

THERAPEUTIC USES OF SOME SEEDS AMONG THE TRIBALS OF BANASKANTHA DISTRICT, GUJARAT, INDIA

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The traditional uses of seeds in different forms viz. seeds-paste, seeds powder, decoction, raw, infusion or oil as medicine for ameliorating diseases is steel prevalent among the tribal communities inhabiting the forest area of Banaskantha District, Gujarat, India. This paper presented 15 plant species that have been listed. All the listed plants belong to 14 genera and 11 families.

Key words: Seeds, Tribal, Rural, Ethnomedicine, Banaskantha, Gujarat.

INTRODUCTION

The people of rural India by and large still depend on traditional medicines for their health care and treatment of diseases (Ambasta 1986). These medicines have been developed through the experience of many generations assimilating the knowledge, in course of time from fragments of Ayurvedic, Yunani as well as tribal's system of medicine (Jain1991; Kirtikar & Basu 1982; Nadkarni 1927).

The majority of people living in the countryside, the rural backward classes and the tribals inhabiting the forest areas depend on crude drugs of plant or plants products as effective remedies for ameliorating various diseases (Khare 2007). Among the different parts of the plant beings used by them, the seeds provide valuable drugs in various forms either as seed paste, seed powder, decoction, infusion, raw or the oil extracted from seeds for use as serviceable medicines on the one hand, the seeds of various species are employed in medicines as antiseptic, laxative, cathartic and also for various treatments, yet on the other hand, some of them are poisonous and may cause health problems. Many seed drug species occur wild and very few are cultivated on a commercial scale (Dagar & Singh 1999; Brahmarm & Saxena 1990).

Banaskantha district lies between 23 35' and 24 43' North latitude and 71 0' and 73 0' East longitude. Banaskantha district is forest area. Tribal and rural people are mainly farmers, with the tribals called Koli, Deviputra, Maldhari, Adivasi, etc. The tribal and rural people have used some seeds with a medicinal value.

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Floristic works have been carried out in Gujarat among them Cooke (1903-08), Thaker (1910), Sexton & Sedgwick (1918), Bole and Pathak (1988). Ethnobotanical works carried out in Gujarat among them Thaker (1926), Shah *et al.* (1981), Jain (1991), Bhatt and Mitaliya (1999).

MATERIAL AND METHODS

The observations are based on surveys conducted in tribal dominated areas of Banaskantha district, Gujarat during 2007–2011. Group interviews were organized bringing plants from surrounding areas and showing them to tribals of assorted ages into the forest, as suggested by Jain (1987) the specimens were identified and voucher specimens herbarium were deposited in the Department of Botany, SPT Arts and Science College, Godhra, Gujarat, India.

The data gathered were screened with the help of available literature by Jain (1987). In the enumeration, the botanical names are arranged alphabetically (Saxton & Sedgwick 1918; Patel 1971; Sutaria 1958; Shah 1978) followed by family, local name and mode of administration.

Argyreia nervosa (Burm.f.) Boj. Family: Convolvulaceae, Local Name: Samudra shosh

Mode of administration. Equal preparation of the seeds of this plant and *Withania somnifera* (Aswagandha) are made in to a paste with water and taken internally on empty stomach for the treatment of debility; it improves the quality of semen.

Azardichta indica A. Juss. Family: Meliaceae, Local Name: Limdo

Mode of administration. The oil extracted from the ripe seeds is used for dressing foul ulcers; it is efficacious as antihelmintic and in parasitic skin diseases. The seed powder with a cup of warm water is gargled for gum treatment and to remove bad smell for mouth. The seed oil and coconut oil in equal preparation is applied on body and hair for removing lice and dandruff respectively.

Butea monosperma (Lamk.) Kuntze, Family: Fabaceae, Local Name: Kesudo, Khakhro

Mode of administration. Intake of seed extract with equal preparation of flower extract of *Madhuca longifolia* (Mahudo) in the morning and evening on empty stomach acts as abortifacient at early stages of pregnancy.

Caesalpinia pulcherrima (Linn.) Sw., Family: Caesalpiniaceae, Local Name: Galtoro

Mode of administration. Decoction of fresh seeds is used as mouth wash, which also relieves pain in gums due inflammation.

Cassia fistula Linn. Family: Caesalpiniaceae, Local Name: Garmalo

Mode of administration. The Rind of pod powder is laxative; the seed paste is applied on the swollen gums to relieve toothache and pain.

Cassia occidentalis Linn., Family: Caesalpiniaceae, Local Name: Aval

Mode of administration. The decoction of seed is very efficacious for whooping cough. The seeds with equal quantity of black peeper are powdered and prescribed with little water twice, daily for one month to reduce fat from the body.

Celastrus paniculatus Willd., Family: Celastraceae, Local Name: Malkangni

Mode of administration. Intake of 2–3 raw seeds in the morning for 15 days is a good remedy for rheumatism and chronic lumbago. The oil extracted from the seeds is rubbed on the body to get relief from swellings and muscular pains.

Clitoria ternatea Linn., Family: Fabaceae, Local Name: Garni bibri

Mode of administration. The seeds pounded with the root of *Clerodendron indicum* are made into a paste and taken thrice daily for curing tuberculosis and leprosy.

Diplocyclos palmatus (Linn.), Family: Cucurbitaceae, Local Name: Shivlingi

Mode of administration. The seed powder with a spoon of honey is taken twice daily to ensure conception and prevent miscarriage.

Helecteres isora Linn., Family: Sterculiaceae, Local Name: Mardasingi

Mode of administration. The paste made from the fruit is applied externally on the stomach to get relief from flatulence.

Martynia annua Linn., Family: Martyniaceae, Local Name: Vinchudo

Mode of administration. The oil extracted from the seeds is applied locally on itches, scabies and wounds.

Nyctanthes arbotrristis Linn.

Family: Oleaceae, Local Name: Parijatak, Mode of administration: Seed powder is rubbed on teeth to cure bleeding gums.

Phyllanthus emblica Linn., Family: Euphorbiaceae, Local Name: Amala

Mode of administration. The infusion of the seeds is used for allaying inflammation of the eyes. The dried fruits with seeds are crushed and taken internally to cure diarrhea and dysentery.

Ricinus communis Linn., Family: Euphorbiaceae, Local Name: Erandi

Mode of administration. The oil extracted from the seeds with leaf juice of *Calotropis procera* (Akado) is used as a local application at bed time for a week to cure bleeding piles and fissures.

Vernonia cineria (Linn.) Less., Family: Asteraceae, Local Name: Sahdevi

Mode of administration. The powdered seeds diluted in a cup of water are swallowed to expel intestinal worms.

RESULTS AND DISCUSSION

The results of the investigation are presented here which provides the list of 15 plant species, the seeds being used as medicines.

In many cases fresh seeds are used. In some species like *Argyreia nervosa*, *Butea monosperma*, *Clitoria ternatea*, *Diplocyclos palmatus* and *Ricinus communis* the drugs are prepared from the seeds in suitable combination with other plant parts for improving the efficacy.

The seeds are used only on a minor scale by the tribal inhabitants and none of the medicinal plants of the region is exploited commercially at present.

Though the practice of traditional health care system is effective, safe and with few side effects, the application of such wisdom on herbal drugs is declining at a faster rate due to developed urban culture, negligence of tribal and rural community, forest habitat destruction and tendency to use allopathic.

The information given in this report on therapeutic uses of practices of plant seeds may provide new sources of herbal drugs and promote awareness among the people to use them as remedy for health security.

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