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Ethno medicinal importance of indigenous plants for the use of Leucoderma and other skin diseases of the Mandar Block, Ranchi, Jharkhand, India

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Abstract : Often Ethnobotanical inventories are made by conducting interviews with the tribal people; formal surveys in the field and collection and identification of plant specimen used. This article deals with 21 plants species used in treatment of Leucoderma and other skin diseases by the ethnic population of Mandar Block. Medical Ethnobotany deals with the nature and application of plants used within traditional medical systems and it involves the identification of plants used in traditional remedies.

Keywords : Ethnomedicinal values; Horopaths; Pahans; Medical Ethnobotany; Mankis; Ojhas

INTRODUCTION

In the Geographical Map, Mandar Block of Ranchi District of Jharkhand stands between 23°27' North Latitude and 85°5' East Longitudinal. According to primary 2001 Census abstract source, the total population of the block was 98,740. Out of total population, the block has 57601 people of tribal which is about 58% of the total population. The numerous important tribal inhabitants of this block include Munda, Oraon, Karmali, Rajak, Rajwar, Santhal, Bedia, Birhore, Ravidas, Ganju etc. It is hardly credible that inspite of only having 56 percent of literacy, these people have very long experience and knowledge about the medicinal cure of diseases.

Some Authoritative studies have been already done on the ethnomedicinal values of local indigenous flora. Although no systematic documentation has been prepared on the disease of Leucoderma and other skin diseases. This article is an attempt to explore the ethnomedicinal plants regarding the treatment of the said diseases.

METHODOLOGY

For the treatment of various skin diseases and specially Leucoderma of the Mandar Block,

ethnobotanical surveys were conducted for recording information regarding the therapeutic properties of wild plants. Herberia was prepared with all relevent information which was kept in P.G. Deptt. of Botany, Maharaja College, Ara Bihar.

MATERIALS USED

The species of important medicinal plant were collected regarding the treatment of various skin diseases and Leucoderma. The local knowledgable people, Pahans, Ojha, Manakis and Horopaths have played a vital role in the collection of these species. A diary was used for recording the detail information regarding the local names, parts used and form of drugs of herbal plants.

The necessary data are recorded and are being presented in the tabular form with botanical names of plant arranged in alphabetical order along with their local names, families; part used and forms of drug. The Wealth of India (A Dictionary of Indian Raw Materials and Industrial Products) is used in the reference for various plants.

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For Leucoderma					
Sl. No	Local Name	Botanical Name	Specific part for use	Constituents	Reference
1	Anarkara	<i>Anacyclus Pyrethrum</i> DC. (Asteraceae)	Juice of Leaves	Pellitorine, the active pungent constituent of the root.	D.E.P., I, 223; Burkil, I, 147.
2	Bans	<i>Bambusa arundinacea</i> Willd. (Poaceae)	Young aerial shoals juice	Cyanogenetic glucoside (poisonous) in young shoots.	D.E.P., I, 390; Gamble, Ann., R. bot. Gdn. Calcutta, 1896, 7, 51, Pl. 48.
3	Champa	<i>Michelia champaca</i> Linn. (Magnoliaceae)	Juice of Flower	Cineole, iso-eugenol, benzaldehyde, phenylethyl alcohol and methyl anthranilate.	D.E.P., V, 241; Fl. Br. Ind., I, 42.
4	Gambhar	<i>Gmelina arborea</i> Roxb. (Verbenaceae)	Juice of Fruit	Butyric acid, Tartaric acid and traces of resinous and saccharine matter.	D.E.P., III, 514; Fl. Br. Ind., IV, 581.
5	Gunchi or "Rati"	<i>Abrus precatorius</i> Linn. (Papilionaceae)	Juice of Leaves	Abrin is a highly toxic protein present in the seed.	Wlth. India Raw Materials, I,2; Fl. Br. Ind., II, 175; Breteler, Blumea, 1960, 10, 607.
6	Haubera	<i>Juniperus communis</i> (Pinaceae)	Juice of Leaves	Volatile oil constituent in the all part of tree.	D.E.P., IV, 552; Fl. Br. Ind., V, 646; Kirt and Basu, Pl. 922B.
7	Jasut	<i>Hibiscus rosa-sinensis</i> Linn. (Malvaceae)	Juice of Leaves	The flowers contain an anthocyanin pigment, cyanidin diglucoside.	D.E.P., IV,242; C.P., 629; Fl. Br. Ind., I, 344.
8	Kapas	<i>Gossypium herbaceum</i> Linn. (Malvaceae)	Powder of Root	The root bark contains dihydroxibenzoic acid ,salicylic acid, two substances of phenolic nature and vitamin E.	D.E.P., IV, 25; C.P., 575, 582; Hutchinson et. Al. 34, Pl. V.
9	Kaunch	<i>Mucuna pruriens</i> Baker (Fabaceae)	Powder of Seed	The seed contains stearic & Palmatic (saturated), oleic and linoleic (unsaturated).	D.E.P., V, 286; Fl. Br. Ind., II, 187; Kirt. And Basu, Pl.317B.
10	Neem	<i>Azadirachta indica</i> A. Juss. (Meliaceae)	Juice of whole plant	The alcoholic extract of the fresh stem bark yields the bitter principle:-nimbin, nimbinin and nimbidin	Wlth India- Raw Materials, I, 140; Fl. Br. Ind., I, 544.

