

Short Communication

A rare occurrence of white flowered *Impatiens lawii* Hook.f. & Thomson (Balsaminaceae) at the Kas plateau, Satara

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The genus *Impatiens* comprises about more than one thousand species distributed throughout the world⁵. In India the genus is represented by more than about 210 species which are commonly referred as balsams or grass jewels. *Impatiens lawii* is endemic to the Western Ghats of Maharashtra and Karnataka. *Impatiens lawii* is a small herb with quadrangular to semi quadrangular stem, leaves are opposite and decussate with serrate margin, flowers are solitary, axillary with pink corolla. The plant flowers in the month of July to September during rainy season and show restricted presence on the lateritic plateaus and is endemic to the Western Ghats³. Kas plateau designated as 'World Heritage Site' located near District Satara in Maharashtra State. Kas has gained the importance and at glance attention due to the high rate of plant endemism and floristic wealth. Such heterogeneity is due to the edaphic, hydrological and topographic factors¹. Field visit to Kas plateau was conducted during post rainy season of the year 2014. During the visit single plant of *Impatiens lawii* with white coloured flower was observed overwhelming the curiosity related with this topic.

According to Mendel⁴, flower colour has being the interesting subject for study since

the developmental basis of the genetics. Sobel and Streisfeld⁶ reviewed the flower colour model system and opined that the changeover in flower colour due to floral pigmentation is due to the *cis* regulatory mutations in R2R3-MYB proteins leading to the variation in floral anthocyanins and flower colours. This is just a curious observation and related explanation which reports the rare white coloured flower in *Impatiens lawii*. Such type of observations are also reported and observed in other plant species. Clegg and Durbin² proposed a model representing the evolutionary trend among the flower colour variation in morning glory plants and postulated that the phenotypic variations are due to molecular and genetic levels mutations resulting due to the insertion of the transposons. We can point out many probable reasons resulting in the production of white coloured flowers such as edaphic factors, mutation, genetic factors etc. But the most probable reason behind such case would be the suppression of genes responsible for the synthesis of anthocyanin a water soluble pigment which imparts various shades from dark purple to faint one.

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Fig 1. *Impatiens lawii* with pink and white coloured flowers.

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