

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

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The purpose of this research was to evaluate the effects of the use of gibberellic acid, Crop-Set bio-stimulant and girdling to improve yield and quality of the marketable bunches of the seedless grape cv. Marroo Seedless in the São Francisco River Valley, Northeast of Brazil. The trial was carried out throughout two cycles (2002-2003) 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 dosage with two time applications (5 + 40 mg/L), Crop-Set in two doses 0.1 and 0.2 % and trunk girdling, isolated or combined to each other. The cv. Marroo Seedless didn't show any response to the treatments with gibberellic acid, Crop-Set and girdling for none of the variables evaluated in 2002, except for total titratable acidity. In 2003, the berry weight and length were bigger in the treatments where gibberellic acid was present. The berry weight in the gibberellic acid and girdling + gibberellic acid + Crop-Set 0.2 % treatments differed significantly of the untreated control. The best result for berry length (23.09 mm) was showed in the girdling + gibberellic acid + Crop-Set 0.2 % treatment. Total titratable acidity and total soluble solids/ total soluble solids ratio presented significant differences among the treatments.