EVALUATION OF THE ACTIVITY OF A PLANT EXTRACT AGAINST **PLASMOPARA** VITICOLA IN GRAPES

Plasmopara viticola (known as downy mildew) is a highly destructive disease of grapevines in all grape-growing areas of the world with spring and summer rainfall at temperatures above 10°C. The use of plant protection products is fundamental for crop cultivation. However, as all pesticides, fungicides may cause point source or diffuse pollution of soils, ground and surface waters. They are currently subject to increasing resistance, thus losing effectiveness (FRAC). Researches show that 2-8,7% of edible plants tissues display pesticide residues above the legal threshold (MRL). Although very little is known on the factorial effect on human health, consumers and their retailers tend to required "Zero residues" food, only achievable by boosting the plant's self defenses. LL017 is a novel plant extract that activates the primary and secondary metabolism of the plant leading to a strong enhancement of the crops comfort and therewith its defense systems called CFE (Crop Fortification Efficacy).

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Results

Treatments with LL017 allowed the decrease of conventional PPP by 33% reaching a comparable level of protection as the full dose (100%) of the fungicide.

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CONCLUSIONS









Results

Treatments with LL017 allowed the decrease of conventional PPP by 30% (Strategy B) reaching a comparable level of protection as the full dose (100%) of the fungicide. Moreover, it increased yield compared to the controls. Strategy C was less effective, although treatment with LL017 gave better results compared to the respective control.



FORMULATION

WITH A STRONG

GREEN

SOUL







Results

Treatments with LL017 allowed the decrease of conventional PPP by 30% in both strategies B and D, reaching a comparable level of protection as the full dose (100%) of the fungicide. Moreover, it increased yield compared to the controls.

The use of LL017 increased resistance to biotic stress in grape vine. These results are very promising, and suggest that a combined strategy with conventional fungicides may be used to effectively decrease the use of this chemicals (Plant Protection Products, PPP) in favor of a "greener" solution to plants diseases. Moreover, LL017 shows a biostimulant effect, In fact it induced higher production in the treated plants.



