MARKET SEGMENTATION IN WINE TOURISM: 
A COMPARISON OF APPROACHES

Maria Alebaki
Aristotle University of Thessaloniki

Olga Iakovidou
Aristotle University of Thessaloniki

In an attempt to approach wine tourism as a form of consumer behaviour, a substantial amount of research has focused on the demand-side, exploring the consumers who travel to wine regions. Despite the fact that there is no single, stereotypical “wine tourist”, some distinctive characteristics regarding demographics, motivations or wine lifestyle can be drawn from literature. Several authors have recently addressed this issue and developed various wine tourist typologies, on the basis both of socio-economic and psychographic data. The objective of this paper is to provide a better understanding of the wine tourist, taking into account the different approaches for profiling and segmentation that have been used in recent studies.

Keywords: wine tourism, consumers, market segmentation

JEL Classification: L83, M1, O1

INTRODUCTION

Wine is an essential component for wine tourism development, since a set of tourism attracting enterprises can be built around it. However, as Mitchell (2004:13, in Mitchell, 2006) asserts: “there is more to… wine tourism than the simple consumption of a beverage (albeit a hedonistic pursuit)...this experience is not limited to the senses and emotions associated with the wine alone”. Hall (1996) and Macionis (1996) (in Hall et al., 2000:3) define wine tourism from consumers’ perspective as “visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attributes of a grape wine region are the prime motivating factors for visitors”. The above definition suggests that beyond wine and viticulture, wine tourism is “marked” by the whole wine region and its attributes, often referred as
“winescape” (Peters, 1997, cited in Hall et al., 2000). Three components constitute the winescape: the presence of vineyards, the wine production activity and the wineries where the wine is produced and stored (Telfer, 2001).

Hall & Mitchell (2002:69, cited in Sparks, 2007) discuss the concept of “tourist terroir” in order to describe “the unique combination of the physical, cultural and natural environment (that) gives each region its distinctive tourist appeal”. In fact, someone who engages in wine-related tourism, seeks for an overall tourism experience, which offers a regional “bundle of benefits” (Getz & Brown, 2006), such as the rural landscape and the appealing environment (de Blij, 1983:4), cultural heritage, festivals, romance and relaxation, exploration, (Carmichael, 2005), socialising, communing with other people, hospitality, meeting the winemaker, or learning about wine (Alant & Bruwer, 2004; Charters & Ali-Knight, 2000; Dodd, 1995). Authenticity, regional culture and gastronomy are closely linked to wine tourism. As Simon states: “Where vines flourish, McDonalds seldom does. Good authentic food is surely a prerequisite for any wine-orientated holiday, and wine and food grow up together in these [wine producing] regions” (Simon, 2001:6, in Boniface, 2003:132). For all the above reasons, wine tourism has been recognised as a form of agricultural tourism, rural tourism, cultural tourism, industrial tourism and special interest tourism (Yuan et al., 2005).

Getz (2000) argues that wine tourism should be examined from three major perspectives: wine producers, tourism agencies and consumers. Getz & Brown (2006) comment: “Wine tourism is, simultaneously a form of consumer behaviour, a strategy by which destinations develop and market wine-related attractions and imagery, and a marketing opportunity for wineries to educate and to sell their products directly to consumers”. Thus, understanding wine-related consumer behavior is vital and can achieve marketing benefits (Yuan et al., 2006; Dodds & Butler, 2010). Towards this direction, market segmentation is significant for wine tourism operators in terms of product development and marketing purposes (Mitchell et al., 2000; Williams & Kelly, 2001) as it provides an understanding of wine tourists and their behaviour.

Market segmentation has been defined as … “the process of dividing a market into distinct subsets of consumers with common needs or characteristics and selecting one or more segments to target with a distinct marketing mix” (Schiffman et al., 2001:54, cited in: Bruwer et al., 2002). Usually, market segmentation is based on socio-economic variables (gender, age, income, educational level). However, in wine tourism literature several psychographic variables are used as criteria for
segmenting. Thus, motivations, lifestyle, interests, values, personality, etc can give useful information in order to have a better insight into who exactly the wine tourist is (Galloway et al., 2008; Gronau & Kaufmann, 2009). Besides, as Bruwer et al. (2002) state, visitors with similar demographics may present considerable differences concerning their attitudes, lifestyle and wine consumer behaviour.

