SUSTAINABLE PRACTICE OF KNOWING MEDICINAL PLANTS THROUGH ENVIRONMENTAL EDUCATION THEME PARK AT RIE, AJMER

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Medicinal plants belong to the earliest known health care products that have been used by mankind. In India, the earliest reference to the medicinal value of plants is found in *Rig-Veda*, in which a brief reference to the healing property of plants has been made. Most of the drug plants are found in the tropics growing in wild condition and are mainly used by Ayurvedic doctors, who refer to them as *Jari-Butis*. We observe that in the absence of proper knowledge related to the identification of medicinal plants, many plants remained either unidentified or wrongly identified. As a result, many important and precious medicinal plants are often considered as weeds and disposed off as waste. Wrong identification even lead towards more serious repercussions as they may be used wrongly in preparing medicines for which they are not recommended. In this paper, an attempt has been made to fill the above identified gaps. Medicinal plants like arborea with locally available medicinal plants will be very useful for Ayurvedic experts, teachers, students and scientists.

Key words: *Medicinal plants, sustainable development, Jari-Butis.*

Introduction

Medicinal plants belong to the earliest known health care products that have been used by the mankind. In India, the earliest reference to the medicinal value of plant is found in *Rig-Veda*, in which a brief reference to the healing property of plants has been made. Most of the medicinal plants are found in the tropics growing in wild condition and are mainly used by Ayurvedic doctors, who refer to them as *Jari-butis*.

The study of Indian medicinal plants was first started in the early part of the century by many researchers. Prominent amongst them were Dastur (1962). Maheshwari and Singh (1965), Jain (1968), Atal and Kapoor (1977), Kirtikar and Basu (1935), etc. In the present paper we try to domesticate, introduce 20 medicinal plants used by the people of Rajasthan in medicinal plant arborea of EE Theme Park which in future will be useful for gathering sustainable knowledge of medicinal plants. Singh and Pandey (1998) and Joshi (1995) have, however, provided comprehensive data on the ethno botany of Rajasthan covering different aspects, including ethno medicines.

Methods and Procedure

The present study is based on the material and information gathered with the help of

two local communities, *Kaviraj* and *Vaidas*. Plantation materials collected carefully and planted season wise. Proper signage board maintained for each plant is helpful for students and researchers for identification.

Result and Discussions

Out of the 20 plants having medicinal importance, the description of only eight plants is given in Table 1.

Table 1

Description of the selected medicinal plants

S. No.	Common Name	Botanical Name	Family	Description
1.	*Madar/Aak*	*Calotropis procera*	*Asclepiadaceae*	The milky juice of the stem is used in leprosy, taenia, dropsy, rheumatism, etc. It is also used in typhus and syphilis. The dried latex is antispasmodic and an efficient nerve tonic. The latex also bears the properties of curing ringworm of scalp and relieving toothache.
2.	*Neem*	*Azadirachta indica*	*Maliaceae*	Juice of leaves with honey or salt cures jaundice and intestinal worms. Decoction of fresh leaves is used in malarial fevers. External application of leaf-paste cures boils, ulcers, skin eruptions swellings and wounds. Mixed with camphor, the leaf juice is applied to fractures. Warm decoction of leaves is used as douche after childbirth.
3.	*Ashvagandha/ Asgand*	*Withania somnifera*	*Solanaceae*	The roots of this plant have been recommended for high cough and in female genetic disorder. It is also useful in all types of skin lesions, ulcers and in reducing pus formation. It is an important drug in the treatment of rheumatic pain, inflammation of joints and certain paralytic conditions. It is also known to stimulate sex impulses and improve sperms.

4.	Sandal wood/ *Safed chandan*	*Santalum album*	*Santalaceae*	The tree is a sedative and bears cooling effects. It is given to relieve thirst and with milk in gonorrhoea and bilious disorders. Mixed with rice and honey, it relieves dysentery and excessive thirst. The paste bears cooling effects and cures boils, sores and skin eruptions. The application of paste in also relieves headache.
5.	Datura/ *Dhatoora*	*Datura stramonium*	*Solanaceae*	Dried leaves of Datura smoked in pipes cure asthma, whooping cough and bronchitis. Juice of leaves with curd is given in gonorrhea. A paste of leaves is a cure for swollen joints, inflammations and tumors. Fresh leaf juice is also used in mumps and gouts. Roasted leaves cure enlargement of testicles.
6.	Curry leaves/ *Mithaneem*	*Murraya koenigii*	*Rutaceae*	They are much valued as an anti diabetic, antioxidant, anti microbial; anti-inflammatory and hepato protective. They also contain iron. Although most commonly used in curries, leaves from the curry tree can be used in many other dishes to add flavor.
7.	Mint/*Pudina*	*Menthea mentha*	*Lamiaceae*	It was originally used as a medicinal herb to treat stomachache and chest pains. Powdered mint leaves were used to whiten teeth. Mint tea is a strong diuretic. Menthol from mint essential oil (40%- 90%) is an ingredient of many cosmetics and some perfumes. Mint oil is also used as an environment friendly insecticide for its ability to kill some common pests like wasp, hornets, ants and cockroaches.
8.	Indian gooseberry/ *Amla*	*Emblica officinalis*	*Euphorbiaceae*	The fruits are richest source of vitamin C and are considered to be a good liver tonic. The fruit is useful in the treatment of hemorrhage, leucorrhoea, menorrhagia, diarrhea, toothache, sores, fever, anemia, epilepsy, pimples, fistula, gonorrhea and dysentery. The leaves are a cerebral and gastrointestinal tonic. The root bark is astringent and is useful in ulcer.

Conclusion

We observe that in the absence of proper knowledge related to the identification of medicinal plants, many plants remained either unidentified or wrongly identified. As a result, many important and precious medicinal plants are often considered as weeds and disposed off as waste material. Wrong identification can lead towards more serious repercussions as they may be used incorrectly in preparing medicines for which they are not recommended. In this paper, an attempt has been made to fill the above identified gaps. This type of medicinal plant arborea with locally available medicinal plants will be of immense use to Ayurvedic experts, teachers, students and scientists.

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