## Studies of sterilization protocol development and calli induction of selected tropical mosses

## Abstract

Four tropical African mosses namely; Racopilum africanum, Thuidium gratum, Archidium ohioense and Bryum coronatum, were studied. This was with a view to developing a sterilization protocol and inducing calli from the gametophyte explants in vitro. The mosses were collected from their natural populations in the Central Campus of the Obafemi Awolowo University, Ile-Ife, Nigeria. Healthy stem tips from the gametophytes of each of the mosses were sterilized with JIK (containing 3.85 % M/V NaOCI) and then cultured on Murashige and Skoog (MS) 1962 full strength medium, which served as the control and a full strength MS medium supplemented with 5 mg/L 2,4-Dichlorophenoxyacetic acid (2,4-D). Sterilization of the explants with 8 % JIK for 8 minutes was found to be most suitable. Only Bryum coronatum produced calli on hormone free medium, while the 2,4-D induced massive production of calli in Bryum coronatum and Racopilum africanum