Medico-Ethnobotany of ‘Chatara’
Block of District Sonebhadra, Uttar Pradesh, India

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Abstracts: Present study was conducted to record the ethnomedicinal wisdom of ‘Chatara’ block of district Sonebhadra. 156 ethnomedicinally important plant species belonging to 63 families were recorded with the help of tribal people and village medicine-men of the area. The study indicates that the traditional medical system is well functioning in the area. The survey of the area shows that some of the important plants are declining because of overexploitation and environmental disturbances.

Key words: Ethnomedicinal plants · Sonebhadra · Chatara Block · Uttar Pradesh

INTRODUCTION

The human plant intimate relation dates back to the origin of human on this planet. With the development of social sense in primitive men, their dependence on the plant resources increased, not only for food, but also for fodder, fuel, drug and shelter. In India there are about 550 tribal communities covered under 227 ethnic groups residing in about 5000 villages in different forest and vegetation types [1]. India with its glorious past of traditional medical system and use pattern of different plants is one of eight major centres of origin and diversification of domesticated taxa [2], having rich biodiversity and is one of the world's twelve megadiversity countries. Botanically derived medicinals have played a major role in human societies throughout history and prehistory [3] but with the development of modern civilization, use of allopathic drugs are at increasing rate and use of herbal drugs is either restricted to few communities or areas only. But there are several tribal members of the family, pockets where use of herbal drugs is the cheapest and only way for the treatment of different ailments. The traditional healers or medicine-men have their own diagnostic and treatment systems, which they have acquired from their ancestors and long history of use pattern. The information about medicinal plants is mainly confined to the village physicians, chieftains of different communities and older

According to the All India coordinated project sponsored by the Ministry of Environment and Forest, New Delhi, 40% of 16,000 recorded flowering plants in India have ethnomedicinal value, whereas only 10% of these are used in drug and pharmaceutical industries. The intrinsic importance of these medicinal plants can very well prove as a protential source of new drugs [4].

Study Site: The area under investigation of district Sonebhadra, which was taken for ethnomedicinal studies, came into existence on March 04, 1989 after division of district Mirzapur. It is situated on Vindhyan plateau and Kaimur range lies between 24°42’ N to 25°3’55” N and 83°3’ 24” E to 83°22’55” E, covering an area of 6788 Km². It is present in the extreme south east of the state and is bounded by Mirzapur district to the northwest, Chandauli district to north, Bihar State to the northeast, Jharkhand state to the east, Chattisgarh state to the south and Madhya Pradesh state to the west.

‘Chatara’ block is situated in the northern part of the district, has an area of 259.81 km², 172 villages and a population of 88857 with a population density of
342 persons per km². It is bounded by Chandauli district to the north, Nagwa block to the east and south and Robertsganj block to the west.

Climatically the area is of dry tropical type. The summer temperature ranges between 21.5°C-42°C and winter between 10°C-17.5°C. The temperature in summer may reach upto 45°C and in winter below 5°C (upto 2°C). The average annual rainfall is 1065 mm. The forest is of tropical dry deciduous type covering an area of 52.35 km² i.e. 20.5% of total area of the block. The tribal inhabitants of this block are Agaria, Baiga, Dhagar, Chero, Painika, Gond, Kharwar, Dharkar and Kol.

In Uttar Pradesh, the work was conducted by Maheshwari et al. 1981 and 1986 [5, 6], Saxena and Vyas, 1981 [7], Maheshwari and Singh, 1984 [8], Dixit and Pandey, 1984 [9], Singh and Maheshwari, 1985 and 1989 [10, 11], Pandey and Verma, 2002 [12], Khanna, 2002 [13], Kumar et al., 2003 [14], Maliya, 2004 and 2007 [15, 16], Prajapati and Verma, 2004 [17], Nigam and Kumar, 2005 [18], Upadhyay and Singh, 2005 [19] and Singh et al., 2007 [20]. Earlier the work on Ethnobotany of Tribals of Mirzapur district of Uttar Pradesh has been conducted by Maheshwari et al., 1986 [6]. Medicinal plants used 'Gond' tribe of 'Dudhi' block of Sonebhadra have been presented by Singh et al., 2007 [20]. The present work has been taken to document the traditional medical system of ethnic groups of the area so that the knowledge of thousands years of evolution could be saved for future generations.

**MATERIAL AND METHOD**

The present work was carried out in the ‘Chatar’ block of the district Sonebhadra of Uttar Pradesh. The extensive studies were conducted during the period 2005–2007 with the help of tribal people and village medicine-men of the area. The local name, part used and medicinal importance was recorded.

Plants of ethnomedicinal importance were collected at their flowering stages in different seasons. The plant specimens were identified with the help of flora [21]. The voucher specimens were deposited in the Department of Botany, K. B. P. G. College, Mirzapur (U.P.).

**Ethnomedicinal Observations:** The plants are enumerated in alphabetical order. The botanical name of each plant is followed by, voucher specimen number, local name, family, flowering period and medicinal importance.
1. **Abras Precatorius Linn:** KBP-169; Local name- Ratti/Gumachi; Family- Fabaceae; Flowering- August-October. Distributed in the forest areas. Root powder is used for the treatment of scorpion bite. Seeds used in the treatment of sciatica. Leaves are used in cough, cold, fever and asthma.

2. **Abutilon Indicum (Linn.) Sweet:** KBP-232; Local name- Kanghi; Family- Malvaceae; Flowering- September-October. Distributed in waste lands and village sites. Seeds used in piles and gonorrhoea. Decoction of leaves is given in toothache and bleeding gums. Roots are used in fever. Also used as aphrodisiac.

3. **Acacia Catechu (Linn.f.) Willd:** KBP-70; Local name- Khair/ Kattha; Family – Fabaceae; Flowering- August-September. Distributed in the forest areas. Decoction of heartwood is useful in sore throat, ulceration and skin diseases. Also used in leprosy.

4. **Acacia Sinuata (Lour.) Merr. A. concinna (Willd.) DC:** KBP-39; Local name – Shikakai; Family – Fabaceae; Flowering – August – October. Distributed in the forest areas. Fruits expectorant, used in chronic cough, jaundice, liver diseases and scorpion bite.

5. **Acacia Nilotica (Linn.) Del syn. A. arabica (Willd.):** KBP-102; Local name – Babul; Family- Fabaceae; Flowering- August-October. Distributed throughout forest areas and roadsides. Gum from the stem is used in dysentery. Flowers, leaves and bark used in pulmonary troubles. Bark is used in sore throat and mouth ulcers.

6. **Acalypa Hispida Burm:** KBP–211; Local name- Sultan /Kuppi, Family–Euphorbiaceae; Flowering-July-September. Distributed on roadsides, barren lands. Used in respiratory affections and toothache. Flowers are used in diarrhoea.

