

Abstract

The genus *Crinum* L. of the family Amaryllidaceae is comprised of 85 genera. Among them *Crinum* is a large genus, with 1300 species, distributed throughout the world. Among them *C. asiaticum* L. and *C. latifolium* L. are two prominent species widely available at different parts of India, both naturally and as garden plants. In the present study, these two species have been chosen to work out their external and internal morphology, karyomorphology and the amount of lycorine. Study, here, has revealed both interspecific as well as intraspecific variations among them. The nature of the bulb appearance has shown the extreme variation amongst the different provenances. Detail anatomical study also revealed that different number of xylem strand, nature of the cortex and vascular bundle, presence of raphides are also varied among the different locations of both of the species. It is also noted that all the provenances have shown same diploid chromosome number $2n=22$, but different chromosome morphological features have been shown the variation into the each individual of both the species. To find out the better productive sources related to active principle – lycorine presence in both of the species. It is observed that among the collection of *C. asiaticum* from different locations the plant from Nadia has been shown the highest percentage of lycorine. Whether among the ten different locations of *C. latifolium*, plants of Kolkata have contained highest percentage of lycorine. The biomass study has been revealed that in *C. asiaticum* Nadia is the better among the eight locations, weather in *C. latifolium* it has been noted that Paschim Medinipur is the better productive plant.

The present studies have been revealed that morphological and karyomorphological diversity of *C. asiaticum* as well as *C. latifolium* in their intra and inter specific level. It is also found that the better productive plant in both of the species and their relation to the others morpho-anatomical as well as cytological parameters.