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MEDICO-ETHNO-BOTANICAL SURVEY OF SATNA FOREST DIVISION, MADHYA PRADESH, INDIA

Sugriv Kumar Gaur¹ and Sanjeev Kumar Lale²

ABSTRACT

Satna forest Division is one of the richest source of medicinal plants in Madhya Pradesh state. Present paper deals with the medico-ethno-botanical survey work of all the 10 forest ranges of Satna forest division. Present work enumerates 136 medicinal plants which are commonly used in Ayurvedic pharmacies/drug industries and are also used by local inhabitants. The plants are arranged in alphabetical order of their botanical names followed by Botanical description, parts used and their action etc.

Keywords: Medico-ethno-botanical survey of Satna, Rich source of Medicinal plants, Important for Ayurvedic pharmacies.

Introduction:

Geographically Madhya Pradesh state is situated in the central part of India between latitudes 17°48’ N to 26°52’ N and longitudes 74° 02’ E to 84° 24’ E¹. Out of which Satna distt. lies between latitudes 23°50’ to 25°12’ N and longitudes 80°21’ to 81°23’ E central part of India bordered by Panna distt. in the West, Banda distt. Utter Pradesh in the North, Rewa distt. in the east, Sidhi distt. in South east, Jabalpur distt. in south while Umara and Shahdol distt. in south west. The total area covered by the Satna distt. is 742432 hectares out of which 10500² hectare area is forest cover. Satna forest division is divided into total 150 beats covering 10 ranges namely Chitrakoot, Barodha, Majhgawan, Satna, Singhpur, Amarpatan, Mukundpur, Nagod, Unchehara and Maihar forest range.

Physiographically Satna distt. is situated on Vindhyn plateau. Mixed red and black soil usually alternates in this area. The red soils are light textured and usually devoid of lime and free carbonates.

The commonest form is sandy clay. It is usually deficient in nitrogen, phosphorus, organic matter and lime. Tons, Son and Paisuni are the important rivers of the distt. which drain into the Bay of Bengal through the river Ganges. Most of the rivers flow towards the east with an inclination towards the north. However Simrawal and the Satna rivers inclined towards the south. The Kymore and the Panna hills act as water-divides.

The earlier record of plant exploration in Satna forest appears to be that of V. Jacquemont (1830)¹. Duthie’s Flora of the Upper Gangetic Plain and of the Adjacent

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Siwalik and Sub-Himalayan tracts (1903-1929)\(^1\) covers some parts of North & West Vindhyan range including Satna district. Botanical Survey of India have worked in Madhya Pradesh including Satna district\(^1\). State Forest Research Institute, Jabalpur (1996) worked in Chitrakoot range of Satna district\(^9\). Sikarwal et al (2008) worked in tribal communities of Chitrakoot of Satna district\(^1\).

Ravindra Singh and Anjula Sharma (2011) have also worked in Majhgawan Block of Satna district for a specific disease of tribal communities\(^1\). Earlier workers have worked either in a wide range like Vindhyan Plateau or in a particular localities of Satna district. Medico-ethno-botany of Satna forest division have not been reported till date, so that exploration of Medicinal plants of Satna forest division necessitated to remove the previous abatements.

**Forest :**

The vegetation of this division varies mostly on the influence of biotic factors like cultivation, fires, grazing, lopping, industrial development, construction of dams, road buildings and other human activities. Generally the forest present in Satna distt. is in various stages of degradation. Almost four types of forest are found in Madhya Pradesh state namely\(^1\). (i) Northern tropical semi-evergreen forests, (ii) Tropical moist deciduous forest, (iii) Tropical dry deciduous forests, (iv) and Tropical thorn forests. Main forest of Satna forest division are categorized as Tropical dry deciduous forest and Tropical thorn forest.

**Plants Bio-diversity :**

Since time immemorial India is famous for its rich medicinal and aromatic plants bio-diversity. The varying soil, topography and occurrence of different climatic and micro-climatic zones of India provide very congenial conditions to grow a number of therapeutically important medicinal plant species. Madhya Pradesh state has an area of about 4,63,452\(^2\) Km. with 1,55,414.38\(^2\) Km. forest area constituting 33% of the total geographical area of the state. They comprise of 17.88% Teak, 16.54% Sal and 65.58% mixed and miscellaneous forest\(^9\). It has a vast variety of plant bio-diversity having 2379 species belonging 973 genera and 225 Families\(^1,2,3\).

