

## **Effects of hydrogen cyanamide on bud break of grapevine cv. Italia in the São Francisco River Valley**

Patrícia Coelho de Souza Leão, Emanuel Élder G. da Silva

Embrapa Semi-Árido, CP 23, CEP 56300-970, Petrolina-PE, Brazil, patricia@cpatsa.embrapa.br, davi@cpatsa.embrapa.br

Financial Support: CNPq, Banco do Nordeste, Improcrop

In conditions of tropical climate as the São Francisco valley, northeast of Brazil, grapevine presents dormancy of buds and high apical dominance. This work aimed to evaluate the effects of hydrogen cyanamide, spreader-sticker and torsion of the canes after the pruning on grapevine bud break cv. Italia. The trial was carried out in Petrolina, PE, during two growing seasons (2001-2002). The treatments were as follows: 1) control; 2)  $\text{H}_2\text{CN}_2$  2.45%; 3)  $\text{H}_2\text{CN}_2$  2.94%; 4)  $\text{H}_2\text{CN}_2$  3.43%; 5)  $\text{H}_2\text{CN}_2$  2.94% + break-thru® 0.03% and 6)  $\text{H}_2\text{CN}_2$  2.45% + torsion of the canes, in a randomized blocks design with four replications. The results show that the hydrogen cyanamide, independent of the doses increased the bud burst and bud fruitfulness, with increments of 68% and 84% in the yield per plant, respectively in the 1<sup>st</sup> and 2<sup>nd</sup> growing seasons. There were no effects on the berry size, sugars and acidity content of the fruits, as well as, harvest anticipation. There was no response to the spreader-sticker. On the other hand, the practice of torsion of the canes presented a tendency to increase the effects of the hydrogen cyanamide.