

## Endemic Use of Medicinal Plants for the Treatment of Skin Diseases in the Balod District

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**ABSTRACT:** The plant based traditional knowledge has become a recognized tool in search for new sources of drugs, wound healing properties and nutraceuticals. Central India is one of those regions in India where the tribal population and forest dwellers form a considerable part of the population. The common tribal communities of area are Kanwar (11.84%), Halba (4.76%), Bhatra (2.52%), Baiga (0.93%), Urao (1.89%), Bijhwar (1.72%), Bhariya (1.58%) and Agariya (0.74%). They are partially or completely dependent on forest products for their survival. Kanwar tribal societies, related to sterility, conception, abortion etc. and the use of abortifacients. Very little work has been done on the ethno-gynecological use of plants in the treatment and health care program of women as evidenced by the literature and references. Medicinal plants are plants containing inherent active ingredients used to cure disease or relieve pain. The main tribes of these districts are Kanwar, Halba, Bhatra, Baiga, Urao, respectively. The tribal traditional healers of these regions practice herbal medicine to cure diseases and disorders. They collect and preserve locally available wild and cultivated plant species. The aim of the present study was to assess the plant species used for medicinal values as treatment of skin disorder specially. The documentation and assessment of the traditional medicinal knowledge is very important for the Indian society. Ethno-botanists over the world have been actively working to collect and document the indigenous medicinal plants. The endemic use of medicinal plants is gaining recognition worldwide because of its support in the discovery of new medicines and its importance for the proper conservation of biodiversity. This paper documents the knowledge of medicinal plants used for the treatment of skin diseases in Balod District, Chhattisgarh, India. The present study was done through structured questionnaires in consultation with the tribal ethno-medical practitioners and has resulted in the documentation of 75 medicinal plant species belonging to 42 families. For curing the skin disease, the use of aboveground plant parts, underground plant parts, leaves, as roots and rhizomes, whole plants. The study thus underlines the potentials of the ethno-botanical research and the need for the documentation of traditional ecological knowledge pertaining

