



Medicinal plants used in the treatment of some common diseases by the tribal and rural people in Korea district of Chhatisgarh

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Abstract

Numerous plants have been used for treating human diseases and disorders in our country since ancient times. A few of them become more popular and widely accepted due to their favourable remedial properties and went into organised Indian system of medicines. Hundreds of ethnomedicinal plants have been subjected in India and abroad to modern laboratory experiments and clinical trials. Obviously, the results of such research work done during last few decades were reviewed by scientists. The present paper include the medicinal value of 64 plant species used in the treatment of various human ailments by the tribal and rural people of Korea district of Chhatisgarh.

Key-Words: Korea, Medicinal Plants, Tribal, Rural

Introduction

Medicinal plants have been available in human societies since time immemorial. Indeed, the uses of plants were discovered by ancient people by the method of trial and error. The system of traditional medicine had their root in the uses of plants by these people and survived only by the oral communications from generation to generation. Obviously, plants have been prized for their aromatic, flowering and drug yielding qualities. Their drug values are lies in phytochemiclas present in the plants. The forest and remote rural places have been the traditional sources of herbs. During the past decade, a dramatic increase in exports of valuable plants attests the worldwide interest in traditional health system. Most of these plants being taken from the wild, hundreds of species our now threatened with extinction because of over-exploitation. Since past decade there has been a considerable interest towards the uses of herbal medicine. Tribal and rural communities use a number of plants for the treatment of various human diseases and disorders.

Earlier, Korea was made the part of Surguja District of Madhya Pradesh state. The District Korea came into existence on May 25, 1998, when it was carved out of Surguja District. After the formation of the new state of Chhattisgarh on November 1, 2000, Korea District became part of the new state.

The original inhabitants of Korea were probably the Kols, Gonds and Bhuinhars. The other communities in the district claim to have come from outside the district. Migration into Korea District was a continuous process. These migrants include the Cherva, Rajwars, Sahu, Ahir, Gwalas, Oraon, Gadaria, Koir, Bargah, Basods, Muslims, Kahars, Kunbi, Kewats, Guptas, Jaiswal, Agrawals, and Jains and Panika.

Korea district is located in north eastern Chhattisgarh and lies between latitude 22°56' and 23°48' North and latitude 81°56' and 82°47' East. It is bounded on the north by Sidhi District of Madhya Pradesh, on the south by Bilaspur District, on the east by Surguja District, and on the west by Shahdol District of Madhya Pradesh. The area of the district is 5977 km², of which 59.9% is forest area. Together with Surguja, Jashpur and Raigarh, Korea form the northern region of the State. The district is rich in forest resources and has substantial coal reserves.

Adequate informatios are available on herbal remedies and medicinal plant wealth of Madhya Pradeshha and

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Chhatisgarh. Some of the noteworthy contributors are those of Anonymous (1985), Brijlal and Dube (1992), Dwivedi (2007), Dwivedi, *et al.* (2010, 2012), Gupta *et al.* (1999) Gupta and Mishra (2000), Jain (1965), Jain (1992), Khan *et al.* (2008), Khanna *et al.* (2004), Kumar and Sikarwar (2002), Maheshwari (1990), Maheshwari *et al.* (1985), Oommachan. and Masih. (1993), Oommachan *et al.* (1986), Sahu (1983), Shukla *et al.* (2001), Singh *et al.* (2004) and Verma *et al.* (1995).

Survey of literature reveals that enough work have been done on various aspects of medicinal plants and herbal medicine. However, equivalent work on Medicinal plants of Korea district has not done, so far. Therefore, the present work was conceived.

Methodology

An extensive survey of Korea district of Chhatisgarh was made to enumerate the medicinal plants used by the tribal and rural people. Field work and collection of medicinal were made during 2010-2011. The specimens were processed as per method suggested by Jain and Rao (1976) and were deposited in the Department of Botany, Janata PG College, A.P.S. University, Rewa (M.P.). The specimens were identified on the basis of their taxonomical characteristics as well as informations recorded in available literatures (Panigarhi. and Murti 1989; Sharma *et al.*, 1993; Verma *et al.*, 1993; Singh *et al.*, 2000; Khanna *et al.*, 2001). Personal interactions between tribal physicians and rural medicemen were carried out to gather the traditional medicinal knowledge and ethnomedicinal uses of the species.

Results and Discussion

Korea district of Chhattisgarh is rich in floristic diversity. This area provides an enormous range of indigenous medicinal plants that are used by the tribal and local communities in the treatment of various diseases and disorders (Table 1). Most of the tribal groups do not have modern health facilities. However, they use the traditional knowledge of locally available plants for medicinal purpose. Due to industrialization and over-exploitation and unscientific exploitation of natural resources, the valuable traditional knowledge is depleting very fast.

