

SIKKIM

State Flower: Noble Orchid

Botanical Name: *Dendrobium nobile* Lindl.

Family: Orchidaceae

Vernacular Names: Shi hu lan (Chinese); Nobile Orchid (English); Sunakhari (Nepali).

Etymology: The generic name, **Dendrobium** is derived from the Latin words 'dendros' meaning 'tree' and 'bios' meaning 'life' [living on a tree] in reference to its epiphytic habit, and the specific epithet, '**nobile**' is also derived from Latin meaning 'noble' or 'grand' in reference to the popularity of its beautiful and long-lasting flowers.



Description: An epiphytic herb; also grows on moss covered rocky slopes and boulders. Pseudobulbs stem-like, clustered, fusiform-clavate, upright, 25 – 50 cm long, swollen at nodes giving a jointed appearance, sheathed. Leaves alternate, oblong, strap-shaped, 6 – 15 × 1 – 3 cm, coriaceous, many-veined. Racemes 2 – 4-flowered, laterally arising from nodes. Flowers large, waxy, fragrant, variable in colour, white, flushed with pink to purple, lip with a large, velvety, maroon blotch towards base, which is surrounded by pale white and mauve to purple

margin; column green, flushed with purple, with acute stelidia; anther mauve purple with white at base. Capsules elongated, prominently ridged.

Flowering & Fruiting: It is a spring flowering species; flowering commences during March and last up to 6 weeks. Fruits appear during June and remain attached to the shoot till next year's flowering.

Range of Distribution: Originally described from China; widespread in the tropical to sub-tropical Himalayas with elevation ranging from 500 to 2000 m. Apart from Himalayan region and NE India, it occurs in Nepal, Bhutan, Myanmar, China and Thailand.

Economic Importance: This species has high horticultural value due to its beautiful and long-lasting flowers. Numerous cultivars are available with differently coloured inflorescence. This species is largely exported to Europe and many other countries for cultivation.



Traditional Use: It is one of the 50 fundamental herbs used in the traditional Chinese Medicine. It has been used to nourish and stimulate stomach. A tea made from stem of this and other Dendrobiums is taken for complaints like fever, sunstroke, and excessive perspiration.

Medicinal Uses: Several medicinal compounds, such as dendrobine, dendroxine, dendrin and other alkaloids have been isolated from the stem and leaf extracts. Many phenantherenes extracted from **Dendrobium nobile** have shown anti-tumour activity. Sesquiterpene glycosides isolated from the stem affect lymphocyte cells, indicating possible immunomodulatory effects. Gigantol isolated from this species has shown antimutagenic properties.

Propagation: Seeds are viable and can be germinated when subjected to suitable nutrient medium. This species can also propagate vegetatively through annual vertical growth from the rhizome.

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