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STUDIES ON PLANTS USED FOR COOLING EFFECT BY THE TRIBES OF ADILABAD DISTRICT, ANDHRA PRADESH

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ABSTRACT

The paper deals with 26 species of plants covering 24 genera and 21 families used by the tribes of Adilabad district for cooling. Cucurbitaceae is the dominant family with 3 species followed by Sapindaceae, Sapotaceae , Arecaceae (2 spp each) and others. Trees are dominant with 10 species followed by herbs (8 spp) and others. Fruits are used in a maximum of 12 practices followed by leaf (6) and others. Ceratophyllum demersum, and 15 practices were found to be new.

KEY WORDS: ***Ethnomedicine, Cooling, Adilabad district, Andhra Pradesh***

INTRODUCTION

From time immemorial, man has been interested in trying to control diseases. The history of medicine thus contributes review of the evolution of man and human knowledge during the 20th century and made medicine more complex. Adilabad district is situated between 77^0 $47^/$ and 80^0 $0^/$ of the eastern longitudes and 18^0 $40^/$ and 19^0 $56^/$ of the northern latitudes. It is bounded on North by Yeotmal and Chanda districts of Maharashtra, on the East by Chanda district, on the South by Karimnagar and Nizamabad districts and on the West by Nanded district of Maharashtra state. It ranks second among all the districts in the state in forest area occupying about 44.5 per cent (7218.86 Sq km). The total tribal population of the district is 495,794 (18.08%) (2011 census) and the main tribes are *Gonds, Kolams, Koyas, Lambadas, Mannes, Naikpods, Pradhans, Thoties* and *Yerukalas.* Though there are publications on cooling effects of plants in different parts of India (Kumar et al. 2008, Sandhya Sri and Reddi 2014, Manjula and Reddi, 2016) exclusive studies on the tribes of Adilabad district were not observed necessitating the present study.

MATERIAL AND METHODS

Extensive ethnobotanical explorations were conducted in 42 tribal pockets with good forest cover in Adilabad district during 2006-2009. Knowledgeable informants including the *vaidyas* and elderly persons (42) of the tribal communities were interviewed and obtained information on the plants used for curing jaundice. The data were verified in different villages among the interviewers showing the same plant sample and even with 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 the plants as given by them were recorded. The voucher specimens were deposited in the Herbarium of the Department of Botany (AUV), Andhra University, Visakhapatnam, India.

ENUMERATION

The plants are enumerated and arranged in an alphabetical order with botanical name followed by family, vernacular name, voucher number, part(s) used, method, mode and duration of treatment. Plants and practices marked with an asterisk (*) are considered to be new or less known.

Aegle marmelos Corr. Rutaceae VN: Maredu 7722

Stem bark is known as *Bilva sonti* and it is soaked in water at night time and the water is taken in the next morning for a week.

Ampelocissus latifolia (Lam.) Planch. Vitaceae VN: Pule–teega 7248

Fruits are directly eaten for the effect.

Bacopa monnieri (L.) Pennel Scrophulariaceae VN: Sambrani chettu 7308

Whole plant juice with sugar candy taken orally in 3-spoonful early in the morning for about 15 days.

Blumea mollis (D. Don.) Merr. Asteraceae VN: Kukka Pogaku 7166

******Leaf paste is applied on head.

Cardiospermum halicacabum L. Sapindaceae VN: Budda kakara 8092

******Leaf paste is applied on head.

Carissa spinarum L. Apocynaceae VN: Vaaka 7434

******Ripened fruits are directly eaten.

****Ceratophyllum demersum*** L. Ceratophyllaceae VN: Neeti sambrani 7956

Stem bark paste is applied on head.

