

## «AZTEC» - THE NEW WHITE TABLE GRAPE RESISTANT VARIETY

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### Abstract:

**Context and purpose of the study** - This paper presents the creation, the study and ampelographic description of the new white Greek table variety grapes "Aztec", created in 2013 by breeder P. Zamanidis at the Athens vineyard of the Institute of Olive, Subtropical Plants and Vine.

**Material and methods** - The variety created by crossing with the method of hybridization of the variety "Talisman" with the newly Greek variety "Ipirotis". "Aztec" is a cross-breeding between American, European grapevine species and Far East varieties (*V. Amurensis*).

**Results** - The duration of the "Aztec" variety from budburst to maturity is 146-155 days. The variety is very strong with large shoot growth (2,1 - 3,0 m). The growth of shoots is higher over 95%. The flowers are morphologically and physiologically hermaphrodite. The yield is moderate (30-40t grapes / ha). The size of the cluster is large with a length of 26 cm and a width 15 cm, the shape is conical, medium density. The length of the peduncle of the grape is 6 cm and the length of the peduncle of the berry is 0.9 cm. The average weight of the cluster is 600gr. The size of the berry is large, sort elliptical in shape, the berry is 25 mm long and 20 mm wide with weight 7 g, and green color. The number of seeds is 1-2 per berry. The skin is of thick and high strength. The flesh is without color with aromatic light flavor Labrusca. The content of sugar in must is greater than 240 g / l. It has high resistance to fungal diseases, insects, high resistance to low temperatures, high resistance to drought and tolerant in Phylloxera. The « Aztec » variety is suitable for table grape and tsipouro production in areas with very humidity. Can be used as a resistance donor, in fungal diseases, low temperature and insects, in the genetic improvement of vitis vinifera varieties.

**Keywords:** Hybridization, variety, shoots, leaves, inflorescence, cluster, berry.

### 1. Introduction.

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### Introduction

In the multi-year study of the International Grapevine Genetic Bank it has been shown that seedless table varieties with disease and cold resistance are minimal. The major objective of genetic improvement of the vine is the creation of quality, productive and adaptable varieties resistant to phylloxera and mycological diseases, suitable for Self-roots crops. The created variety is a complex inter-species Euro American-Amur hybrid. This paper presents the new white Greek table variety grapes "Aztec", created in 2013 by breeder P. Zamanidis.

**Keywords:** Hybridization, variety, leaves, inflorescence, berry,



Fig.1 Young shoot of the variety "Aztec"

### Material and methods

The seedless resistant grape variety "Aztec" at the Athens Vine Department of the Institute of Olive and Subtropical Plants. For the creation of the variety were carried out the following tasks: Harvest grapes stratification seeding, seedling planting, cultivation of hybrid seedlings and selecting the best seedlings for candidate varieties. The variety created by crossing of the variety "Talisman" with the newly Greek variety "Ipirotis". The describe the new variety was done by the methodology of the International Organization of Vine and Wine (OIV 2013).



Fig.2 Mature leaves of the variety "Aztec"

### Results – Discussion

"Aztec" is a cross-breeding between American and European grapevine species and also of V. Amurensis. The duration of the "Aztec" variety from budburst to maturity is 146-155 days. The variety is moderate with medium shoots growth (1.3 – 2.0 m). The growth of shoots is higher over 95%. The flowers are morphologically and physiologically hermaphrodite. The yield is moderate (3-4 t grapes / ha). The size of the cluster is large with a length of 26 cm and a width 15 cm, the shape is conical, medium density. The length of the peduncle of the grape is 6 cm and the length of the peduncle of the berry is 0.9 cm. The average weight of the cluster is 600gr. The size of the berry is large, sort elliptical in shape, the berry is 25 mm long and 20 mm wide with weight 7 g, and green color. The number of seeds is 1-2 per berry. The skin is of thick and high strength. The flesh is without color with aromatic light flavor Labrusca. The content of sugar in must is greater than 240 g / L. It has high resistance to low temperatures, high resistance to drought and high resistance to fungal diseases. The «Aztec» variety is suitable for table and dried grape and tsipouro production in areas immaturity. Can be used as a resistance donor, in fungal diseases, low temperature and insects, in the genetic improvement of vitis venifera varietals. The new table grape variety with resistance to phylloxera, fungal diseases and unfavorable cold climatic conditions in line with the methodology of the International Organization of Vine and Wine



Fig. 3 Inflorescence, bunch, berries of the variety "Aztec"

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