Through the process of market segmentation, answers for a variety of questions regarding the consumers of wine tourism maybe drawn: Do they consider a distinct group with specific characteristics compared to an average traveller in rural areas or urban centers? Does wine constitute the main reason for visiting a grape wine region? Does wine tourism apply to only one specific type of consumers? A wine lover may visit a winery with his friends, or family, who do not share the same interest in wine. Moreover, there is a variety of reasons for visiting a wine region, such as the rural setting, which may not be directly and exclusively related to wine consumption. All these considerations engage both academics and wine tourism stakeholders to further research.

Within this context, the objective of this paper is to provide a useful insight into the types of visitors engaged in wine tourism as well as to identify their specific characteristics. In particular, a comparison of approaches concerning wine tourism profiling and segmentation is provided. Identifying similarities and differences among wine tourists, both in Europe and in the New World countries has practical implications for both national and regional tourism authorities in order to meet customer needs and to improve customer service.

**SKETCHING A GENERAL PROFILE OF THE WINE TOURIST**

Approximately two thirds of wine tourism literature comes from Australia and New Zealand, while a large amount of research comes from Canada and the USA (Mitchell & Hall, 2006). Research in relation to wine tourists is well developed, despite the fact that studies on wine tourism policy and economics are in early stage (Goldberg & Merdy, 2006). However, only after 1995 academics began to focus on the wine tourist, while it is important to stress that in many cases information has been gathered from the wineries’ perspective (supply – side research) rather than from the wine tourism consumers themselves (Mitchell et al., 2000; Tassiopoulos et al., 2004). Moreover, a substantial amount of research deals with winery visitors and their relationship with special issues concerning specific tourism products or services and does not investigate wine tourists in general (Williams & Kelly, 2001).
Descriptions that refer to wine tourists before 1995 vary and in some cases are not flattering. Spawton (1986:57 in Macionis & Cambourne, 1998:42) describes them as “mobile drunks”, McKinna (1987:85 in Macionis & Cambourne, 1998:42) refers to wine tourist as “the passing tourist trade who thinks a ‘winery crawl’ is just a good holiday”, while, a milder description that has been given is “wine connoisseur” (Edwards, 1989 in Macionis & Cambourne, 1998:42). Folwell & Grassel (1995:14, in Mitchell et al., 2000) give some more information about the wine tourist’s profile, arguing that the visitor of wineries in Washington state during the late of 1980’s is “middle-aged with an above average income”. Dodd (1995) asserts that a winery visitor is generally of higher educational level and income comparing to an average traveller. According to the South Australian Tourism Commission (1997, in Charters & Ali-Knight, 2002), wine tourism appeals to “couples with no children and those with higher education and incomes in professional occupations”. Mitchell et al. (2000), after a preview of the existing literature mainly basing on studies in Australia, New Zealand and the U.S.A., arrive at the following description: “(the wine tourist) is usually 30-50 years of age, in the moderate to high income bracket and comes from within or in close proximity to the wine region itself”. More recently, Treloar et al. (2004), pinpoint several similarities in previous studies regarding the winery visitor, which they describe as “predominantly female, generally university or higher educated and with a slightly higher than average income...usually domestic or intrastate traveller who has some experience with wine or wine education”.

In Australia, as Charters & Ali-Knight (2000) state, the winery visitor in Margaret River and Swan Valley is mainly female (53,7%), young (under 47 years old) and comes from the metropolitan area of Perth. Likewise, O’Neill & Palmer (2004) suggest that the winery visitor in Western Australia is female, young (under 44 years of age), with a managerial or professional occupation, well-educated and comes from Australia. More recently, O’Neill & Charters (2006) also come to the same conclusion, describing winery visitors in Margaret River as “mainly young females, who are highly educated”.

According to the New Zealand Ministry of Tourism (2007, cited in McDonnell & Hall, 2008), wine tourists in New Zealand are international and domestic visitors, aged 15 years old and over, who visit a winery at least once when travelling in New Zealand. Moreover, between 2001 and 2006, international visitors increased in an annual average growth rate of 16%. During the same period, the number of domestic visitors has been almost cut in half. Similarly, while in 1999 there was a low percentage of
international tourists who lived overseas (16%) (Mitchell, 1999, cited in Alonso et al., 2007b), a recent research (Alonso et al., 2007b), indicates almost 20% growth in international tourist numbers. The above considerations emphasise the enormous potential of wine tourism development in New Zealand.

