

Translation from Bulgarian

TEST REPORT FOR THE BIO FERTILISER POWER SEC

The study was conducted in an experimental rooting nursery of the Institute of Viticulture and Oenology, Pleven, over three consecutive years - 2019, 2020 and 2021. The study was carried out on the following wine grape varieties: Plevenski Misket, Bolgar, Cabernet Sauvignon, and Plevenski Favourite, grafted onto the Berlandieri X Riparia selection Oppenheim 4 (SO4) rootstock, and compared with untreated control samples of the same variety rootstock combinations. The results were recorded in four replications.

The effect of the product POWER SEC (active ingredients: 0.3% *Pyrethrum* (chrysanthemum) extract and 0.3% *Ailanthus* extract) was tested, at an application rate of 0.1 l/da and an application volume of 30 l/da of prepared solution, on the growth and development of grafted cuttings of the above-listed varieties during the process of production of grapevine planting material therefrom. During the period of active shoot growth (June, July, and August), six treatments were carried out (using a backpack sprayer) at an air temperature below 28°C.

The yield of standard rooted grapevines, expressed as percentage (%) of the grafted cuttings, for the year 2019 is:

Treated with POWER SEC:		Control samples	
Variety	%	Variety	%
Plevenski Misket	42.8	Plevenski Misket	30.8
Bolgar	36.0	Bolgar	30.6
Cabernet Sauvignon	72.5	Cabernet Sauvignon	64.2
Plevenski Favourite	65.8	Plevenski Favourite	54.0

The results regarding yield show increase compared to control samples as follows:

Plevenski Misket – 12.0% higher yield.
 Bolgar – 5.4% higher yield.
 Cabernet Sauvignon – 8.3% higher yield.
 Plevenski Favourite – 11.8% higher yield.

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The yield of standard rooted grapevines, expressed as percentage (%) of the grafted cuttings, for the year 2020 is:

Treated with POWER SEC:		Control samples	
Variety	%	Variety	%
Plevenski Misket	63.5	Plevenski Misket	54.0
Bolgar	48.4	Bolgar	41.5
Cabernet Sauvignon	72.3	Cabernet Sauvignon	63.5
Plevenski Favourite	64.0	Plevenski Favourite	56.0

The results regarding yield show increase compared to control samples as follows:

Plevenski Misket – 9.5% higher yield.
 Bolgar – 6.9% higher yield.
 Cabernet Sauvignon – 8.8% higher yield.
 Plevenski Favourite – 8.0% higher yield.

The yield of standard rooted grapevines, expressed as percentage (%) of the grafted cuttings, for the year 2021 is:

Treated with POWER SEC:		Control samples	
Variety	%	Variety	%
Plevenski Misket	64.0	Plevenski Misket	53.8
Bolgar	47.8	Bolgar	40.8
Cabernet Sauvignon	62.8	Cabernet Sauvignon	53.5
Plevenski Favourite	57.0	Plevenski Favourite	48.0

The results regarding yield show increase compared to control samples as follows:

Plevenski Misket – 10.2% higher yield.
 Bolgar – 6.2% higher yield.
 Cabernet Sauvignon – 9.3% higher yield.
 Plevenski Favourite – 9.0% higher yield.

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The average yield of standard rooted grapevines, expressed as percentage (%) of the grafted cuttings, for the period 2019 – 2021 is:

Treated with POWER SEC:		Control samples	
Variety	%	Variety	%
Plevenski Misket	56.8	Plevenski Misket	46.2
Bolgar	43.8	Bolgar	37.6
Cabernet Sauvignon	69.2	Cabernet Sauvignon	60.4
Plevenski Favourite	62.3	Plevenski Favourite	52.7

The results regarding yield show increase compared to control samples as follows:

Plevenski Misket – 10.6% higher yield.
 Bolgar – 6.2% higher yield.
 Cabernet Sauvignon – 8.8% higher yield.
 Plevenski Favourite – 9.6% higher yield.

9 June 2023
 City of Pleven

Made by: Signed (*illegible*)
 Institute of Viticulture and Oenology, Pleven
 Round seal of the Institute of Viticulture
 and Oenology, Pleven

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The undersigned, Milen Stoychev Mihalev, hereby certify the authenticity of the translation from Bulgarian into English language of the attached document – Test Report. The translation consists of 2 pages.
 Translator:

Milen Stoychev Mihalev