

STUDY OF POLLEN FERTILITY IN FIVE VARIETIES OF *IMPATIENS BALSAMINA*

Aruna Katiyar¹, Bharati Singh² and Deepmala Katiyar^{2*}

¹Departments of Botany, Faculty of Sciences, University of Lucknow, Lucknow, India

²Vitaegen Biotech- Educational and Research Institute, Varanasi, India

E- mail: deepmala.katiyar@gmail.com

Abstract: *Impatiens* is a widely cultivated ornamental plant, belonging to family Balsaminaceae. Nearly 91% of Indian species of *Impatiens* are endemic. *Impatiens balsamina* L. also known as Gulmehndi is one of the popular species of North India. The present communication is an account of study of pollen fertility in different varieties of *Impatiens balsamina*. There was a statistically significant difference between varieties as determined by one way analysis of variance of pollen fertility indicates significant difference due to variety. The result showed that orange variety pollen fertility significantly highest from each of the other varieties and lowest in pink variety.

Keywords: *Impatiens balsamina*, Pollen fertility, varieties

REFERENCES

- Bose S. and Mukherjee R.** (1967). Colchipoity in *Impatiens balsamina* L. II. Studies in the C2 generation. *Cytologia*, 32: 350-353.
- Kamar, S. and Dubey, D.K.** (1998). "Induced morphological mutations in *L. sativus* L." *J. cytol Genet.* 33 (2): 131-137.
- Masuda M. Yahara T.** (1994). Reproductive ecology of a cleistogamous annual, *Impatiens nolitangere* L., occurring under different environmental condition. *Ecological research.* 9:67-75.
- Mc call C., Wller D.M., Mitchell-olds T.** (1994). Effect of serial inbreeding on fitness components in *Impatiens capensis*. *Evolution.* 48:818-827.
- Raghuvanshi S.S. and Singh D.N.** (1979). Comparative ploidy response of different varieties of *Impatiens balsamina* L. *Cytologia*, 44: 241-247.
- Schoen D.J Bell G lechowicz M.J.** (1994). The ecology and genetics of fitness in forest plants. Quantitative genetics of fitness components in *impatiens pallid* (Balsaminaceae). *Amer. J. Bot.* 81: 232-239.