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TRADITIONAL USE OF SOME MEDICINAL PLANTS OF FABACEAE FAMILY OF KUCHINDA SUB-DIVISION IN SAMBALPUR DISTRICT

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ABSTRACT

The use of herbal medicine is widely spread over and it is not only used by the tribal and rural people but also by the urban people. The present study is based on medicinal plant survey in remote areas of Kuchinda sub-division of Sambalpur district along with various uses of medicinal plants by different communities in the sub-division. The present paper highlights specially on 6 medicinal plant species of Fabaceae family and to explore the treatment of some diseases by these people. The plant specimens are enumerated serially according to their botanical names, English name, local names and the mode of use.

KEYWORDS: Traditional use, Medicinal plants, Fabaceae, Tribals, Kuchinda Sub-division.

INTRODUCTION

In Odisha, about 70% of people live in villages and they are depending mainly on agriculture and also on animals for their day to day life. The people residing in and surrounding forest area also depend on forest and forest products for their livelihood and medicine for their primary health care.

Kuchinda is one of the three sub-divisions under Sambalpur district and situated at a distance of 85 Kms from the district head quarter Sambalpur. Kuchinda wildlife forest range comes under Bamra forest division. It is located between 84’ 15˚ and 84’ 40˚ East longitude and 21’ 39˚ and 21’ 56˚ North latitude. The North-west group of hills from the northern boundary of the Kuchinda plan is extended upto the Bonai hill ranges. The general direction of the hill is mostly from North-west to South-east. The general height of the region is 243 m above the mean sea level. There are some perennial streams like the Gudguda, Bheden and Kharla. The Kuchinda forest range has five sections namely Kuchinda, Badbahal, Mahulpali, Gochhara and Kusumi.

At present the medicinal plants are cultivated to provide an opportunity to enhance income of people residing in villages and remote areas. Although a good number of scientific work on taxonomy and medicinal plants (Bal, 1942; Panigrahi, 1963; Jain, 1971; Choudhury et al, 1975; Saxena and Dutta, 1975; Saxena et al., 1979; Brahmam and Saxena, 1990; Saxena and Brahmam, 1995; Aminuddin and Girach, 1991; Aminuddin et al, 1993; Pal and Jain, 1998; Prusti and Panda, 2005) have been reported from some part of Odisha; no work has been under taken from this locality. At attempt has been made in this paper to highlight on some plants of fabaceae family having medicinal properties and which are used in the traditional system medicine in the study region.

MATERIALS AND METHODS

The study is primarily based on information collected through surveys during different period of the year to collect different plant species. Ethnobotanical survey of the study site has been conducted. The aim of the study is to gather information of medicinal uses plants from rural folk, tribals like *Kondh*, *Gond*, *Kisan*, *Kolha* and *Bhuiyans* and the traditional herbal medicine practitioners locally known as *Kabiraj* and *Vaidya*. Surveys were conducted by making use of questionnaire method. The ethnobotanical information has been collected through personal interviews with some selected villagers, the *Kabirajs* and *Vaidyas*, and other herbal medicine practitioners. The information about their medicinal uses in one locality was confirmed through repeated interviews of such persons of other localities. These information has also crossed-checked with some relevant scientific literatures (Jain, 1991; Kirtikar and Basu, 1991; Ambasta et al., 1992; Chopra and Chopra, 1992; Warrier et al, 1996; Sahoo, 2014) The identification of plants was done by standard flora books (Haines, 1921-25 and Saxena and Brahmam, 1994-96). The collected specimen was preserved in the department of Botany, Kuchinda College, Kuchinda.

Enumeration

The plants are arranged alphabetically with their correct botanical names followed by local name and English name, voucher number, brief description of the plant and mode of application as reported by herbal medicine practitioners and experienced local inhabitants.

Butea monosperma (Lam.) Taub. 'Palasha (O), Bastard tree (E), Saida- 49

It is a medium-sized tree. The leaves are pinnate, with a long petiole and three leaflets, flowers are bright orange red, and produced in racemes. The fruit is a pod.

Uses: Leaves decoction is useful in leucorrhoea and diabetes. The flowers are crushed to paste along with cow milk and sugar candy and taken (4 teaspoon) once daily in empty stomach for 7 days to reduce body heat and chronic fever. The flowers are soaked overnight in a glass of water, crushed and filtered in the next morning. The filtrate (one cup) is taken once daily in empty stomach in the morning for one month to cure leucorrhoea.

Clitoria ternatea Linn. Aparajita (O), Butterfly (E), Kuchinda- 26

It is perennial climber Leaves pinnately compound with 5-7 leaflets. Flowers showy, deep blue or white with unequal petals; inflorescence solitary axillary Pod 4-6 cm long; 6-8 seeds, black in colour. Flowering during July to October and fruiting during November to December.