These plants (Table 1) have adequate curative properties due to the presence of various complex chemical substance of different composition, which are found as secondary plant metabolites in one or more parts. These plant metabolites, according to their composition, are grouped as alkaloids, glycosides, saponins, corticosteroids, essential oils etc. However, it should be stated in all fairness that our-knowledge is still less about the biosynthetic pathway, leading to the

formation of active constituents for which these plants are valued

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References

1. Anonymous, 1985. Ethnobotany of Baigas of Madhya Pradesh, N.B.R.I. Newsletter. **12** : 28-29.
2. Brijlal and Dube, V.P. 1992. A survey of the plant of ethnomedicine of Amarkantak Plateau in Central India. *Agri. Biol. Res.* **8(1)**:29-37.
3. Dwivedi, S.N. (2007). Antimicrobial herbs used among tribal and rural communities. *Ethnobotany*, **19 (1&2)** : 111-115.
4. Dwivedi, S.N., Dwivedi, Abhishek and Dwivedi, Sumeet (2010). Status and utilisation of medicinal plants in Shahdol district, Madhya Pradesh, India, Part 2. *NutraCos* (Milano-Italy), **9** : 40-42.
5. Dwivedi, S.N., Sangeeta Alawa and R. P. Mishra (2012). Phytochemistry, pharmacological studies and traditional benefits of *Trachyspermum ammi* (Linn.) Sprague. *IJPLS*, **3(5)** : 1705-1709.
6. Gupta, Ashok Kumar, Mishra, S.K. and Khan, A.A. 1999. Ethnobotanical notes on some herbs from Chhatisgarh region of Madhya pradesh. *Ad. Plant Sci.* **12(1)**: 163-166.
7. Gupta, Ashok Kumar and Mishra, S.K. 2000. Folklore dental protector plants of Chhatisgarh, India. *Ad. Plant Sci.*, **13(11)**: 501-503.
8. Jain, S.K. 1965. Medicinal plant lore of the tribals of Bastar. *Econ. Bot.* **19**: 230-250.
9. Jain, S.K. and Rao, R.R. 1976. *A Handbook of Field and Herbarium methods*. Today and Tomorrow's Printers and Publishers. New Delhi, India.
10. Jain, A.K., 1992. Clans of Sor tribals of Madhya Pradesh and heir role in Conservation. *Ethnobotany*. **4** : 67-69.
11. Khan, A.A., Santosh Kumar Agnihotri, Manoj Kumar Singh and Ramesh Kumar Ahirwar 2008. Enumeration of certain angiospermic plants used by baiga tribe for conservation of plant species. *Plant archives*, 8(1): 289-291.
12. Khanna, K.K.; Kumar, A., Dixit, R.D. and Singh, N.P. 2001. *Supplement to the Flora of Madhya Pradesh*. Botanical Survey of India, Calcutta.
13. Khanna, K.K.; Jha, Ajay Kumar, Kumar, Anand and Murti, S.K. 2004. Endemic and rare plants of Chhattisgarh. *Bull. Bot. Surv. India* **46(1-4)**: 77-138.

14. Kumar, V. and Sikarwar, R.L.S. 2002. Observations on some rare and endangered plants of Chhattisgarh state, India. *Phytotaxonomy* **2**: 135-142.
15. Maheshwari, J.K. 1990. Recent ethnobotanical researches in Madhya Pradesh, S.E.B.S. News letter **9(1-3)** : 5.
16. Maheshwari, J.K. and Dwivedi, R.P. 1985. Ethnobotany of Abujhmaria tribe of Bastar district M.P.-1, Eight All India Botanical Conference (Hyderabad). *J. Ind. Bot. Soc.* Abstract Volume 64 Supplement, pp-53.
17. Oommachan, M. and Masih, S.K. 1993. Ethnobotanical observation on certain plants of the tribal region of M.P. *Biome*, **6(1)**: 59-64.
18. Oommachan, M.; Shrivastava, J.L. and Shukla, Hemdutt 1986. Observations on certain plants used in human skin diseases in Central India. *Indian J. Applied & Pure Biol.*, **1(1)**: 23-27.
19. Panigarhi, G. and Murti, S.K. 1989. *Flora of Bilaspur Vol. I*. Botanical Survey of India, Calcutta
20. Sahu, T.R. 1983. Less known uses of weeds as medicinal plants. *Ancient Science of Life.*, **4** : 245-249.
21. Sharma, B.D., Balakrishnan, N.P., Rao, R.R. and Hajra, P.K. (eds.) 1993. *Flora of India*. Botanical Survey of India, Calcutta
22. Shukla, K.M.L., Khan, A.A., Khan, Shabina and Verma, Ashok Kumar 2001. Ethnobotanical studies in Korba basin district Bilaspur (M.P.) India *Ad. Plant Sci* **14(11)** : 391-394.
23. Singh, M.P.; A.A. Khan and Shabina Khan 2004. Medicinal plants of ethnobotanical importance curing jaundice from Maikal hills (Amarkantak) Shahdol district (M.P.) India. *Adv. Plant, Sci.*, **17(I)** : 41-44.
24. Singh, N.P.; Singh, D.K.; Hajra, P.K. and Sharma, B.D. (eds.) 2000. *Flora of India. Introductory, Vol. II*. Botanical Survey of India, Calcutta.
25. Verma, D.M. and Balakrishnan, N.P. and Dixit, R.D. (eds.) 1993. *Flora of Madhya Pradesh Vol. I*. Botanical Survey of India, Calcutta.
26. Verma, P.; Khan, A.A. and Singh, K.K. 1995. Traditional Phytotherapy among the Baiga Tribe of Shahdol district of Madhya Pradesh, India. *Ethnobotany*. **7**: 69-73.