7. **Achyrathes Aspera Linn:** KBP–131; Local name- Chichidi ′ Family – Amaranthaceae; Flowering- July-September. Distributed on roadsides and barren lands. Whole plant is used in cough, asthma, toothache and bleeding piles. Root powder is use as an antidote to snake and scorpion bite. Seeds used for the treatment of hydrophobia and skin diseases. Leaves and seeds are also used to control hunger.

8. **Adina Cordifolia (Roxb.) HK. F.ex Bradis:** KBP-69 Local name-Haldu; Family-Rubiaceae; Flowering-May-June. Distributed in the forest areas. Applied over swollen portion to remove pain and swelling.

9. **Ageratum Conyzoides Linn:** KBP–92; Local name- Koobhi; Family – Asteraceae; Flowering – August –September. Commonly found is barren lands. Leaves are used in headache, muscular pain and wound healing. Seeds are used in diarrhoea.

10. **Aegle Marmelos (Linn.) Corr:** KBP-139; Local name- Bel; Family - Rutaceae ; Flowering September – October Distributed throughout forest areas. Leaves used in diabetes. Fruits astringent, used in diarrhoea, dysentery and piles.

11. **Agave Americana Linn:** KBP–172 ; Local name – Rambans ; Family – Agavaceae ; Flowering – June - July. Distributed in forest areas and village sites. Leaves used for the treatment of cancerous ulcers, dropsy, syphilis and dysentery.

12. **Albizia Lebbeck (Linn.) Benth:** KBP–150 ; Local name – Siris ; Family – Fabaceae; Flowering – April – May. Distributed in forest areas. Paste of bark applied externally in ulcers. Used in cough and as antidote to snake bite. Leaf juice used to cure night blindness. Also used as blood purifier and anti-inflammatory agent.

13. **Aloe Barbadensis Mill:** KBP – 67; Local name – Ghee - Kwar / Ghrit Kumari ; Family – Liliaceae ; Flowering – November – December. Distributed in villages. The pulp is used to cure piles, cough, rheumatic pain, constipation and menstrual disorders. The pulp is also used as blood purifier.

14. **Alpinia Galanga Willd:** KBP–179; Local name– Kulinjan; Family- Zingiberaceae; Flowering – September – October Distributed on the village sites. Used in rheumatic pain, asthma, cough and cold. Also used as aphrodisiac and stimulant.
15. **Alstonia Scholaris R.Br.** : KBP-99; Local name – Saptparni; Family – Apocynaceae; Flowering- November-December.
   Distributed on road sides.
   Used in all types of fever, rheumatic pain and toothache. Also used in gastric troubles and as liver tonic.

16. **Amaranthus Blitum Linn.** : KBP – 91; Local name – Chaurai; Family - Amaranthaceae; Flowering – August –October.
   Common in cultivated fields.
   Root powder is used as an antidote to snake bite. Also used in blood disorders, fever and diarrhoea.

17. **Amaranthus Spinosus Linn.** : KBP – 244; Local name – Kateli Chaurai; Family – Amaranthaceae; Flowering – July – August.
   Commonly found on roadsides, barren lands.
   Used in cough, fever, diarrhoea, leucorrhoea and gonorrhoea. Also used as an antidote to snake bite and as blood purifier.

18. **Amorphophallus Companulatus Blume** : KBP – 57;
   Local name – Suran; Family – Araceae; Flowering – September – October
   Distributed throughout the area and cultivated as well.
   Used in gastric troubles and in rheumatic pain. A potent drug for the treatment of piles.

19. **Andographis paniculata Nees** : KBP- 199; Local name- Kalmegh; Family – Acanthaceae; Flowering – Throughout year
   Distributed throughout the forest area.
   Used as blood purifier, in skin diseases and malaria.

20. **Annona Squamosa Linn.** : KBP- 31; Local name – Sharifa; Family – Annonaceae; Flowering- August – September
   Distributed in the forest areas.
   Leaf juice is antiseptic and used in wound healing. Leaves and fruits are also useful in treatment of tumour and cancer. Roots are used in rheumatism, syphilis, carbuncle and fever. Fruits are used in burning sensation.

21. **Anogeissus latifolia (Roxb.) Wall. ex Bedd.;**
    KBP- 144; Local name – Dhaura; Family – Combretaceae; Flowering – June -July
    Distributed in the forest areas.
    The bark powder is applied externally in wound healing.

22. **Anthocephalus cadamba Miq. syn. A. chinensis (Lamk.) Rich. ex Walp.;**
    KBP- 154; Local name – Kadam; Family – Rubiaceae; Flowering – June -July
    Distributed on road sides .
    Used in fever, high blood pressure, bacterial infection and as antidote to snake bite.

23. **Argemone mexicana Linn.;**
    KBP- 208; Local name – Bhatkataia/Satyanashi; Family – Papaveraceae; Flowering – March – June.
    Distributed in barren lands/waste lands.
    Latex is used in jaundice, skin diseases, wound healing and leprosy. Also used as blood purifier.

24. **Argyreia speciosa (Sweet.) Syn. A. nervosa (Burm. f.) Boj.**
    KBP-280; Local name – Bidhara/Samudrasok; Family – Convolvulaceae; Flowering - August - October.
    Distributed on village sites .
    Used in fever, cough, gonorrhoea, chronic ulcers, rheumatic pain and skin diseases. Also used as aphrodisiac, nervine tonic and diuretic agent.

25. **Artocarpus heterophyllus (Lamk.) syn. A. integrifolia Linn.;**
    KBP-29; Local name- Kathal; Family – Moraceae;
    Flowering – March – April.
    Cultivated in the area.
    Roots used in asthma, diarrhoea and toothache. Leaves are used in wound healing and skin diseases.

26. **Asparagus racemosus Willd.;**
    KBP-78; Local name – Satawar; Family – Liliaceae;
    Flowering – August – September
    Distributed in the forest areas.
    Tuberous roots given to increase lactation in females. Also used in diarrhoea, dysentery, leucorrhoea, seminal debility, high blood pressure, headache and urinary troubles.

27. **Asphodelus tenuifolius Cav.;**
    KBP- 01; Local name – Banpiyaji; Family-Liliaceae, Flowering- October- November.
    Common in croplands.
    Seeds are used in toothache and as diuretic agent.

28. **Azadirachta indica Juss. ;**
    KBP – 185; Local name – Neem ; Family – Meliaceae ;
    Flowering – March – April.
    Distributed throughout area.
Bark is used in rheumatism, constipation, fever, diabetes, ulcer and bacterial infections. Leaves are used in skin diseases, tuberculosis and toothache. Oil is used in rheumatism, leprosy and ulcer.

