



PRELIMINARY COMPARISON THROUGH METABOLIC PROFILE OF PLANTS *ex vitro* AND *in vitro* IN SPECIES OF *Croton* GENUS

**Coy Barrera Carlos Andrés¹, Gómez Gutiérrez Diana Constanza¹, Coy Barrera
Ericsson David¹.**

¹Facultad de Ciencias Universidad Militar Nueva Granada, AA 49300, Cajicá, Colombia. E-mail:
carlos.coy@unimilitar.edu.co.

Abstract: The genus *Croton* (Euphorbiaceae), are characterized by reported by traditional medicine uses, has been studied in recent years due to the wide variety of biosynthesized chemical compounds [1]. In this work we explore the *in vitro* culture of two species of genus *Croton* through embryo rescue and compare the production of secondary metabolites in early stages of development [2], [3]. We take wild mature seed of *Croton bogotanus* and certified seed of *Croton funckianus*, this was disinfected with ethanol and sodium hipoclorite (NaClO) to 3% during 15 min. Aseptically the embryos were dissected and growth in medium MS [4]. solidified with Gellum Gum. Leaves samples were taken *in vitro* and greenhouse conditions; their ethanolic extract was analyzed by HPLC. It was noted that the production of secondary metabolites of the *in vitro* plants was low or null. However, when the plants were exposed to greenhouses conditions, the metabolic profile change and were observed the formation of up to 5 compounds. These results allowed to explore the *in vitro* culture of a forestry plant, and to evaluate the changes of it metaboloma in early stages of development and different conditions. We thanks to UMNG by financial support by Project CIAS1784.

References:

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