**Key-Words:** Skin Diseases, Medicinal; Ethno-botany; Balod; Tribes

Date of Submission: 09-02-2018

Date of acceptance: 24-02-2018

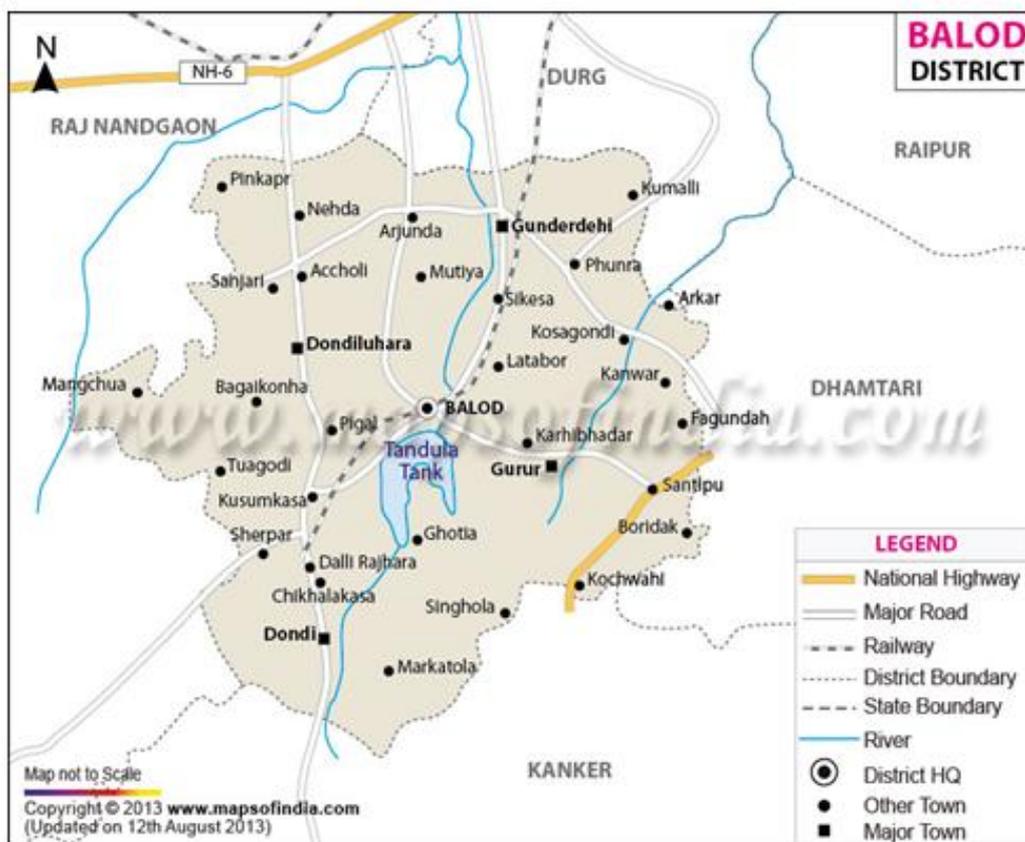
### I. INTRODUCTION

Chhattisgarh, the 26th state of the country. This area is rich in medicinal plant diversity. The tribal people mostly depend on forests for their livelihood like- foods, fibers, woods etc., and up to 50% of the rural population still depends on traditional medicine as primary near their source. Balod is the 16<sup>th</sup> District of C.G. State. Has ample variation in physical and cultural features. Balod district is located in North Chhattisgarh and lies between latitude 22°56' and 23°48' North and 81°56' and 82°47' longitude. The area of the district is 5977 km<sup>2</sup>, which 59.9% is forest area. Balod district is five blocks: Baikunthpur, Sonhat, Manendragarh and Bharatpur and Kadgawaon. Skin is the more sensitive organ of the body. It serves many important functions, including protection, percutaneous absorption, temperature regulation, fluid maintenance, sensory and disease control (Gebelein CG In: Colin, H., Wheatley (Eds.), America. 1997). Skin complaints affect all ages from the infant to the elderly and cause harm in many ways. It has been estimated that skin diseases amount to as high as 34% of all occupational diseases (Spiewak 1998.) About 400 plants are used in regular production of Ayurvedic, Unani, Siddha and tribal medicine. About 75% are from tropical and 25% from temperate forests. 30% of preparations are derived from roots, 14% bark, 16% whole plants, 5% flowers, 10% fruits, 6% leaves, 7% seeds, 3% wood, 4% rhizomes, 6% stems and only less than 20% of the species used are cultivated (Anonymous 1997). The common tribal communities are Kanwar, Halba, Bhatra, Baiga, Urao tribes. They are partially or completely dependent on forest products for their survival. Botanically derived medicinal plants have played a major role in human societies throughout history and prehistory (Lewis, W.H. and Elwin Lewis, M.P. (2003))

Showing Table- 1 Chhattisgh Map in District.