29. **Bacopa monneiri (Linn.) Pennell.**
   - KBP – 198; Local name – Chhoti Brahmi; Family – Scrophulariaceae; Flowering – February – March.
   - Commonly found in moist and shady places.
   - Used as cardiac tonic, nerve tonic and blood purifier. Also used in epilepsy, blood pressure and urinary affections.

30. **Bambusa arundinacea (Retz.) Willd.**
   - KBP – 101; Local name – Bans; Family – Poaceae; Flowering – October – November.
   - Common in forest areas.
   - Used in tuberculosis, wound healing, bronchitis, leprosy and leucoderma.

31. **Barleria prionitis Linn.**
   - KBP – 231, Local name – Kansaraiya / Pili vajradanti; Family – Acanthaceae; Flowering – September – April.
   - Common in forest areas and barren lands.
   - Decoction of plant is given in cough, toothache and dropsy. Leaf juice is used in fever and wounds. Bark is used in respiratory affections.

32. **Basella alba (Linn.) Stewart**
   - KBP –153, Local name – Poi; Family – Basellaceae; Flowering – August – September.
   - Cultivated by farmers and also found in forest areas.
   - Leaves are used in constipation and gonorrhoea. Fruit juice is used in conjunctivitis. Decoction of roots is given in intestinal disorders.

33. **Bauhinia variegata Linn.**
   - KBP – 207; Local name – Kachnar; Family – Fabaceae; Flowering – February – March.
   - Cultivated as well as found in forest areas.
   - Flowers are used in piles, diabetes and obesity. Stem bark in skin diseases, intestinal worm affections and asthma. Flower buds are used in dysentery and diarrhoea.

34. **Biophytum sensitivum (Linn.) DC.**
   - KBP –61; Local name – Lajwanti; Family – Oxalidaceae; Flowering – August - September
   - Distributed in the forest areas as well as in wastelands.
   - Decoction of whole plant given in tuberculosis and asthma. Root decoction is given in fever and urinary troubles. Also used as antiseptic in cut and wounds.

35. **Blumea lacerata (Lour.) Merrill.**
   - KBP-168; Local name – Kukraundha; Family – Asteraceae; Flowering- February- March.
   - Distributed on barren lands.
   - Leaf juice is antiseptic, applied as healing agent on cut and wounds. Leaves also used in urinary troubles and piles.

36. **Boerhaavia diffusa Linn. syn. B. repens Linn.**
   - KB-P-30; Local name – Punarnawa/Gadahpunna; Family – Nyctaginaceae; Flowering- September-October
   - Common in the forest areas, on the slopes of river banks.
   - Used as blood purifier, myocardial stimulant, expectorant. Also used in jaundice, cough and snake bite.

37. **Bombax ceiba Linn. syn. B. malabaricum DC.**
   - KBP-195; Local name – Semal/ Semar; Family- Bombacaceae; Flowering- February – March.
   - Distributed in the forest areas.
   - Leaves are used in anaemia, bark in blood dysentery and diarrhoea. Also used in rheumatic pain, scorpion bite, snake bite and leprosy.

38. **Boswellia serrata Roxb. ex Colebr.**
   - KBP-140; Local name – Salai; Family – Burseraceae; Flowering- January- February.
   - Distributed in the forest areas.
   - Seeds are used in snake bite. Stem bark is used in diarrhoea and dysentery and as antiseptic. Leaves are used in wound healing.

39. **Buchanania lanzan Spr. syn. B. latifolia Roxb.**
   - KBP-03; Local name- Chironji; Family – Anacardiaceae; Flowering – March- April.
   - Distributed in the forest areas.
   - Bark is used in cut and wounds, skin diseases and snake bite. Also used in diarrhoea. Seeds are used as tonic.

40. **Butea frondosa (Roxb.) syn. Butea monosperma (Lamk.) Taub.;**
   - KBP- 210; Local name- Dhak/Palas/Chhul; Family – Anacardiaceae; Flowering – February – March.
   - Distributed in the forest areas.
   - Used in piles, skin diseases. Gum is used in diarrhoea and dysentery. Used as antihelminthic and anti - inflammatory.
   - Seed powder is used in scorpion sting. Fruit is used in irregular menstruation.
41. *Caesalpinia bonduc* (Linn.) Roxb.;
KBP- 264, Local name – Karanj; Family – Fabaceae;
Flowering – August – September.
Distributed in the forest areas.
Seed powder is used in fever, leprosy, urinary troubles and as an antidote to snake bite.

42. *Calotropis procera* (Ait.) R.Br.;
KBP-27; Local name – Madar; Family – Asclepiadaceae;
Flowering – February – March.
Common throughout the area on barren lands.
Root decoction is given for the treatment of fever. Milky juice is used for the treatment of leprosy, dropsy and rheumatic pain. Root paste is applied on cuts and wounds.

43. *Cannabis sativa* Linn.;
KBP – 104; Local name- Bhang/ Ganja; Family – Cannabinaceae, Flowering – January – February
Distributed on roadsides, barren lands.
Leaves are used in ear troubles, cuts and wounds, crushed leaves used in skin diseases. Flowers are used in gonorrhoea, diarrhoea and dysentery.

44. *Canna indica* Linn.;
KBP-98; Local name - Baijanti; Family – Cannaceae; Flowering- September – March
Distributed on village sites.
Rhizome used to reduce blood pressure. Also used as an anti-inflammatory agent. Rhizome is also used in menstrual disorders.

45. *Capparis decidua* (Forsk.) Edgew. syn. *C. aphylla* Roth.;
KBP-207; Local name- Kareel/Karerua; Family- Capparaceae; Flowering – February- March
Distributed in the forest areas.
Leaves are used in wound healing. Seeds are used as antidote to snake bite.

46. *Carica papaya* Linn.;
KBP - 203; Local name – Papita; Family – Caricaceae; Flowering – August – September.
Cultivated throughout the area.
Fruits are used in piles, diarrhoea and in liver enlargement. Seeds are used in worm affections. Leaf juice is used in heart problems.

47. *Carissa carandas* Linn.;
KBP- 145; Local name – Karonda; Family – Apocynaceae;
Flowering – February – March.
Distributed in forest areas.
Used in rheumatic pain and fever. Roots are used in wound healing.

48. *Cassia fistula* Linn.;
KBP-25; Local name – Dhanba/Amaltas; Family – Fabaceae; Flowering – April – May.
Distributed in forest areas and roadsides.
Leaf juice is antifungal and antiseptic, used in the treatment of ringworm and for clearing cuts and wounds. Also used in rheumatic pain. Seeds are used as antidote to snake bite and scorpion sting. Also useful in fever, cough and leprosy.

49. *Cassia obtusifolia* Linn.;
KBP- 133; Local name – Panwad; Family- Fabaceae; Flowering – July – August.
Distributed throughout the area on roadsides and barren lands.
Seeds are used in leprosy, ringworm and eczema. Very much effective in all kinds of skin problems. Leaves are used in constipation.

