

## THERAPEUTIC EFFECT OF CYTOKININ SEQUENCE APPLICATION ON VIRUS-INFECTED CATTLEYA TISSUE CULTURES

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The study investigates the chemotherapeutic effect of plant growth regulators in eradicating mixed infection with *Cymbidium* mosaic (CyMV) and *Odontoglossum* ringspot viruses (ORSV) from *Cattleya schönbrunnensis* × *C. leopoldii gutata*. The experiment was designed to test a range of concentrations of 6-benzylaminopurine, kinetin and zeatin added to the basal medium on proliferating *Cattleya* mericlones. The results indicate that to eliminate CyMV from tissue cultures the best protocol for adding plant growth regulators was induction with 3.2 mg·l<sup>-1</sup> kinetin added to modified MS medium and then further propagation on 0.2 mg l<sup>-1</sup> zeatin. This treatment was advantageous in terms of micropropagation. Micropropagation on basal medium supplemented with 5.0 mg l<sup>-1</sup> BA after induction with 0.5 mg l<sup>-1</sup> zeatin also effectively eliminated CyMV from cultures of the *Cattleya* hybrid. Infection with ORSV virus persisted in all treatments.

**Key words:** *Cattleya*, cytokinins, mericlone, *Cymbidium* mosaic virus, *Odontoglossum* ringspot virus.