EARLY ELGO DEMETRA : THE NEW PINK TABLE VARIETY SEEDLESS WITH BIG BERRY AND RESISTANT

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Abstract:

Context and purpose of the study - This paper presents is the create, the study and amplographic description the new pink"Early Elgo Demetra" variety. The seedless resistant grape variety "Early Elgo Demetra" was created by P. Zamanidis at the Athens Vine Department of the Institute of Olive and Subtropical Plants, in 2014.

Material and methods - The variety created by crossing with the hybridization method of the Russian resistant table variety "Talisman" with the newly Greek variety "Volga" ("Talisman" with a mixture of pollen "Perlet" and "Sultanina"). Created variety is a complex hybrid between dissimilar species of European, American and Far East(V. Amurensis).

Results - The duration of the "Early Elgo Demetra" variety from budburst to maturity is 126-135 days. The variety is strong withvery large shoots growth (2.1 - 3.0 m). The growth of shoots is higher over 95%. The shoot and the tip of the young shoot are green-colored and hairless. The yield is high more than 40 t / ha. The average weight of the cluster is 700 g. The content of sugar is high. The "Early Elgo Demetra" grape is large, conical, low density, with a long elliptical shape, pink color, with an average weight ofuntil to 8 g, and has small pseudo-seed that are not understood in consumption. The mature leaf is medium size, symmetrical, and five sort lobs.The berry is sort elliptical with skin is thin andhighresistance. The flesh has a pleasant taste. The grape is kept on for a long time. It is intended for edible use. It is kept for a long time in refrigerators and has excellent transport behavior.It has high resistance to fungal diseases, insects, high resistance to low temperatures, high resistance to drought and tolerant in Phylloxera. compared to other varieties of Vitisvinifera. Can be used in the genetic improvement of vitis venifera varieties as a resistance donor, for fungal diseases, insectsand low temperature.

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

1. Introduction.

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Introduction

By crossing different species of the genus Vitis, new quality productive table varieties are created of vineyards, resistant to diseases and enemies, acclimated to local 'conditiors. The creation of new varieties is a permanent topical pursuit for wine-growers in all countries and continents. The purpose of the present paper is to create and describe the new pink "Early Elgo Demetra" strawberry variety.

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

Fig.1 Young shoot of the variety " Early Elgo Demetra "

Material and methods

The seedless resistant grape variety "Early Elgo Demetra" was created by P. Zamanidis at the Athens Vine Department of the Institute of Olive and Subtropical Plants, with the hybridization method in 2013. 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 of the Russian resistant table variety "Talisman" with the newly Greek variety "Volga" ("Talisman" with a mixture of pollen "Perlet" and "Sultanina"). The describe the new variety was done by the methodology of the International Organization of Vine and Wine (OIV 2013).

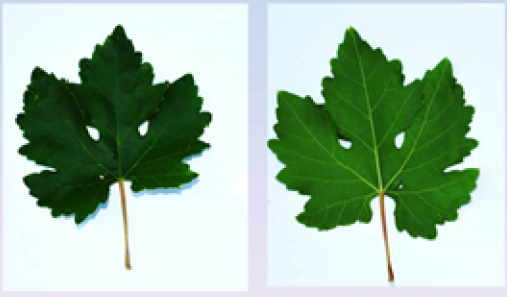

Fig.2 Mature leaves off the variety " Early Elgo Demetra "

Results – Discussion

Created variety is a complex hybrid between dissimilar species of European, American and Far East varieties. The duration of the "Early Elgo Demetra" variety from budburst to maturity is 126-135 days. The variety is strong with large shoots growth (2.1 - 3.0 m). The growth of shoots is higher over 95%. The shoot and the tip of the young shoot are green-colored and hairless. The yield is high more than 4 t / ha. The average weight of the cluster is 700 g. The content of sugar is high. The "Early Elgo Demetra" grape is large, conical,, low density, with a long elliptical shape, pink color, with an average weight of until to 8 g., and has small pseudo-seed that are not understood in consumption. The mature leaf is symmetrical, of medium size and five, sort lobs. The skin is thin with high resistance.. The flesh has a pleasant taste. The grape is kept on for a long time and it is raisin. It is intended for edible use and raisin. It is kept for a long time in refrigerators and has excellent transport behavior. It is distinguished for its high resistance to insects, fungal diseases (downy mildew, mildew and botrytis), phylloxera and in adverse climatic conditions (cold, drought) compared to other varieties of Vitis vinifera. Can be used as a resistance donor, in fungal diseases, low temperature and insects, in the genetic improvement of vitis venifera varietiesThe 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 " Early Elgo Demetra "

References

1. Meteorological Station of Kifissia (National Geographic Station 265NE) kifisia.meteoclub.gr
2. Negroul,A.M.,1959 Viticulture from the ampelographical and genetically point of view Moscow (Russian).
3. OIV 2013 Codes des characters descriptifs des varieties etespeces de Vitis.Website
4. Poehman J.M.1979 Breeding field crops. AVI Publishing Company INC, Westport, Connecticut
5. Stavrakakis M.2010 Ampelography. Tropic Publishing
6. Stavrakas D., 2010 Ampelography
7. Vavilov N.J.,1987The theoretical background of Genetics. Moscow, Science Publications,169 p.(Russian)
8. Winkler et al.1974 General Viticulture.University of California Press Ltd. London England
9. Xinias I., 2004 Plant Improvement. Laboratory Exercises. Embryo Publications
10. Zamanidis P., 2005 Vineyard Family (WitaceaeJussVitisTuned). Agriculture Livestock 3: 22-26
11. Zamanidis P. Paschalidis Ch., 2013 Creation of new wine grape varieties with the hybridization method at the Athens Vineyard Institute. Varieties for producing red wines. Quarterly Edition of ELGO Demetra Issue 4, pp. 6-9
12. Zamanidis P. K. , Paschalidis CH. , Evangelogianis D. I. 2017 Genetic improvement of vine varieties with interspecific Hybridization Eurasian union of scientists No 4 (37).