Study of plant bio-diversity of Satna forest division of Madhya Pradesh reveals 136 species belonging to 116 genera and 55 families dominated by Fabaceae, followed by Asteraceae, Moraceae, Mimosaceae, Caesalpiniaceae and Euphorbiaceae. Among total 116 genera *Ficus* is dominating followed by *Terminalia, Zizyphus, Syzygium, Solanum, Butea, Capparis, Acacia and Anogeissus* are dominant.
Map of India showing Satna district in Madhya Pradesh state

Map of Satna Distt. Madhya Pradesh showing Red circle with forest Range Offices and Red dots showing surveyed areas in various ranges.
Material and Methods:

Medico-ethno-botanical survey of Satna district Madhya Pradesh including Satna forest division was conducted during June 2012. Plant materials were collected with mature plants having flowers and fruits and specific size of plant parts for standard herbarium preparation. Characteristic features of the collected plant materials like, habit, habitat, flower colour, distribution and occurrence were recorded in field book. Collected plant materials were pressed under blotting sheets which were regularly changed at an interval of 2-3 days which depends upon the moisture content of the collected samples. Change of blotting sheet was usually made up to 6-7 times or till complete drying of the collected specimens. Poisoning of collected sample was done in 1% solution of Mercuric chloride in 90% alcohol. After poisoning, plant materials were shade dried and mounted on the standard herbarium sheet. Identification of mounted specimen was done with the consultation of different floras, followed by matching of the specimens with the authentic specimens kept in the Herbarium of the Institute. The vouchers herbarium specimens are deposited in the Herbaria of National Vrakshayurveda Research Institute, Jhansi.

Enumeration of medicinal plants:

Enumerations of medicinal plants are arranged alphabetically with botanical names (Latin name) with Scientist name followed by Family name, Ayurvedic name (Ay. N.) and or Local name (L.N.), salient features of the plant and distribution with field number, occurrence and various uses of different parts in various systems of medicines are being given.

1. *Abrus precatorius* L. (Fabaceae)\(^1,3,6,7,12\) Ay. N. Gunja, L.N. Ratti, Chunhati. A beautiful climbing shrub with 2-3 seeded pods. 6645-Saria beat under Mukundpur Forest Range, Rare.
   
   Seeds: Purgative, emetic, tonic, aphrodisiac. Poultice used to bring out abortion.
   
   Root: Emetic, alexiteric.

2. *Abutilon indicum* (L.) Sweet. (Malvaceae)\(^1,3,6,7,12\) Ay. N. Atibala, L.N. Kanghi. Herb with cordate leaves, golden yellow flowers.6551- Moruhar under Satna Forest Range, Scattered.
   
   Leaves: Demulcent.
   
   Bark: Astringent, diuretic, infusion in fevers.
   
   Seeds: Aphrodisiac, laxative, demulcent.

3. *Acacia catechu* (L.f.) Willd. (Mimosaceae)\(^1,3,6,7,12\) Ay. N. Khadir, L.N. Khair Medium sized deciduous tree with hooked spines and flowers white in axillary pedunculate spikes. 6498- Barodha Forest Range, Scattered.
   
   Stem Bark: Astringent.

4. *Acacia leucophloea* (Roxb.) Willd. (Mimosaceae)\(^1,3,7,12\) Ay. N. Erimeda bhed, L. N. Reunja. Medium sized deciduous spiny tree with terminal panicles. 6497-
Barodha Forest Range, Scattered.
Stem Bark: Astringent.

5. *Acacia nilotica subsp. indica* (Benth.) Brenan (Mimosaceae) \(^{1,3,6,7,11,12}\) Ay. N. Babbool, L.N. Babool. Medium sized tree with paired spines with yellow inflorescence and lomentum fruits. 6561-Jamodi under Satna Forest Range, Abundant.
   Gum: Used in diarrhoea, dysentery, useful in diabetes mellitus.
   Stem Bark: Astringent, demulcent.

   Plant: Pungent, purgative, diuretic, dropsy, piles, boils, skin eruptions, colic and snake bite.
   Seeds: Emetic.

   Rhizomes: Emetic, stomachic, in dyspepsia, colic, remittent fevers, nerve tonic, bronchitis, dysentery of children, insectifuge, in snake bite.

8. *Adiantum lunulatum* Burm. (Polypodiaceae) \(^{1,10,12}\) Ay. N. Hanspadi, L. N. Mohini. Annual diffuse herb. 6642- Saria under Mukundpur Forest Range, Rare.
   Whole plant: Used in fever and erysipelas.

   Ripe fruits: Aromatic, cooling, laxative.
   Unripe fruits: Astringent, digestive, stomachic, in diarrhoea.
   Root bark: In intermittent fevers.

10. *Ailanthus excelsa* Roxb. (Simaroubaceae) \(^{1,3,6,7,12}\) Ay. N. Arlu, L. N. Maharukha. Tall tree with dense crown of leaves. Flowers in axillary panicles. 6516- Pindra under Barodha Forest Range, Scattered.
    Bark: Used in dyspepsia, tonic, febrifuge, expectorant, antispasmodic, chronic bronchitis and asthma, as astringent in diarrhoea and dysentery.

11. *Alangium salvifolium* (L.f.) Wang. (Alangiaceae) \(^{1,3,6,12}\) Ay. N. Ankola, L. N. Akola. Medium sized tree with oblong lanceolate leaves, fruit globose berry crowded by calyx lobes. 6514- Pindra under Barodha Forest Range, Abundant.
    Root bark: Purgative, anthelmintic, useful in fever and skin diseases.
    Leaves: As poultice used in rheumatic pains.
12. *Albizia lebbek* (L.) Benth. (Mimosaceae)\textsuperscript{1,3,6,7,12} Ay. N. Shirisha, L. N. Shirish. Deciduous tree with bipinnately compound leaves, flowers white on peduncled head, fruit pods. 6574- Jamodi under Satna Forest Range, Scattered.
Bark and seeds: Astringent, given in piles and diarrhoea, tonic, restorative.
Root bark: Powder used for gum strengthening.