50. *Cassia occidentalis* Linn.;
KBP-52; Local name – Kasondhi; Family – Fabaceae; Flowering – August – September.
Distributed throughout the area on roadsides, barren lands.
Seeds are used in skin diseases, leprosy and cough. Leaves are used as purgative. Also used as aphrodisiac, antipyretic, blood purifier and as antidote to snake bite.

51. *Cassia tora* Linn.;
KBP- 151; Local name – Chakwar; Family – Fabaceae; Flowering – July – August.
Common throughout the area.
Seed powder is used externally in skin diseases. Leaves, roots and seeds are purgative. Roots are used as an antidote to snake bite.

52. *Catharanthus roseus* (Linn.) G. Don. syn. *Vinca rosea* Linn.;
KBP – 06; Local name – Sadabahar; Family – Apocynaceae; Flowering – Throughout year.
Cultivated in gardens. Used in blood cancer, diabetes and as cardiac tonic.

53. *Chenopodium album* Linn.;
KBP – 200; Local name – Bathua; Family – Chenopodiaceae; Flowering – November - December. Very common in crop fields. Used in bleeding piles, dysentery, cough and fever. Also used as anthelmintic, appetite and laxative.

54. *Chlorophytum tuberosum* Baker.;
KBP-222; Local name – Safed musli; Family- Liliaceae, Flowering – February- April. Distributed in the forest areas. Used as diuretic, aphrodisiac and tonic. Also used in diarrhoea, dysentery, leucorrhoea and seminal debility.

55. *Citrullus colocynthis* (Linn.) Schrad.;
KBP – 251; Local name – Indrayan; Family – Cucurbitaceae; Flowering – July- August. Distributed in the forest areas. Fruits are used in constipation. Roots are used in skin diseases.

56. *Citrus medica* Linn. ;
KBP – 75; Local name – Neebu; Family – Rutaceae; Flowering – February- March. A small, much branched, thorny tree. Leaves ovate with winged petiole. Flowers white, 3-10 in axil of leaf. Fruits ovoid, yellow, juicy and acidic pulp. Cultivated in the area. Used in liver diseases, cough, throat disorders, fever, tuberculosis and arthritis. Also used as antihelminthic, antiseptic and digestive.

KBP-261, Local name – Hul-hul; Family – Cleomaceae; Flowering – August- September. Commonly found in barren lands. Leaves are used for the treatment of rheumatism. Used as an antidote to snake bite and scorpion sting. Seeds are used in skin diseases, cough and headache. Also used for the treatment of malaria.

58. *Cleome viscosa* Linn.;
KBP – 97; Local name – Hurhur; Family – Cleomaceae; Flowering – August- September. Commonly found in barren lands and on old buildings. Leaf decoction is applied in the ear to relieve inflammation and also to cure pus formation. Also used in cough, fever, leprosy, malaria and uterus trouble.

59. *Clitoria ternatea* Linn. ;
KBP- 171; Local name – Aparajita; Family – Fabaceae ; Flowering – August – September. Distributed mostly in the forest areas. Also found in barren lands climbing over the shrubs. Roots are used in headache, cough, fever, leprosy and as an antidote to snake bite. Powdered leaves are used in urinary troubles.

60. *Coccinia grandis* (Linn.) Voigt ;
KBP – 36; Local name- Kunuru/Kunduru; Family – Cucurbitaceae; Flowering- July – August. Commonly distributed in the forest areas and cultivated in villages. Paste of leaves is used in high fever. Also used in diabetes, jaundice, tuberculosis and skin diseases.

61. *Convolvulus arvensis* Linn.,
KBP- 129; Local name – Hiran khuri; Family – Convolvulaceae; Flowering – October- November. Commonly distributed in cultivated fields. Root powder is used in constipation as purgative.

62. *Convolvulus microphyllus* Sieb ex Spreng. syn. *C. pluricaulis* Choisy ;
KBP- 13; Local name – Shankhpushpi, Family – Convolvulaceae; Flowering – February – March. Distributed throughout the area in grass lands, barren lands. Used as brain tonic and cardiac tonic. Also used in high blood pressure, skin diseases and insomnia.

63. *Cordia myxa* Roxb. syn. *C. dichotoma* Forst. f. ;
KBP- 269, Local name – Lisora; Family – Cordiaceae; Flowering- March – May. Distributed in the forest areas. Bark is used in chronic fever and indigestion. Fruits are used in urinary troubles.

64. *Curculigo orchioides* Gaertn.;
KBP- 212; Local name – Kali musli; Family – Hypoxidaceae; Flowering – September – March. Distributed in the forest areas. Used in the treatment of jaundice, piles, leucoderma, leucorrhoea and seminal debility. Roots are used as antidote to snake bite and scorpion sting. Also used in cough, dysentery and as aphrodisiac.
65. *Curcuma longa* Linn. syn. *C. domestica* Val.;
KBP - 162; Local name – Haldi; Family – Zingiberaceae;
Flowering – October – November.
Cultivated in some areas.
Used in cough, skin diseases, diabetes and worm affection. Also used as blood purifier, anti-inflammatory and liver tonic.

66. *Cuscuta reflexa* Roxb.;
KBP - 33; Local name – Amarbel / Akash bel; Family – Convolvulaceae; Flowering – September – October.
Distributed as total stem parasite on road side plants and in forest areas.
Paste of plant applied externally to cure headache and painful testicles. Plant extract is used in constipation, leucorrhoea and heart problems.

67. *Cynodon dactylon* (Linn.) Pers.;
KBP - 245; Local name – Doob; Family – Poaceae; Flowering – Most part of the year.
Distributed throughout the area.
Used in diarrhoea, dysentery, skin problems, wound healing and diabetes. Also used as blood purifier and anti-inflammatory.

68. *Cyprus rotundus* Linn.;
KBP - 161; Local name – Motha; Family – Cyperaceae; Flowering – September - October.
Distributed throughout the area.
Used in skin diseases, diarrhoea, fever, wound healing. Also used as blood purifier and anti-inflammatory.

69. *Dalbergia sissoo* Roxb.;
KBP - 187; Local name – Shisham; Family – Fabaceae; Flowering – August - September.
Distributed on roadsides and forest areas.
Decoction of leaves in given in gonorrhoea. Bark powder in bleeding piles and diarrhoea. Also used in skin diseases, leucoderma and leprosy. Wood is used in cough, fever and as aphrodisiac.

70. *Datura innoxia* Mill;
KBP - 220; Local name – Dhatura; Family – Solanaceae; Flowering – July - October.
Distributed on barren lands.
Seed powder is used in fever, skin diseases and rheumatism. Also used in diarrhoea, oedema and bronchial asthma.

