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Photo credit: Dr. Dinesh Singh & Deep Shekhar Das



Plant Diversity of Valley of Flowers National Park Uttarakhand





Biodiversity Assessment Through Long Term Monitoring Plots in
Indian Himalayan Landscape
(National Mission on Himalayan Studies)

Botanical Survey of India
Kolkata

The Valley of Flowers National Park (VFNP) lies between 30°41'–30°48' N and 79°33'–79°46' E covering an area of 87.5 sq. km in Chamoli district of Uttarakhand. The park is part of Nanda Devi Biosphere Reserve (NDBR).

The VFNP located in the transition zone of Zaskar and Great Himalayas ranges and endowed with great diversity of alpine flora, typical alpine shrub and meadows. It is interesting to note that, the valley comprises of varied landscapes, ranging from low-lying flat lands to gentle slopes; steep alpine slope to rocky glacial moraines; fragile river banks to forest-meadows; and snow clad mountains high range plateaus. River Pushpavati flows through the valley and has its source from Tipra Glacier; one of the legendary religious peaks, the Gauri Parbat.

Being an inner Himalayan valley, the VFNP has many distinct microclimatic zones. Heavy downpours occur during monsoon seasons which normally start from late June and continue up to early September. The Valley usually remains snow-bound for six to seven months from late October to late March.

Depending upon the altitude, vegetation of the national park can be divided into three zones, viz. sub-alpine, lower alpine and alpine. The tree species are limited to sub-alpine zones only.

The Park harbours more than 500 species of flowering plants out of which a number of plants are threatened.

The dominant trees are *Betula utilis*, *Rhododendron campanulatum*, *Abies pindrow*, *Prunus cornuta* etc. while dominant herbs & shrubs are *Arisaema jacquemontii*, *Boschniakia himalaica*, *Corydalis cashmeriana*, *Polemonium caeruleum*, *Polygonum polystachyum*, *Impatiens sulcata*, *Geranium wallichianum*, *Galium aparine*, *Morina longifolia*, *Inula grandiflora*, *Nomochoris oxypetala*, *Anemone rivularis*, *Pedicularis pectinata*, *Pedicularis bicornuta*, *Primula denticulata*, *Trillium govanianum* etc.

Some of the threatened plants of the park are *Aconitum falconeri*, *Aconitum balfouri*, *Acer caesium*, *Meconopsis aculeata*, *Saussurea atkinsoni*, *Saussurea obvallata* etc.

