

## THE OLIVE TREE AND THE VINE BETWEEN TRADITION AND THE MARKET VALUE

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### Abstract

*The knowing of the cost and of the rentability of a plantation help the farmers to streamline their crops of economical point of view. For this it is necessary to make a study of economical efficiency by identifying the critical point*

**Key words:** rentability, critical point, cost, ecological, pesticides

### INTRODUCTION

Since ancient times, the olive trees and the vines have been expressions of culture and civilization. During modern era, besides historical and cultural importance, we can not neglect economic implications the two cultures have on the lives of those who grow them. Both plants have remarkable therapeutic implications, harness arid areas where other crops would be totally ineffective and through industrialization the olive oil and the wine promoting the right of origin are obtained (Brata, Anca, 2008).

Much of modern vine culture derives from the practices of the ancient Greeks. While the exact arrival of vine in Greek territory remains obscure, it was certainly known to both the Minoan and Mycenaean cultures (David, K., 2011). Many of the grapes grown in modern Greece are grown there exclusively and are similar or identical to varieties grown in ancient times. Indeed, the most popular modern Greek vine, a strongly aromatic white called retsina, is thought to be a carryover from the ancient practice of lining wine jugs with tree resin, which imparted a distinct flavor to the drink.

Evidence from archaeological sites in Greece, in the form of 6,500-year-old grape remnants, represents the earliest known appearance of wine production in Europe (Spilling, M., Wong, W., 2008). The "feast of the wine" was a festival in Mycenaean Greece celebrating the "month of the new wine." (Phillips, R., 2000) Several ancient sources, such as the Roman writer Pliny the Elder, describe the ancient Greek method of using partly dehydrated gypsum before fermentation, and some type of lime after fermentation, to reduce acidity (Sandler, M., Pinder R., 2011). The Greek writer

Theophrastus provides the oldest known description of this aspect of Greek wine making( [greekwinemakers.com](http://greekwinemakers.com)). Greek wine was widely known and exported throughout the Mediterranean basin, as amphoras with Greek styling and art have been found throughout the area (Spilling, M., Wong, W., 2008). The Greeks may have been involved in the first appearance of wine in ancient Egypt (Harrington, M., Spencer P.M., 2004). They introduced the *V. vinifera* vine (Fagan, B., 1996) and made wine in their numerous colonies in modern-day Italy (Pellechia, J., 2006) Sicily, southern France and Spain (*BBC News*, 2011). We also can say Greece is full of olive groves. The Olive Tree, "the tree that feeds the children" according to Sophocles, is the protagonist of the Greek nature and history as olive oil is the protagonist of the Greek diet. The indigenous olive tree (wild olive tree) first appeared in the eastern Mediterranean but it was in Greece that it was first cultivated ([www.discovery news](http://www.discoverynews.com)). Since then, the presence of the olive tree in the Greek region has been uninterrupted and closely connected with the traditions and the culture of the Greek people. Olive oil production held a prominent position in the Cretan Minoan and the Mycenaean society and economy as it shown by excavations and findings (earthenware jars, recordings on tablets, remains of oil mills). During the Minoan Period, olives were treated and oil was produced which in turn was stored in earthenware jars and amphorae. Quite often it was exported to the Aegean islands and mainland Greece. Apart from the financial gains, though, the olive tree was worshipped as sacred and its oil, besides being offered to the Gods and the dead, was also used in the production of perfumes, medicine and in daily life as a basic product in diet, lighting and heating ([www.history of olive](http://www.historyofolive.com)).

## **MATERIAL AND METHOD**

The study was maked in Greece on the island of Samos. The soil and climate of this island are favorable to olive culture and vine culture. Beside the olives and the wine of Samos have international recognition.

The study of economic efficiency is based on four crops having an area of 1 hectare each, as follows: 2 cultures of each species, one that uses pesticides and the other one environmental.

The study of economic efficiency has as objective the analysis of the costs. This is done by identifying critical point. Analysis of critical point is a method of determining the point where sales cover costs, a point that indicates when the farm becomes profitable (if sales exceed this point) or, on the contrary, the holding is at a loss (if sales value is below this point). For this it is necessary to find the profit (P) and the minimum quantity

(Qmin). We will calculate this variable for each species using the following formulas.

$$P_E = VT - CT$$

$$VT = CT \rightarrow P \times Q_{\min} = CT$$

## RESULTS AND DISSCUSIONS

Determining critical point is based on data related to costs, respectively revenues and on identifying minimum quantity from which the culture becomes profitable. These data are presented in the next two tables:

*Table 1*

**Comparison between ecological olive culture and the one using pesticides (1 ha)**

<b>Culture</b>	<b>Annual income €</b>	<b>All cost €</b>	<b>Net profit €</b>	<b>Q<sub>min</sub> Kg</b>
Ecological olive culture	13200	960	12240	240
Olive culture using pesticides	19800	4760	15040	1180

We can observe from the data presented that both cultures are profitable. The most profitable is the olive culture using pesticides both the differences are not major. The olive culture using pesticides costs are much higher (4760 €) than the ecological olive culture (960 €). This is a great disadvantage for the farmers who need money every year to resume production. To make the culture profitable the minimum quantity for the olive culture using pesticides must be much higher (1180 kg) than the ecological olive culture (240 kg).

*Table 2*

**Comparison between ecological vine culture and the one using pesticides (1 ha)**

<b>Culture</b>	<b>Annual income €</b>	<b>All cost €</b>	<b>Net profit €</b>	<b>Q<sub>min</sub> Kg</b>
Ecological vine culture	16200	1440	14760	480
Vine culture using pesticides	21060	5240	15820	1746

We can observe from the data presented that both cultures are profitable. The most profitable is the vine culture using pesticides both the differences are not major. The wine culture using pesticides costs are much higher (5240 €) than the ecological wine culture (1440 €). This is a great disadvantage for the farmers who need money every year to resume

production. To make the culture profitable the minimum quantity for the wine culture using pesticides must be much higher (1746 kg) than the ecological wine culture (480 kg).

## CONCLUSIONS

*The conclusions* coming from this study of economic profitability are:

- Both types of cultures are profitable;
- The total costs related to ecological cultures are lower, so in order to reach the break even point the necessary production is lower, this leading to a lower risk in covering total costs;
- Also, from an economical point of view, ecological cultures represent in both situations a viable alternative, along with other arguments such as: environment protection, socio-human implications and touring benefits.

We must not omit ecological production market trends in developed countries, which have increased in recent years with over 40% (Germany, England), countries ensuring an inflow of tourists in this region and leading the market development in this direction.

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