



ETHNOMEDICINAL STUDIES OF GENUS: *Butea* USED BY THE ETHNIC GROUPS OF NORTH COASTAL ANDHRA PRADESH

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ABSTRACT

The tribal people depend on forests for their livelihood and most of the rural people still depend on traditional medicine as a primary healthcare source. The paper deals with the ethnomedicinal treatment of *Butea monosperma* and *Butea superba* by the tribals of north coastal Andhra Pradesh. A total twenty-three practices recorded of which 6 are newly reported or less known.

KEY WORDS: Ethnomedicine, *Butea*, tribals, North Coastal Andhra Pradesh

INTRODUCTION

India is rich in medicinal plant diversity which is distributed in different geographical, environmental conditions and associated tribal & folk knowledge systems. The tribal people mostly depend on forests for their livelihood and up to 70% of the rural population still depends on traditional medicine as a primary healthcare source. There are 550 tribal communities in India of which 75 were recognized as Primitive and Vulnerable Tribal Groups (PVTGs) by the Government of India as per Dhebar Commission (1961). Thirty communities are recognized as schedule tribes in Andhra Pradesh of which 10 communities viz., Bagatha, Bodo Gadaba, Chenchu, Dongria Khond, Bondo Porja, Gutob Gadaba, Jathapu, Kammara, Khond Porja, Konda Dora, Konda Reddi, Konda Savara, Kutia Khond and Parengi Porja, Valmiki are inhabited in the study area. It falls in between 81° 51' and 84° 46' of Eastern longitude and 17° 45' and 19° 40' Northern latitude with a total area of 10,860 sq km covering 23 mandals of Srikakulam, Vizianagaram and Visakhapatnam districts with a total population of 42,88,113 of which the tribals are 6,18,500 (14.42%) and the Primitive and Vulnerable Tribal Groups (PVTGs) constitutes 1,76,324 (4.11%) as per 2011 census. Though there are publications on bites by different tribes in different parts of India (Chandan Das et al. 2012, Ahmed and Kabir, 2015, Dilip et al. 2022, Srivastava et al. 2022, Pooja and Shah. 2023, Dharti Methaniya et al 2023, Rohini and Mehta, 2026) exclusive studies on the tribes are not undertaken necessitating the present study.

MATERIAL AND METHODS

Interviews were conducted with tribal vaidhyas at their dwellings during 2008-2011 covering all seasons of an year. During oral interviews specific questions were asked and the information supplied by the informants was noted. The knowledgeable informants were taken to the field and along with the collection of plants for the voucher specimens, the use of plants as given by the tribal informants was noted. In 95 pockets of the study area, 139 vaidhyas and practitioners were consulted. Each medicinal practice was cross checked with at least 3-4 informants. Voucher specimens were collected and deposited in the Herbarium of the Department of Botany, Andhra University, Visakhapatnam (AUV).

RESULTS

Botanical Name: *Butea monosperma* (Lam.) Taub.

Family: Fabaceae

Vernacular Names: Moduga (Telugu), S: Palasha (Sanskrit), Pala (Hindi), Muthugada mara (Kannada), Porasu (Tamil), Flame of the forest (English)

Plant Description

Erect tree up to 18 m height; stem crooked, branchlets densely tomentose; leaves trifoliate, coriaceous, nerves 7 pairs, glabrous above, sericeous below, cuneate, entire, apex obtuse, retuse; flowers large, lowest calyx tooth much shorter than the side ones, corolla orange-scarlet; petals silky-pubescent without; standard petal lanceolate, wing petal falcate, keel petal veined; pod flat pubescent.



Fig. *Butea Monosperma*

Flower & Fruiting: April – June.

Location: Boddaputtu (G.Madugula)

Ethnomedicinal observations:

Root with leaves of *Datura metel* and mustared oil are taken in equal quantities and made into juice. 1 or 2 drops is instilled into the ear once a day for 3 days for ear infection.