Showing Table- 2 Study Aria Map in BalodDistrict



**Table 3-** Showing Botanical Name, Local Name, Family Part Used, Habit, Medicinal Use

S/N	BOTANICAL NAME	LOCAL NAME	FAMILY	PART OF USE	HABIT OF PLANT	MEDICINAL USE
1	<i>Abrus precatorius Linn.</i>	Ratti	Fabaceae	Root	Climber shrub	The juice of root, mixed with the half the amount of the juice of <i>Allium sativum</i> is applied on ringwormSpot.
2	<i>Acacia sinuate, (Lour.)</i>	Satala	Mimosaceae	Pods	Shrub	The pods along with emblica officinal is, curcuma longa and Rubia cordifolia are recommended for skin ring worm and wound.
3	<i>Achyranthus aspera, Linn.</i>	Circita	Amaranthaceae	Leaf	Herb	Leaf juice with a pinch of salt is applied to cure skin infection due to
4	<i>Ailanthus excelsa, Roxb.</i>	Adu, Ghoda Neem	Simaroubaceae,	Leaf	Tree	The leaf powdermixed with whole plant of <i>Solanum xanthocarpum</i> is used for skin infection.
5	<i>Allium Sativum Linn</i>	Lahsun	Amaryllidaceae	Root, Times	Herb	Skin Boil garlic in mustard oil than apply in affected lesion. Garlic in treating wounds. Antiviral, antibacterial, antifungal,antiparasitic.
6	<i>Aloe vera (L.)</i>	Gwarpatha	Liliaceae	Leaf	Herb	Leaf pulp is used as a moisturizer in
7	<i>Andrographis paniculata, (Burm.f.) Wall</i>	Kalmegha, kirayat	Acanthaceae	Leaf pest	Herb	Leaf juice mixed with cow milk is taken orally twice a day for six to eight days to cure tineacurris.
8	<i>Argemonemexicana, Linn.</i>	Satynasi	Papavaraceae	Whole plant	Herb	Pounded seed along with rhizome of curcuma Aromatica and Calamus made in to paste are applied on all kinds of skin diseases twice a day till recovery.
9	<i>Azadirachtaindica, Linn</i>	Neem	Meliaceae	Leaf powder	Tree	1 spoon of powder mixed with water/orally thrice in a day/3 days, Wound. Ringworm Effective against skin diseases like ringworms,scabies,wounds
10	<i>Bacopamonniери Linn</i>	Brahmi	Plantaginaceae	Whole plant	Herb	Juice leap In treat ment of skin. Is treatment of psoriasis, eczema.
11	<i>Bambusabambos , Linn.</i>	Bans	Poaceae	Stem	Shrub	The paste of stem is applied topically on wounds.
12	<i>Bryophyllumpinnatum</i>	<i>Patharchata</i>	Crassulaceae	Leaf	Herb	Tender leaves are crushed mixed with wheat husk and administered to Cure
13	<i>Buteamonosperma (Lam.)Taub.</i>	Palas	Fabaceae,	Seed	Tree	Seed paste isUsed to cure skin diseases.
14	<i>Calotropisprocer a, (Aiton)</i>	Madar	Asclepiadeceae	Root, Latex, Flower, Leaves	Shrub	The leaves and flower are crushed together, made in to pest and applied tropically on boils.
15	<i>Carica papaya Linn</i>	Papaya	Caricaceae	Fruit	Tree	Clean and attractive fresh in skin
16	<i>Cassia alataLinn.</i>	Dadukapatta	Caesalpiniaceae	Leaf	Shrub	Leaf paste mixed with seed oil of <i>Pongamiapinnata</i> , applied externally for skin diseases.
17	<i>Cassia fistula Linn.</i>	Amaltas	Caesalpiniaceae	Bark	Tree	Bark is used for fungal skin diseases.
18	<i>Cassia tora, Linn.</i>	Charota	Caesalpiniaceae	Leaf	Shrub	Paste of leaf is applied over skin to cure skin diseases.
19	<i>Centellaasiatica (L.)Urban</i>	Brahmibooti	Apiaceae	Aerial part	Herb	Treatment of wound, and protection of skin ageing damage,UV damage.
20	<i>Cicerorientinum, Linn</i>	Gram, chhana	Fabaceae	Fruit, root	Herb	Powder pest clean of fresh and Ring worm treatment use.
21	<i>Cocciniagrandis (L.) J. Otto Voigt</i>	Kundururu	Cucurbitaceae	Leaf	Herb	The leaf pest use in antibacterial and ring worm.
22	<i>Commiferamukul (Arn) Bhandari</i>	Gugul	Burseraceae	Gum, Leaves	Tree	The paste used in wrinkles and aged skin, skin colour improvement, Wound treatment.
23	<i>Crotalaria retusa, Linn.</i>	Khunkuniyan , Devil bean	Fabaceae	Root, Leaf, seed	Herb	Oil as non-edible oil but could be used in the production of hair shampoos, skin cream