Table 1: Medicinal plants of Korea district of Chhatishgarh

Botanical Name	Local Name	Family	Parts Used	Diseases
<i>Abrus precatorius</i> L.	Ratti	Fabaceae	Root	Cough & Cold
<i>Acorus calamus</i> L.	Bach	Araceae	Rhizome	Stomach disorders
			Leaf & Flower	Pulmonary affections
<i>Aegle marmelos</i> (L.) Corr.	Bel	Rutaceae	Fruit	Gastric disorders
			Leaf	Diabetes
<i>Aloe vera</i> L.	Gwatpatha	Liliaceae	Leaf	Burn, Headache
<i>Annona squamosa</i> L.	Sitaphal	Annonaceae	Leaf	Diabetes
<i>Andrographis paniculata</i> (Brum. f.) Wall. ex Ness.	Kalmegh	Acanthaceae	Whole plant	Malaria, Jaundice
<i>Asparagus racemosus</i> Willd.	Satawar	Liliaceae	Root	Anaemia Weakness
<i>Azadirachta indica</i> A. Juss.	Neem	Meliaceae	Leaf & Seed oil	Skin diseases
<i>Bauhinia variegata</i> L.	Kachnar	Caesalpiniaceae	Bark	Dysentery
<i>Bixa orellana</i> L.	Sinduri	Bixaceae	Leaf	Inflammation
<i>Boerhaavia diffusa</i> L.	Punanaba	Nyctaginaceae	Panchang	Viral hepatitis
<i>Butea monosperma</i> (Lamk.) Taub.	Chhiula	Fabaceae	Gum	Diarrhoea & Dysentery
<i>Caesalpinia cristita</i> L.	Gatayan	Caesalpiniaceae	Seed	Malarial fever
<i>Calotropis procera</i> (Ait.) R.Br.	Madar	Asclepiadaceae	Leaf	Swelling
			Latex	Toothache
<i>Cassia fistula</i> L.	Amaltas	Caesalpiniaceae	Fruit	Abdominal disorders
<i>Catharanthes roseus</i>	Sadabahar	Apocynaceae	Leaf	Diabetes

(L.) G. Don.				
<i>Centella asiatica</i> (L.) Urban.	Brahmi	Apiaceae	Leaf	Brain tonic
<i>Chenopodium album</i> L.	Bathua	Chenopodiaceae	Whole plant	Laxative Appetizer
<i>Chlorophytum tuberosum</i> Bak.	Safed musli	Liliaceae	Root	Weakness Sexual vitality
<i>Cissus quadrangularis</i> L.	Harjor	Vitaceae	Stem	Bone fracture
<i>Cleome gynandra</i> L.	Hulhul	Cleomaceae	Root	Fever
<i>Clitoria ternatea</i> L.	Aparajita	Fabaceae	Seed	Purgative
<i>Curcuma longa</i> L.	Haldi	Zinziberaceae	Rhizome	Pulmonary diseases Sprain & Swelling
<i>Delbergia sissoo</i> Roxb.	Shisham	Fabaceae	Leaf	Skin eruptions
<i>Diospyros melanoxylon</i> Roxb.	Tendu	Ebenaceae	Fruit	Dysentery
<i>Diplocyclos palmatus</i> (L.) Jefery.	Shivalingi	Cucurbitaceae	Fruit & Seed	Malaria, Colitis
<i>Eclipta prostrata</i> L.	Ghamira	Asteraceae	Leaf	Cut, Wound, Hair tonic
			Whole plant	Spleen & Liver disorders
<i>Emblica officinalis</i> Gaertn.	Amla	Euphorbiaceae	Fruit	Gastric disorders,
<i>Enicostema hyssopifolium</i> Willd.	Chhota chirayta	Gentianaceae	Whole plant	Skin diseases Diabetes
<i>Fumaria indica</i> (Hassk.) Pugsley.	Pitapapara	Fumariaceae	Whole plant	Malaria
<i>Gloriosa superba</i> L.	Kalihari	Liliaceae	Tuber	Leprosy & Leucoderma
<i>Hedychium coronarium</i> Koen.ex Retz.	Gulbakawali	Zingiberaceae	Petals	Ophthalmic ailments
<i>Hygrophila auriculata</i> (Schum.) Heine.	Talmakhana	Acanthaceae	Root	Liver disorders
			Whole plant	Blood purifier
<i>Lawsonia inermis</i> L.	Mehandi	Lythraceae	Leaf	Skin eruption, Headache, Hair dyes
<i>Leucas cephalotes</i> (Roth.) Spr.	Gumma	Lamiaceae	Leaf	Rispiratory diseases
			Whole plant	Fever
<i>Madhuca indica</i> J. Gmel.	Mahua	Sapotaceae	Flower	Bronchitis & Cough.
<i>Martynia annua</i> L.	Bicchhu	Martyniaceae	Fruit	Scorpin sting Skin diseases
<i>Mucuna pruriens</i> (L.) DC.	Kemanch	Fabaceae	Seed	Diabetes, Abdominal disorders
<i>Nigella sativa</i> L.	Karayal	Ranunculaceae	Seed	General debility, Skin eruptions
<i>Nyctanthus arbor-tristis</i> L.	Seharua	Oleaceae	Leaf	Sciatica, Rheumatism, Intestinal worms.
<i>Ocimum sanctum</i> L.	Tulsi	Lamiaceae	Leaf	Respiratory