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Citrullus colocynthis (L.) Schard. Cucurbitaceae VN: Erripuchcha 8040
Fruit pulp with sugar is eaten.
Cocculus hirsutus (L.) Diels Menispermaceae VN: Dushta theega 8244
Leaf paste is applied on head.
Cocos nucifera L. Arecaceae VN: Kobbari chettu 7124
Coconut water is said to be good for cooling effect.
Cucumis melo L. Cucurbitaceae VN: Karbuja 8056
Ripened fruits are eaten during summer.
Cucumis sativus L. Cucurbitaceae VN: Dosakaya 7178
Tender fruits are eaten during summer.
Garuga pinnata Roxb. Burseraceae VN: Garuga chettu 8288
*****Fruits are eaten when thirsty (sweet and sour) also pickled and eaten by local people.
Ipomoea aquatica Forssk. Convolvulaceae VN: Tuti koora 8072
*****Whole plant crushed with turmeric and 10 gm of paste is orally taken once a day.
Leea asiatica (L.) Ridsd. Leeaceae VN: Jata mokidi 7774
*****Leaf paste is applied on head for 3-4 days.
Manilkara hexandra (Roxb.) Dubard Sapotaceae VN: Pala chettu 8032
Fruits are eaten directly.
Manikara zapota (L.) P. Royen Sapotaceae VN: Sapota 7886
Fruits are eaten directly.
Phoenix sylvestris (L.) Roxb. Arecaceae VN: Eetha 8180
*****Ripened fruits are eaten for cooling effect.
Sansevieria roxburghiana Schult. et Schult. f. Agavaceae VN: Chemma kithala 8052
*****Rhizome paste is applied on head.
Santalum album L. Santalaceae VN: Chandanamu 7070
*****Wood paste is applied on forehead.
Sapindus trifoliata L. Sapindaceae VN: Kunkudu 7004
*****Leaf paste is applied on head for cooling effect.
Sterculia urens Roxb. Sterculiaceae VN: Tapasy chettu 7034
*****Gum is called **katira**, and is eaten directly.
Tephrosia purpurea (L.) Pers. Fabaceae VN: Vempali 8640
*****Leaf paste is applied on head.
Tribulus terrestris L. Zygophyllaceae VN: Palleru 7082
*****Fruit paste is taken for cooling effect.
Typha angustifolia L. Typhaceae VN: Jammu gaddi 7086
*****Well-cleaned rhizomes are sliced and soaked in buttermilk and eaten early in the morning for about 10 days.
Ziziphus mauritiana Lam. Rhamnaceae VN: Regu 8544
*****Fruit paste is applied on the head for cooling effect.

RESULTS AND DISCUSSION

The paper deals with 26 species of plants covering 24 genera and 21 families used by the tribes of Adilabad district for cooling purposes. Cucurbitaceae is the dominant family with 3 species followed by Sapindaceae, Sapotaceae, Arecaceae (2 spp each) and others with one species each. Habit-wise analysis showed the dominance of trees with 10 species followed by herbs (8 spp), climbers (5 spp) and shrubs (3 spp). Morphological analysis showed the maximum utilization of fruits in 12 practices followed by leaf (6), stem bark, whole plant, and rhizome (2 practices each) and wood and gum in one practice each. *Ceratophyllum demersum* and 15 practices were found to be new or less known (Jain 1991, Kirtikar and Basu 2003). Plants used for similar purpose in different parts of India are *Aegle marmelos, Cocculus hirsutus* by the people in Jaisalmer, Barmer, Jodhpur and Bikaner districts of Rajasthan (Kumar et al., 2008); *Aegle marmelos, Cocculus hirsutus, Ziziphus mauritiana* by the *Gond, Kol, Baiga, Panica, Khairwar, Manjhi, Mawasi* and *Agaria* tribes of Rewa district, Madhya Pradesh (Shukla et al., 2010); *Cocculus hirsutus* by the *Bagta* tribe of Visakhapatnam district, Andhra Pradesh (Sandhya Sri and Reddi, 2014); *Cocculus hirsutus, Cocos nucifera, Ziziphus mauritiana* by the *Koya, Gond, Lambada, Konda reddi* tribes of Khammam district, Andhra Pradesh (Manjula and Reddi, 2016). The tribals of the study area have sound knowledge on the use of different medicinal plant species for their own healthcare management. They have acquired this knowledge from their long-term experiences and practices as well as from their ancestors. This knowledge should be preserved for posterity.

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