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

Patrícia Coelho de Souza Leão, Davi José Silva, Emanuel Élder G. da Silva
Embrapa Semi-Árido, C.P 23, CEP 56300-970, Petrolina, PE, Brazil, patricia@cpatsa.embrapa.br, davi@cpatsa.embrapa.br
Financial support: CNPq, Banco do Nordeste, Improcrop

The present research was aimed 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. Catalunha in the São Francisco River Valley, Northeast of Brazil. The trial was carried out throughout 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 unique dosage with five time applications (10 + 15 + 15 + 50 + 50 mg/L), Crop-Set in two doses 0.1 and 0.2% and trunk girdling, isolated or combined to each other. In 2001, the maximum values for berry weight, length and diameter were observed with girdling + gibberellic acid and girdling + gibberellic acid + Crop-Set 0.1% treatments. The treatments girdling and Crop-Set when applied isolated and/or combined to each other was not efficient to increase the berry size. In 2002, the treatments girdling + gibberellic acid and girdling + gibberellic acid + Crop-Set 0.2% promoted larger berries, increasing 32% in the berry length.