ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 10| October 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

ETHNOMEDICINAL PLANTS TO TREAT HYDROCELE BY THE PRIMITIVE AND VULNERABLE TRIBAL GROUPS (PVTG) OF VISAKHAPATNAM DT.A.P.

J. Koteswara Rao
Department of Botany, Govt. Degree and PG College, Puttur, Tirupati Dt.

ABSTRACT
The paper deals with 10 species of plants as many as genera and families used by the PVTGs of Visakhapatnam district, Andhra Pradesh for curing hydrocele. Seven practice are found to new or less known.
KEYWORDS: *Ethnomedicine, PVTGS, Visakhapatnam Dt., Andhra Pradesh.*

INTRODUCTION

The study area includes 11 mandals of the Visakhapatnam district. It lies between 17º-34' 11" and 18º-32' 57" northern latitude and 18º-51' 49" and 83º-16' 9" eastern longitude. The entire agency track covers 6, 298 Km^2 i. e., 56.4% of the total geographical area of the district. The annual temperature ranges from 33.7º C (April-May) to 9.8º C (December-January) and the average elevation is about 1200 m above MSL. A detailed investigation on plants associated with Primitive Tribal Groups (PTGs) is taken up with the objectives of an extensive and intensive exploration studies in the areas of PTGs habitations. The PTG communities present in the study area are Gadaba, Khond, Porja and Savara. The present study was carried out in 11 mandals viz., Chintapalli, G.Madugula, G.K.Veedhi, Koyyuru, Hukumpeta, Pedabayalu, Dumbriguda, Munchingput, Araku valley and Ananthagiri. The total population of the study area is 38, 32, 336 (as per 2001 census). The total tribal population is 5, 57,572 (14.55%) and PTGs population is 1, 26, 778 (3.30%).

Generally, a hydrocele is a pathological accumulation of serum fluid around the testicle in the

scrotum, causing swelling in the scrotum. During normal development, the testicles descend down a tube from the abdomen into the scrotum. Hydrocele occurs when this tube fails to close and the fluid drains from the abdomen through the open tube into the scrotum. Hydroceles are common in newborn infants and normally resolve without treatment by the age of one year. In adult men, it may also be caused by inflammation or injury of the testicle or epididymis, or by fluid or blood blockage within the spermatic cord. A hydrocele usually occurs on one side, but can also affect both sides. It is normally painless and harmless, but may cause discomfort because of its abnormal size. Treatment is usually recommended, if the hydrocele persists for longer than 18 months in case of infants and if it causes discomfort or embarrassment in adolescents and adults. A hydrocele can be treated by draining the fluid with a needle (aspiration) or by a minor surgical procedure, in the modern medical system. However, tribal people mostly collect the available plants from their surrounding forest areas and prepare a paste of the plants. This they apply on the affected portion externally or give hot fomentation for the treatment of hydrocele. Sometimes the extract or decoction of the plant is also given orally for a complete cure of the disorder (Singh 2012).

Some ethnomedicinal studies published in literature on ethnomedicine of cold and cough (Das and Choudhury 2012, Singh 2012, Parijatham et al. 2016, Vaibhav Sharma 2016).

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).

Enumeration

The plants are arranged in an alphabetical order with their botanical name along with family name, vernacular name, Sanskrit name, Hindi name, English name, locality, method, mode and duration of treatment. Practices marked with an asterisk (*) are considered to be new or less known.

Argyreia nervosa (Burm. *f.*) Boj. **(**Convolvulaceae) VN: Gumada mada, S: Samudra palka H: Samandar E: Elephant creeper, Bonampalli, (GK Veedhi)

*****Root paste mixed with half tea glass of water is administered twice a day for 3 days.

***Cannabis sativa* L. (**Cannabinaceae), VN: Ganjayi S: Bhang H: Caras E: True hemp

Two spoonfuls of stem bark paste mixed in a glass of goat milk is administered daily twice for 5 days.

Caesalpinia bonduc (L.) Roxb. (Caesalpiniaceae) VN: Gachakaya, S: Kuberaksi H: Karanju E: Fever nut, Gadaparai (Chintapalli)

Leaves crushed with fine husk of paddy mildly heated and tightly tied over testis.

