Chemical characteristics of the clusters and production of 'BRS Clara' grapevine under protected cultivation during out of season crop

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Abstract

The aim of this study was to evaluate the clusters physico-chemical characteristics and the production of the 'BRS Clara' grapevines grafted on IAC-766 'Campinas' rootstock, under protected cultivation during out of season crop, in order to reduce the application of fungicides to control downy mildew. The experiment was performed at Marialva, and the vines were trained in an over-head trellis system, in a spacing of 2.0 x 5.0 m. The randomized design was used as a statistical model, consisted of two protected cultivation (under plastic cover and under plastic screen) with seven replications. The applications of fungicides to control downy mildew in vines under plastic cover were reduced by 80% compared to plastic screen. It was verified that the soluble solids content of berries under plastic cover was higher in relation to those under plastic screen. However, there was no difference between the covers for acidity and maturation index. Both protected cultivation systems were highly efficiente to reduce the incidence of downy mildew. It was concluded that the use of plastic cover allows the reduction of the number of fungicide applications to control downy mildew, with no change on production characteristics of 'BRS Clara' grape.

Keywords: viticulture, seedless grape, plastic cover, productivity.