

EVIDENCE FOR VINICULTURE FROM
THE OTTOMAN TAX REGISTERS: 15TH TO 17TH CENTURY

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Abstract

This paper presents qualitative and quantitative data from Ottoman registers on viticulture and wine production in Greek regions from the fifteenth to the seventeenth centuries. Several methodological tools that will enable researchers to use this quantitative data more productively are also proposed, in the hope of encouraging fuller documentation of viticulture in Greek lands during the Ottoman period. Examples are taken also from different types of Ottoman registers from various Greek regions, such as Crete, the Cyclades, the Peloponnese, Mount Athos, Euboea, and Macedonia. Based on this initial research, the following observations can be made. Viticulture in Greek lands extended over a wide geographical area and was therefore a basic source of the tax revenues. Preference for viticulture was directly linked to the possibilities afforded commercial exploitation wine. As a rule villages in Greek lands did not specialise in viticulture, at least during the first Ottoman centuries, 15th-17th. The vine was a supplementary crop.

Keywords

Wine, viticulture, Crete, Morea, Cyclades, Eğriboz (Euboea), Macedonia, Mount Athos.

At the 1993 viticulture conference in Greece, it was suggested that the Ottoman tax registers¹ should be investigated in order to answer certain questions, such as:

– Which villages had vineyards, and which not? What can we say about the geography of viticulture in Greece?

– How much land was used for viticulture during the Ottoman period, namely what was the percentage of vineyards in relation to the total extent of cultivated land?

– How much wine did any specific area produce? How can wine production in general be established?

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¹ B. Demetriades, "Viticulture and Wine-making in Macedonia during the Ottoman Period" in: *Viticultural History in Macedonia and Thrace*, (Conference proceedings, Naoussa, 17-19 September 1993), Athens 1998, pp. 262-275 (in Greek).

I have based my research on the Ottoman survey registers (*Tapu Defterleri*) to underscore the valuable evidence that can be gleaned from this source, evidence of prime importance for the history of viticulture during the Ottoman period. Recorded in these *tahrirs*, by settlement units (villages or towns), are the taxpayers and the taxes on agricultural and urban revenues. From these sources, and especially the detailed registers (*mufassal defterleri*), it is possible reasonably to reconstruct the settlement network of a region, to estimate the size of the population, and to investigate its composition, to outline its production activity and to evaluate yields of each crop. I should add that the registers do not record evidence for various practices of cultivation, grape varieties etc. They are purely of a financial nature and demonstrate the logic of the taxation system. Consequently, they can be used to provide an estimate of the extent of cultivation. One, after all, has to know how to question these sources and draw answers from them with certainty.

I. Which villages had vineyards and which did not?

The entry for the *resm-i dönüm* (tax on vineyards per *dönüm*) or the tithe on must (*öşr-i şıra*) in Ottoman registers automatically implies vine cultivation and wine production. These registers constitute our evidence for viticulture in the provinces during the Ottoman period. The Ottoman tax registers record, village by village, the tax-paying population and the tax imposed on its produce. Many such registers were drawn up during the Ottoman occupation of Greek lands. From such a source for a region such as Serres, Drama, or Morea etc., where a census was undertaken, it is possible to map the wine-producing areas. Clearly, the tabulation alone of such data is a desideratum of great value, especially when the Ottoman tax registers from Greek lands remain almost unexploited.² The results of my research into unpublished registers of Greek lands drawn up during the 15th and 17th centuries, combined with information in other studies of the period, are presented below.

First, viticulture in Greek lands was spread over a wide geographical area and thus constituted a basic element of the tax revenue. Preference for viticul-

² This communication provided me with the opportunity (with funding from the company "Farma Atalante Agrotike S.A.") to conduct research at the Başbakanlık Arşivi in Istanbul for the region of Lokris, with emphasis on the investigation of data for viticulture during the first centuries of the Ottoman occupation. The study, entitled, "The region of Talanda and Moudounitsa in the early Ottoman period, 15th-16th century", is included in a book on the history of Lokris edited by Demetrios L. Chatzemichales (forthcoming). A counterpart study on viticulture in Megaris (a region of the kaza of Gördes in Morea) is nearing completion.

ture was directly linked to the possibilities of commercial exploitation wine, the sale of which secured the necessary income to supplement the farmers' main crops, which were cereals. A well-known saying of a 17th-century local magnate, preserved in the *Chronicle of Serres* by Papasynadinos: "Sell the grapes of one *stremma* of land [1,000 square metres] for your taxes, the grapes of another for your *haraç* and to clothe the children, and keep those of the last *stremma* for your house, for you and your children to drink".³ One third, then, of this most commercially profitable of agricultural products, wine, was destined for the market, while the remainder was distributed between tax obligations and family consumption. Most importantly, however, the custom of selling a portion of the wine produced to pay taxes is here clearly formulated.