Research carried out in Texas (Kolyesnikova et al., 2007) suggests that wine tourists are young females (less than 51 years old), in high levels of education and occupation that usually belongs to the following categories: professional/technical (engineers, architects, lawyers, doctors etc) and executive/managerial (accountants, managers, administrators etc). Carmichael (2005), while investigating the winery visitors’ characteristics in Niagara region, Ontario-Canada, states that the Canadian winery visitor’s profile is quite similar compared to the general winery visitor’s profile, as described in the New World countries. In particular, visitors in Canadian wineries are mainly couples, middle-aged, highly educated, high income and professional workers. The majority of visitors are domestic travellers coming from regions in close proximity to the wine area.

Brown & Getz (2005) explored wine consumers’ attitudes concerning wine tourism in Calgary of Canada. Specifically, the links between wine preferences and propensity to travel to specific wine regions were investigated. The above research is consistent to Carmichael’s (2005) findings in the same country. In fact, winery visitors in Canada were found to be mainly females, middle-aged (average age: 49 years), married, highly educated and with higher incomes. A third study in British Columbia, conducted by Williams & Kelly (2001), describes wine tourists as: “of a middle income, moderately well educated and females, empty nester, baby boomers”.

In South Africa, results of a research carried out by Tassiopoulos et al. (2004) suggest that wine tourists are mostly females, young (less than 35 years), single, without children and with a professional occupation. Also, they are usually day-trip tourists and travel in a party of 2.1 persons. Only 9.1% of them are international, while they mainly come from Cape Town metropolitan area. More recently, Tassiopoulos & Haydam (2006) argued that wine tourism in South Africa includes day trips and wine tourists use their own mode of transport.

Winemaking activity has a long tradition in Europe and over 60% of all world wine is produced there. Furthermore, France is the world’s number one destination. However, research concerning the wine tourist’s profile and characteristics is relatively inchoate (Charters & Carlsen,
A review from four European countries (France, Italy, Spain and Greece) is presented in the current article.

Wine tourists in France usually visit wine regions in winter months and less frequently during the summer season (May to September). Wine-related holidays are usually short-term. Thus, wine tourism applies mainly in domestic travellers, who prefer to organise their vacation out of the main summer season. Contrarily, foreign visitors are more likely to be attracted in the summer season, because holiday is longer and wine can be mixed with other tourist activities (Frochot, 2000:79). According to another research in Alsace (Waller, 2006), only 40% of visitors stay overnight. Guzman et al. (2008) found that a typical wine tourist in Southern Spain is between 50-59 years old, middle/high income and usually travels with family. According to Gatti & Maroni (2004), the wine tourist in Italy is mainly young, foreign male. In addition, female wine tourists in Italy are usually younger than male. As Gatti (2001) states: “Foreign tourists are usually the most organised ones. They take advantage of specialised magazines and guides on Italy”.

As far as Greece is concerned, there is a lack of official data regarding wine tourism. However, according to a relative research conducted by the Association of “the Greek Women of Wine” (Triantafyllou – Pitsaki, 2005) and based on winemakers’ perceptions, this form of tourism so far seems to apply particularly to the domestic market. In fact, domestic travellers constitute more than 70% of the total number of winery visitors in Northern, Central and South Greece, while their common characteristic is their strong interest in wine. It is important to point out that there is a high percentage of international winery visitors in the insular regions and that results to an increased percentage of international tourists at a national level. However, it is possible that visitation to islands is a part of an organised vacation in the framework of mass tourism. Thus, a winery tour seems to be a collateral activity. Sketching the winery visitors’ socio-economic profile in Greece, based on a recent study in the Macedonia region, Alebaki & Iakovidou (2006) argue that the average winery visitor is male, young, has high levels of education and medium-high income, is either civil servant or employee and comes from urban centers in close proximity to the wine region.

An extensive literature has suggested that demographic variables have a great impact on wine tourism behaviour (Bruwer, 2002a; Mitchell, 2002; Treloar et al., 2004). Dodd & Bigotte (1997), using cluster analysis, segmented visitors in Texas wineries on the basis of age and income. It was found that younger respondents were more critical of their winery experience and rated service quality in winery as the most important
factor of visitor satisfaction. Charters & Fountain (2006) found evidence that while older people give an emphasis to the product itself, for younger wine tourists the overall experience and the received services are more important than the quality of wine. Alonso et al. (2007a) pinpointed differences among different age groups of winery visitors in New Zealand in several dimensions, such as wine knowledge, product involvement and winery expenditures. Specifically, it was found that older visitors have greater wine knowledge as well as interest in wine than younger respondents, and although they earn lower incomes, they have higher expenditures at the winery.