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22	<i>Cucumissativus, Linn.</i>	Khira	Cucurbitaceae	Fruit	Herb	Skin fresh in use of leap
24	<i>Curcuma aromatic</i>	Van haldi	Zingiberaceae	Rhizomes	Herb	The Paste of the rhizome with a 50% of Neem leafs powder is applied on the skin against eczema.
25	<i>Curcuma caesia, Linn.</i>	Kali Haldi	Zingiberaceae	Rhizomes	Herb	Grind fresh Rhizomes and put on affected area. Paste is mixed with Neem oil is applied Ring worms control.
26	<i>Curcuma longa, Linn</i>	Tumeric, Haldi	Zingiberaceae	Whole part	Herb	Stimulative, expectarent, Face ringworm
27	<i>Cuscutareflexa, Roxb</i>	Amarbel	Convolvulaceae	Leaves	Shrub	Paste is mixed with Neem oil is applied
28	<i>Dalbergiasissoo Roxb.</i>	Bahabija/ Hermala	Fabaceae	Wood, Leaf	<b>Tree</b>	Decoction of bark and heartwood are useful in Skin diseases.
29	<i>Datura metal, Linn</i>	Dhatura	Solanaceae	Whole plant	Herb	Leaf juice is mixed with a little opium and applied to the affected area to reduce swelling of gums or base of ears.
30	<i>Diplocyclospalm atus (L). C. jeffrey</i>	Shivlingi	Cucurbitaceae	Whole plant	Climbing herb	The seed oil and coconut oil in equal preparation is applied on body in skin disease.
32	<i>Emblicaofficinalis, Gatertrn.</i>	Amla	Euphorbiaceae	Fruit	Tree	Take 10 gm of equal part of powder of leaves of Amla&NeemWith honey.
33	<i>Euphorbia hirtaLinn.</i>	Dudhi	Euphorbiaceae	Whole plant	Herb	The latex of the plant is applied topically on wounds. Latex is also applied on eczema. The pest of whole plant applied topically on ring warm.
34	<i>FicushispidaLinn, f.</i>	Gobla	Moraceae	Leaf	Tree	Fresh Leaf juice is applied externally for skin disorders like Leucoderma and fruit juice is given internally for 3 days.
35	<i>Ficusracemosa Linn.</i>	Gillor	Moraceae	Latex	Tree	The latex is applied topically on boils.
36	<i>Ficusreligiosa Linn</i>	Peepal	Moraceae	Bark	Tree	Paste of powdered bark is good for skin diseases.
37	<i>Hedyotiscoryonbosa, Linn.</i>	Davnapatta.	Rubiaceae	Whole plant	Herb	Leaves pest used ring worm.
38	<i>Hemidesmusindicus Linn</i>	Anantmool	Apocynaceae	Root	Shrub	Skin diseses gout, syphilis and non-healing wound, soft skin.
39	<i>Hordiumvulgare Linn.</i>	Jow	Poaceae	Grain	Herb	Apply floor of barley with linseed oil & butter milk.
40	<i>Ipomoea carnea, Jacq.</i>	Beshram	Convolvulaceae	Leaves	Herb	The leaves are fried in musterd oil and tied topically on cuts and wound.
41	<i>Jasminumangustifolia, Willd.</i>	Jasmin	Oleraceae	Root, Leaf	Herb	The oil used help moisture in the skin to naturally reduce dryness.
42	<i>Lablab purpureus (L.) R. Sweet</i>	Semi	Fabaceae	Leaves	Herb	Leaves pest used bleaching cream, and Skin cool.
43	<i>Lantana camaraLinn.</i>	Machhimudhi	Verbenaceae	Leaf	Shrub	Leaf paste is an externally applied to wounds and cuts.
44	<i>Lawsoniainermis, Linn</i>	Mehndi	Lythraceae	Whole part	Shrub	The leaf paste is applied on cracked heels in rainy season due to mud infection.
45	<i>Lens esculenta, Medikus</i>	Lentil	Fabaceae	Whole plant	Herb	Seed pest is known to cure skin diseases.
46	<i>Linus usitatissimum, Linn,</i>	Alsi	Fabaceae	Whole plant	Herb	The paste of whole plant is applied topically on wounds,
47	<i>Lycopersicumesculentum, Linn.</i>	Tomato	Solanaceae	Fruit	Herb	Ring worm
48	<i>Madhucaindica</i>	Mahuva	Sapotaceae	Leaves	Tree	The leaves paste is applied.
49	<i>Mallotusphilippensis, (Lam.) Muell. Arg</i>	Kamala. Sinduri.	Euphorbiaceae	Stem, fruit, powder	Tree	All part used in treat parasitic infection of the skin. Wounds treatment.