Second, as a rule villages in Greek lands did not specialise in viniculture, at least during the first centuries of Ottoman rule. The vine was a supplementary crop, the revenue from which represented part of a total income that included corresponding revenues from cereal cultivation and animal husbandry. Analysis of the data in the 1474 Euboean register shows that villages of this island with insufficient cereal production had a higher income from viniculture, although this should not necessarily imply that wine production was higher in villages with insufficient cereal production than it was in villages where cereal production was sufficient or even constituted a surplus⁴. Spyros Asdrachas' study of published Peloponnesian registers showed that tax revenue from viniculture corresponded to 67% of revenue from cereals in the late 15th and early the 16th century; and 51% in Macedonian villages of the same period.⁵

The Ottoman registers, therefore, indicate which villages were producing wine, and allow an elementary calculation to be made of the volume of production, given that the tax on wine recorded therein is usually a percentage of the total: normally a tithe –in fact, an eighth– or a tax of the order of a fifth or a third of production. If the volume of production for a single region can be roughly established, then income from wine production can be compared with income from other agricultural activity. The registers thus provide us with indirect information on the role of viniculture in the economy of a given re-

³ Spyros Asdrachas, *Economy and Mentalities* (in Greek), Athens, Hermes editions, 1988, p. 172. See also Paolo Odorico, *Conseils et mémoires de Synadinos, prêtre de Serrès en Macédoine, XVII^e siècle* (with S. Asdrachas, T. Karanastassis, K. Kostis, S. Petmézas), Editions de l'Association "Pierre Belon" [Paris] 1996, p. 122.

⁴ Evangelia Balta, *L'Eubée à la fin du XV^e siècle. Économie et Population. Les registres de l'année 1474*, Athens 1989, p. 57.

⁵ Spyros Asdrachas, *Economie*, op. cit., p. 20.

gion during a given period.⁶ Since the wine tithe is usually recorded, viniculture can easily be classified in the tax burden of a given village. In other words, the percentage of tax charged on viniculture helps the scholar to assess the value of viniculture in relation to the total tax on corresponding produce, such as cotton and livestock products.

Calculation of production is, in most instances, hindered by the fact that the volume of the measure used to record the tithe of the *sipah* remains unknown, as does any given revenue which had to be deposited in kind. It remains a desideratum of research to record the wine measures used in Greek lands region by region, a programme which I hope will one day be realised. Even though such difficulties remain to be overcome in defining the volume of regional measures for wine production, it remains possible to deduce an approximate level of production by comparing, for a given time period, the volume of known wine measures with their rates of taxation: the latter may, consequently, act as an indicator –more or less– of the volume of a still unknown measure.⁷

The availability of the Ottoman registers makes it possible to trace the development of most Greek regions for one or two centuries, or for even longer periods of time in cases such as the Peloponnese, for which very many Ottoman registers exist. If these are combined, as they should be, with Venetian registers of the intervening period, then the entire period from the 15th to the 18th century is covered.

Moreover, these sources also provide significant information on how taxes were levied on different religious-ethnic groups. For example, in the settlements of the sancak of Eğriboz (Euboea), more specifically in the settlements of the *kaza* of İstefa (Thebes), Livadye (Livadia), Talanda (Atalante), and Mudoñça (Moudounitsa), which are described as Albanian (*Arnavudan*), tax collected from viniculture was calculated by the stremma (*resm-i bağat*); Albanian and Muslim villagers paid five aspers per *dönüm*.⁸ In contrast, the Rum (Greek) Orthodox villages were subjected to heavier taxation, paying the tithe and the *resm-i karış* on barrelled wine. On top of this, inhabitants of market towns,

⁶ Spyros Asdrachas, *Mechanisms of Rural Economy in Ottoman Period, 15th-16th Century* (in Greek), Themelio editions² 1999, p. 146-151. Evangelia Balta, *L'Eubée*, op. cit., p. 45-61.

