Cowhage

*Mucuna prurita* Hook.


*Carpogon pruriens*

*Dolichos pruriens*

**Family: Liguminosae**

An herbaceous twining annual found almost all over India and in Andaman and Nicobar Islands. Leaves trifoliate; leaflets broadly ovate, elliptic or rhomboid ovate, unequal at base; flowers in axillary pendulous racemes, purple; pods curved, 5-10cm × 1.5-1.8 cm., longitudinally ribbed, turgid, densely clothed with persistent pale brown or grey, irritant bristles seeds black, 4-6 in a pod, ovoid, with funicular hilum.

**Distribution:**

The plant found in bushes and hedges, damp places, ravines and scrub jungles throughout the plains of India mainly in West Bengal, Madhya Pradesh, Karnataka, Kerala, Uttar Pradesh, Andaman and Nicobar Island. It is reported to be pest of Sal plantation in Bengal. The plant is occasionally cultivated.

**Vernacular Names:**

Sanskrit – Aatmagupta, kapikacchu, Vanari

Hindi – Kiwach, kaunch, goncha

Bengali – Alkushi, bichoti

Kannada – Nasugunnni kai, Turuche gida

Telugu - Dulagondi, pilliadugu

Tamil – Poonaipidukkan, poonaikalei

Malayalam – Naicorna
Agro-climatic requirements:

Mucuna is a hardy plant, grows in variety of soil which has good water drainage. It can be grown well in tropical and subtropical regions. Its growth doesn’t depend much upon climate so, it can be grown throughout the year if water for irrigation is available. This plant can’t tolerate too much of cold and fog.

Cultivation:

For rain fed crop of mucuna seeds are sown in the month of June and harvested in the month of December otherwise, sowing is done in the month of August and harvesting done in the month of February in a irrigated land. Seeds are directly sown, for that seeds required at the rate of 5kg/ha.

The land is 2-3 times ploughed and brought to a fine tilth, and manured with 10 tones of farmyard manure or compost prior to sowing. Seeds are directly sown at the distance of 60cm on patches or hills on each way. The plants are staked up when they are few inches tall. The plants can be allowed to trail on the ground without any support if sowing is done at a distance of 45 × 60 cm. light irrigation given soon after sowing.

Manure and fertilizers:

For cowhage crop per hectare requires 100kg N, 80kg phosphorous and 40 kg potash. Phosphorous added during land preparation, nitrogen and potash given in 2 divided doses, 30 and 60days of sowing respectively.

Intercultural and pruning:

To begin with weeding is done at an interval of 15-20 days, after 60 days cowhage will spread all over the ground and it becomes difficult to carry out. For the irrigational crop irrigation is done before sowing, just after germination and 4-6 times at an interval of 20-25 days during November and December.

Plant protection:

Periwinkle crop is relatively free from damage due to pests and diseases. At the later stage infested by leaf eating insect and leaf spot disease caused by Sarcospora. Insect can be controlled by spraying 0.2% Mylathiyan or metacid at an interval of 15 days. Diethane M-45(0.3%) sprayed at an interval of 7 days to control leaf spot disease.

Harvest and yield:

The crop is harvested after 170-180 days. Fully mature fruits are harvested 3-4 times in a season. If harvesting is not done then the fruits will get dried up and split in to two halves and seeds will fall off. After harvesting fruits are dried under sunlight, seeds are separated from the legume, dried and stored.

Seed yield of irrigated and support received crop is around 3000-4000 kg/ha.

Seed yield of rain fed crop and where the plant is allowed to trail on the ground is 1500-1750kg/ha.
Inputs:

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<th>Sl.No</th>
<th>Materials</th>
<th>Per acre</th>
<th>Per hectare</th>
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<tbody>
<tr>
<td>1</td>
<td>Seeds (kg)</td>
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<td>50</td>
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<td>2</td>
<td>Farm Yard Manure (t)</td>
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<td>15</td>
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<tr>
<td>3</td>
<td>Fertilizer (kg)</td>
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<tr>
<td></td>
<td>N</td>
<td>40</td>
<td>100</td>
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<td>P₂O₅</td>
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<td>80</td>
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<tr>
<td></td>
<td>K₂O</td>
<td>30</td>
<td>75</td>
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Parts used: roots, seeds and bristly hairs

Medicinal uses:

Common cowitch has long been valued in medicine. The roots are tonic, stimulant, diuretic, purgative and emmenagogue. They are used for diseases of nervous system such as facial paralysis, hemiplegia etc., kidney troubles and dropsy. An ointment prepared from root is applied for elephantiasis. The seed are astringent and tonic; they possess slight insecticidal activity. Seed powder in doses of 20-40 grains prescribed in leucorrhoea, spermatorrhoea and it acts as aphrodisiac. Vanari kalpa and Vanari gulika are the compound preparations and are reputed as best aphrodisiac. The leaves of the plant are applied to ulcers.

The bristly hairs covering fresh and dry pods cause intense itching on contact with skin and sometimes cause blister and dermatitis; a wash with warm water containing alkali or ammonia reduces the burning sensation. They are administered as bolus along with honey or syrup followed by purgative as a vermifuge in round worms.