

Anogeissus Latifolia

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Introduction

Anogeissus latifolia (DC.) is medium sized deciduous tree belonging to the family combretaceae and it is commonly known as gahtti. It attains height of about 30-40 feet (Orwa, 2006). Leaves are opposite or sub-opposite. Bark is smooth with grey- white colour and exfoliating in irregular thin scales (Warrier, 1994). Flowers sessile, in dense heads. Fruit small, compressed, winged with beak, seed ovoid. Tree flowers and fruits in the month of Sept-March (Yadav and Sardesai, 2002).The amorphous translucent exudates of the *Anogeissuslatifolia* (Roxb) wall is known as Gum Ghatti (Amar *et al.*, 2006).

Distribution

It is a smaller or fairly large tree, commonly found in the forests of the sub-Himalayan region, Myanmar, Srilanka, Siwalik hills and throughout India up to 1200 m. It is an important timber and the leaves and bark are used for tanning.

Common Uses

Ethnobotanically, the bark has been reported to be used in the treatment of various disorders like skin diseases such as sores, boils and itching, snake and scorpion bite, stomach diseases, colic, cough, diarrhoea. Further, antioxidant and wound healing activities have been evaluated in *A. latifolia*.

Gum ghatti has become used as an alternative to gum arabic since around 1900. Functional properties of gum ghatti have been reviewed (Stephen *et al.*, 2006). The fractionation, chemical and physical characterization of processed gum Ghatti was carried out by Kang *et al.* (2011).The excellent emulsification properties of gum ghatti in oil-in-water emulsions, which enable its application in the food, cosmetic and/or pharmaceutical industries



was studied by Kang *et al.* (2014). From the ancient times bark and leaves of *Anogeissuslatifolia* has been extensively utilized in the treatment of different diseases.

Medicinal uses

A number of medicinal uses of different parts of *A. latifolia* for the treatment of several human ailments. The plant (root, leaf and fruit) finds ethnomedicinal uses as antiseptic and is used to treat wounds, tumor and cancer, rheumatism and burning sensation by tribal community in Dindori district, Madhya Pradesh, India (Marko and Sandya, 2020). Different parts of the plant are useful in skin diseases, diarrhea and dysentery in Mandaragiri, Angul forest division, Odisha, India (Pradhan *et al.*, 2014). The tribal community in Guna district, Madhya Pradesh use different parts such as fruit, root and leaves of the plant as antiseptic and to treat wound, tumor and cancer, rheumatism and burning sensation (Samar *et al.*, 2015).

Sharma *et al.* (2020) showed that the ethanol extract of *A. latifolia* exhibited analgesic, antiinflammatory and antipyretic effects. The presence of phenolic and flavonoid compounds which may be responsible for the effects. The study validates the use of stem bark of *Anogeissuslatifolia* for treatment of painful inflammatory conditions. The *in vitro* anti-proliferative potential of extracts from four Indian medicinal plants, namely *Anogeissuslatifolia*, *Terminaliabellerica*, *Acacia catechu* and *Moringaoleiferna* and the extracts inhibited the cell proliferation of nine human cancer cell lines in a concentration dependent manner (Diabet *et al.*, 2015). Ramachandran *et al.* (2012) studied the antidiabetic, antihyperlipidemic and *in vivo* antioxidant potential of aqueous extract of *Anogeissuslatifolia* bark in streptozotocin-nicotinamide-induced type 2 diabetic rats.

Other uses

Besides medicinal uses, *A. latifolia* is also used for other purposes such as construction, fodder, fibre, fuel and ritualistic purposes. *A. latifolia* is utilized as fodder and fibre in foot hills of Garhwal Himalaya (Kumar and Bhatt, 2006).

Conclusion

From the ancient times bark and leaves of *Anogeissuslatifolia* has been extensively utilized in the treatment of different diseases proving their potential use in medicine as a potent herbal drug.