

## Morphological and floral biological variability in *Plantago ovata* and its allied species

ROSHNI R. SAMARTH, R.S. FOUGAT AND G.C. JADEJA

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### SUMMARY

Morphology and floral biology of six *Plantago* species was studied. Highly significant differences for the morphological and floral biological characters were recorded among different species. *P. coronopus* and *P. lanceolata* were better in terms of spike length, number of flower per spike, days to maturity and days to 50% flowering. *P. indica*, *P. arenaria* and *P. psyllium* were having more number of spikes per plant and longer duration of stigma receptivity. *Plantago lanceolata* was found to be self incompatible species, whereas *Plantago coronopus* and *Plantago indica* were self compatible. Maximum overlapping in flowering period was found between *P. ovata* and *P. coronopus*. *P. coronopus* also had better pollen characteristics such as viability, size, germination and tube length. *Plantago ovata* and *Plantago coronopus* were more near to each other than any other species for their morphological and floral biological traits. By taking the advantage of overlapping flowering periods, anthesis and duration of stigma receptivity; it may be possible to transfer some important traits to *Plantago ovata* from *P. coronopus* by direct crossing or using it as a bridge species for gene introgression from other less related species.

**Key words :** *Plantago*, morphology, floral biology, introgression.