

Alkaloid Spectrum in Diploid and Tetraploid Hairy Root Cultures of *Datura stramonium*

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Hairy root cultures were obtained from diploid and induced tetraploid plants of *Datura stramonium* and analyzed by gas chromatography/mass spectrometry. Twenty alkaloids (19 for diploid and 9 for tetraploid hairy root cultures) were identified. A new tropane ester 3-tigloyloxy-6-propionyloxy-7-hydroxytropane was identified on the basis of mass spectral data. Hyoscyamine was the main alkaloid in both diploid and tetraploid cultures. In contrast to diploid hairy roots, the percentage contributions of the alkaloids, with exceptions for hyoscyamine and apoatropine, were higher in the total alkaloid mixture of tetraploid hairy roots.

Key words: Alkaloids, Polyploidy, Hairy Roots