



## Article

# *Rhododendron rawatii* (Ericaceae), a new species from the Western Himalaya, India

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### Abstract

A new species of *Rhododendron, R. rawatii* is illustrated and described from the Western Himalaya. The species is sporadically found in the subalpine–timberline zone of Uttarakhand state. Fascicled white cottony hairs on the abaxial surface in between lateral veins of leaves, bright pink and shine-less corolla and comparatively large calyx with hairy margins distinguish the new species from its nearest ally *R. fulgens*. The populations of the species were found in two geographically distinct localities in the Rudraprayag and Pithoragarh districts of Uttarakhand state. The distinguishing morphological characters, affinities with other species and various ecological aspects of the new species are discussed here.

Key words: Floral diversity, subalpine-timberline zone, taxonomy, Uttarakhand

#### Introduction

Rhododendron Linnaeus (1753: 392) is a large genus comprising ca. 1000 species worldwide, classified into 8 subgenera (Chamberlain 1996, Fang et al. 2005). Rhdododendron is distributed widely in the northern hemisphere, with China having the highest diversity (ca. 571 species fide Fang et al. 2005) and endemism. In India, 92 species, 8 subspecies and 9 varieties are reported, which are distributed from Arunachal Pradesh to Jammu and Kashmir and one subspecies from the Western Ghats. The Eastern Himalayan region is a hot spot for *Rhododendron* diversity (75 species, 4 subspecies, 5 varieties), whereas only 6 species are reported from the Western Himalaya (Sastry & Hajra 2010). Among all the species in India, Rhododendron arboreum Smith (1805: 9) has the widest elevational range, while other species are confined to high altitude regions which mainly form krummholz vegetation and alpine scrubs (Naithani 1984). During 2007-2010, a vegetation survey was carried out in the Western Himalaya along the subalpine-timberline zone, and a new species of Rhododendron was observed, which was conspicuously distinct in morphology from other species of rhododendrons across the world. The morphological characters such as habit, size, leaf, bark, floral parts, capsule and seed were measured with the help of a stereo microscope and scales. Each vegetative and floral part was measured of different individuals. Morphological characters and phenological traits of the new species were monitored for three years (2008–2010) and distinguishing characters were identified. A flowering branch of the species was deposited in the herbarium of the Wildlife Institute of India (WII). Comparison with the relevant literature on *Rhododendron* species and local floras, such as Hooker (1851, 1882), Osmaston (1978), Naithani (1984), Pollunin & Stainton (1984), Grierson & Long (1991), Gaur (1999), Milleville (2002), Fang et al. (2005) and Sastry (2010) revealed that the new species is a hitherto undescribed species and new to the genus Rhododendron.