

Effects of gibberellic acid, crop-set and girdling on the quality of bunches of table grape cv. 'Perlette' in the São Francisco river valley

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The aim of this study was to evaluate the effects of the gibberellic acid, bio-stimulant Crop-Set and girdling applied during bloom and post-bloom stage to improve yield and quality of the marketable bunches of the seedless grape cv. Perlette in the São Francisco River Valley, Northeast of Brazil. The trial was carried out during two growing seasons (2001-2002) in the Bebedouro Experimental Station, Embrapa Semi-Árido, Petrolina, PE. The trial was laid out in a randomized complete block design with three replicates, each replicate consisting of a four-tree plot. The treatments were: gibberellic acid in one dosis with three time applications (5 + 20 + 40 mg/L), Crop-Set in two dosis 0.1 and 0.2% and trunk girdling, isolated or combined to each other. It were evaluated the bunch and berry weight, berry length and diameter, rachis and pedicels weight, yield per plant, number of bunches per plant and chemical composition of the fruits. In the cycle of 2001, the largest berry weight and length were obtained in the treatment gibberellic acid + Crop Set 0.2%. In 2002, just the berry length and diameter answered to the application of the treatments, and the best results were showed with girdling + gibberellic acid. The rachis and pedicels of bunches treated with gibberellic acid became stronger, resulting in the largest rachis weight. There were no effects on other variables.