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11	Ram Tulsi	<i>Ocimum gratissimum</i> Linn. (Lamiaceae)	Juice of Leaf	The oil contains citral, geraniol, citronellol, geranyle acetate and sesquiterpenes.	D.E.P., V, 443; Fl. Br. Ind., IV, 608; Kirt. And Basu, Pl.749B.
For Skin Diseases					
1	Arusa	<i>Adhatoda vasica</i> Nees. (Acanthaceae)	Paste of Leaves	Alkaloids are present in the drug and the chief principle is a quinazoline alkaloids.	Wlth India- Raw Materials, I, 31; Fl. Br. Ind., IV, 540.
2	Babul	<i>Acacia arabica</i> Willd. (Fabaceae)	Paste of Bark	The bark is demulcent and astringent and shows antiviral properties.	Wlth India- Raw Materials, I, 5; Fl. Br. Ind., II, 293.
3	Bijasal	<i>Pterocarpus marsupium</i> Roxb. (Papilionaceae)	Paste of Leaves	The tree yields gumkino, kino contains a non-glucosidal tannin, kinotannic acid, kinoin and kino red.	D.E.P.,VI(I), 357; C.P., 908; Fl. Br. Ind., II, 239.
4	Bukchi	<i>Psoralea corylifolia</i> Linn. (Papilionaceae)	Paste of Leaves	The seeds contain terpenoid oil, dark brown resin, and bakuchioil and coumarin compounds.	D.E.P.,VI, 353; Fl. Br. Ind., II, 103; Kirt. And Basu, Pl.300A.
5	Kachnar	<i>Bauhinia variegata</i> Linn.(Caesalpinaceae)	Paste of Bark	The bark acts as a tringent and is of alternative nature.	D.E.P.,I, 425; C.P., Fl. Br. Ind., II, 284; Pl. XXVI.2.
6	Kalimirch	<i>Piper nigrum</i> Linn. (Piperaceae)	Powder of Seeds	Pepper owes its characteristics pungency and aroma to its oleoresin.	D.E.P.,VI(I), 261; C.P., 896; Fl. Br. Ind., V, 90.
7	Kapur	<i>Cinnamomum camphora</i> (Linn.) Nees & Eberm (Lauraceae)	Oil of Leaves	The leaf oil contains camphor, cincol and aldehydes, also contain pinene, camphene, etc.	D.E.P., II, 317, 84; C.P., 245
8	Kathal	<i>Artocarpus integrifolia</i> Hook (Moraceae)	Ash of Leaves	The seed extract stimulates the heart and causes a fall in the arterial blood pressure of experimental animals pretreated with physostigmine.	Wlth India- Raw Materials, I, 125; Fl. Br. Ind., V, 541.

9	Meghapati	<i>Centella asiatica</i> (Linn.) Urban (Apiaceae)	Juice of Leaves	A bitter principle, vellarine, pectic acid and a resin are present in the leaves and roots of the plant.	D.E.P., IV, 311, Fl. Br. Ind., II, 669
10	Piyavasa	<i>Barleria prionitis</i> Linn. (Acantheceae)	Juice of Whole Plant	Juice of leaves is slightly acidic and bitter.	D.E.P., I, 400, Fl. Br. Ind., IV, 482; Pl. XXIV, I.

RESULTS AND DISCUSSIONS

The survey of the Mandar Block introduced that twenty one various species of plants are used by indigeneous people for getting cure from Leucoderma and different skin diseases. There are atleast two species whose each & every part are being used for getting relief from Leucoderma and the skin's diseases. Out of the rest nineteen species, they use, some or the other part like they are using the seeds of three species, leaves of about nine species, back of two plant species and fruits & flower of two species. Whatever part of the plant they are using, it is either in the form of powder, ash, prepared paste or in the form of juice. They prepare the extract from "Kapur" and use it.

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