



Ethnomedicinal importance of *Oroxylum indicum* by the tribal of Eastern ghats of North Coastal Andhra Pradesh

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Abstract: The paper deals with the ethnomedicinal importance of *Oroxylum indicum* (Linn.) Vent. belongs to the family Bignoniaceae by the tribal people of Eastern ghats of North Coastal Andhra Pradesh. The plant used to cure a variety of ailments such as abdomen pains, Asthma, Cough, Cuts, Diarrhea, Galactagogue, jaundice, Leg pains, Leucorrhoea, Lungs pains, menorrhagia, Oedema, Piles, Post-partum problems, Respiratory problems, Rheumatism, rib pains, Snake bite, swellings, wounds. Eight practices were found to be new.

Keywords: Ethnomedicine, *Oroxylum indicum*, Eastern ghats, North coastal Andhra.

In Andhra Pradesh, 10 communities viz., *Bodo Gadaba, Chenchu, Dongria Khond, Bondo Porja, Gutob Gadaba, Khond Porja, Konda Reddi, Konda Savara, Kutia Khond* and *Parengi Porja* are recognized as PVTGs and except *Chenchu* and *Konda Reddi* the rest are present 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 4002 scheduled villages with a total population of 42,88,113 of which the tribes 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 ethnomedicine (Naidu et al. 2008, Rao et al. 2014, Rao et al. 2013, Rao and Kumari 202, Rao et al. 2006)

Materials and Methods

Interviews were conducted with PVTGs at their dwellings during 2008-2011. During oral interviews specific questions were asked and the information supplied by the informants was noted. The data were verified in different villages among the interviewers showing the same plant sample and even with the same informants on different occasions. 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. The field trips were meant for gathering information on medicinal plants used by them, the method and time of collection, ingredients used, mode of application, dosage and duration were recorded. 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). Plant identifications were made with the help of Flora of the Presidency of Madras (Gamble and Fischer 1916-1935), Flora of Visakhapatnam, Andhra Pradesh (Rao and Kumari, 2002).

Vernacular names

Pampenga (Telugu), Syanaka (Sanskrit), Sonapatha (Hindi), Sona (Bengali), Alangi (Kannada), Aralu (Malayalam), Achi pana (Tamil), Indian trumpet-flower (English)

Description of the Plant

A small medium sized tree; leaves opposite, leaflets ovate; flowers in racemes; corolla fleshy; stamens 5, one stamen a little shorter than the other 4; fruit very large, septifragally 2-valved capsule straight, tapering to both ends, flat; seeds many, surrounded by a papery wing. Flowering and Fruiting in May-Jan.



Fig. a. *Oroxylum indicum* fruiting



Fig. b. *Oroxylum indicum* flowering

Ethnomedicinal observations

Asthma: Three to five g of stem bark powder mixed with honey is taken orally or five ml of stem bark decoction is administered daily once.

***Cough & jaundice:** Stem bark is ground with roots of *Phyllanthus amarus* in equal quantities and one spoon of it is administered daily once on empty stomach.

***Cuts & wounds:** Fresh root bark paste is applied on the affected areas.

Diarrhoea: Stem paste is boiled in water and a quarter cup of filtrate is administered daily twice.

***Galactagogue:** One spoon of root bark paste or powder is taken with water daily twice.

Jaundice: Ten g of stem bark is ground with two g of turmeric. One spoon of paste is administered daily twice for five days.

Stem bark with tuberous roots of *Mirabilis jalapa* is taken in equal quantities and ground. 2 spoonfuls of paste with a glass of butter milk is administered twice a day for a week.

Joint pains: Ethnomedicinal practices: Paste prepared from crushed leaves is applied on.

***Leg pains & *swellings:** Stem bark ground with that of *Datura metel* and tender leaves of *Cardiospermum halicacabum* and boiled into liquor. Five ml of filtrate is taken daily once after meal.

***Leucorrhoea & *menorrhagia:** Stem bark is ground with tubers of *Mirabilis jalapa* and *Asparagus racemosus* in equal quantities. One spoon of paste is administered with half glass of water.

***Lungs, abdomen & rib pains:** Stem bark is ground with that of *Pongamia pinnata* and *Artocarpus heterophyllus* in equal amounts and one spoon of the extract is administered daily once.

Oedema: 2 spoonfuls of stem bark paste is applied on the affected areas once a day till cure.

Piles: Stem bark with that of *Holarrhena pubescens*, crystal salt and dried ginger of equal quantities are made into powder. Half spoon of it is taken with butter milk twice a day.

***Post-partum problems:** Root with that of *Dichrostachys cinerea* are pounded with water and one to two spoons of filtered juice is administered daily once.

Half cup of stem bark decoction is given after delivery to suppress all types of pains.

***Respiratory problems:** One spoon of root juice is administered daily once.

Rheumatism: Quarter cup of root decoction mixed with one spoon of castor oil is administered twice a day.

Snake bite: Stem bark, root of *Achyranthes aspera*, leaves of *Ocimum sanctum* in equal quantities and 4 cloves of garlic are ground and made into pills. One pill is administered daily once.

Discussions and conclusions

The present study includes information on ethnomedicinal values of *Oroxylum indicum* belongs to the family Bignoniaceae with 18 ethnomedicinal practices were used to cure various diseases, viz. abdomen pains, Asthma, Cough, Cuts, Diarrhea, Galactagogue, jaundice, Leg pains, Leucorrhoea, Lungs pains, menorrhagia, Oedema, Piles, Post-partum problems, Respiratory problems, Rheumatism, rib pains, Snake bite, swellings, wounds. Eight new practices were reported (Jain, 1997, Kirtikar and Basu, 2003). The observations revealed that the tribals used leaves, whole plant and root as most common crude drug in their preparation for cure various diseases.

The survey revealed that the tribal inhabitants of Eastern Ghats have good knowledge of the ethnomedicinal plants. Unfortunately, they are not interested in sharing their traditional knowledge with others and their folklore ends with the end of their lives.

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