⁷ Spyros Asdrachas, *Mechanisms*, op. cit., p. 59-60.

⁸ According to B. Demetriades, the Muslim farmers paid only the tax per *dönüm* (*resm-i bağat*), because they were, theoretically at least, forbidden to make wine, see B. Demetriades, op. cit., p. 266.

where the tithes were collected, paid a monopoly tax (*resm-i monopolye*)⁹. A Peloponnesian regulation dating to approximately the same period, namely the mid-the 16th century, states:

“And the Muslims in the entire *vilayet*, Muslims who possess vineyards give four akçe per dönüm, if they themselves planted them and they were not acquired from the Infidels; in certain localities they give five akçe. It is inscribed in the appropriate place in the registers. However, should they take grape-must and sell it, they pay the tithe. And if it is a vineyard acquired from an Infidel, they give the tithe for the land”¹⁰.

If our interpretation of the letter of this law is correct, both the Muslims of the Peloponnese and the Muslims and Albanian (*Arnavud*) villagers of Atalante and Moudounitsa were involved in limited production of grapes or some wine simply to cover their own needs. They did not, in other words, produce wine for commercial sale, and probably did not produce wine at all, and for this reason were taxed less than the Christians.¹¹

Certain articles included in legislative texts on taxation, which frequently accompany the registers, indicate indirectly that the Ottoman state actively encouraged the dissemination of viticulture. One such interesting article is recorded in the legislation for Livadia and Amphissa (Salona):

“If someone should plant a vineyard, he will pay tax of five aspers per dönüm for the first year. Later, should the vine no longer bear fruit, he should pay nothing”¹².

Systematic recording of information on viticulture and wine production contained in the tax registers of Greek lands will surely increase our knowledge of the period, and remains a task yet to be done.

⁹ For the taxes on viticulture, see J. Kabrda, “Contribution à l'étude de la rente féodale dans l'empire otoman”, I (Redevances féodales perçues sur le vin et le miel), *Sborník Prací Filosofické Fakulty Brněnské Univerzity* 10 (1963), p. 33-53.

¹⁰ (Ve cümle-i vilâyette Müslümanlar elinde bağlar eğer kendiler dikmişler ise, kim kâfirden alınmamış ola, bedel-i öşür her dönüme dörder akçe, ve bazı mahalde beşer akçe verirler. Defter mahallinde mesturdur amma, şöyle ki şıra edip satarlar, öşür vereler; ve eger kefereden alınmış bağ ise, öşür yere verirler). See J. Ch. Alexander, *Toward a History of Post-Byzantine Greece: The Ottoman Kanunnames for the Greek Lands, circa 1500-circa 1600*, Athens 1985, p. 193, 371.

¹¹ See note 8.

¹² (Ve bir kimesne bağ dikse dikdüğü yıl her dönümüne beşer akçe virür, andan sonra yemiş virmeyince nesne virmezler). See Evangelia Balta-M. Oğuz, “Le kanunname du sandjak d'Égriboz (milieu du XVIe siècle)”, *Osmanlı Araştırmaları* 18 (1998), p. 35 and 37. The article is reprinted in Evangelia Balta, *Peuple et Production. Pour une interprétation des sources ottomanes*, *Analecta Isiasiana* XLI, Les éditions Isis, Istanbul 1999, p. 147-177.

II. How much land was used for viniculture within the context of the entire amount of cultivated land?

Not all the Ottoman tax registers can answer this question. Those that can, as far as I can judge, are those for areas where Ottoman occupation succeeded Venetian occupation: e.g. the Peloponnese, Crete, the islands of Lemnos, Mytilene, Chios, and the Cyclades, where the fields and the vineyards of any given cultivator are recorded separately. In these instances, the amount of land devoted to viniculture can be calculated. Usually, the tax levied on the given areas is calculated per *dönüm*. For example, in the Peloponnese during the second Ottoman period, on the basis of the *kanunname* issued by Sultan Ahmed III, Muslims were obliged to pay a tax of twelve aspers for their vineyards, while Infidels had to pay twenty-four aspers per *stremma*. All other taxes that had in previous years been demanded were abolished, including the tithe on the must, the barrel tax, the *resm-i karış*, the wine levy etc.¹³ Indeed, I have noticed that in the Peloponnesian registers of the second Ottoman period, only the number of *dönüm* of vineyards is recorded, precisely because only a tax per *dönüm* of vineyard was being levied.¹⁴ Given that our source also records the extent of fields, the number of olive trees, mulberry bushes etc., land available for viniculture can be assessed in comparison with land available for other crops. I plan to research viniculture in the Peloponnese and to collect the relevant archival material, which I hope to investigate. Since I am not ready at this stage to speak on the extent of vineyards in the 18th - century Morea, allow me to present a parallel example: East Crete in the 17th century. Recently, while studying olive production in Crete, I worked on a type of source similar to the Peloponnesian register.¹⁵

