

Kuntz, a multipurpose plant

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Kuntz (*Thysanolaena maxima* (Roxb.), family: Poaceae) locally called 'Amliso' is a multipurpose plant, commercially cultivated in Darjeeling and Sikkim Hills in India. After harvesting of its inflorescence, from which brooms are made, the plant is used as animal fodder. Local farmers rate it as one of the best fodders for milk production. The stem is used for fuelwood during winter and the plant as medicine for both humans and animals. The plant is 2 m. tall and flowers during November-December. The leaves are oblong lanciolates with a blade-like sharp edge all around. It is a shrub and perennial and is propagated by suckers. Despite its multi-use from time immemorial, it has never received recognition from researchers and extension workers, and has remained as it was decades ago. This article aims to introduce this plant as a "close friend of poor farmers" which helps them in times of scarcity.

Habit

It grows wild in deep forest, river and stream banks, rocks, and uncultivable lands in foothills up to 1800 m. above sea level. As a crop it does well without any inputs and irrigation. Now that thatch as cover for houses has almost been wiped-out by durable and lasting plain steel sheets, farmers have replaced their thatch fields ('Khar-bari' in Nepali) with 'amliso' cultivation which gives better economic return. There are two varieties, 'Kalo Khalay' and 'Seto Khalay', which can be easily identified by the intensity of colour. The former is dark green and yields more broom and fodder than the latter.

Fodder and broom

If the plant is used only for fodder then, two to three cuttings can be obtained in a year. If the broom is harvested between mid-November and mid-January, fodder only can be cut

thereafter. The plant starts to regrow from the sucker in March-April when the temperature rises above 20° C. After drying, the stem is used as fuelwood during winter.

After harvest, the inflorescence is sun dried and sold in the market. Brooms are made from these inflorescence by tying them with bamboo strips, locally called 'choya'. During the 1995-96 season, the price in local markets rose up to Rs. 20/- per kg, which is the highest so far recorded. This plant is developing as a good alternative to ginger (*Zingiber officinale* Rose) which is slowly losing its potential as the number one cash crop due to the deadly disease 'Rhizome Rot' (see 'Wanted').

Medicinal Values

The extract from the root suckers is used to check boils. It has been observed that in some cases, boils were healed overnight. In case of retention of placenta in cows, the 'amliso' plant is fed for easy and immediate release (the author has practised this several times with success on his own farm). When the navel cord of a newly-born child has to be cut, the 'amliso' leaf is used as a knife without any infection. The root extract is also used as a mouth wash (Rai and Sharma, 1994).

Conclusion

'Amliso' helps local people to produce their own fodder and fuelwood. This prevents collection from forests, which directly helps in the conservation of forest resources. It provides fodder during periods of scarcity and emergency. The broom provides a good income for farmers every year. The quick establishment, low-nutrient requirement, no intercultural operations, and very low water requirement of this plant is another important factor accounting for its good acceptance by farmers.



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References

- Rai LK. & Sharma E. 1994. Medicinal plants of the Sikkim Himalaya. Bishan Singh Mahendra Pal Singh, Dehradun.

Wanted

Problem of ginger rhizome rot disease

Ginger (*Zingiber officinale* Rose) is one of the major cash crops for thousands of poor farmers of Sikkim and the Darjeeling hills in India. Its commercial cultivation since the late seventies, has to some extent helped farmers to improve their economy. But for the last decade, farmers have faced severe problems of "Ginger Rhizome Rot Disease", which has become endemic. Nothing has so far been done about this. The farmers in this hilly area are traditionally organic farmers, but out of frustration many are these days indiscriminately using pesticides. The disease is caused by fungus, but farmers are trying their luck even with insecticides, out of ignorance, lack of proper guidance and inadequate legislation on pesticide marketing. Improvement of the crop through conventional breeding and genetic engineering appears to have left the problem unsolved. Who can give me suggestions on how to improve ginger production with these farmers in an ecologically friendly way, or who can provide resistant genetic material?

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Harvesting of 'amliso' brooms.