				complaints, Earache
<i>Pergularia daemia</i> (Forak.) Chiov.	Utarni	Asclepiadaceae	Leaf	Carbuncle
			Latex	Skin disorders
<i>Peristrophe bicalyculata</i> (Retz.) Nees.	Atrilal	Acanthaceae	Whole plant	Snake bite, Sprain, Fracture.
<i>Phyllanthus niruri</i> Auct.	Bhuamla	Euphorbiaceae	Whole plant	Menstrual bleeding, Jaundice
<i>Plumbago zeylanica</i> L.	Chitrak	Plumbaginaceae	Leaf & Shoot	Digestive disorders
			Whole plant	Skin & Jont diseases
<i>Pongamia pinnata</i> (L.) Pierre.	Karanj	Fabaceae	Seed	Skin diseases
			Bark	Menstrual problems
<i>Rauwolfia serpentina</i> (L.) Benth. ex. Kurz.	Sarpgandha	Apocynaceae	Root	Blood pressure, Nervous disorders
<i>Sapindus mukorossi</i> Gaertn.	Ritha	Sapindaceae	Fruit	Hair shampoo
<i>Saraca indica</i> L.	Ashoka	Caesalpiniaceae	Bark	Piles, Leucorrhoea
<i>Solanum nigrum</i> L.	Makoya	Solanaceae	Fruit	Fever, Eye diseases
<i>Solanum surrattense</i> Burm. f.	Bhatakataia	Solanaceae	Root	Cough & Bronchitis
<i>Spilanthes calva</i> DC.	Akarkara	Asteraceae	Shoot, Flower heads	Toothache Affection of throat & gums,
<i>Sphaeranthus indicus</i> L.	Mundi	Asteraceae	Panchang	Rheumatism, Blood purifier
<i>Syzygium cumini</i> (L.) Skleels.	Jamun	Myrtaceae	Kernel	Diabetes
<i>Tephrosia purpurea</i> (L.) Pers.	Sarphonka	Fabaceae	Root bark	Obstinate colic
			Root	Tonsilitis
<i>Tinospora cordifolia</i> (L.) Merr.	Giloya	Menispermaceae	Stem	Diabetes General debility Sexual vitality
<i>Tribulus terrestris</i> L.	Gokhru	Zygophyllaceae	Fruit	Urinary troubles
<i>Tridax procumbens</i> L.	Ghawapatti	Asteraceae	Shoot & Leaf	Piles, Cut & Wounds
<i>Vitex negundo</i> L.	Nirgundi	Verbenaceae	Leaf	Joint diseases, Skin eruptions
<i>Withania somnifera</i> (L.) Dunal.	Ashwgandha	Solanaceae	Root	General debility, Sexual vitality
<i>Woodfordia fruticosa</i> (L.) Kurz.	Dhawai	Lythraceae	Fruit	Couth & Cold
<i>Xanthium strumarium</i> L.	Latkani	Asteraceae	Leaf	Malaria
<i>Zingiber officinale</i> Rosc.	Adarakh	Zingiberaceae	Fruit	Respiratory diseases
<i>Zizyphus mauritiana</i> Lamk.	Ber	Rhamnaceae	Bark	Diarrhoea, Dysentery, Colic