

Control of Rot Diseases in Cabernet Sauvignon by the Use of Plastic Cover of Vineyard

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During the grape maturation period in the Serra Gaúcha region, Brazil, the high frequency of precipitation usually promote the incidence of rot diseases, which have poor chemical control. This problem tends to be stronger in *Vitis vinifera* cultivars promoting losses in production and quality. The plastic cover could be a useful technology to avoid these problems and with this idea the present experiment was conducted in Bento Gonçalves-RS, cycle 2007, using a 10 year old vineyard of Cabernet Sauvignon/Paulsen 1103, 1.5 x 3m spaced and trained in a head system with mixed pruning method (spur and cane). The treatments were rows without (control) and with plastic cover, employing plastic of low density polyethylene (200 microns, 2.6m x 30m, placed during the pruning). The design was a randomly block-type, with four blocks. The fungicide sprays were performed only in the control areas according to the needs. The evaluations were done during the harvest, determining the severity (percentage of damaged clusters in regard to the total grapes by cluster) of Ripe rot (*Glomerella cingulata*). Furthermore, was also observed the incidence (percentage of infested cluster in relation to the total clusters per plant) of Botrytis (*Botrytis cinerea*) and Sour rot (bacteria and fungal). The plastic cover treatment reduced drastically the severity of Ripe rot in clusters of C. Sauvignon (94,5% in control area and 10,9% in covered area). The same effect was also observed with the incidence of Sour rot (from 13,7% to 1,6%) and Botrytis (from 1,87% to 0%). In general, the results show that the plastic cover can be a useful technology to rot disease control and also to reduce the needs of chemical sprays in the vineyards.

keywords: *Vitis vinifera*, Fungal disease, Plasticulture.

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