Turkish Journal of Botany

Turkish Journal

of

Botany

Dynamics of 2,4-D in generation of cytomorphological variants in an important anticancerous and antihepatotoxic herb – Cichorium intybus L.

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Abstract: The genotoxic effect of 2,4-D was investigated in chicory (2n = 18). At 100 ppm concentration 4 variants differing in morphological traits were isolated and subjected to chromosomal analysis. Morphological variations in shape, height, and yield parameters were observed. Different cytological anomalies such as univalents, multivalents, bridges, laggards, chromosome stickiness, and polyads occurred in all 4 isolates. However, the frequency of these chromosomal irregularities decreased at anaphase, exhibiting recovery at later stages. Thus the above concentration of growth hormone 2,4-D can be effectively incorporated for raising viable mutants in this medicinally useful herb.

Key words: 2,4-D, Cichorium intybus

Keywords
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Turk. J. Bot., **33**, (2009), 383-387.
Full text: pdf
Other articles published in the same issue: Turk. J. Bot.,vol.33,iss.5.