¹³ (*Vilayet-i mezbûrede olan bağların her bir dönüm-i islamîsinden bedel-i 'öşür müslümandan on iki ve kefereden yigirmi dörder akçe bağlanub defteri 'atikde olan 'öşür-i şire ve resm-i fuçî ve resm-i karış bâc-i hamr ref' olunmuştur*). See Ö. L. Barkan, *XV ve XVI inci asırlarda Osmanlı İmparatorluğunda Ziraî Ekonominin Hukukî ve Malî Esasları*, t. I, *Kanunlar*, İstanbul 1943, p. 328.

¹⁴ For example, the registers TT no 876 (Tripolitsa), TT no 878 (Mani), TT no 880 (Arcadia, Navarino) or TT no 884 (all the Morea).

¹⁵ Evangelia Balta, "Olive Cultivation in Crete at the time of the Ottoman Conquest", *Osmanlı Araştırmaları* 20 (2000), p. 143-164.

The Tapu Tahrir no 825 was drawn up for taxation purposes immediately following the fall of Candia (Herakleion) in 1669. It records the inhabitants of East Crete and, in great detail, their property: fields, vineyards, vegetable and fruit gardens, and olive trees in the possession of each farmer in the village. The record of the villagers' landed property is followed by the total extent of cultivated land (fields, vineyards, fallow land — notably, also taxed), and finally the total number of olive trees. The tax amounts follow, recorded in units of physical and monetary value. The vineyards are divided, evidently on the base of productivity, into three categories, which are taxed respectively at 120, 60 and 30 aspers per *tzerip* (*cerib*).¹⁶ The information provided here allows us to glean an idea of the extent of vineyards in Crete in comparison to fields for cereal cultivation. It also allows us to ascertain, on the basis of the taxes recorded for both crops, the status of viniculture in the income of a 17th - century Cretan villager. Recorded in the table is the extent of cereal and vineyard cultivation in the eleven *nahiyes* of East Crete and, correspondingly, the level of tax levied on each crop. We note that the vineyards of East Crete extended over only 11% of cultivable land, but were taxed at a rate of 45% the levy on cereals. This fact clearly indicates the importance of viniculture in the island's economy. Given its date of 1669, register TT no 825 also illustrates the situation which prevailed in Crete under the Venetians, when wine constituted the island's principal product.¹⁷

¹⁶ The *tzerip* was equivalent to 60 square yards, according to the kanunname that accompanies the census of 1670: (*Ve kütüb-i şer'yyede musarrah olan her yedi kabza bir zirâ olub, altmış zirâ tulen ve altmış zirâ arzen bir cerib*), This kanunname copied in kadı court register #3 of Candia published for the first time in Greek, see N. Stavrinides, *Translations of Turkish Documents concerning the History of Crete*, (in Greek), Herakleion, Crete, vol. 1 (1975), p. 310. The Turkish text of the same kanunname, without its introduction, is included in: Ersin Gülsoy, *Girit'in Fethi ve Adada Osmanlı İdaresinin Tesisi (1645-1670)*, unpublished Ph.D thesis in Marmara Üniversitesi, İstanbul 1997, p. 267.

¹⁷ Bruno Simon, *Les relations veneto-ottomanes au milieu du XVIIe siècle: la mission de Cavalli, Bayle à Constantinople (1558-1560)*, Thèse de doctorat d'Etat, Université de Strasbourg 1987, p. 344.