KBP - 55; Local name- Kala Dhatura; Family – Solanaceae; Flowering – August – December.
Distributed on barren lands.
Paste of leaves used in wound healing. Smoke of dried leaves is taken in asthma. Seeds are used in leprosy. Leaves are used as antidote to snake bite.

72. *Dendrophthoe falcata* (Linn. f.) Etting. syn. *Loranthus longiflorus* Desr.;
KBP - 191; Local name – Banda; Family – Loranthaceae; Flowering – January – February.
Found as partial stem parasite in forest areas.
Roots used in skin diseases. Crushed stem is used as brain tonic and in menstrual disorders.

73. *Desmodium gangeticum* (Linn.) DC.;
KBP- 230; Local name – Salparni; Family – Fabaceae; Flowering – August –September.
Commonly distributed in forest areas.
Roots are used as antidote to snake bite, also used in diarrhoea, dysentery, fever, tuberculosis and bronchitis.

74. *Dioscorea bulbifera* Linn.;
KBP- 54; Local name – Ratalu/ Bilaikand; Family – Dioscoreaceae; Flowering – September – October.
Commonly distributed in the forest areas.
Used in cough, leprosy, urinary troubles and diabetes. Also used as purgative, spermopoietic, aphrodisiac, rejuvenator and antihelminthic.

75. *Diospyros melanoxylon* Roxb.;
KBP-148; Local name – Tendu; Family- Ebenaceae; Flowering - February – March.
Distributed in the forest areas.
Fruits are astringent, used in dysentery. Root paste used in scorpion sting. Flowers are used as aphrodisiac and to cure leucorrhoea.

76. *Drypetes roxburghii* (Wall.) Huru. syn. *Putranjiva roxburghii* Wall.;
KBP –105; Local name- Putjev; Family- Euphorbiaceae; Flowering – April – May.
Distributed in the forest areas.
Leaf juice is used in washing of infected eyes. Used in cold dysentery and fever. Also used as aphrodisiac, stimulant and spermopoietic.
77. *Echinops echinatus* Roxb.;
KBP- 121; Local name- Utkanta/ Gokrul; Family – Asteraceae; Flowering – November – December
Common in barren lands and field margins.
Used in malarial fever, skin diseases and wound healing.
Root paste is thought to facilitate childbirth.

KBP- 07; Local name- Bhringraj/Bhangraiya; Family – Asteraceae; Flowering – August – September
Commonly found in fields and near water bodies.
Plant juice is used in spleen enlargement, liver disorders, fever, leucoderma and as blood purifier.

KBP - 155; Local name - Dudhi; Family – Euphorbiaceae; Flowering – Throughout year.
Common throughout the area on roadsides, grasslands, barren lands.
Leaf juice is used as expectorant, in skin diseases, fever, bronchial asthma and dysentery. Roots are used in leucorrhoea and gonorrhoea.

KBP – 111; Local name-Chhoti dudhi; Family- Euphorbiaceae; Flowering – August – September.
Distributed throughout area in croplands, grasslands and barren lands.
Leaves are used in diarrhoea and dysentery. Roots are used in leucorrhoea. Dried leaves used in skin diseases.

KBP - 56 ; Local name - Sehund; Family- Euphorbiaceae; Flowering – December – January
Distributed in the forest areas.
Used as purgative, diuretic and expectorant. Used in piles, skin diseases, fever and gastric troubles.

82. *Evolvulus alsinoides* Linn. syn. *Convolvulus alsinoides* Linn.;
KBP 112; Local name – Neeli Shankpushpi/ Hirankhuri; Family – Convolvulaceae; Flowering – March – May.
Commonly distributed in grasslands.
Used as nerve tonic. Ash of whole plant is used in skin diseases. Also used in sexual debility and urinary troubles.

83. *Ficus benghalensis* Linn.;
KBP - 288 ; Local name – Bar/ Boargad; Family – Moraceae; Flowering – January – March
Distributed in the villages as well as in forest areas.
Latex is used in genital diseases, toothache and cough.
Bud infusion is used in diarrhoea. Bark is used in diabetes. Also used in seminal debility.

84. *Ficus cairica* Linn.;
KBP - 26 ; Local name – Anjir; Family – Moraceae; Flowering – February – March.
Distributed in the forest areas.
Used as liver tonic, purgative and anti-inflammatory. Also used in respiratory troubles and blood purification.

85. *Ficus racemosa* Linn. syn. *F. glomerata* Roxb.;
KBP - 02 ; Local name – Gular; Family - Moraceae; Flowering – April- June
Distributed in forest areas and some villages.
Leaf juice is used in leucorrhoea and bronchitis. Latex is used in piles and diarrhoea and dysentery. Roots are used in urinary troubles and roots are anti-diabetic.

86. *Ficus religiosa* Linn.;
KBP - 213 ; Local name – Pipal; Family- Moraceae; Flowering - April – May.
Distributed in villages and roadsides.
Bark infusion is given in skin diseases. Decoction of leaves is given in gonorrhoea. Also used as blood purifier, antihelminthic and aphrodisiac.

KBP - 51; Local name – Pittapra; Family – Fumariaceae; Flowering – December – February.
Distributed on barren lands.
Whole plant is used medicinally in fever, leprosy, blood disorders and tuberculosis.

88. *Gloriosa superba* Linn.;
KBP - 113; Local name – Kariyari ; Family – Liliaceae; Flowering – September- October.
Distributed in forest areas and village sites.
Rhizome is used as antidote to snake bite. Roots are used in rheumatic pain, fever and gonorrhoea. Rhizome is used in leprosy and piles.

89. *Gossypium herbaceum* Linn.;
KBP - 85 Local name - Kapas; Family – Malvaceae; Flowering – August- September.
Cultivated in some areas. Seeds are used in malarial fever. Roots are used in leucorrhoea.

90. *Holoptelea integrifolia* (Roxb.) Planch.;
KBP-10; Local name – Chibil, Family – Ulmaceae; Flowering – March– April.
Distributed in the forest areas and roadsides. Stem bark is used in rheumatism. Leaves are used in skin diseases and scorpion sting.

91. *Grewia asiatica* auct. syn. *G. subinequalis* DC.;
KBP-23; Local name – Phalsa; Family – Tiliaceae; Flowering – February – March.
Distributed is forest area as well as cultivated in some areas. Fruit juice is digestive. Bark is used in rheumatic pain and fever.

92. *Grewia hirsuta* Vahl.;
KBP–44 ; Local name – Gursukari; Family -Tiliaceae; Flowering – August – September.
Distributed in the forest areas. Root paste is applied externally for wound healing. Fruits are used the dysentery.

93. *Gymnema sylvestre* (Retz.) R.Br. ;
KBP–257 ; Local name – Gudmar ; Family -Asclepiadaceae; Flowering – September – October.
Distributed in the forest areas. Used as antidiabetic agent and liver tonic. Also used in cough and asthma.