**WINE TOURIST’S PSYCHOGRAPHICS: MOTIVATIONS AND WINE LIFESTYLE**

As discussed, a deep comprehension of the nature of the wine tourists and their needs is a precondition for a successful marketing of the wine tourism destination and product (Macionis & Cambourne, 1998, cited in Mitchell et al., 2000). Thus, as wine tourism development has been increasingly international, one of the major themes expressed in literature was the need to better understand the nature of wine tourist (Brown & Getz, 2005). Many researchers have proposed a wide range of segments, based on demographic, socio-economic and psychographic characteristics, with important implications for wine tourism product development. As Charters & Ali-Knight (2002) admonish: “...in practical terms (that is for the winery), segmentation maybe the most important aspect of the wine tourist as a consumer, but - in order to be possible- it is necessary to consider briefly the motivation of visitors to wine regions”.

Kay (2003) states that there are four main theoretical approaches to tourist motivation, each of these being based upon earlier motivation theories from other consumer behaviour research: needs-based motivation, value-based motivation, benefits sought or realised and expectancy theory based motivation. In addition to the above approaches, another approach distinguishes motivations into push and pull factors. Pull factors (or external motivations) draw the visitor to the winery and include general characteristics or activities of the winery (wine tasting and buying, tours, eating at the winery and rural setting). Push factors are internal motivations that drive an individual to visit the winery (socialising, learning about wine, relaxation and meeting the winemaker) (Mitchell et al., 2000; Yuan et al., 2005).

Getz and Brown (2006) point out that the experience of wine tourism includes three core dimensions, which they label the “core wine product”,
the “core destination appeal”, and the “cultural product”. These findings are supported by Sparks (2007), who proposed the following three dimensions: the “destination experience”, the “core wine experience” and the “personal development”. While “destination experience” and “core wine experience” are pull factors, “personal development” is considered to be an internal motivation (push factor) and is strongly related to the desire to seek information about wine.

A basic distinction between wine tourists based on motivations was introduced by Johnson (1998:15, in Galloway et al., 2008). Using as a main criterion the purpose of the visit, he distinguishes two types of wine tourists: The “specialist winery tourist” and the “generalist” visitor. The first type refers to someone who “visits a vineyard, winery, wine festival or wine show for the purpose of recreation and whose primary motivation is a specific interest in grape wine or grape wine-related phenomena”, while the second type includes those that are primarily motivated to visit a wine region for other reasons. Wine tourists’ motivations were also the basis for the segmentation applied by Gatti & Maroni (2004), who conducted a more recent study in Italy. Using Multiple Correspondence Analysis (MCA), they classified wine tourists into four distinct groups: 1) The “Professional”, 2) the “Cultured”, 3) the “Enthusiastic” and 4) the “Wine Tourist by Change”.

In an attempt to segment winery visitors in the Macedonia region, Alebaki & Iakovidou (2006), used two-step cluster analysis, based both on demographics and winery visitors’ motivations. The findings showed four distinct types of visitors who engage wine tourism in Greece: 1) the “Wine lovers”, who are usually highly educated and high income and whose prime objectives for visiting the area are: visiting the winery, meeting the winemaker and learning more about wine and wine making, 2) the “Neophytes”, who are mainly low-income students with a special interest in wine and visiting the winery is their major incentive, 3) the “Occasional Wine Tourists”, who are not interested in learning about wine, but are attracted by the local gastronomy and 4) The “Hangers-on”, who are not interested in wine or wine making, they are not wine consumers in general and for them, a vineyard or a winery is just another tourist attraction. It is of utmost importance to be stressed, that for the ‘hangers-on’, the membership of a winery in the project: “Wine Roads of Northern Greece” is an important factor and can become a motive for visiting it.