Uses: Root extract is diluted and the extract (2-3 drops) put into the nostrils to get relief from headache. The leaves paste (5 gm) with sugar candy is taken 1-2 times daily in empty stomach for 5-7 days to get relief from menorrhagia. Flowers (5-7 numbers) boiled in water (2 cups) to one forth of a cup. The decoction with honey is taken 2 times daily in case of cold and throat infection. Equal amount of root, stem, leaf, flower and fruits are crushed to paste (1-2 teaspoon) is taken 2 times daily to get relief from piles.

Crotolaria retusa L. Jhunjhuni (O), Devil-bean (E), Taputikira- 36

It is an annual erect herbaceous plant. The leaves are simple, oblanceolate, retusa apex and glabrous. Flowers yellow in terminal racemes. Pods are dark brown in young and black at maturity. Flowering and fruiting during October to March.

Uses: Fresh leaves extract or paste/ seed paste is applied over the affected part to cure skin disease. Whole plant decoction used in bathing to cure scabies. Leaves and flowers decoction (one cup) is taken 1-2 times daily to cure cold fever.

Dalbergia sissoo Roxb. Sishu (O), North Indian Rosewood (E), Mahulpali-66

It is a medium to large size tree with green yellow trunk. Leaves are pinnately compound with unequal sized leaflets. Flowers are white to pink in corymbose panicles. Pod is flat, oblong; 3-7 cm long. Flowering during February to March and fruiting during May to August.

Uses: Bark (10g) is boiled with water (500 ml) till it reduced to half. The decoction (one cup) is taken once daily in empty stomach in the morning to get relief from leprosy. Leaf extract (10-15 ml) is taken 3 times daily to cure eliminating pus in urine and jaundice, Seed oil is useful in burning skin and scabies.

Pongamia pinnata (L.) Pierre Karanj (O), Indian Beech (E), Badbahal- 67

It is an evergreen deciduous tree with a short bole. Leaves imparipinnate with 5-7 leaflets. Flowers are pinkish-white in axillary racemes. The fruits are woody pod and with a short beak, seeds 1-2.

Uses: Traditionally the seed oil is useful in all types of skin disease. The leaves poultice is applied to ulcers infected with worm. The root extract is mixed with equal amount of coconut milk and lime water. The mixture (10-15 ml) is taken twice daily to cure gonorrhoea.

Pterocarpus marsupium Roxb. Bijasal (O), Indain kino (E), Kusumi- 60

It is large handsome tree with spreading branches. Leaves are imparipinnate having 5-7 leaflets. The wood is strong and yellowish brown. Flowers are yellow, scanted racemes on terminal panicle. Fruits are rounded, membranous winged with one seed.

Uses: The bruised leaves are applied externally to cure boils, sores and skin diseases. A piece of wood is soaked overnight in a glass of water and filtered. The filtrate is taken once daily in empty stomach in the morning to get relief from diabetes. Gum of the plant is applied locally to cure toothache and pyorrhoea.

RESULTS AND DISCUSSION

The present study revealed that most of the encountered plants were reported to have multiple local uses by the tribals of the locality. Besides medicinal importance *Dalbergia sissoo* and *Pterocarpus marsupium* have commercial value; whereas *Butea monosperma* and *Clitoria ternatea* are known for their religious importance. Different plant parts such as root, stem, bark, flower, fruit, seed and gum are used as medicine by the local traditional healers. The plants are mostly used in the form of paste, decoction, plant parts extract and seed oil.

There are 6 medicinal plant species have been reported in this paper with 27 ethnomedicinal prescription. Out of which 13 numbers are used orally, 11 numbers used externally and 3 numbers used internally. These plants are utilised to cure several diseases and ailments like leucorrhoea, diabetes, fever, headache, throat infection, piles, menorrhagia, cold fever, skin diseases, skin

burning, leprosy, urine infection, scabies, jaundice ulcer, boils, sores, gonorrhoea, toothache and, pyorrhoea.

CONCLUSION

Although Western System of medicine has several options for the treatment of simple as well as serious diseases, still the people of study area have strong belief in efficacy on the success of herbal medicines. But due to lack of interest among the present young generation this traditional wealth is going to be lost in the near future. That is why it is now necessary to acquire and preserve this traditional knowledge on medicinal plants through documentation and identification of plant species.

The present study concludes that the plant species reported here are with multifarious uses for the community. Therefore it is necessary to ensure the survival of plant species by providing protection, conservation and multiplication of such medicinal and economically important plants. These plants can be further studied for their pharmacological activity and active compound. Awareness regarding scientific and systematic collections of medicinal plants may be done by responsible authority for commercial purposes, which can be beneficial for the local inhabitants.

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