

Wine region: Popice
 Area: Mikulovská
 Variety: Chardonnay
 Dates of application: June 11, 2018, June 25, 2018
 Date of assessment: September 24, 2018

Assessment of qualitative parameters:

Variant	Sugar content (oNM)	pH	Titrateable acidity (g/l)	Assimilable nitrogen
Cytohumate	20.63a	3.53	6.63	339.74a
Inspection	18.74b	3.71	5.68	209.93b
	**	n.s.	n.s.	*

Variant	Weight of 100 grapes (g)	Grape yield per vine in kg
Cytohumate	1.85	2.50a
Inspection	1.82	2.20b
	n.s.	*

n.s. - statistically insignificant differences

The grape analyses were repeated 3 times.

Application of the product resulted in a very significant positive effect on the quality of grapes. The sugar content of the grapes was significantly higher than in the untreated tested specimens. This may be due to the fact that the untreated vine was vital and symptoms of stress caused by the drought and high temperatures of 2018 were limited.

The product's effect on pH values and titrateable acidity may be considered very positive. The acidity was higher and pH values were lower than in untreated specimens. This effect is primarily positive in hot, dry years.

The assimilable nitrogen content was excessively high. This parameter is very dependent on dry weather and the methods of soil treatment, and it is often lower than the optimal value. Any agrotechnical possibility of increasing its content is positive.

Overall assessment:

In the dry and hot year of 2018, the fertilizer was demonstrated to have a positive effect on the vitality of vines and the qualitative parameters of grapes. In terms of assimilable nitrogen, 3 applications during the growing season seem sufficient. In more humid years a smaller number of applications would be appropriate. It would be suitable to continue to test the fertilizer as a means of reducing stress caused by drought. I would therefore recommend repeating the experiment on multiple varieties next year.

