
P71. DETERMINATION OF GENOTOXICITY AND CYTOTOXICITY OF PROMOCARB-HCl BY ALLIUM CEPA TEST

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Pesticides are used comprehensively in agricultural fields to protect pest-induced damage throughout the world. The extensive use of pesticides at high concentrations may induce toxicity problem, which can negatively affect plant growth and development. Pesticides are considered as an important group of environmental pollutants, and many of them are reported to cause mutagenic effects in plants. Promocarb-HCl fungicide is used to control downy mildew on sunflower, cucurbits and potatoes, root rots on tobacco seedlings.

In this study, investigated was on mitotic index and mitotic abnormalities by *Allium cepa* test. *A. cepa* test is highly sensitive, reliable and capable of detecting mutagens, carcinogens and clastogens. To investigate the effects of promocarb-HCl fungicide the roots of *A. cepa* were treated with 0,5 ml/L, 1 ml/L, 2 ml/L, 4 ml/L, 8 ml/L concentrations fungicide for 24, 48 and 72 h.

As a result, determined was that promocarb-HCl fungicide for induced mitotic abnormalities. Mitotic index decreased with increasing of concentrations and the exposure time as compared to their controls.

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