# THE EFFECT OF ENVIRONMENTAL FACTORS IN THE MICROPROPAGATION OF YELLOW FLOWER TEA (*Camellia tamdaoensis* Hakoda et Ninh)

**Nguyen Van Viet, Tran Viet Ha, Khuong Thi Thu Huong**

**Summary**

Micropropagation of *Camellia tamdaoensis* Ninh et Hakoda was developed. The result showed that the optimal method for fruit sterilization was soaked in 70% ethanol in 1 minutes, in 0.1% $HgCl_2$ 0.1% solution in 13 minutes. The explants were then grown *in vitro* on Woody Plant Medium (WPM) basal supplemented with 0.2 mg/l benzylaminopurine (BAP) and 30 g/l sucrose, provided the proportion of purified samples was 90.13% and which the regeneration rate achieved 84.04% after 21days of culture. Forming multi-buds induction in WPM, BAP 0.4 ml/l, kinetin 0.2 ml/l, α-Naphtyl acetic axit (α-NAA) 0.2 mg/l, coconut milk 100 ml/l, sucrose 30 g/l, the coefficient of formed buds and the samples regeneration rate were hightest (94.06% and 4.15). The buds rooted rached 87.24%, the average roots was 3.71 roots/shoot and the average length of roots achieved 3.3 cm when cultured after 6 weeks in WPM medium supplemented IBA 0.2 mg/l, NAA 0.2 mg/l after 6 weeks. The plantlets were successfully acclimatized under greenhouse conditions with high humidity before transferring to the field. This procedure can be applied for mass production of *Camellia tamdaoensis* to meet the commercial demand.

**Keywords:** *Camellia tamdaoensis, multi-shoot, micropropagation, tissue culture.*