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# **EUONYMUS TINGENS WALL. (CELASTRACEAE), A TREE OF MULTI-ECONOMIC** FOLK UTILITY IN RAATH REGION (GARHWAL HIMALAYA)

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#### ABSTRACT

E. tingens, a temperate arborescent plant species, collected from Raath region (Dudhatoli area) of Garhwal Himalaya (U.P.), is observed to be closely associated with the folk culture, traditions and the daily life of the inhabitants of this area. The ethnobotanical importance, obtained from the natives and medical practioners represented its multipurpose economic uses in medicine, psychomedicines, dye, timber, fodder, fuel and in folk songs etc. Hence, this tree of multieconomic value, needs to be protected and conserved. The present paper incorporated its distribution in area, brief description with figures of some parts, and various folk utility.

#### INTRODUCTION

Raath is an interior hilly region of district Pauri Garhwal (U.P.). It has geographical limits between 29 50' to 30 15' N and 78 55' to 79 20' E with temperate like climatography. The local inhabitants are still beyond with the influence of modern culture and are closely dependent on the natural resources, specially on flora and fauna for their daily necessities.

## **DISTRIBUTION AND DESCRIPTION**

Hooker (1875) reported two species viz. E. echinatus Wall. (Garhwal to Sikkim) and E. pendulus Wall. (Garhwal to Nepal) from temperate Garhwal Himalaya. Later on Duthie (1906), reported two more species i.e. E. tingens and E. lacerus Buch.-Ham. Rau (1961) described E. fimbrieta Wall., E. hamiltonianus Wall. and E. echinatus Wall. from North Garhwal. The species E. tingens Wall. vern. Konk, Konki, Shomeli is fairly distributed in open dry forest of Raath region, from 2200 to 2500 m; associated with the species of

Quercus, Lyonia, Ilex and Rhododendron. E. tingens Wall. Roxb. Fl. Ind. ed. carey 2: 406. 1824; Hook. f. FBI. 1: 610. 1875.

Evergreen or subdeciduous, small tree up to 10 m high and 25-35 cm in dia. Bark rough, grey-brown, exfoliating in woody pieces. Leaves opposite, broadly ovatelanceolate, 3.5-5.3 × 1.5-3.5 cm, crenate dentate, dark coriaceous or glossy green above, paler beneath glabrous. Flowers pale-white, usually 5-merous, 1.2-2 cm across, in axillary or terminal dichotomously drooping cymes. Calyx lobes small persistent. Petals ovate, 0.5-0.7 × 0.6 cm, tinged with faint purple veins, margins dentate. Stamens 4-5, inserted with the petals. Capsule pale green, globose, 1-1.5 cm in dia., usually .5 angled, not winged.

Fl. & Fr. March-Sept., on way to Binsar, ± 2400 m, GUH 6077 (Fig. I & II).

## ETHNOBOTANICAL IMPORTANCE OF E. TINGENS

in the recent years, Gaur and Semwal (1983), Gaur et al. (1980) Gupta (1981),

Purohit et al. (1985) and others have worked out some ethnobotanical aspects on the Flora of Himalayan region, but the identity and utility of genus Euonymus, hardly came into light. In the following paragraphs, the ethnobotanical aspects of E. tingens Wall. in Raath region have been incorporated.

## **MEDICINAL USES**

The information gathered from the local health practioners and natives through personal interviews represents that the tree species has multiferous uses in folk medicine. The juice of the young leaves and inner layers of bark is used eye troubles like physical injuries and pains. The extracted prepared after crushing the roots is applied on forehead to relieve headache. The root stock (bark) is also used in dyspepsia.