TABLE 1: Cereal fields and vineyards in East Crete

nahiye	fields		vineyards	
	<i>tzerip</i>	tax (akçe)	<i>tzerip</i>	tax (akçe)
Pediada	51,738.5	1,118,415	11,465	1,294,192.5
Monophasi	54,491	1,357,590	5,947	600,570
Kainourgia	39,674.7	994,011	1,596	162,195
Pyrgiotissa	15,810.5	395,640	802	82,230
Temenos	18,939	473,620	805	82,308
Malebizi	22,883	572,370	3,771.5	378,990
Seteia	13,864.5	353,460	1,524.5	143,255
Hierapetra	11,053	276,442.5	339.25	35,640
Merambelou	16,312	389,070	2,406.5	242,490
Lasithi	6,413	192,390	759	88,260
Rizou	21,207	591,645	2,434.5	279,660

The example of Crete clearly indicates that Ottoman registers can, for certain regions, provide us with information on the extent of viticulture and help indicate the pro rata share of viticulture for the farmer.

III. How can we estimate of the extent of wine production per *stremma*?

Given that the Ottoman registers not only record villages where viticulture was practised, but also indicate the extent of the vineyards and the volume of production, I should like now to present a specific example, to show that in certain instances these sources allow the extraction of even more refined results: namely, an estimate of wine production per *stremma*. We note that no concrete information on per *stremma* output in Greek lands appears until the first decades of the 20th century.

Registers exist, such as those from the Cyclades of 1670, which record not only the extent of vineyard cultivation, but also the tax on the wine in kind and monetary value. The ratio of tax is recorded in the register to be a fifth of production. Furthermore, the volume of the measure of wine equivalent to the villagers' tax obligation is also recorded. I refer to the case of Santorini, which I worked on some time ago.¹⁸ In 1670 5,938 *dönüm* of vineyards are recorded in

¹⁸ Evangelia Balta, "Du document fiscal à l'économie agricole: les cultures à Santorin au XVIII^e s.", in Evangelia Balta, *Problèmes et approches de l'histoire ottomane. Un itinéraire*

Santorini, with a tax on production estimated at 237,880 aspers. Consequently, each *stremma* of vineyard was taxed at 40 aspers. The *mistato*, a measure of wine, corresponded in Santorini to 8 *okkas*, according to a note made by the scribe. The tax in kind is recorded as 2.5 *mistata*, or about 20 *okkas*. Since the tax was established as a fifth of production, then the *stremma* must have yielded 100 *okkas*. By way of these simple deductions, based on the above information, it can be shown that Ottomans taxed the wine of Santorini on the basis of an average annual production rate of 100 *okkas* per *stremma*.

In preparing this communication, I used the same register to calculate wine production in two other Cycladic islands. On Paros¹⁹, where the local measure of land was the *pinaki*, average wine production per annum was calculated at 135 *okkas*. The *mistato* of Paros has a volume of nine *okkas*, according to the scribe. In Syros²⁰, where the vineyards were also measured in *pinaki* and the *mistato* equalled nine *okkas*, the average annual production reached 120

scientifique de Kayseri à Eğriboz, Analecta Isisiana XXVIII, Istanbul, Isis editions, 1997, p 67-96. On the distribution of the vineyards and the average extent, see, Evangelia Balta - Maria Speliotopoulou, "Landed Property and Taxation in Santorini in the 17th Century", in: Evangelia Balta, *Problèmes et approches de l'histoire ottomane*, op. cit., p. 115-148.

¹⁹ BOA, TD no 800 of 1670 (p. 182-260) I did not take the monasteries into account, confining myself only to the settlements on Paros, where the following vineyards and wine tax was recorded.

Villages	<i>pinakia</i>	<i>mistata</i>
Paroikia	1684.5	5,053.5
Naoussa	873.5	2,620.5
Kassio	118.5	355.5
Marmara	821	2,163
Dragoula	239.5	718.5
Tsipitas	594	1,782
Leuka	494	1,482
TOTAL	4,825	14,175

The *pinaki* was taxed: $14.175 : 4825 = 2.97$ *mistata* or about 27 *okkas* (the *mistato* had a volume of nine *okkas* on Paros). Consequently, the average yield per *pinaki* was 135 *okkas* of wine, since the tax: production rate was determined at 1/5. The taxed population totalled 1,464 houses. Slot's interpretation of the same register presented a table recording only the amount of tax paid in *akçes*, which is how the population of Paros met its tax obligations. See B. J. Slot, *Archipelagus Turbatus. Les Cyclades entre colonisation latine et occupation ottomane c. 1500-1718*, Nederlands Historisch-Archaeologisch Instituut te Istanbul, Istanbul 1982, t. I, p. 302-303.

