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Capsule Maturation Timing in *Rhododendron arboreum* Smith in the Central Himalayan Region

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Abstract: The main aim of the study was to assess the time of capsule/seed maturation and germination in view of warming climate in *Rhododendron arboreum* Smith (2500-2800 m) an important under canopy tree species of Central Himalayan Region. The capsules of *R. arboreum* were collected at ten days interval from the month of December up to the availability of capsules from selected sites located at different altitudes. The colour of capsule was initially green and finally turned brown. The seed moisture content was negatively correlated with germination in *R. arboreum*. Flowering period ranged between 7-8 weeks. The periodicity in flowering was one month earlier in comparison to other studies. The seeds remain viable for approximately 10 months and the viability decreases gradually. The change in capsule colour and seed moisture content appears to be the major indicators of seed maturation in selected species. Shifts in timing of capsule/seed maturation can affect the germination and regeneration of the species.

Keywords**:** Capsule maturation, Germination, Moisture content, Phenology, Viability