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Medicinal importance of *Leucas aspera* (Wild) link family lamiaceae

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Abstract

Leucas aspera is an herb, which is having so many properties and uses. It can be used as an insecticidal, anti-inflammatory, antipyretic, antiseptic for skin rashes and even as anti-snake venom. So it is a perfect poor man remedy.

Keywords: Analgesic, Anti-inflammatory, anti-snake venom, insecticidal, *phlomis aspera* wild

Introduction

Leucas aspera is a plant which is seen on waste land and roadsides of India. It belongs to family- Lamiaceae and its scientific name is *Phlomis Aspera* wild. It is also known as Goma. These are available as herbs or under shrubs. It is having stem, branches, leaves and flowers. The stems are quadrangular grooved, wooly, villon pubescent or hirsute. The leaves are opposite, elliptic-lanceolate to broadly ovate, entire to serrate, acute to acuminate. Inflorescence of dense axillary less often terminal, usually distant whorls. Calyx 10-nerved, often striate, mouth equal or oblique teeth 6-10 unusually unequal, pubescent to hirsute. Corolla with upper lip erect, concave, villous externally, lower lip 3 fid, spreading, mid-lobe, larger. Stamens 4, didynamous, ascending under upper lip, anthers connivent, cells divaricated, ultimatels confluent. Disc entire or lobed uniform or sometimes enlarged anteriorly, style shortly 2-lobed. Nutlets ovoid, triquetrous, obtuse to truncate-rounded at apex (Khanam & Hassan 2005) ^[1].

Leucas Aspera is an erect or diffuse, annual herb. It is about 50 cm tall, hirsute or scabid. The leaves with 0.5-1.0 cm long petioles, lamina 4-8 X 1-1.5 cm, oblong lanceolate often entire or slightly serrate, acute to obtuse. Inflorescence with terminal and axillary whorls. Bract 1 cm long almost calyx 1.2 cm long, tubular, curved, constricted above the nutlets, usually smooth and glabrous below ribbed and hirsute above, teeth triangular, spinulose ciliated, the upper one longest. Nutlets 0.2 X 0.1 cm, obovoil oblong, angular on inner surface, outer surface, rounded on outer, smooth, brownish black. (Federov 1969; Sadhu 2003) ^[2, 3].

Chemical Discussion

The juice of the leaves is used in psoriasis, chronic skin eruption, in chronic rheumatism and applied to disperse painful swellings (Kirtikar Basu 1918, Chopra *et al.* 1996) ^[4, 5]. The flowers are being warmed with a little honey and given orally for cough and cold to children (Caius 1998) ^[6].

Properties of *Leucas aspera*

Entire plant is used as an insecticidal and in traditional medicine. The plant has been scientifically investigated for anti-inflammatory, analgesic and used for wound healing. It is also used in Cobra venom poisoning. It is having the insecticidal property due to the presence of Nicotine. Large numbers of plant products are having the Mosquito larvicidal properties (Ansari *et al.* 2000; Green *et al.* 1991; Mittal *et al.* 1995; Macedo *et al.* 1997; Parich *et al.* 1994; Zebitz 1984) ^[7-12]. The compounds extracted from the plant include launch in elephatic compound, triterpenes sterols-sitosterol, stigmasterol, campesterol and a novel phenolic compound. It is pungently aromatic and commonly used as an antipyretic in south India in crude compound.



Fig 1: Flowering *Leucas aspera* Plant



Fig 2: *Leucas aspera* Plant

Medicinal importance of *Leucas aspera*

1. The juice from its leaves is used as an external application for painful swellings (Kirtikar and Basu 1918; Chopra *et al.* 1996) ^[4, 5].
2. The flowers are given with honey to treat with coughs and cold in children (Caius 1998) ^[6].
3. The leaves are applied to the bits to serpents, poisonous insects and scorpion sting.
4. The extract of plant is used with honey in case of abdominal pain and also in digestion.
5. The leaves are used as an insecticide and mosquito repellent in rural areas (Kirtikar and Basu 1990; Sadhu 2003) ^[13, 3].
6. The juice of leaf is used as local application for psoriasis and chronic skin eruptions.
7. It can be used as insecticidal also by sprays extract of the plant on other plants by mixing with water.
8. It is also used in Gynaecological and obstetrical problem like hastening menstruation.

Conclusion

Leucas aspera is a wild herb or shrub which is having medicinal value to a great extent and is available abundantly in field of India, Bangladesh and also adjoining areas in India. It is easily available at a very low cost. It can be used in crude form as well as in extract form and also in the refined form as a medicine.

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