Wine tourism researchers have also demonstrated a strong interest in wine lifestyle as a characteristic which can be used in segmentation. The latter includes wine interest, wine cellaring behaviour and wine club
participation (Alonso et al., 2007b; Mitchell et al., 2000). For instance, lifestyle components, such as wine knowledge, motivations and wine behaviour were used as a basis for segmenting the wine tourists in Italy. According to the Movimento del Turismo del Vino, four groups emerge: 1) The “Professional”, 2) the “Impassioned Neophyte”, 3) the “Hanger-on” and 4) the “Drinker” (Coriglano, 1996). Following the same approach, Macionis & Cambourne (1998:44, in Cambourne & Macionis, 2000:88), used data from a previous research in Australia (Roy Morgan Holiday Tracking Research, 1996) in order to create a “wine tourism portfolio”. The latter classifies wine tourists into ten “value segments”, using as criteria socio-economic variables as well as values, beliefs and the general lifestyle. According to Cambourne & Macionis (2000:89), the groups: “Visible Achievers”, “Socially Aware”, “Traditional Family Life” and “Young Optimists” constitute the majority of winery visitors and “appear to be the most appropriate target markets for wine tourism marketers and practitioners”.

Knowing the level of interest in wine of wine tourists is of high importance (Mitchell et al., 2000: 124). Therefore, using the interest in wine as criterion, Ali-Knight & Charters (1999) segmented wine tourists in two categories: the “Casual Tourists”, who just want to taste wine and nothing else and the “Sophisticated Drinkers”, who seek to gather as much information as they can about the product. However, it should be mentioned that this study is supply-focused and is based on the winemakers’ perceptions. This “intuitional approach”, has been also adopted by Hall (1996, cited in Hall & Macionis, 1998). The segmentation, using as a basis both tourists’ motivations and their interest in wine, resulted in three primarily segments: 1) The “Wine Lover” (who is similar to the “Specialist” of Johnson’s typology), 2) the “Wine Interested” and 3) the “Curious Tourist”.

Charters & Ali-Knight (2002) built upon Hall’s typology and approached the issue from a demand –side (consumer perceptions). They segmented wine tourists on the basis of their lifestyle (wine knowledge, interest in wine motivations for visiting the wine region). Five groups emerged: 1) The “Wine Lover”, who has a desire to seek education about wine, 2) the “Connoisseur” (which is a sub-set of the wine lover), 3) the “Wine Interested” and 4) the “Wine Novice” (correspondingly to the curious tourist). They also added a small group that consists of the “Hangers-on”. The same study proposes a model that consists of three dimensions: purpose of visit, general tourist motivation and relationship to other tourist activities.
In some cases, it is asked from wine tourists to classify themselves regarding their knowledge about wine (“Advanced”, “Intermediate” or “Basic”) (Maddern & Colledge, 1996). However, according to Charters & Ali-Knight (2002), “the problem with knowledge is that it is only suggestive of the respondent’s motivation as a wine tourist and it is difficult to quantify”. Therefore, O’Mahony et al. (2006) use as a criterion the involvement in the wine product category and classify wine tourists in three segments: 1) the “Committed Consumer”, 2) the “Traditional Consumer” and 3) the “Uninvolved Consumer”.

A part of research (Bruwer, 2002b; Houghton, 2001, 2008; Juan et al., 2005, 2006; Weiler et al., 2004) was focused exclusively on the characteristics of a particular group of wine tourists: those who attend wine festivals. The latter have been defined by Yuan et al. (2005) as “a special occasion that attendees actively engage in for the satisfaction of their interest in wine and/or for the entertainment made available by other leisure activities”. For instance, Houghton (2008) used Hall’s (1996) classification as a basis for distinguishing distinct wine festival customers’ types. The study, based on K-Means cluster analysis suggested that wine festivals attract many different types of visitors and there is the same possibility to attract “… a serious wine drinker along with a novice”. Cluster analysis that has also been used by Juan et al. (2006) on the basis of motivations, produced three distinct groups named as: the “Wine Focusers”, the “Festivity Seekers” and the “Hangers-on” (who showed no interesting in anything at the festival). Each category includes visitors who emphasise in different activities or products when attending a festival.

