Plants used as galactagogues by the tribes of East Godavari district, Andhra Pradesh

Suneetha, J. and T.V.V. Seetharami Reddi*

Department of Botany, Andhra University, Visakhapatnam 530003 Corresponding author: reddytvvs@rediffmail.com

Abstract

The paper deals with 13 species of plants covering 13 genera and 11 families used as galactagogues by the tribes of East Godavari district, Andhra Pradesh. Nine practices were found to be new.

Key Words: Galactagogue; Konda reddi; Manne dora; Valmiki; Andhra Pradesh.

Introduction

Knowledge of plants in India is amassed over millennia by tribes. There are millions of women and elders who have traditional knowledge of herbal home-remedies and of food and nutrition. The informal system of folk medicine which exists in tribal communities is passed orally from generation to generation. East Godavari district is situated on the North East of Andhra Pradesh in the geographical condition of 16°-30' and 18°-20' of the Northern latitude and 81°-30' and 82°-36' of Eastern longitude. It is bounded on the North by Visakhapatnam district and the state of Odisha, on the East and South by Bay of Bengal, on the West by West Godavari district and on the Northwest by Khammam district. The agency area of the district spreads over an area of 4,629 sq. miles. It is inhabited by 297,044 tribal people comprising 5.62 percent of the population of the district (Census 2011). The main tribes are Konda reddi, Konda dora, Koya dora, Konda kammara, Konda kapu, Manne dora and Valmiki. Exclusive publications on galactagogues are not many in India (Sayeed et al. 2007, Sandhya Sri & Reddi 2015) necessitating the present study.

Material and Methods

Ethnobotanical explorations were conducted in 126 villages inhabited by the tribes in East Godavari district during 2005-2007. The informants including the *vaidyas* and older persons (139) having knowledge of local flora and its uses as galactagogues were interviewed. Voucher specimens were prepared and deposited in the Herbarium of the Department of Botany, Andhra University, Visakhapatnam (AUV).

Enumeration

The plants are arranged in alphabetical order with the botanical name followed by family, vernacular name, english name, locality, voucher specimen number, along with the method of preparation and mode of administration.

Abutilon indicum (L.) Sweet (Malvaceae) VN 'Tutturabenda' E: Indian abutilon, Rayapalli, JS 6705 *Root paste is anointed on the breasts to increase lactation.

Alternanthera sessilis (L.) R. Br. ex DC. (Amaranthaceae) VN: 'Ponnaganti' E: Dwarf copperleaf, Thungamadugula, JS 7397

*Hundred gm of leaves are used in the preparation of curry and eaten daily once for 3 days.

Arachis hypogaea L. (Fabaceae) VN: 'Verusengalu' E: Groundnut, Etipalli, JS 6313

About 50 gm of fried seeds are administered along with jaggery daily twice for 3 days soon after delivery.

Artocarpus heterophyllus Lam. (Moraceae) VN: 'Panasa' E: Jack fruit, Sarlanka, JS 5017

*Ten gm of fruit paste mixed in 200 ml of milk is administered daily twice for 3 days.

Cajanus cajan (L.) Millsp. (Fabaceae) VN: 'Kandulu' E: Red gram, J. Annavaram, JS 7028

*Leaf paste is rubbed on the breasts to check excessive secretion of milk.

Carica papaya L.(Caricaceae)VN: Boppayi' E: Papaya, Pathakottam, JS 5595

*Unripe fruit (100 gm) cooked as curry is administered daily once for 2 days.

Chlorophytum arundinaceum Baker (Liliaceae) VN: "Tellanelatadi' E: India spider plant, Peduru, JS 5618

*Ten gm of tuberous root paste mixed in 200 ml of goat milk is administered daily twice for 3 days.





Cryptolepis buchanani Roem. & Schult. (Periplocaceae) VN: 'Adavipalateega' E: Indian sarsaparilla, Anuvarthi, JS 5460

Ten gm of stem bark paste mixed with powder of 4 seeds of pepper is administered daily once for 3 days.

Cyperus rotundus L. (Cyperaceae) VN: "Tungamustaluveru' E: Nut grass, G. Kothapalli, JS 6949 *Whole plant paste is rubbed on the breasts daily once for 2 days.

Leptadenia reticulata (Retz.)Wight & Arn. (Asclepiadaceae) VN: 'Mekamaeaniaku' E: Jivanti, Meda Madipally, JS 6733

Ten gm of leaf paste mixed with 5 gm of tamarind paste is administered daily twice for 3 days.

Luffa cylindrical (L.) Roem. (Cucurbitaceae) VN: 'Netibeerakaya' E: Dishcloth gourd, Kotananduru, JS 6057

*Ten gm of boiled fruit paste mixed with 2 gm of asafoetida is administered daily twice for 3 days.