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50	<i>Maringa oleifera</i> Lamk.	Munga	Moringaceae	Leaf	Tree	Plant powder is taken internally to treat skin diseases.
51	<i>Murrayakoenigii</i> (L.) Sprengel	MeethiNeem	Rutaceae	Roots	Tree	Roots are used to curing of wound.
52	<i>Musa paradisiacal</i> Linn.	Banana	Musaceae	Fruit	Shrub	Fruit wall used skin Smooth muscle.
53	<i>Ocimum sanctum</i> , Linn.	Tulsi	Lamiaceae	Leaf Juice	Herb	Soya bean oil mix. Apply externally at the spot of infection before sleep/3 days.
54	<i>Origanumvulgar e</i> Linn.	Dounapatti	Lamiaceae	Whole plant	Herb	Whole plant is used as antibacterial and antifungal.
55	<i>Oxalis corniculata</i> Linn.	Amrul	Oxalidaceae	Whole plant	Creeping Herb	The juice of the whole plant is gently rubbed on the skin against allergies for 2-5 days.
56	<i>Phyllanthusacid us</i> (L.) Skeels.	Shriamla	Phyllanthaceae	Bark,	Tree	Bark is heated with coconut oil skin diseases treatment.
57	<i>Piper nigrum</i> Linn.	Kalimircha	Piperaceae	Seeds	Herb	Seeds are used in wound healing and skin diseases.
58	<i>PlumbagoZeylan ica</i> , Linn	Chitrak	Plumbaginaceae	Root	Herb	Antifungal, Antibacterial used in root pest.
59	<i>Psidiumguajava</i> , Linn.	Guava	Myrteae	Fruit, Leaves	Tree	The leaves and bark is taken externally as a lotion for skin complaints, ring worm, wound.
60	<i>Ricinuscommuni s</i> Linn	Arandi	Euphorbiaceae	Seed	Shrub	Seed pest to the skin as a poultice for inflammatory skin disorders.
61	<i>Saracaindica</i> Linn.	Ashok	Fabaceae	Bark	Tree	Powder on skin problem by making paste.
62	<i>SemecarpusAnac ardium</i> , Linn	Bhilawa	Anacardiaceae	Seed , fruit	Tree	Face ringworm, Boil the fruit in Rar oil & apply.
63	<i>Sesamumindicu m</i> , Linn.	Til	Fabaceae	Seed	Herb	The oil of seed is applied topically in leprosy. The paste is applied on boils.
64	<i>Smilax china</i> , Linn.	Chobchini	Smilacaceae	Tuber	Shrub	Powder and mishari to use.
65	<i>Solanumnigrum</i> , Linn.	Makoi	Solanaceae	Leaves	Herb	Leaves are used as poultice for skin diseases
66	<i>Solanumtuberos um</i> , Linn	Potato, Alu	Solanaceae	Tuber	Herb	Skin black Ring worm
67	<i>Spharanthusindi cus</i> , Linn.	Mundi	Asteraceae	Whole plant	Herb	Plant powder is taken internally to skin disease.
68	<i>Strychnosnux- vomica</i> Linn.	Bilewa	Strychnaceae	Leaf	Tree	Leaf paste is applied externally for common skin diseases.
69	<i>Taivetianeerifoli a</i> , Linn	Kaner	Apocynaceae	Leaves, Root	Shrub	Oil is used externally for skin ailments, and ring worm treatment.
70	<i>Tephrosiapurpur ea</i> , Linn.	Meghapati	Fabaceae	Arial part	Herb	Healing of burn wound.
71	<i>Terminaliaarjun a</i> (Roxb. Ex DC.) Wight and Arn.	Kahuva, Arjun	Combretaceae	Bark, Leaf	Tree	Leaves are used in wound healing.
72	<i>Terminaliachebu la</i> Retz.	Harra	Combretaceae	Fruit	Tree	Boil; the 1 part of fruits of Harra in 8 times mustard oil and apply on affected area.
73	<i>Vemoniacinerea</i> , Schreb	Sadodi	Asteraceae	Whole plant	Herb	Leaf juice is use full for amobiasis, eczema, ring worm and other skin tubers.
74	<i>Withaniasomnife ra</i>	Asgandh	Solanaceae	Whole part	Shrub	Small pieces of plant are mixed with cow's urine and applied on the Affected skin.
75	<i>Zingiberofficinal e</i> , Linn.	Adrak	Zingiberaceae	Rhizomes	Herb	Rhizomes are ground into a fine paste and applied on the Skin.

