

# STUDY ON THE CAPACITY OF REGENERATION OF SOME GRAPEFRUIT CULTIVARS (*Citrus grandis* (L.) Osbeck) BY IN VITRO CULTURE METHOD

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## Summary

Study on the capacity of shoot regeneration of five grapefruit cultivars: Dien, Phuc Trach, Nam Roi, Doan Hung and Do were carried out at Faculty of Biotechnology and Food technology, TUAU. Hypocotyls of 14 day-old-seedlings were dissected into short fragments (0.7-1.0 cm length) for investigation of shoot regeneration. In order to induce shoots, fragments were cultured on the MS agar medium that supplemented various BAP concentrations, 1.0 to 2.5 mg/l. The results showed that BAP 2.0 mg/l was suitable for shoot regeneration for all examined varieties, wherein Dien and Do cultivars were obtained the highest level of shoot regeneration, 41.6 and 64%, the mean number of shoots was 8.7 and 7.2, respectively. Moreover, the results also indicated that either NAA or IBA at 1.0 mg/l concentration could be applied for root induction for all five cultivars. These results might be useful for other studies such as gene transformation, in vitro grafting...to generate new citrus varieties.

**Keywords:** *In vitro*, grapefruit, growth regulation, regeneration, shoot.