

On the long-term effect of Novihum in the cultivation of wine

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The dynamics of the long-term effect of the soil additive Novihum on a wine plantation, which was established in 2013 on a lignite open pit recultivation area, were investigated. The additional plant physiological effect of Novihum, which correlates with faster shoot growth, better vitality, greater photosynthetic performance and higher yields, ends after about 5-8 years. The annual measurements of the chlorophyll fluorescence dynamics (CFD) on the vine leaves proved to be particularly efficient, showing a linear decrease in Novihum activity in terms of additional photosynthetic performance over the entire period. In addition, we report on the geochemical initial state of the soil and results from biological soil analyzes after the 5th year of cultivation. The latter, however, are only snapshots and provide only initial hypotheses on the assumed role of the biological, phytosanitary and physico-chemical initial state of the soil on the long-term effect of Novihum. The influence of these soil parameters should therefore be investigated more precisely in new experimental settings.

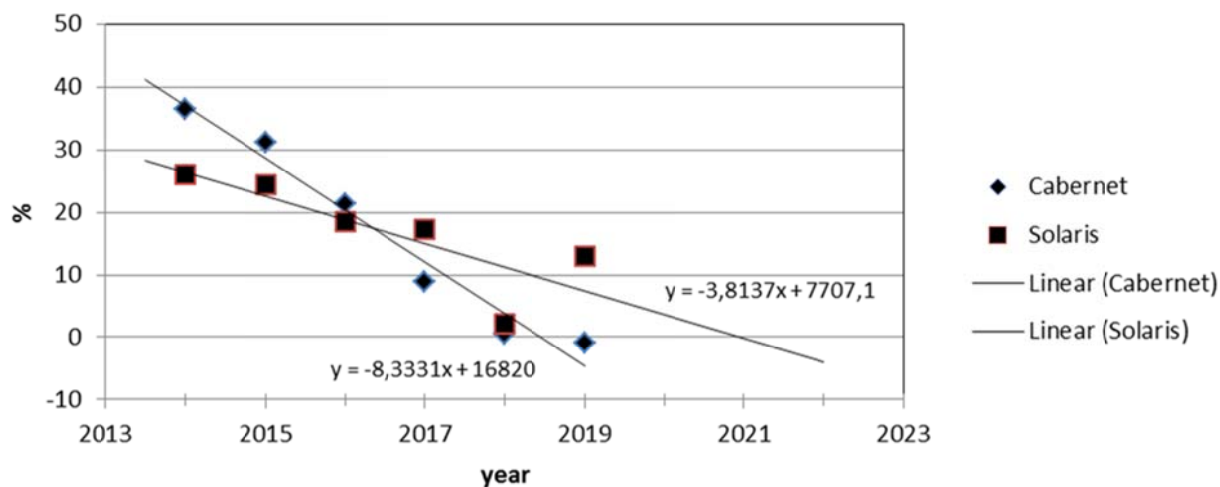


Figure 1. Photosynthesis effectiveness (seasonal average) by Novihum compared to control in %

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References

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