CONCLUSIONS

The first conclusion that arises from this study results from the examination of the wine tourist’s demographics. In particular, when wine tourists between “Old” and “New World” countries are compared, distinctive differences concerning gender are evident. In the New World countries, the typical wine tourist is usually female, while in Europe it appears to be a male. The above consideration is highly important, because, as Mitchell & Hall (2001b) state, there are differences between wine tourists in terms of gender. For example, female wine tourists tend to attract more easily from wine bottles/labels (i.e. packaging), share the winery’s wine with others and make post winery visit wine purchases. As Mitchell & Hall (2001a) also report: “Females were also around twice as likely to enjoy elements of the ambience of the winery, including the
inviting or relaxed nature of a winery, socialising with friends at the winery and sunny weather and alfresco dining”. This result has important implications for the wine tourism stakeholders, as they can develop and diversify their products and strategies successfully, according to the needs and expectations of each target group, taking into consider gender differentiation. Contrarily, common demographic characteristics of wine tourists seem to be their age, educational level and income. Most of research supports the assumption that wine tourists are young, highly educated and have high - income. These findings are of particular importance, as income is one of the most obvious predictors of wine consumption and is used by wineries to target certain visitor groups (Dodd & Bigotte, 1997).

Generally, there is a perspective that “…the ideal wine tourist is male, professional and middle –aged, because they will spend most” (Charters & Carlsen, 2006). However, although younger wine tourists have limited knowledge about wine compared to older ones, they may be more important in the long term. Thus, greater attention needs to be paid, because high satisfaction from the whole wine tourism experience can help in terms to bring them back for return visits (Roberts & Sparks, 2006), create a demand in the long term for specific brands, and built customer loyalty towards individual wineries and their wines (Getz, 2000).

Market segments that have been identified should be valuable to wine tourism operators since they can constitute specific targets for wineries or wine tourism destinations. Each group of visitors can, albeit in a different level, contribute in wine tourism development. There are distinct market segments (i.e. the “Occasional Wine Tourists” or the “Hangers – on”), for whom a winery visit is not the primarily motivation for visiting the wine region. These types of tourists may visit a winery out of obligation because their friends or family want to go. Therefore, they are not particularly profitable for wineries and they have less commercial potential. Nevertheless, they can contribute to rural tourism development in general, as they take part in a variety of activities in the wine region. In this case, a great emphasis should be given in promoting the attraction of the whole destination. However, for the “Wine Lovers” and the “Neophytes” (which can be potential wine lovers under the right circumstances), the winery appears to be an important determinant of visitation. Furthermore, a winery visit may provide a competitive advantage both for the destination and local wines, creating not only profit for wine enterprises but also opportunities for the development of the regional grape and wine sector.
It is significant to note that research findings have to be dealt with caution and extractions of generalised conclusions without taking into account both different approaches and dissimilarities in tourism structure among countries should be avoided. It has already been suggested that wine tourists are not a single and culturally homogeneous group (Charters & Fountain, 2006; Dritsaki, 2009). For example, there are wine tourists in Italy who are quite different compared with South African wine tourists. Also, according to European research, wine tourists in Europe can be broadly categorised into three groups: “Formal wine tourists”, “Tourists with an acknowledged interested in wine” and “General Tourists”. However, a “Formal Wine Tourist” in Europe, usually travels in an organised tour. On the contrary, in the New World countries such as Australia and New Zealand, a highly educated wine tourist is less possible to travel in an organised tour compared with the “Wine Interested” or the “Wine Curious”. As expectations and experiences of wine tourism vary from region to region, intercultural differences among wine tourists as well as their influence on wine tourism behaviour should be taken into consideration (Charters & Ali-Knight, 2000; Charters & Ali-Knight, 2002; Charters & Carlsen, 2006).

Given the “shifting nature of the wine tourist in various places” (Charters & Ali-Knight, 2002), there is a need for more quantitative research to be carried out, especially in the European countries, including data from several wine regions, in order to further investigate the factors that influence on wine tourist’s characteristics, motives and preferences. At last, even in cases where research is focused on the demand-side (wine tourists’ perceptions), it is necessary to obtain data from broader samples (Sparks, 2007) and different locations and not only by sampling winery visitors or studying consumers at the cellar door. Therefore, more research is needed to gain a fuller understanding of wine consumers in general (Getz and Brown, 2006).

REFERENCES


**SUBMITTED: JUNE 2010**  
**REVISION SUBMITTED: SEPTEMBER 2010**  
**ACCEPTED: OCTOBER 2010**  
**REFEREED ANONYMOUSLY**  

**Maria Alebaki** (mariale@agro.auth.gr) is a Phd Candidate at the Aristotle University of Thessaloniki, Department of Agricultural Economics, 541 24, Greece.

**Olga Iakovidou** (olg@agro.auth.gr) is a Professor at the Aristotle University of Thessaloniki, Department of Agricultural Economics, 541 24, Greece.