94. *Helictres isora* Linn.;
KBP - 253 ; Local name – Maror Phali ; Family – Sterculiaceae ; Flowering – August – September.
Distributed in the forest areas.
Decoction of bark is given in diarrhoea and dysentery. Roots are used in diabetes. Leaf juice is used in skin diseases. Roots are also used as an antidote to snake bite.

95. *Hibiscus rosa – sinensis* Linn. ;
KBP - 126 ; Local name – Gudhal; Family – Malvaceae ; Flowering – Throughout year.
Cultivated by people in their own gardens and near temples.
Used in cough, fever, urinary troubles. The floral buds are claimed to increase fertility in males.

96. *Holopetlea integrifolia* (Roxb.) Planch.;
KBP – 10; Local name – Chibil, Family – Ulmaceae; Flowering – March – April.
Distributed in the forest areas and roadsides. Stem bark is used in rheumatism. Leaves are used in skin diseases and scorpion sting. 

97. *Hordeum vulgare* Linn. ;
KBP - 118 ; Local name – Jau, Family- Poaceae; Flowering – December - January.
Cultivated in the area. Grains are used in stomach disorders. Leaf juice is used as rejuvenator. Grains are also used in skin diseases.

KBP – 254 ; Local name – Talmakhana; Family – Acanthaceae; Flowering – September-October.
Commonly found in water-logged condition. Roots are used in rheumatic pain. Seeds are used as tonic after childbirth. Leaves are used in jaundice.

99. *Hyptis suaveolens* (Linn.) Poit.;
KBP – 130 ; Local name – Ban Tulsi ; Family – Lamiaceae, Flowering – September-October.
Distributed in barrenlands, roadsides.
Leaves are used in wound healing, cough and fever. Roots are used as antidote to snake bite.

100. *Ipomoea aquatica* Forsk. syn. *I. reptans* (Linn.) Poir.;
KBP–257 ; Local name–Karemua/Nari Ka sag ; Family – Convolvulaceae ; Flowering - August - September.
Distributed in the water bodies or near the water bodies. Whole plant is used in digestive problems and liver diseases.

KBP – 63 ; Local name – Gulmohar ; Family – Bignoniaceae; Flowering – August - September.
Distributed in some areas near villages and roadsides. Leaves are used in syphilis and gonorrhoea. Bark is used in skin problems.

102. *Justicia adhatoda* Linn. syn. *Adhatoda vesica* Nees.,*Adhatoda zeylanica* Medic.;
KBP-192; Local name - Adusa; Family - Acanthaceae; Flowering - October - November.
Distributed throughout the area on barren lands. Decoction of plant is given in cough and cold and in rheumatism. Also used in fever and jaundice.
103. *Lablab purpureus* (Linn.) Sweet. syn. *Dolichos lablab* Linn.;
KBP-177; Local name - Sem ; Family - Fabaceae; Flowering - September - October.
Cultivated as vegetable in the area.
Roots are used as antihelminthic. Leaves are used in cough and skin diseases.

KBP - 190; Local name - Mehandi; Family - Lythraceae ; Flowering - August - September.
Commonly distributed in the forest areas.
Used in skin diseases, leucoderma, cough and leprosy. Also used in headache and spleen disorders.

105. *Leucas cephalotus* (Roth) Spreng. ;
KBP - 47; Local name - Gumbi; Family - Lamiaceae ; Flowering - August - September.
Distributed on roadsides, barren lands.
Flowers are used in cough and cold. Leaves are used in fever and headache. Decoction of whole plant is given in worm affections. Also used as an antidote to snake bite.

106. *Limonia acidissima* Linn. syn. *Feronia limonia* (Linn.) Swingle.;
KBP - 226; Local name - Kaith, Family - Rutaceae; Flowering - March - April.
Distributed in the forest areas and near some village.
Fruits are used in diarrhoea and dysentery. Leaves are used in digestive problems.

107. *Linum usitatissimum* Linn. ;
KBP - 174; Local name - Alsi/Tisi; Family - Linaceae, Flowering - January - February.
Cultivated in the area.
Crushed seeds are used as poultice on the wounds and carbuncles. Sweet cakes made from the seeds are given to the women after childbirth.

108. *Luffa acutangula* (Linn.) Roxb.;
KBP - 135; Local name - Jangli Torai; Family- Cucurbitaceae; Flowering - August - September.
Commonly distributed in the forest areas.
Fruits are used in jaundice. Seeds are used in constipation. Tendrils are used as an antidote to snake bite. Also used as a laxative, stomachic and heart tonic.

KBP - 178; Local name - Mahua; Family - Sapotaceae; Flowering - March - April.
Distributed throughout forest areas and some village orchards.
Flowers are claimed for its nutrient richness. Bark is used in toothache and diabetes. Seed oil is used in rheumatism. Alcohol obtained from flowers is also applied externally in body pain.

110. *Mentha spicata* Linn. syn. *M. viridis* Linn. ;
KBP - 181; Local name - Podina ; Family - Lamiaceae; Flowering - May - June.
Cultivated in the area.
Leaves are used in gastro - intestinal disorders. Also used in cough, cold, cholera and fever.

111. *Mimosa pudica* Linn. ;
KBP - 19; Local name - Chhuimui/Lajwanti ; Family- Fabaceae ; Flowering - September- November
Distributed on barren lands.
Roots are used as antidote to snake bite and in toothache. Leaves are used in piles, wound healing and leucoderma.

112. *Momordica dioica* Roxb. ex Willd. ;
KBP - 48 ; Local name - Khetsa ; Family - Cucurbitaceae; Flowering - July - August.
Commonly distributed in forest areas and village sites growing on other plants. Found wildly and cultivated as well.
Used in diarrhoea, dysentery and asthma. Roots are used in piles and fever.

KBP - 125 ; Local name - Sahijan ; Family - Moringaceae; Flowering - November - January.
Distributed throughout the areas, village sites, road sides.
Fruits are used in constipation, liver and spleen disorders. Also used in rheumatic pain and fever. Bark is used in dental disorders.

KBP - 221 ; Local name - Kevanch ; Family- Fabaceae ; Flowering - September - October.
Commonly distributed in forest areas and cultivate as well. Fruits are used in worm affections. Seeds are used as aphrodisiac. Also used in tuberculosis, asthma and snakebite.

KBP - 14 ; Local name - Meethi Neem ; Family - Rutaceae; Flowering - March- April.
Cultivated in the area. Leaves are used in diarrhoea and vomiting. Roots are used in leucoderma and wound healing.

KBP - 107; Local name - Kela; Family - Musaceae; Flowering - March - April.
A large tree like herb with thick under ground rhizome. Pseudo aerial stem with long sheathing leaf bases. Leaves large, glabrous, oblong, 4-5 feet long. Flowers in spadix. Cultivated throughout the area. Used in dysentery, high blood pressure and rheumatic pain. Fruits with black pepper are taken in respiratory problems. Flowers are used in diabetes and genital disorders.