*Flower paste is administered to reduce backache and leg pains for backache and leg pains.

Flowers are presoaked in a glass of water overnight and mixed with sugar candy is administered daily for bleeding in urinary canal.

Seed paste mixed with honey and ghee is applied on the vagina during menses to avoid pregnancy (contraceptive).

*Leaf plates made up of leaves of this plant are used for eating meals daily for dyspepsia.

Flowers are boiled and made into paste and is applied on the navel for free urination.

*Seed paste is applied on the affected areas for leucoderma.

*Seed paste is applied on the affected areas for ringworm.

Flower paste is applied on the affected areas to reduce swellings.

Stem bark juice is applied on the affected areas for wounds.

Powder of the seeds in doses of 2 spoonfuls are given once a day for 3 d to treat amenorrhoea.

Two g of gum extracted from the bark is fried in ghee and is administered twice a day for 15 days to get relief from post delivery back ache and weakness.

Flower paste is applied over chest as the plaster for curing asthma.

Stem bark extract in sesamum oil is administered in doses of 1 spoonful twice a day from fourth day of menstruation to eleventh day for anti-fertility.

Seed paste in doses of 100 g once a day is administered to cattle to kill intestinal worms.

2 spoonfuls of ash of the tender branches mixed with a spoonful of ghee is administered daily twice for 2 days abdominal disorders.

Stem bark and bulbs of *Allium sativum* are taken in equal quantities and ground. A spoonful of paste mixed with a pinch of cheese is administered from the third days of menses daily twice for 3 d for monorrhagia.

The stem bark is ground into a paste. It is applied on the affected areas daily once for 3 d for skin diseases.

*Root paste is applied on the forehead twice a day for 3 days for headache.

*Half tea glass of leaf juice is given orally once a day till cure for jaundice.

Botanical Name: *Butea superba* Roxb.

Family: Fabaceae

Vernakular Name: Palasamu (Telugu), Palasa (Sanskrit) Palas (Hindi) Bastard teak (English)

Plant description

A large climbing shrub; leaves pinnately 3-foliolate; flowers in axillary or terminal racemes; calyx broadly campanulate; corolla much exserted; stamens diadelphous; ovary 2 per locule; pod follicle; seed obovate.

Flowering & Fruiting: April-May

Location: Bandabayalu (Chintapalli)

Ethnomedicinal Observation

Root paste mixed with half tea glass of water is administered twice a day till cure cough.

Flowers are ground with the leaves of *Cinnamomum zeylanicum* and the paste is administered orally twice a day for snake bite.

Stem bark is made into a paste and the paste in doses of 2 spoonfuls once a day for 3 d is administered on empty stomach to treat haematuria.

Root paste is applied externally on weeping eczema.

DISCUSSIONS

All parts of *Butea monosperma* (Lam.) Kuntze and *Butea superba* Roxb. are employed for various purposes by the tribal people north coastal Andhra Pradesh. Twenty three practices are recorded to cure various human ailments of which 6 are newly reported (Jain 1991 and Kirtikar and Basu, 2023). The root of *Butea monosperma* used to cure ear infection, headache; flower used to cure backache and leg pains, urinary canal, free urination, reduce swellings, asthma; seed used for Avoid pregnancy, leukoderma, ringworm, kill intestinal worms; leaf for Dyspepsia, jaundice; stem bark used to cure Wounds, anti-fertility, menorrhagia, skin diseases and tender branches used to cure abdominal disorders. The root of *Butea*



superba used to treat cough and weeping eczema; flower use for snake bite and stem used to treat haematuria.

Versatility of medicinal plants (about half million in diversity) around the world, make them a promising future because most of their medical activities have not investigated yet, and their medical properties could be significant in the treatment of disease in present or future. The traditional and ethnomedicinal literatures showed that *Butea monosperma* and *Butea superba* is very effective and safe for medicinal uses.

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