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A CASE STUDY

Medicinal plants used in local health care system of Chanawada village, Udaipur, Rajasthan

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SUMMARY

An insight into local healthcare systems and traditional knowledge about medicinal plants is always instrumental in providing nascent ideas to pharmaceutical industries to develop strategic research programmes for the identification of new bioactive compounds for the production of synthetic drug molecules. Many a times this undocumented information is lost much before it is realized by the users since it passed from generation to generation orally. For strengthening the proper usage and conservation of the medicinal traditions prevailing in the Chanawada village of Girwa block in Udaipur, a survey was undertaken to document the medicinal plants used by the tribal inhabitants of the area. Traditional uses of 24 medicinal plants occurring in wild habitat were recorded and are being presented in this paper.

Key Words : Medicinal plants, Health care

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Traditional medicines and traditional healers are getting much importance because even today in the world of modern medicine, 80 per cent of the population still depends on the plant based drugs for their daily primary health care needs. The glare of the western medicines is loosing its charm in light of age-old jungle remedies long employed by the traditional practitioners.

The Chanawada village lies in the Girwa block of the Udaipur district of Rajasthan which constitute 26 per cent of the tribal population. The village in particular has a total population of 5340 of which 1508 families belong to the ten tribes namely Meghwal, Kalbelia, Doli, Meena, Kalal, Brahmin, Jain, Vaid, Lohar and Teli. The primary source of income is agriculture. The total area of the village is 3243.4hectare of which agricultural land comprise 653.1 ha. in addition to the 2822.64 ha of forest area and 767.6 ha of waste land. There are five primary schools, six anganwadies and one each of secondary and senior secondary school. The medical facilities are in the form of a veterinary dispensary in Prasad village and one ayurvedic dispensary in Chanawada. All local people in general take medication from the dispensary and the medical practitioner is giving herbal formulations both purchased from the market as well as self-made using the local biodiversity available in the area.

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MATERIALS AND METHODS

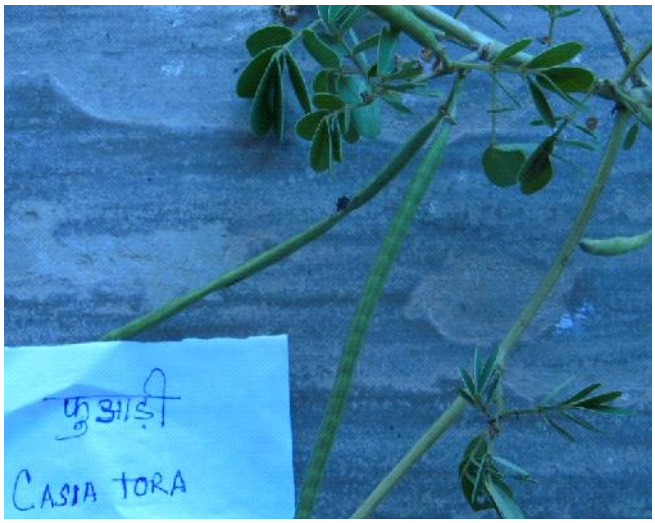
A total of 26 people (aged between 20-85 years) were interviewed including the Ayurvedic doctor employed in the dispensary in the village but most of the information was provided by three informants and the medical practitioner. The informants were selected randomly. The interviews were not structured and involved no formal questionnaire. All the discussions were held during our field visit for plant biodiversity register documentation survey (November 2011 and March 2012).

