

## CALLINIKOS: THE NEW WHITE TABLE GRAPSEEDLESS VARIETY FOR BIOLOGICAL PRODUCE

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### Abstract:

**Context and purpose of the study** - This paper presents the creation, the study and amplographic description of the new seedless grape variety «Callinicos» which was created by P. Zamanidis at the Athens Vine Department of the Institute of Olive and Subtropical Plants, with the hybridization method in 2012

**Material and methods** - The variety was created by crossing a resistant newly Greek table variety "Georgakis" with the variety "Soulтанina". The resulting cultivar is a complex interspecific cross-breeding between American, European and Far East (*V. Amurensis*).

**Results** - «Callinicos» is a complex seedless table grape cultivar. The duration 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 than 95%. The shoot growth is strong. The bearing percentage of the grapevine is 90%. The average cluster weight is very big 900g. The yield is high more than 35-45 t / ha. The bunch has green color with yellow-brown tones. The mature leaf is medium size, symmetrical, and has five hard lobes divided weakly. In some lobes there are serrated teeth. The flowers are hermaphrodite. One or more usually have two inflorescences, on 4th and 6th knots. The flower is hermaphrodite. The cluster is big sized, cone-shaped, of medium density. The berry is medium, sort elliptical, green-yellow colored. The berry weight is 5 g. The berry skin is thin and has high resistance. The pulp is very firm, with varietal flavor. The sugar content is high. The grapes can be consumed fresh and be used for raisin production. It has high resistance to fungal diseases, insects, high resistance to low temperatures, high resistance to drought and tolerant to Phylloxera.

**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. This paper describes the creation and study of the new grape variety "Callinicos".

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



Fig.1 Young shoot of the variety "Callinicos"

### Material and methods

The seedless grape variety «Callinicos» was created by P. Zamanidis at the Athens Vine Department of the Institute of Olive and Subtropical Plants, with the hybridization method in 2012. For the creation of the variety were carried out the following tasks: Harvest grapes stratification seeding, seeding planting, cultivation of hybrid seedlings and selecting the best seedlings for candidate varieties. The variety created by crossing by resistant table variety "Georgakis" with the variety "Soulantina". The describe the new variety was done by the methodology of the International Organization of Vine and Wine (OIV 2013).

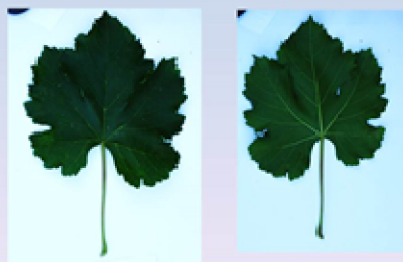


Fig.2 Mature leaves of the variety "Callinicos"

### Results – Discussion

«Callinicos» is a complex seedless very early table grape cultivar. The resulting cultivar is a complex interspecific Eurasian cross-breed. The duration of the "Callinicos" variety from budburst to maturity is 135-145 days. The variety is strong with large shoots growth (2.1 – 3.0 m). The growth of shoots is higher over 95%. The shoots growth is strong. The vine ripening degree and the yield are high. The bearing grapevine percentage is 90%. The average cluster weight is very big 900g. The cultivar is distinguished for its high winter hardiness, drought resistance and advanced fungal disease immunity; it is also phylloxera tolerant. A blossom bud has green color with yellowish-brown tones. Adult leaf is symmetric. Leaf plate is medium, green color, five bladed, it is divided weakly. In some lobes has sort teeth. One arm usually has two inflorescences, on 4th and 6th knots. Inflorescences are formed both on the arms which have grown from replacing buds, and from the arms which have been developed from sleeping buds on a long-term wood. The flower is hermaphrodite. The cluster is big sized, cone-shaped, of medium-density. The berry is medium, sort elliptical, green-yellow colored. The berry weight is 5 g. The berry skin is thin and firm. The pulp is juicy, with varietal flavor. The content of sugar is high. The grapes can be consumed fresh and be used for raisin production. 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 (OIV 2013).



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

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