## **Botector** • - BIOTECHNOLOGICAL BOTRYTICIDE effective against Botrytis on grapes



Wine growers all over the world have problems with the fungal pathogen Botrytis cinerea, the causal agent of grey mould or Botrytis Bunch Rot of grapes. In vineyards Botrytis cinerea preferably occurs as bunch and stalk rot. Depending on the grape variety and on the season, botrytis-disease can result in a yield loss of more than 50% and that is one reason winegrowers are sometimes forced to choose an early harvest time.

## Efficacy trials

From 2007 to 2009 several field trials in middle and southern Europe were performed with the biotechnological botryticide, containing the acitve substance Aureobasidium pullulans. Mode of action of this yeast like antagonistic fungus is a competition for space and nutrients with the pathogen. Reference substances used were standard chemical treatments (Fenhexamid, Cyprodinil, Fludioxonil). It could be demonstarted that Botector had an efficacy comparable with a two fold application of a chemical botryticide.

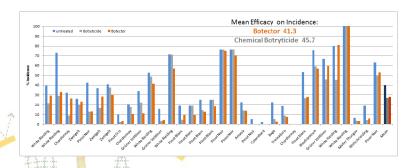
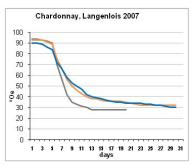


Abb. 1: Results of Efficacy trials 2007-2009 with Botector





Spontaneus Fermentation trials

Trials were performed at the University of Natural Resources and Life Sciences in Vienna, Department of plant protection, Prof. H. Redl.

Abb. 2: Microvinifikation (spontaneus fermentation) of must from Untreated Botryticidvariante (Application date: BBCH 77 and BBCH 85).

## Most and vine analysis

Treatments with Botector did not influence the must and wine quality. Density, sugars, acids and nitrogen in the must did not show significant differences. Further there was no influence of an Botector treatment on the vinification: during spontaneus fermentation there was no difference in starting point, shape of the fermentation curve and final attenuation.

Compared with the untreated control there was no difference in Botector treated samples concerning alcohol, sugars, acids and nutrients.

During professional tastings of the wine performed by different groups of wine producers and officials (Bundesamt für Weinbau) there were neither negative comments on taste, smell or color of the wines. Futher a taint test with treated table grapes was performed, proving that treatments with Botector did not influence tast of fresh table grapes.

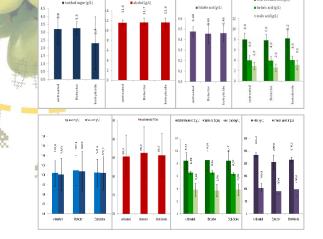


Abb. 3: Must and wine analysis FTIR 2007-2009: means for alcohol, sugar and acid for 10 trial sites UK= Untreated, Botector- an Botryticidtreatment (Application BBCH 77 and BBCH 85).