RESULTS AND DISCUSSION

A total of 123 plant species of trees, shrubs, climbers

Table 1 : Diversity of medicinal plants in Chanawada village

Sr. No.	Plant type	Local name	Scientific name	Source of plant/seeds	Other uses	Part used	Associated TK
1.	Shrub	Aak	*Calotropis procera*	Wild	Fibre and Fuel	Leaves	Desi ghee applied leaf is warmed and the juice is dropped in ear for ear pain.
2.	Shrub	Aak, Akada	*Calotropis gigantea*	Wild	Fibre and Fuel	Leaves	Desi ghee applied leaf is warmed and the juice is dropped in ear for ear pain.
3.	Herb	Adusa	*Adhatoda vasica*	Wild	Medicinal	Leaves and Flower	Kada prepared from leaves and flower is given in cold and cough.
4	Climber	Neem-Giloy	*Tinospora cordifolia*	Wild	Fuel	Stem	Juice of crushed stem is given for respiratory diseases.
5.	Herb	Andha kata	*Achyranthes aspera*	Wild	Famine food	Root	Root tied to pregnant woman for normal delivery.
6.	Climber	Indrayan	*Trichosanthes cucumerina*	Wild	Food	Root	Root kept on mouth of pregnant woman for normal delivery.
7.	Climber	Tumba/Tumbi	*Citrullus colocynthis*	Wild	Fuel, Food	Root	Given in stomach problems.
8.	Tree	Shisham	*Dalbergia sisso*	Wild	Wood, Fuel, Fodder and	Leaves	Given to goats for loose motion.
9	Tree	Jharberi	*Ziziphus nummularia*	Wild	Fuel, Fodder, Food	Root	Root is dipped in water and the red water from the dipped root is used in tooth pain.
10.	Shrub	Sarpunkha	*Tephrosia purpurea*	Wild	Fodder	Leaves	Leaves are burnt and the ash mixed in giloe juice and harad is given for large spleen.
11.	Shrub	Fuari	*Cassia tora*	Wild	Animal feed	Leaves and Seeds	Crushed leaves and seed powder mixed in oil is applied for skin disease.
12.	Tree	Peepal	*Ficus religiosa*	Wild	Wood, Fuel, Fodder, Fibre, Fruit Famine Food	Bark	Extract Given in kidney problems.
13.	Herb	Gokshur	*Tribulus terrestris*	Wild	Fodder for Camels	Plant	Given in kidney problems
14.	Shrub	Ratanjot	*Jatropha curcas*	Wild	Fuel	Latex	Treating cut and wounds. Applied on bleeding wounds
15.	Tree	Imli	*Tamarindus indica*	Wild	Wood, Fuel, Food	Fruit	Ripe fruit dipped in water and water is applied on whole body for sun stroke.
16.	Shrub	Kateri, Kantali	*Solanum surattense*	Wild	Soil binder	Leaf, Stem and Root	Juice of leaf, stem and root given in respiratory diseases and cold and cough.
17.	Tree	Khakra	*Butea monosperma*	Wild	Wood, Fuel, Fodder, Famine Food, Fibre,	Bark	Treating cut and wounds Bark is crushed and tied on wounds. Leaves are used for making dona
18.	Tree	Bel	*Aegle marmelos*	Wild	Fuel, Fodder, Food	Fruit	Leaves are burnt and the ash mixed in giloy juice and har is given for large spleen. Fruit and leaves used in puja
19.	Herb	Dholi musli	*Chlorophytum tuberosum*	Wild	Medicinal	Root	Treating vomiting and loosemotion Kada of root is given in fever vomiting and loosemotion
20.	Tree	Adua	*Ailanthus excelsa*	Wild	Wood, Fuel, Fodder and	Bark	Treating Animal fever Bark is crushed boiled and given to animals for fever.
21.	Tree	Castor	*Ricinus communis*	Wild	Medicinal	Leaves	Treating wounds. Leaves warmed with mustard oil and tied on wounds also used for removal of spine
22.	Tree	Neem	*Azadirachta indica*	Wild	Wood, Fuel, Fodder, Fruits Famine Food,	Leaves	Treating Fever Kada of leaves given in fever.
23.	Tree	Aam	*Mangifera indica*	Wild	Wood, Fuel, Food	Root	Stomach problems.Dried root powder given to children in loose motion
24.	Tree	Bakayan	*Melia azadarach*	Wild	Wood, Fuel,	Leaves	Treating cough. Kada of leaves given in fever
25.	Herb	Chirata	Andrographis echioides	Wild	Medicinal	Whole plant	Kada of whole plant given in fever.



***Cassia tora*- used in dermatological problems**

***Gmelina arborescens* -**

***Andrographis echiodes* – used in fever**

***Bryonopsis laceneosa* – given for male child birth**

***Limonia acidissema* used in chutenies and culinary purposes**

***Tephrosia purpurea* – used in large spleen**

Fig. 1 : Diversity of medicinal plants

and herbs were recorded comprising agricultural crops (18),fruits (17), fodder(13), medicinal plants(44), weeds and wild relatives (65), ornamental(3), timber and fuel (18). Of the 44 medicinal plants two species were used in animal system and rest in the human system. The most common growth forms for medicinal plants herbs (21%), shrubs (21%), climbers (12.5%) and trees (45%). The roots (29%) and leaves (37%) are the commonly collected and used plant parts for medicinal purposes with flowers (8%), stem (8%), seeds (4.1%), bark (12.5%), fruit (8%) and whole herb (8%). Although, a large number of weeds (64 species) occur in the area but only 24 were being collected and in usage by the local inhabitants. At present the collection and preparation of the herbal drug is very informal (Table1and Fig.1) but its efficacy is reported by the local people and the medical practitioner is quite good. For common problems like fever, cold, cough, minor wounds, cuts, headache, body ache, migraine, all villagers go to the ayurvedic doctor. These local healthcare systems have become an important part of their cultural heritage and it strengthens the fact that plants supply the main medicinal source for healthcare. Thus, it is necessary to part this knowledge on herbal traditions and their applications in regular health care system from these tribal communities to the modern world of medicines.

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REFERENCES

Anonymous (1992). Weath of India: Raw material, Council of Scientic and Maultrial Research, Research Publication, NEW DELHI, INDIA.

Harehburger, J.W. (1996). The pupose of ethnobotany, *Bot. GA*$_3$., **31**: 146-154.

Jain, S.K. (1964). The role of batanist in folkore research. *Folklore*, **5**: 145-150.

Kirtikan, K.R. and Basu, B.D. (2001). *Indian medicinal plants.* Vol. **I** Lalit Mohan Balu, Allahabad (U.P.) INDIA pp. 35-45.

Mitra, S.N. and Ghosh, R.B. (1971) A census to the aquatic and semi aquatic vegetation of the Indian Botanic Garden, Howrah, *Bull. Bot. Soc. Beng.*,**25** (1-2): 11-115.

Muthu, Chellaiah, Ayyanar, Muniappan, Raja, Nagappan and Ignacimuthce, Savarimuthu (2006). Medicinal plants used by: traditional healere in Kancheepuram District of Tamil Nadu, India. *Ethnobiol Ethnomed*, **2**:43.

Naik V.N. (1998).*Flora of Marathwada*, Amrut Prakashan, Aurangabad (M.S.) INDIA .

Pradhan, S.G. and Singh, N.P. (1999). Flora of Ahmednagar District. (M.S.) INDIA.

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