## RELIGIOUS AND PSYCHOMEDICINAL USES

This area still preserves old traditions traits, rituals, religious social and family customs. All these activities are associated with folk uses of plants. E. tingens Wall. is enormously associated with several religious and psychomedicinal activities. The

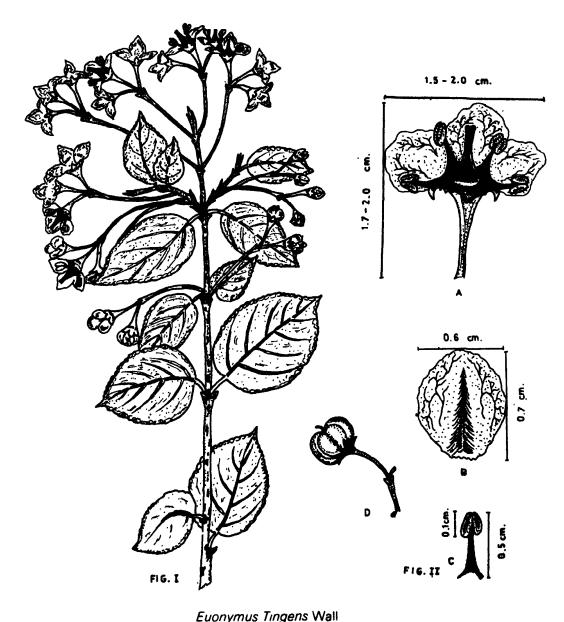


Fig. I. Habit. Fig II A Flower in v s. B Petal.C. Stamen D Capsule.

yellow coloured dye obtained from the inner parts of the tree bark serve as a substitute of "Chandan" (commonly obtained from Santalum sp.). It is used on special occasions of religious ceremonies and worships. The wood is regarded as sacred and used for incense fires (Hawan).

The yellow dye is utilized as ink for writing Psychomedicinal formulae (Tantramantra) on locally prepared coarser fibrous paper of *Daphne papyracea*.

## E. TINGENS AND FOLK SONGS

The real and indigenous culture of Raath, is reflected in its folklores. Like several other plants, *E. tingens* including different parts (leaves, bark, flowers, dye, fruits) are fairly incorporated in folksongs of happiness, affection and festivals etc. Generally the tree and its parts are regarded as simile or metaphor and local languages are used in the songs *e.g.* 

Bhameli ki chhali maaji, Bhameli ki chhali, Heund ka bagat maaji, bhulla bulanu ku aali. In the above lines, the bark of *E. tingens* (Bhameli ki chhali) is used as simile. Similarly there are a number of folk songs in which beauty of this plant is expressed.

## UTILITY AS DYE, FODDER AND TIMBER TREE

The tree is an excellent and rare source of a yellow dye, obtained from grinding the inner portions of stem bark. It is fairly consumed as 'chandan' for various religious ceremonies, writing religious verses, horoscopes, colouring and dying cloths.

The juvenile leaves constitutes the best fodder for cattles and goats. It is supposed to increase the quantity of milk in milching cattles. The pale coloured timber obtained from the tree is utilized for the preparation of wooden combs, decorating boxes and light furniture.

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## REFERENCES

- DUTHIE, J.F. Catalogue of the plants of Kumaon and Garhwal and the Adjacent Portion of Garhwal and Tibet Dehra Dun. 1906.
- GAUR, R.D., M.P. SHARMA AND J.K. SEMWAL. Ethnotoxic plants of Garhwal Hills. *The Eastern Anthropologist* 33 159-163, 1980.
- ---- AND J.K. SEMWAL. Some little known wild edibles of Garhwal Himalaya. *Man and Environment* 7: 161-165. 1983
- GUPTA, R. Plants in folk medicine of the Himalayas. In S.K. Jain (ed.) Glimpses of Indian Ethnobotany 83-90 1981.
- HOOKER, J.D. Flora of British India Vol. I. London. 1875.
- PUROHIT, V.P., R.A. SILAS, AND R.D. GAUR. Plants in the folk songs, proverbs and folktales of Raath zone (Pauri Garhwal). The Eastern Anthropologist 38(1) 33-34, 1985.
- RAU, M.A. Flowering plants and Ferns of North Garhwal, Uttar Pradesh. Bull. Bot. Surv. India 3 215, 1961.