

OVULE ABORTION AND ITS POSSIBLE IMPLICATIONS IN *FUMARIA INDICA* (HAUSKN.) PUGSLEY – AN ANNUAL WEED

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Abstract: Our studies on the breeding systems and pollination biology of number of annual weed species of Jammu region of J&K, India has revealed most of them to be annuals, sexually reproducing and selfers. Majority of them are prolific fruit and seed producers. Predominant / obligate selfing enables these plants to set seeds even in uncertain pollinator conditions, helping both in their survival and rapid spread. Two plant species of this group namely *Trifolium dubium* Sibth and *Fumaria indica* (Hauskn.) Pugsley however defy these generalisation. Plants of these species like their other counterparts are selfers with high fruit set. Seed set in these two species however averages below 50 %. This dip in seed set is because they invariably abort a proportion of their ovules. The abortion is mostly prefertilization and fruits are invariably one seeded. The details of the studies in different populations of *Fumaria indica* point towards this mechanism to be universal, although the pattern differs. Investigated abortion seems predetermined and is uniform indicating it to be genetically determined.

Keywords: Cleistogamous, *Fumaria indica*, *In situ* pollen germination, Ovule abortion

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