A cytotoxic study of five species of Impatiens (Balsaminaceae) in Java and Borneo, Malesia

Abstract

Somatic chromosome numbers of five species belonging to the genus Impatiens (Balsaminaceae) collected from Java and Borneo, Malesia are reported. Impatiens chonoceras Hassk. was found to be 2n = 14, I. javensis Steud., J. platypetala Lindl., and I. radicans Zoll. were 2n = 16, and I. kinabaluensis S. Akiyama & H. Ohba was 2n = 12. Chromosome numbers of I. chonoceras, I. javensis, I. radicans, and I. kinabaluensis were examined for the first time. Karyotypes of I. javensis, I. platypetala, and I. radicans are similar and are thought to be closely related to each other. Taxonomical notes for each species are given.