Phoenix sylvestris (L.) Roxb. (Arecaceae) VN: 'Eatha' E: Date sugar palm, Jadderu, JS 6048

*Ten ml of leaf juice is rubbed on the breasts daily twice for 2 days.

Pueraria tuberosa (Willd.) DC. (Fabaceae) VN: 'Nelagummadi' E: Indian kudzu, Kothuru, IS 5433

Fifteen gm of tuberous root paste is administered orally daily twice for 3 days. Meanwhile paste is rubbed on the breasts daily once for 3 days.

Results and Discussion

The present paper deals with 13 species of plants covering 13 genera and 11 families used by the tribes of East Godavari district, Andhra Pradesh as galactagogues. Fabaceae is the dominant family with 3 species followed by others with one species each. Habit-wise analysis showed the dominance of shrubs with 5 species followed by herbs (4 spp), trees (3 spp) and a lone climber. Morphological analysis showed the maximum utilization of leaf in 4 practices followed by root and fruit (3 each) and seed, stem bark and whole plant in one practice each. They are used either in the form of paste, juice or curry along with either milk, breast milk, goat milk, jaggery, asafoetida, pepper or tamarind juice. Of the total 13 practices 9 were found to be new or less known (Jain 1991). Plants used for similar purpose in different parts of India and Pakistan are Carica papaya by the tribes of Assam (Borthakur 1993) and rural people of Haryana (Yadav et al. 2006), Nyishi tribe of Arunachal Pradesh (Srivastava & Nyishi 2010), folklore of Kerala (Beegam & Nayar 2011); Abutilon indicum, Leptadenia reticulata by the Yanadi, Nakkala, Irula. Yerukala.

Sugali/Lambadi and Chenchu tribes of Chittoor district, Andhra Pradesh (Vedavathy et al. 1997); Cyperus rotundus by the Baloch, Cheena, Bhidwal, Jhamat, Rajput ethnic groups of Bhakkar district, Pakistan (Shah 2005); Carica papaya, Cryptolepis buchanani, Cyperus rotundus, Pueraria tuberosa by the Kokna, Mahadeo koli, Thakar, Katkari, Warli tribes of Thane district, Maharashtra (Sayed et al. 2007); Abutilon indicum, Alternanthera sessilis, Artocarpus heterophyllus, Carica papaya, Chlorophytum arundinaceum, Cryptolepis buchanani, Cyperus rotundus, Pueraria tuberosa by the Bagata tribe of Visakhapatnam district, Andhra Pradesh (Sandhya Sri & Reddi 2011) and Cajanus cajan by the Lodha tribe of West Bengal (Chaudhury et al. 2018). Plants would prove to be a better option as they are usually devoid of side effects. Hence a detailed scientific study is required to be carried out to investigate various parameters of plants used as galactagogues by the tribes of the present study.

Acknowledgements

The authors express their gratitude to knowledgeable tribes for sharing their valuable knowledge on plants used as galactagogues and help during field work.

References

Beegam, R. & Nayar, T.S. 2011 Plants used for natal healthcare in folk medicine of Kerala, India, *Indian J. Trad. Knowl.***10**: 523-527.

Borthakur, S.K. 1993. Native phytotherapy for child and women diseases from Assam. *Ethnobotany* **5**: 87-91.

Census of India 2011. Registrar General & Census Commissioner, India 2/A Mansingh Road, New Delhi 110011.

Chaudhury, S., Singh, H. & Rahaman, C.H. 2018. Ethnomedicinal uses of plants by the *Lodhas* tribal group of West Bengal, India. *J. Traditional and Folk Practices* **6**: 67-97.

Jain, S. K. 1991. Dictionary of Indian Folk Medicine and Ethnobotany. Deep Publications, New Delhi.

Sandhya Sri, B. & Reddi T.V.V.S. 2011. Native herbal galactagogues used by Bagata tribe of Visakhapatnam district, Andhra Pradesh. *Ethnobotany* 23: 125-128

Sayed, N.Z., Deo, R. & Mukundan, U. 2007. Herbal remedies used by *Warlis* of Dahanu to induce lactation in nursing mothers. *Indian J. Trad. Knowl.* **6**: 602-605.

Shah, M.A.U. 2005. Ethnomedicinal plants of Bhakkar Tehsil in Punjab, Pakistan. *Ethnobotany* 17: 171-175.

Srivastava, R.C. & Nyishi, C. 2010. Traditional knowledge of *Nyishi (Daffla)* tribe of Arunachal Pradesh. *Indian J. Trad. Knowl.* **9**: 26-37.

Vedavathy, S., Sudhakar, A. & Mrdula, V. 1997. Tribal medicinal plants of Chittoor. *Ancient Sci. Life* **XVI**: 307-330.

Yadav J. P., Kumar, S. & Siwach, P. 2006. Folk medicine used in gynaecological and other related problems by rural population of Haryana. *Indian J. Trad. Knowl.* 5: 323-326.