

SEED BIOLOGY OF *ARTEMISIA MARITIMA* L. AN OVEREXPLOITED MEDICINALLY IMPORTANT SPECIES IN NORTH WEST HIMALAYAS

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Abstract: *Artemisia maritima* of family Compositae is an endangered perennial shrub with localized distribution because of its being highly habitat specific (Parihar *et al.*, 2011). Plants forming natural populations in Kishtwar Himalayas in J&K state, India, show high fruit and seed set in open fields ($x = 83.7\%$). Details of floral structure and events of floral biology reveal the species to be outcrossed, although it has the capacity to set seeds by selfing also. The same is accomplished through geitonogamy and by self pollen germinating at the point of nectary capping the ovary (Parihar *et al.* 2009). Seeds of the species, one per fruit, is with straight embryo and unique in being of two different colors, grey and brown. Both types are alike morphologically but differ in weight. On a moist filter paper, the %age of seeds germinating averages 34.33% for grey seeds and 47.5% for brown seeds. Most of the seedlings emerging out of these seeds however fail to establish. These observations reveal the manifestation of inbreeding depression in the species. This outcrossed species is supposedly forced to set seed by selfing due to squeezing of populations due to overexploitation and by a single individual occupying considerable area due to perennation for several years.

Keywords: *Artemisia maritima*, Seed

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