117. *Nelumbo nucifera* syn. *Nelumbium speciosum* Willd.;
KBP-252; Local name - Kamal; Family - Nelumbonaceae; Flowering - August - September.
Distributed in some aquatic bodies of the area. Used in heart trouble, urinary diseases, bleeding piles and as nerve tonic. Seeds are given in pregnancy. Also used as diuretic, sedative and expectorant.

118. *Nerium indicum* Mill. syn. *N. odorum* Soland.;
KBP - 146; Local name - Kaner/Kanail; Family - Apocynaceae; Flowering - Throughout year.
Cultivated on the village sites near temples. Used in leprosy, skin diseases and eye troubles. Roots are used as an antidote to snake bite. Also used in fever, cancer and worm affections. Roots are used as aphrodisiac.

119. *Nyctanthes arbor - tristic* Linn. ;
KBN - 12; Local name - Harsingar/Parijat/ Bhexa; Family - Oleaceae; Flowering - August - October.
Distributed in the forest areas and cultivated as well. Decoction of leaves is given in sciatica, rheumatic pain and fever. Bark is used in asthma. Flowers are used in skin diseases.

120. *Ocimum basilicum* Linn. ;
KBP - 237; Local name - Kali Tulsi; Family - Lamiaceae; Flowering - October - January.
Found in the forest areas and planted by most of hindu families in their homes. Leaves are used in cough, cholera and dysentery. Whole plant is used as antihelminthic, antibacterial and antifungal. Also used as antidote to snake bite.

121. *Ocimum sanctum* Linn. ;
KBP - 268; Local name - Tulsi; Family - Lamiaceae; Flowering - October - February.
Commonly found in cultivated form. Used in leucoderma, leprosy, fever, urinary trouble and diabetes. Also used in liver diseases, gastric troubles and skin diseases.

KBP - 240; Local name - Khatti Booti; Family - Oxalidaceae; Flowering - November - March.
Commonly distributed in moist and shady places. Used in diarrhoea, fever, scurvy and piles. Also used as an antidote to snake bite.

123. *Peristrophe paniculata* (Forsk.) Burm.f. syn. *P. bicalyculata* (Retz.) Nees.;
KBP - 96; Local name - Atrilal /Chirchiri; Family - Acanthaceae; Flowering - September - November.
Distributed commonly on roadsides, barren lands. Paste of leaves and roots applied externally in rheumatic pain.

KBP - 173; Local name - Awla / Aura Family - Euphorbiaceae; Flowering - March - April.
Distributed in the forest areas and cultivated as well. Leaf juice is used in diarrhoea and dysentery. Fruits are used in constipation and diabetes. Fruits are used for washing hair.

125. *Phyllanthus fraternus* Webst. syn. *P. niruri* auct. non Linn.;
KBP - 232; Local name - Bhui Awala; Family - Euphorbiaceae; Flowering - July - August.
Commonly distributed on wastelands, barren lands and croplands. Decoction of whole plant is given in malarial fever. Fresh roots are used in jaundice. Also used in diabetes, diarrhoea and skin diseases.

126. *Physalis minima* Linn.
KBP - 93; Local name - Rasbhari; Family - Solanaceae; Flowering - August - September.
Distributed on barren lands and and crop fields. Leaf juice is used in urinary diseases and earache.
127. *Plumbago zeylanica* Linn.
KBP - 241; Local name - Chitrak; Family - Plumbaginaceae; Flowering - August - October.
Commonly distributed in shady places. Root powder is used in diarrhoea. Decoction of root is given in urinary troubles. Root powder is also used in leprosy and skin diseases.

128. *Psidium guajava* Linn.
KBP - 132; Local name - Amrud; Family - Myrtaceae; Flowering - August - September / March - April.
Cultivated in several areas. Decoction of leaves is used in bleeding gums and diarrhoea. Bark and leaves are used in cholera.

KBP - 128; Local name - Vijay sal; Family - Fabaceae; Flowering - July - August.
Distributed in the forest areas. Decoction of stem is given in diabetes. Paste of leaves is applied in skin diseases. Decoction of root is given in leprosy.

130. *Pueraria tuberosa* (Willd.) DC.
KBP - 18; Local name - Bilaikand/ Patal Kumhara; Family - Fabaceae; Flowering - August - September.
Distributed in the forest areas. Tubers increase lactation in females. Also used in rheumatic pain and diarrhoea.

KBP - 46; Local name - Sarpgandha; Family - Apocynaceae; Flowering - November – December.
Distributed in the forest areas. Used in insomnia, high blood pressure and madness. Also used as an antidote to snake bite.

132. *Ricinus communis* Linn.
KBP - 256; Local name - Rendi / Arandi; Family – Euphorbiaceae; Flowering – September - October.
Distributed on barren lands / wastelands. Seed oil is used as purgative. Also used in skin diseases, piles and rheumatism.

133. *Rumex dentatus* Linn.
KBP - 206; Local name – Jangali Palak; Family – Polygonaceae; Flowering – December – February.
Found near water bodies like ponds. Leaves are used as laxative. Leaf paste is applied externally in sunburns.

134. *Sesamum indicum* S. orientale Linn.
KBP - 167; Local name – Tili / Til; Family – Pedaliaceae; Flowering – July – August.
Cultivated in the area. Seeds increase lactation in females. Oil is used in wound healing, skin diseases and worm affections. Seeds are also used as aphrodisiac and expectorant.

KBP - 158; Local Name – Sal/Sakhu; Family – Dipterocarpaceae; Flowering – September – October.
Distributed in the forest areas. Bark and wood are used in diabetes, asthma and wound healing. Resin is used in skin diseases.

136. *Sida cordifolia* Linn.
KBP - 21; Local name – Bariyari / Khareti; Family – Malvaceae; Flowering – August – September.
Distributed on wastelands / barren lands. Roots are used in urinary diseases, leucorrhoea and piles. Seed powder is used in gonorrhoea. Extract of whole plant is used in spermatorrhoea. Leaves are used in seminal debility.

137. *Sida rhombifolia* Linn.
KBP - 234; Local name – Bariara / Bala; Family – Malvaceae; Flowering – August- September.
Distributed on roadsides, barren lands. Decoction of root is given in urinary complaints. Leaves are used in leucorrhoea. Roots are also used in rheumatic pain and fever.

KBP - 28; Local name – Makoy; Family – Solanaceae, Flowering – August – September.
Distributed on wastelands / barren lands. Paste of leaves is applied in skin diseases. Extract of whole plant is applied externally in inflammation and leprosy. Plant extract is taken in liver diseases.

