

Manuscript Number: 3224 NAAS Rating: 5.79

Capsule Ripening and Seed Germination in *Rhododendron* campanulatum (D. Don) in Aali Treeline Area of Western Himalaya, India

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Abstract: *R.* campanulatum is found at the treeline, timberline and subalpine forests between 3000-4200msl across the Himalaya. The present study documents the capsule maturation time and seed germination status of *R.* campanulatum in recent warming scenario at Aali treeline area. The different physical parameters like, capsule size, number of capsule/100g, weight and mass of 100 capsule were taken and germination was carried out in a dual chamber seed germinator for each collection date. The tree density of *R.* campanulatum was 190 ha⁻¹. The mean capsule size during collection ranged from 63.71 to 246.14mm², the change in capsule weight was 46.67 to 48.66 g across the collection period. The mass of 100 capsule during study varied between 19.13 and 79.43g. Seed germination was low and maximum germination 39.57 occurred at 29.00 per cent moisture content. The change in capsule colour from light green to dark green and decline in moisture content of capsules appear to be good indicators of seed maturity in *R.* campanulatum.

Keywords: R. campanulatum, Maturity, Moisture Content, Germination, Treeline