

THE EFFECT OF SOME CHEMICAL MUTAGENS EFFECT ON THE MITOTIC DIVISION TO *DIGITALIS LANATA* EHRH

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Abstract

The little woolly finger seeds (*Digitalis lanata Ehrh.*) Lanata 1 variety, were treated with three chemicals, each of these with four concentrations: 2,4-D acid, ethidium bromide and colchicine, in four concentrations each (0.01%, 0.02%, 0.03%, 0.04%), at every experience the results were compared with the control (untreated).

The mutagenic chemicals in the mentioned concentrations influenced the mitotic cycle from the root meristems, by modifying the mitotic index and through changes of some of its phases, by the occurrence of some changed phases, namely some chromosomes reorganization (single or multiple chromosomal bridges, residuary chromosomes, chromosomes fragments and micronuclei). The research has established the correlations resulted from the interactions of the biological material and the mutagen (the biological material sensitivity) and between the substances concentration and the frequency of the chromosomal aberrations.

Key words: chemical mutagens (2,4-D acid, ethidium bromide, colchicine), ana-telophase aberrations

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