139. *Solanum surattense* Burm. f. syn. *S. xanthocarpum* Schrad. and Wendl.;
KBP - 203; Local name – Pili Bhatkataiya/Kateri; Family – Solanaceae; Flowering – August – September / March - April.
Distributed on wastelands / barren lands. Decoction of roots is given in urinary diseases. Root extract is used in cough. Extract of whole plant is used to check hair falling.
140. *Sphaeranthus indicus* Linn.;
KBP- 72; Local name – Mundi; Family – Asteraceae;
Flowering – August – October.
Distributed on moist and shady places.
Floral heads are chewed in toothache. The floral head is taken with water in eye infection. Extract of whole plant is used in jaundice and piles.

141. *Syzygium cumini* (Linn.) Skeels syn. *S. jambolana Lamk.* **Eugenia jambolana** Lamk.;
KBP- 209; Local name – Jamun; Family – Myrtaceae;
Flowering – March – April.
Cultivated in the area.
Fruits are used in diabetes. Leaves are used in diarrhoea and dysentery. Bark is used in dental problems.

142. *Tagetes erecta* Linn.;
KBP - 160; Local name – Genda; Family – Asteraceae;
Flowering – October – March.
Cultivated in the area.
Leaves are used in cut and wounds. Leaf juice is used in earache.

143. *Tamarindus indica* Linn.;
KBP -202; Local name – Imli; Family – Fabaceae;
Flowering – May – June.
Distributed throughout the area.
Stem bark is used in fever. Leaves are used in piles. Fruits are used in gastric troubles.

144. *Tephrosia purpurea* (Linn.) Pers.;
KBP - 157; Local name – Sarpunkha; Family– Fabaceae;
Flowering – August – September
Distributed throughout the area on roadsides, barren lands.
Seed powder is used as antihelminthic. Seed oil is applied externally in skin diseases. Extract of whole plant is used in liver and spleen disorders.

KBP - 163; Local name – Arjun/Kahua; Family– Combretaceae; Flowering – March – May
Distributed in the forest areas.
Bark powder is given in heart and liver diseases. Leaves are used in wound healing.

146. *Terminalia bellerica* (Gaertn.) Roxb. syn. *Myrobalanus bellerica* Gaertn.;
KBP-35; Local name- Bahera ; Family – Combretaceae;
Flowering – March- April.
Distributed in the forest areas.
Fruits are used in gastric troubles, cough and cold and as heart tonic.

147. *Terminalia chebula* Retz.;
KBP - 159, Local name – Harra; Family – Combretaceae,
Flowering – March- April.
Distributed in the forest areas.
Fruits are used in digestive problems. Bark is used in skin diseases. Paste of fruit is applied on wounds.

148. *Tinospora cordifolia* (Linn.) Merr.;
KBP - 37; Local name– Gurich/ Giloy; Family– Menispermaceae; Flowering – September – October.
Distributed in the forest areas as well as climbing on road side trees.
Decoction of whole plant is given in rheumatism, fever, urinary troubles and heart problems.

149. *Tridax procumbens* Linn.;
KBP - 70; Local name– Phulni, Family – Asteraceae;
Flowering – Throughout year.
Distributed on barren lands, roadsides.
Leaves are applied externally on cuts and wounds.

150. *Trigonella foenum - graceum* Linn.;
KBP - 242; Local name – Menthi; Family – Fabaceae;
Flowering – October - November.
Cultivated in the area.
Seeds are used in rheumatism and diabetes.

151. *Vanda tessellata* (Roxb.)Hook. ex G.Don.
KBP-281; Local name- Van Aadi; Family- Orchidaceae;
Flowering- September - October.
Distributed in forest areas.
Leaf juice is used in the treatment of earache. Roots are touched to the body during childbirth for easier delivery.

KBP- 20; Local name – Asgandh/Ashwagandha; Family– Solanaceae; Flowering – January – March.
Distributed in the forest areas.
Root powder is used in fever, rheumatic pain, respiratory troubles and tuberculosis. Also used as aphrodisiac, nerve tonic and rejuvenator.

153. *Xanthium strumarium* Linn.;
KBP - 16; Local name – Gokru/Chirchita ; Family – Asteraceae; Flowering- December – March.
Commonly found on barren lands. Leaf juice is applied externally in skin diseases. Decotion of whole plant is given in leucorrhoea.

KBP - 188; Local name – Ber; Family – Rhamnaceae; Flowering – September – October. Distributed in the forest areas. Decoction of bark is used for washing wounds. Decoction of root bark is used in diarrhoea.

KBP - 137; Local name – Jharberi/Jharbaila; Family – Rhamnaceae; Flowering – October – December. Distributed in the forest areas. Decoction of bark is used in dysentery. Fruits are used in digestive problems.

**DISCUSSION**

The study clearly indicates that traditional medicinal practice and culture is alive and well functioning in the study area. In many of the tribal communities/ethnic groups the herbal drugs are the cheapest and only way for the treatment of different ailments. Lack of sustainable use pattern, inadequate knowledge about forest management and lack of financial resources are the main causes of overexploitation.

The study area is floristically very rich with strong ethnobotanical traditions existing among the tribal groups/ethnic communities. Therefore, there is an urgent need for the conservation and sustainable uses of these plants, which are part of India's traditional medical system and of local tribes residing in different areas.

The causes of rarity of some of the important plants were also recorded on the basis of interviews of local people and visual survey of the area e.g. *Acacia catechu* (Kattha) has become rare in wild condition because of overexploitation for 'Kattha', timber and fire fuel; *Adina cordifolia* (Haldu) for fire fuel and timber; *Andrographis paniculata* (Kalmegh), *Artemisia vulgaris* (Nagdaman), *Asparagus racemosus* (Satawar), *Dioscorea bulbifera* (Bilai Kand), *Gymnema sylvestre* (Gudmar), *Hemidesmus indicus* (Anantmool), *Pueraria tuberosa* (Patal Kumhara), *Rauwolfia serpentina* (Sarpgangha) and *Withania somnifera* (Ashwagandha) because of overexploitation for medicinal uses.

Plants like *Aloe barbadensis* (Ghrit Kumari), *Chlorophytum tuberosum* (Safed Musli), *Curculigo orchioides* (Kali Musli) etc. have become endangered because of overexploitation for potential medicinal importance. The tribals of the area should be encouraged for the cultivation of economically important plants and they should be provided with lands and seedlings. There should be a strong market infrastructure for the selling of cultivated plants and plant products without involving any middle-man keeping in view the economic upkeeping of the tribal people in the area which may also be a tool both for economic upkeeping of the area and maintenance of biodiversity. The detailed assessment of the productive capacity, sustainable use of plant resources and cultivation of valuable medicinal and economically important plants is required.

**ACKNOWLEDGEMENTS**

One of the authors PKS (S.R.F.) is thankful to C.S.I.R., New Delhi for the financial assistance. We are also grateful to the tribes of the area for their support during the survey.

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