



## A18 - Cytokinin, pyraclostrobin, and putrescine: influence on seedling development of three grape cultivars in different environments

Camargo RB<sup>1</sup>, Ono EO<sup>2</sup>, Queiroz MA<sup>3</sup>, Barbosa MAG<sup>4</sup>, Rodrigues JD<sup>2</sup>

<sup>1</sup>Postdoctoral Fellow (Horticulture), FCA – College of Agricultural Sciences, UNESP – São Paulo State University, Botucatu, SP, Brazil; <sup>2</sup>Professor, Department of Botany, Institute of Biosciences, UNESP - São Paulo State University, Botucatu, SP, Brazil. mingo@ibb.unesp.br; <sup>3</sup>Full Professor, Department of Technology and Social Sciences, DTCS/UNEB - Bahia State University; <sup>4</sup>Researcher at Embrapa Semi-Arid. Petrolina, PE, Brazil

The work aimed at evaluating the production of 'Niagara Rosada' seedlings in an environment located at Botucatu, SP, Brazil, and 'Isabel Precoce' and 'Thompson Seedless' seedlings onto the rootstock 'IAC 766' in environments located at Petrolina (PE) and Juazeiro (BA), Brazil, using polyamines and cytokinins, and fungicide (pyraclostrobin). Treatments were: T1- Control (water); T2- Putrescine (Put, 2 mM); T3- Cytokinin (6-BA 20 mg L<sup>-1</sup>); T4- Pyraclostrobin (Pyra, 200 g 100 L<sup>-1</sup>); T5- Put + 6-BA;T6- Put + Pyra; T7- Pyra + 6-BA; T8- 6-BA applied to leaves (20 mg L<sup>-1</sup>) and soil (40 mg L<sup>-1</sup>), with applications performed once a week, totaling three applications. In order to assess the effect of treatments, the following morphological and physiological traits were evaluated: leaf number, leaf and root fresh weight, leaf and root dry weight, in addition to biochemical parameters: total protein and flavonoid contents, peroxidase (POD, EC 1.11.1.7) and polyphenol oxidase (PPO, EC 1.10.3.1) activities, in the three studied cultivars in their environments, as well as their interactions according to each product applied singly and in combination. The used plant growth regulators and fungicide led to positive physiological responses of three grape cultivars seedlings. Interactions between cultivars x treatments, treatments x environments, and cultivars x environments were detected, although the latter was less important. Treatments with significant results for total protein and flavonoid contents and POD and PPO activities were Put, 6-BA, and the combination of Put + 6-BA, which can be used as an auxiliary tool for developing seedlings of 'Niagara Rosada', 'Isabel Precoce', and 'Thompson Seedless' grape cultivars.

**Keywords:** Polyamines, 6-benzylaminopurine, strobilurins, physiological effect, genotype x environment interaction

## A19 - Effect of auxin at different concentrations on the rooting of conilon coffee cuttings

Crasque J<sup>1</sup>, dos Santos MF<sup>1</sup>, <u>Dousseau S</u><sup>1</sup>, Arantes L de O<sup>1</sup>, Machado Filho JA<sup>2</sup>, Lavanhole DF<sup>1</sup>, Cerri Neto B<sup>1</sup>, Buffon SB<sup>1</sup>, Sant'Ana RC<sup>1</sup>, Rodrigues PS<sup>1</sup>, Sant'Ana C<sup>1</sup>, Leite L de A<sup>1</sup>

<sup>1</sup>Instituto Capixaba de Pesquisa, Assistência Técnica e Extensão Rural - INCAPER, Centro Regional de Desenvolvimento Rural - Centro Norte, Linhares, ES, Brasil. sara.arantes@incaper.es.gov.br; <sup>2</sup>Pesquisador Incaper CRDR -NORTE Linhares — ES, Brasil

The objective of this study was to evaluate the influence of indole butyric acid (IBA) on rooting of cuttings of genotype 02. The experiment was conducted in a nursery at the