Clerodendrum philippinum Schr. In DC. (Verbenaceae) VN: Phidithiki mokka, Mysore malli E: Fragrant glory tree, Kunukuru (Koyyuru)

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 10| October 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

*****Root paste mixed with half tea glass of water is administered twice a day for 3 days.

Clerodendrum phlomoides Linn. *f.* (Verbenaceae) VN: Takkali S: Agni mantha H. Arni E: Wind Killer, Edulagaruvu (Hukumpeta)

*****Root paste mixed with half glass of water is administered daily twice till cure.

Clerodendrum viscosum Vent. (Verbenaceae) VN: Bandaripulu S: Bhandirah H: Titabhant E: Glory tree, Thotalagondi (G,Madugula)

*****Root paste mixed with half tea glass of water is administered daily twice.

Madhuca indica Gmel. (Sapotaceae), VN: Ippa S: Madhuca H: Mohva E: South Indian mahua tree, Devarapalli (G.K. Veedhi)

*****Dried flowers are slightly warmed and plastered on the inflammed hydrocele.

Mimosa pudica L. (Mimosaceae), VN: Atti patthi, S: Lajjalu H: Lajwanti E: Touch me-not, Gabbangi (Paderu)

50g of leaf paste mixed with a spoonful of castor oil is applied on the hydrocele and bandaged for 6 h once a day for one week.

*Fresh leaf paste is plastered on the affected areas.

Sida acuta Burm.f. (Malvaceae), VN: Nagabala S: Bala H: Kharenti E: Horn bean leaved sida, Kappada (Pedabayalu)

Leaf paste warmed with coconut oil is applied and bandaged daily once for 2 days.

Thalictrum foliolosum DC. **(**Ranunculaceae) VN: Piyaranga Thotalagondi (G.Madugula)

*****Tuber paste mixed with half tea glass of water is administered twice a day for 3 days.

DISCUSSIONS

The present work denotes the documentation of plant to cure hydrocele. A total of 10 plant species belonging to as many as genera and families. Seven practices are new or less known (Kirtikar and Basu, 2003). Root and leaf used in 4 practices each followed by flowers, stembark, tuber in each one practices. Habit-wise analysis showed the dominance of herbs and shrubs with 8 species, followed by climber and trees (1 spp. each).

The indigenous communities included in the present study used the leaves of *Mimosa pudica* for the same purpose as the tribal communities of Tripura. Similarly, the dried flowers of *Madhuca indica* were used in the present study for the same purpose as reported among the tribal communities of Vizianagaram district.

All the new uses must be taken up for further scientific validation and pursued for value addition for the development of drugs.

Acknowledgements

The authors are grateful to the PVTGs and practitioners for their cooperation and help during field work by providing information on hydrocele.

REFERENCES

1. *Jain, S. K. Dictionary of Indian Folk Medicine and Ethnobotany, Deep Publications, New Delhi, 1991.*
2. *Kirtikar, K. R. & Basu, B. D. Indian Medicinal Plants, Oriental Enterprises, Dehra Dun, Uttaranchal, 2003 (Reprinted).*
3. *Harish Singh 2012. Traditional phytotherapy for the treatment of hydrocele in Odisha, India. Ancient Science of Life, 31(3): 137-140.*
4. *Parijatham T.R., B. Sujatha and B. Seetha Lakshmi.2016. Ethnomedicinal studies of medicinal plants in Eastern ghats of Vizianagaram district, Andhra Pradesh, India. International Journal of Bioassays 5.2: 4825-4842.*
5. *Vaibhav Sharma 2016. Traditional Use of Ethnomedicinal Plants of Asteraceae in the Alpine Zone of Tungnath Region. International Journal of Theoretical & Applied Sciences, 8(2): 54-57.*
6. *Sudipta Das and Manabendra Dutta Choudhury. 2012. Ethnomedicinal uses of some traditional medicinal plants found in Tripura, India. Journal of Medicinal Plants Research. 6(35), pp. 4908-4914.*