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Studies on the reproductive biology and seed biology of *Aconitum nagarum* Stapf: a threatened medicinal plant of North East India

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ABSTRACT:

Present study was undertaken to study the reproductive behaviours and seed biology of *Aconitum nagarum*. As per the present study, the species starts flowering from october first week onwards. The flowers are blue in colour, arranged as slender raceme, petals and filaments glabrous, carpel five and bisexual. The flowers bloom acropetally and anthesis was observed between 6.00 - 6.30 AM. Anther dehisced longitudinally from 7.00 AM till 9.30 AM. The number of anthers were found to be 49 per flower. It was observed that flower colour changes as the plant goes on fully dehisced. The flowering duration per flower varied from 4-6 days followed by fruit formations and matures within 10-15 days. The average flowers per plant varied from 8-28 and common pollinator was found to be bees. Mean seeds per plant was ~270-540 and pollen per anther was approximately 1000 - 2000. The seeds exhibited ~38% germination from seeds stratified at 4°C for 96 h.

Keywords:
Aconitum nagarum, Floral biology, Medicinal plant, Reproductive biology.

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