²⁰ On the basis of register TT no 800 of 1670 (p. 478-505) 1,330 *pinakia* are recorded on Syros, and a wine tax of 3,458 *mistata* is paid (the *mistato* having a volume of 9 *okkas* on that island). Consequently, the *pinaki* was taxed $3458 : 1330 = 2.6$ *mistata*, or 24 *okkas* approximately. In other words, the average wine production per *pinaki* reached 120 *okkas* of wine. The taxed population of the island was 487 households. Slot, in the case of Syros also records only the monetary value of the wine tax, see op. cit., p. 306.

okkas, according to my calculations. I concluded, therefore, that the average annual production of must in the islands of the Cyclades ranged between 130 and 175 kg.

I apologise for tiring the audience with numbers, but I want to show that these rates are not much different from those presented in statistical data for the decade 1930-1940. Thanks to the contribution of the vinologist Mrs Kourakou-Dragona, I was informed that the average per *stremma* yield of must from a traditional farm was 250 kg²¹, with a weight loss of 10% during the transformation process from must to wine. Maurice Aymard, basing his results on archive material, estimates Italian wine production in the 17th century at 21.5 hl/ha.²² Consequently, the average per *stremma* output of 150 kg of wine in the 17th-century Cyclades must be considered as the lowest yield per *stremma* of vineyard. This per *stremma* output was taken by the tax collector to be base rate for the calculation of tax on production. Such assessments can be augmented by registers of various regions, to confirm the above observations regarding the average yield of must per *stremma*.

In order to underscore the value of such information for yield per *stremma*, even by way of a rough indication of the lowest level, I shall proceed to my last example, which comes from Mount Athos. In the 1764 Ottoman census of the Holy Mountain, which I discovered in the Turkish archives, one can clearly note the predominance of the vine in proportion to other crops on the Athonite peninsula.²³ The register records, monastery by monastery, the vineyards, meadows, fields, fruit gardens, olive trees, hazelnut trees etc. I compared the extent of vineyards on Athos with the amount of wine production recorded in a Greek register of the Protaton that is contemporary with the Ottoman register. This register, dated to the second half of the 18th century, was published re-

²¹ The data given to me by Mrs Kourakou-Dragona are as follows:

<u>Year</u>	<u>average per <i>stremma</i> yield of must</u>
1933	272 kg.
1934	255
1935	329
1936	140
1937	223
1938	291

²² M. Aymard, "Rendements et productivité agricole dans l'Italie moderne", in: *Produttività e tecnologia nei secoli XII- XVII* (ed. Sara Mariotti), Florence, 1981, p. 103.

²³ On this census, see Evangelia Balta, "Landed Property of the Monasteries on the Athos Peninsula and its Taxation in 1764", *Mélanges Prof. M. Kiel*, éd. Abdeljelil Temimi, Zaghuan, October 1999, p. 135-159. This article is reprinted in: Evangelia Balta, *Peuple et production. Pour une interprétation des sources ottomanes*, Analecta Isisiana XLI, Istanbul, Isis editions 1999, p. 179-207.

cently by Ioakeim Papaggelos²⁴. Most importantly, I wanted to ascertain whether, indeed, the figures recorded represented the volume of wine production or the tax calculated on it; the total of the wine *measures* recorded in the register as produce appeared extremely small. The key to investigating the matter was provided by the ratio between the *stremma* of each monastery and the measures of wine declared as produce, shown in the following table.

TABLE 2: Average annual production on Mt. Athos (1764)

MONASTERIES	VINEYARDS	WINE PRODUCTION	AVERAGE YIELD PER STREMMMA
	<i>stremma</i>	<i>mezur</i>	<i>mezur</i>
Lavra	323	798	2,5
Vatopedi	225	1054	4,9
Iveron	199	917,5	4,6
Hilandar	128	1.526	11,9
Dionysiou	30	107	3,6
Koutloumousiou	135,5	416,5	3,1
Pantokratora	134,5	234	1,7
Zographou	58,5	445	7,6
Xeropotamos	66,5	585	8,8
Docheiariou	41,5	280	6,7
Karakalou	82	170,5	2,1
Philotheou	80	287	3,6
Esphigmenou	30	63,5	2,1
Simonopetra	10	67	6,7
Xenophontos	32	247,5	7,7
Kastamonitou	26,5	155	5,8
Stavronikita	51,5	184	3,5
Roussiko	46	133	2,9
Hag. Pavlos	22	177	8,1
Gregeriou	8	79	9,9
TOTAL	1,729,5	7926,5	4,6