**Table 4.** Plant species distribution according to their families.

S/ N	Family	Number of species	S/N	Family	Number of species
1	Acanthaceae	1	26	Oleraceae	1
2	Amaranthaceae	1	27	Oxalidaceae	1
3	Amaryllidaceae	1	28	Papavaraceae	1
4	Anacardiaceae	1	29	Phyllanthaceae	1
5	Apiaceae	1	30	Piperaceae	1
6	Apocynaceae	2	31	Plantaginaceae	1
7	Asclepiadeceae	1	32	Plumbaginaceae	1
8	Asteraceae	2	33	Poaceae	2
9	Burseraceae	1	34	Rubiaceae	1
10	Caesalpiniaceae	3	35	Rutaceae	1
11	Caricaceae	1	36	Sapotaceae	1
12	Combretaceae	2	37	Simaroubaceae	1
13	Convolvulaceae	2	38	Smilacaceae	1
14	Crassulaceae	1	39	Solanaceae	5
15	Cucurbitaceae	3	40	Strychnaceae	1
16	Euphorbiaceae	4	41	Verbenaceae	1
17	Fabaceae	11	42	Zingiberaceae	4
18	Lamiaceae	2		<b>Total Family -42</b>	<b>Species-75</b>
19	Lythraceae	1			
20	Meliaceae	1			
21	Mimosaceae	1			
22	Moraceae	3			
23	Moringaceae	1			
24	Musaceae	1			
25	Myrteae	1			

## II. MATERIAL AND METHODS

In present study the identification of plants, documentation, Ethno-medico observation and photography of plant species was done in study areas of district Balod CG. Identification of plant species was done by Flora of Madhya Pradesh and Local flora of District. Ethno-botanical information was gathered from tribal people, vaidyas and ethnic peoples. The collection of voucher specimens of plant species with vernacular name and field notes were also discussed during field trips. The first-hand information on the medicinal plants used by the villagers was arranged alphabetically with common name and families name in (Table 1).

## III. RESULT AND DISCUSSION

The present study reports 75 plant species are used for skin disease Treatment. (Table-3). Medicines were prepared in the form of powder, decoction, paste and juice. It was observed that both wild and cultivated plant species were used in more than one form of preparation. Generally fresh part of the plant used to preparation of medicine. When fresh plant part are not available dried parts also used. This study revealed that traditional wisdom about medicinal plants still play a vital role in primary health care of people. During the survey it was that there must need to protect this knowledge forever.

## IV. CONCLUSION

The biochemical analysis and pharmacological studies of those plant species may bring some new scientific information of immense ethno pharmacological interest. That's why these medicines should be cultivated and traditional healer should get economic support from government. Hence the benefit of this knowledge may be useful to coming generation.

## ACKNOWLEDGEMENT

The authors are thankful to the tribal of Balod, C.G., for sharing their traditional knowledge. Authors are also express our gratitude to the Dr. Pratiksha Pandey, Bhilai Mahila Mahavidyalaya, Bhilai C.G. suggestions and encouragement during this work. The author is thankful to Rajwade Baidh, Cher (Salka) and local people inhabiting localities of forest villages of Baikunthpur, Kadgawaon and Sonhat because of their kind support and thankful to the division forest officer and range officer of the district Balod, Chhattisgarh

