

PRELIMINARY STUDIES REGARDING THE ANDROGENETIC RESPONSE OF WHITE CABBAGE (*BRASSICA OLERACEA* L.) ANTHERS UNDER THE INFLUENCE OF BASAL MEDIUM COMPOSITION

Tina Oana CRISTEA¹, Constantin LEONTE²

E-mail: constantin_leonte@yahoo.com

¹ Vegetable Research and Development Station Bacau

²University of Agricultural Sciences and Veterinary Medicine of Iași

Abstract

The present study targeted toward the accomplishment of a screening regarding the androgenetic response of white cabbage (*Brassica oleracea* L.) anthers under the influence of basal medium composition. The biologic material is represented through unopened flower buds collected from mother plants belonging to a variety – DL20 developed and maintained by Vegetable Research and Development Station Bacau. The buds contained anthers with microspores at late uninucleate to binucleate stage. We tested three different variants: variant M1- MS (Murashige Skoog, 1962), variant M2 - Gamborg B5, 1968, variant M3 - NLN (Lichter, 1982). In the experimental condition tested in our study and previously presented, the anthers reacted through direct organogenesis and embryogenesis but mainly through the formation of callus (indirect embryogenesis and organogenesis). The best results were obtained on variant M3, the standardized basal medium NLN, established by Lichter, 1982, which also seemed to support more the development of embryos directly on the anthers.

Key words: callusogenesis, embryogenesis, organogenesis, flower, buds