Comparison, therefore, showed that the average yield of eleven monasteries lay below five measures, namely at around 65 kg of wine per *stremma*, if we accept that the measure of wine in the late 18th century was of the same volume as that in the early 20th, when Eulogios Kourilas reported that 500 measures equalled 8,000 *okkas*. Thus, the wine measure (*mezur*) on Mount Athos had a

²⁴ Ioakeim A. Papaggelos, "Vineyard and Wine in Medieval Chalkidiki", (in Greek) *History of Greek Wine* (Second Conference Proceedings, 7-9 September 1990), Cultural-Technical Foundation ETBA-PTI, Athens 1992, p. 242-254.

volume of 16 *okkas*.²⁵ Correspondingly, in seven monasteries the average production fluctuated around 155 kg, and in two monasteries, Chilandariou and Gregoriou, reached 225 kg of wine per *stremma*. The fact that in nine out of twenty monasteries average production approaches the figures for yield per *stremma* in 17th century and those of the first decade of the 20th, led me to conclude that this register did indeed record production and not tax.

I have tried to show that the Ottoman registers provide useful information on viticulture and wine production in Greek lands during the first centuries of Ottoman rule, a period we know very little about, and for which Greek sources are limited. While much significant work has certainly been undertaken on literature, art, and folklore, all of which has been used unsparingly, work on releasing the information contained in the Ottoman registers concerning the four centuries of Ottoman rule may prove equally and perhaps even more useful. Otherwise, we shall just have to continue to satisfy ourselves with the incidental information in the accounts of the travellers of the period, or simply bypass it altogether, jumping from the last Byzantine sources straight to the reports of the first agronomist, Gregorios Palaiologos of Constantinople, who was invited to Greece by Capodistrias.²⁶

“OSMANLI VERGİ DEFTERLERİNDEN ŞARAPÇILIK İLE İLGİLİ BULGULAR (15-17. YY.)”

Özet

Bu makalede Osmanlı vergi defterlerinden 15-17. yüzyıllar için üzüm ve şarap üretimi ile ilgili niteliksel ve niceliksel bulgular verilmektedir. Osmanlı döneminde Yunan illerindeki şarapçılığı da alacak çalışmaları teşvik etmek amacıyla da araştırmacıların bu niceliksel verileri kullanlarına yardımcı olabilmek üzere bazı yöntemsel araçlar da önerilmektedir.

Girit, Kikladlar, Pelopones, Makedonya, Eğriboz gibi değişik bölgeleri kapsayan çeşitli defterlerden örnekler alınmıştır.

Bu ön çalışmaya dayanılarak şu gözlemler yapılabilir: Yunan illerinde üzüm geniş bir alan üzerinde yayılmış olup vergi gelirleri açısından önemli bir kaynak teşkil etmekteydi. Üzüm üretimi doğrudan ticari şarap üretimine bağlıydı. Genellikle sözkonusu dönemde Yunan illerinde köylerde üzüm tek ürün olmayıp ancak tamamlayıcı bir niteliğe sahip idi.

Anahtar Kelimeler

Şarap, Girit, Mora, Adalar, Eğriboz, Makedonya, Aynaroz, bağcılık.

²⁵ Eulogios Kourilas Lavriotes, *Athos, Light in the darkness. Forests and Arable Land on Mount Athos, The Agriculture* (in Greek), Athens 1935, p. 140. On the variety of volumes of wine measures during the Ottoman period, see J. Kabdra, “Poids et mesures employés dans les sandjaks balkaniques aux XVIe et XVIIe siècles. (Contribution à la métrologie ottomane)”, *Sbornik Prací Filosofické Fakulty Brněnské University* 20 (1968), p. 119-120.

²⁶ Gregorios Palaiologos, *On Viticulture and wine-making. A manual for the villagers of Greece*, Athens 1836. Gregorios Palaiologos is the author of the Greek novel “He who has suffered much” (1839) published in Karamanli (Turkish with Greek characters) with the title “Temaşa-i Dünya ve Cefakâr ü Cefakeş” (1871) by Evangelinos Misaelidis. See the edition *Temaşa-i Dünya ve Cefakâr ü Cefakeş* (eds. R. Anhegger, V. Günyol), Istanbul 1988.