### REFERENCES

- [1]. Agrawal, R., Chouhan, D. (2014) "Indigenous Medicinal Herbs used by Tribal of C.G. for Skin diseases treatment." *Indianj.sci.res.4* (1):108-110.
- [2]. Anonymous (1970-1983) "Index Kewensis plant arum Phanerogamarum." vole 1-2 (1883-1855)& is supply (1886-1970), Clarendon press Oxford.
- [3]. Balick, M.J. (1996) "Transforming ethno botany for the new millennium." *Ann. M. Bot. Garden*, 83: 58-66.
- [4]. Buragohain, J., Konwar, B. K. (2007) "Ethnomedicinal Plants used in Skin Diseases by some Indo-Mongoloid Communities of Assam." *Asian J. Exp. Sci.*, Vol. 21, No. 2, : 281-288
- [5]. Chopra R. N., Chopra I. C., Verma V.C. (1969) "Supplement to the Glossary of Indian medicinal plants." CSIR, New Delhi.
- [6]. Chopra R. N., Nayar S.L., Chopra I.C. (1956) "Glossary of Indian Medicinal Plants." CSIR, New Delhi.
- [7]. Chopra R.N., Chopra I. C. and Verma V.C. (1969) "Supplement to the Glossary of Indian Medicinal plants." CSIR, New Dehli.
- [8]. F. N. Yalcin and D. Kaya (2006) "Ethnobotany, Pharmacology and Photochemistry of the Genus *Lamium* (Lamiaceae)."
- [9]. Gebelein CG In: Colin, H., Wheatley (Eds.) (1997) "Chemistry and Our Life." Graphic World Publishing Services, United States of America. 1997; pp. 435-456.
- [10]. Hajara P.K., Rao P.R., Sing D.K., Uniyal V.P. (1987) "Flora of India." BSI, Vol.-12, Calcutta 1987.
- [11]. Hassan M.A., Khan M.S. (1996) "Ethnobotanical records in Bangladesh and Plants used for healing cuts and wounds." *Bangladesh J. Plant Taxon.* 3(2): 49-52.
- [12]. Kiruba, S., Dhruw, S.S.K., Sahu, P.K. and more (2014) "Phytotherapeutic drugs used by the tribal folk of Achanakmar, Amarkantak Biosphere Reserve." *Central India, International Journal of Pharma Research and Health Sciences Volume 2* (2), 2014, Page-157 e-ISSN: 2348-6465
- [13]. Lal, S. Masih, V. Sahu, P. and Soni, I. (2015) "Observation of Traditional Knowledge of Tribe Peoples of Gurur, District Balod, CG." *Int. J. Pharm. Life Sci.*, 6(8-9):4746-4750.
- [14]. Lewis, W.H. and Elwin Lewis, M.P. (2003) "Medical Botany Plants Affecting Human Health." John Wiley and Sons, New York, 812.
- [15]. M. K. Sinha, D. K. Patel and V. K. Kanungo (2013) "Medicinal plants used in the treatment of skin diseases in Central Bastar of Chhattisgarh." *India. (GARJMP) Vol. 2*(1) pp. 001-003, July, 2013.
- [16]. Owolabi J., Omogbai E.K.I., Obasuyi O. (2007) "Antifungal and antibacterial activities of the ethanolic and aqueous extract of *Kigelia africana* (Bignoniaceae) stem bark." *African Jour. Biotechnol.*, 6:882-85.
- [17]. Spiewak R. (1998) "Occupational skin diseases among formers." In: Zagorski, J. (Ed.), *Occupational* 1998.
- [18]. Tirkey, A. (2004) "Some Ethnobotanical Plant Species of Chhattisgarh State." *Ethnobotany*, **16**, 118-124.
- [19]. Tiwari, A.K. (2015) "Indigenous knowledge for treating skin disease in some selected District of chhattisgarh." *International Journal of Recent Scientific Research Research Vol. 6*, Issue, 2, pp.2654-2657, February, 2015.
- [20]. Yadav M., Yhan K.K., Beg M.Z. (2012) "Ethno-botanical plants used for curing skin diseases by tribals of Rewa district (Madhya Pradesh)." *Indian J.L.Sci.2* (1): 123-126.

IOSR Journal of Pharmacy (IOSR-PHR) is UGC approved Journal with Sl. No. 5012

Dr. Deepak Kumar Gupta "Endemic Use of Medicinal Plants for the Treatment of Skin Diseases in the Balod district." *IOSR Journal of Pharmacy (IOSRPHR)*, vol. 8, no. 2, 2018, pp. 18-24