100 to 3,000, and when multiplied by 8-, 6- or 5-sextarii represent a considerable amount of wine, between ca. 13,200 and 450 liters. I list these below in order of number of *κηκόματα* per 8-, 6- or 5-sext.

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|---|-------|-----------|
| <i>P.Oxy.</i> XVI 1896.19, 20, 28 | 3,000 | 8-sext. |
| <i>P.Mich.</i> XV 734.7 | 107 | 8-sext. |
| <i>SB</i> V 8264.12 | 500 | [6-sext.] |
| <i>P.Flor.</i> I 65.6 | 360 | 6-sext. |
| <i>P.Oxy.</i> LXI 4132.20 | 800 | 5-sext. |
| <i>P.Mich.</i> XV 743.14 | 515 | 5-sext. |
| <i>P.Mich. inv.</i> 4291.6 (= <i>ZPE</i> 100 (1994) 272) | 246 | 5-sext. |
| <i>P.Rein.</i> II 102.3 | 230 | 5-sext. |
| <i>P.Mich.</i> XI 608.2 | 200 | 5-sext. |
| <i>PSI</i> X 1122.12 | 200 | 5-sext. |
| <i>P.Heid.</i> V 358.6 | 200 | 5-sext. |
| <i>PSI</i> VIII 881.5 | 160 | 5-sext. |

In an occasional contract, the measure is not spelled out when the *κήκωμα* is well-known to the buyer and seller of wine. That is the case in *P.Oxy.* XLIV 3512, which involves the sale of "63 *sekomata* of wine measured by the estate-*sekoma*" (ll. 9-13, *κηκωμάτων τῶ γεουχικῶ ἐξήκοντα τρία*). The buyer contracts to provide the empty jars (l. 14, *κοῦ παρέχοντος τὰ κοῦφα*). *P.Oxy.* XVI 2058, a repayment for damages, calls for simply 600 *sekomata* of wine for 18 *solidi* (l. 6 [*οἴνου*] *κηκώματα X εἰς νομ. ιη*).²

How large these numbers of measures of wine were decanted into jars is not stated, but almost certainly not 8, 6, or 5 *sextarii* at a time. For a likely solution we turn to nearby Palestine and Epiphanius' treatise on weights and measures. In the Syriac version,³ Epiphanius describes a measuring vessel, termed "the drawing vessel of the wine press," that was used to decant wine. At Ascalon it consisted of 22 *sextarii*; at Azotus 18 *sextarii*; at Gaza 14 *sextarii*.⁴ If the Palestinian measuring vessel called the *Sabitha* offers a suitable analogue for Egypt, we can conceive of similar measuring vessels—dipping jars or wine skins—holding several times the enumerated *κηκώματα* which would decant wine from catch-basins (*ὑπολήνια*) into wine jars of varying capacities. This method would provide the means for calculating and keeping records of large quantities of wine.

To sum up, I believe that a case has been made to view the appearance of *κηκώματα* of wine in the late documents as wine meas-

² *P.Oxy.* XIV 1720 (IV?) is a receipt for 110 *sekomata* of wine. The text reads *οἴνου κυκώματα* (sic) *ἐκατὸν δέκα δι(πλῶν) ρι*. The *δι()* is puzzling since it is not likely that double jars were used for each *sekoma*. I suggest that the writer possibly wrote *δι* when he meant *ρι* and then repeated the correct amount *ρι*.

³ The standard Syriac edition is by J.E. Dean, *Epiphanius' Treatise on Weights and Measures: The Syriac Version*. SAOC 11 (Chicago 1935).

⁴ See my article, "Another Unreported Ascalonian Jar: The *Sabitha* / *Sapation*," *Israel Exploration Journal* 46 (1996) 258-61. The shorter Greek version reads: *Σαβιθά: Τοῦτο Κυριατικόν ἐστι τὸ ὄνομα, ὃ ἐρμηνεύεται ληνιαῖον ἀντλημα, παρὰ Ἀσκαλωνίταις ξεστῶν κβ'*.

ures in terms of a known or presumed number of xestai. Producers and buyers of wine in large quantities may calculate the amounts in terms of 5-, 6- or 8- xestai measures, but not as jars containing 5,6, or 8 sextarii (2.7, 3.3, 4.4 liters). Small amounts, it is true, may be dispensed in these numbers from measuring jars, but measuring jars generally hold capacities greater than the amount dispensed.

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