

# *Saussurea costus*



**Family:** Asteraceae

**Local/common names:** Costus, Kuth, Rusta (Spiti, Ladakh), Kuth (Kinnaur, Uttaranchal), Kustha, Pachak

**Trade name:** Kuth

**Profile:**

*Saussurea costus* is distinctive perennial that cannot be missed in any of the high altitude meadows or on the bunds by the agricultural fields, especially in autumn when it is abloom with clusters of purple flowers. The plant is very important because of its medicinal properties and is one of the 50 key plants in traditional Chinese medicine. The traditional processing of the plant in order to convert it into a drug varies according to the use it is being put to. At times the whole plant is used as a drug and the active principle is extracted with water or oil. In other circumstances, the roots are crushed and powdered and this is later used singly or in a mixture with other plants. The drug that is prepared is grey to dull brown, aromatic and bitter in taste.

**Habitat and ecology:** This perennial shrub thrives at altitudes ranging from 1600-4200 m. In wild condition the plants are mainly found in rocky sloppy areas also across bunds in the field. The plant thrives well in shady, moist places. The species is found naturally only in the Kashmir Himalayas and the surrounding country, growing on moist slopes at an altitude of 2600-4000 m. The plant is now cultivated in Jammu and Kashmir, Himachal Pradesh, Uttaranchal, Sikkim and Arunachal Pradesh. It also occurs in parts of the basins of the Chenab and Jhelum at altitudes of 3000-3800 m. In Himachal Pradesh, it is found in Kinnaur and Lahaul-Spiti districts. The plant is found in Keylong, Pattan valley, Sangla Kanda, Panihartu (Bara-Bhanganal) and Pangi-Bharmour areas where it has been naturalized.

**Morphology:** *Saussurea costus* is a tall, robust herb, growing up to a height of 1.5 m to 2 m. The leaves are triangular, large and long stalked at the base, borne on the winged stalks. The upper leaves are smaller sometimes with two lobes at the base almost clasping the stems. All the leaves are rough above, glabrous beneath and are irregularly toothed. The flowers are bluish purple almost black, about 2 cm long, borne on rounded flower heads. Pappus is feathery brown, giving a curious, fluffy appearance to the fruiting flower heads. The fruits are small, curved, compressed and of brown appearance.

**Distinguishing features:** The flower heads are almost black, borne on long stalks with upper clasping leaves and long stalked large lower leaves.

**Life cycle:** The plant is in flowering stage in June-August and fruiting takes place in the months of August-September.

**Uses:** An essential oil obtained from the roots is used medicinally, in the perfume industry, as incense and as a hair rinse as it is said to darken grey hair. It is also used as an insecticide and insect repellents. It is useful in asthma, bronchitis, colic, cough, dental trouble, diarrhoea and dysentery, fever flatulence, headache, hysteria, in some cases of heart troubles, menstruation trouble, rheumatism and promotes urination. It is used in the treatment of pulmonary disorders like bronchial asthma, very common in the region, and acts as an expectorant for coughs. The crushed, dried roots are applied as a poultice over painful joints and boils. The drug is used to treat chronic skin diseases, rheumatic pain. Dry stems are used as fodder during winter in the cold areas of Kashmir. The leaves contain an alkaloid saussurine, which produces a definite relaxation of the bronchioles. It also has a great depressant action on the involuntary muscle tissue of the body; also as a substitute of opium for smoking, it produces marked depression of the cerebral nervous system. The people of the Himalayan region keep the dried roots in their boxes and safes and storage spaces, as they are excellent insect repellents. The plant material is also used as a hair wash and for treating facial marks and blemishes.

**Market rate:** The dried roots are sold at a rate of Rs.180-200/- per kg