13. *Albizia procera* (Roxb.) Benth. (Mimosaceae)\textsuperscript{1,3,6,12} Ay. N. Shweta Shirisha, L. N. Safed Shirish. Deciduous tree with bipinnately compound leaves, Stem bark white, flowers white on peduncled head, fruit pods. 6581- Ramnagar under Amarpatan Forest Range, Rare.
Leaves: Insecticide, made into poultice applied to ulcers.

14. *Anogeissus latifolia* (Roxb. ex. DC.) Wall. ex. Bedd. (Combretaceae)\textsuperscript{1,6,12} Ay. N. Dhav, L. N. Dhawda, Safed Dhawda. Large tree with greyish white stem bark. 6524- Barodha Forest Range, Abundant.
Bark: Bitter, astringent.
Plant: In scorpion sting and snake bite.

15. *Annona squamosa* L. (Annonaceae)\textsuperscript{1,3,6,12} Ay. N. Gandgatra, L. N. Sharifa. Small tree with spreading branches and aggregate globose fruit. 6530- Pindra under Barodha Forest Range, Frequent.
Root: Purgative.
Seeds, fruits and leaves: Insecticide, fish poison.

16. *Argemone mexicana* L. (Papaveraceae)\textsuperscript{1,3,6,7,10,12} Ay. N. Swarnkshiri, L. N. Bharbhanda. Erect annual Prickly herb with yellow latex. 6515- Pindra under Barodha Forest Range, Abundant.
Root: Used as alterative, in chronic skin diseases.
Seeds: Laxative, emetic, expectorant and demulcent.
Seed oil: Purgative, used in cutaneous affection.
Plant latex: Used in dropsy, jaundice and cutaneous affection.

17. *Artocarpus lakoocha* Lam. (Moraceae)\textsuperscript{2,4,12} Ay. N. Lakuch, L. N. Barahal. Tree, flowers yellow. 6602- Kothi under Singhpur Forest Range, Rare.
Root: Used in diarrhoea.
Fruits: Laxative, tonic.
Plant: Galactagogue, cholagogue, febrifuge, and in snake bite.

18. *Atylosia scarabaeoides* (L.) Benth. (Fabaceae) \textsuperscript{1,3,7,12} L. N. Bankulthi. Trifoliate greyish green perennial climber. 6545-Guduhura under Satna Forest Range, Scattered.
Plant: Used for diarrhoea in cattle.
Whole plant: Astringent, antipyretic, tonic, antiseptic.
Root and young fruits: Tonic, antiperiodic, alterative.
Leaves: Decoction antiseptic, used in ulcers and eczema, poultice applied to boils.
Dried flowers: Tonic, stomachic.
Milky juice: Applied to ulcers.

Plant: Nerve tonic, used in asthma, epilepsy, insanity, diuretic and aperient.
Stem and leaves: In snake bite.

Bark, unripe fruits and leaves: Purgative, anthelmintic.
Seeds: Expectorant, given in cough and colic.

Seeds: Purgative, used externally as stimulant and rubifacient and in snake bite.
Oil used in hydrogogue, cathartic and external application in rheumatism.
Root: Cathartic, used in dropsy, anasarca and jaundice.
Leaves: Decoction used in asthma.

23. *Bauhinia racemosa* Lamk. (Caesalpiniaceae)\(^{1,3,6,7,12}\). Ay. N. Ashmantak bhed, L. N. Kathool. Small tree with deeply cordate, broader than longer leaves, flowers white. 6488-Chitrakoot Forest Range, Scattered.
Stem bark: Astringent, used in diarrhoea and dysentery.
Leaves: Decoction used in headache and malaria.

24. *Bauhinia vahlii* Wt. & Arn. (Caesalpiniaceae)\(^{1,3,6,12}\). Ay. N. Lata Kanchnar, L. N. Mahul, Mohlain. Gigantic climber with white or buff flowers. 6490- Chitrakoot Forest Range, Rare.
Seeds: Tonic, aphrodisiac.
Leaves: Demulcent.

Gum: Diaphoretic, diuretic, astringent, in rheumatism, nervous and skin diseases.

26. *Buchanania chinensis* (Lour.) M.R. Almeida *(Anacardiaceae)* $^{1,3,6,12}$, Ay. N. Priyal, L. N. Char, Chironji. Large tree with tomentose elliptic oblong leaves. 6475- Chitrakoot Forest Range, Abundant.

Gum: Used in diarrhoea.

Kernel: As ointment used in skin diseases. Oil used as substitute for almond oil in native medicinal preparation.

27. *Butea monosperma* (Lamk.) Taub. *(Fabaceae)* $^{1,3,6,7,11,12}$, Ay. N. Palasha, L. N. Chheula. A middle sized tree with crooked trunk, trifoliate leaves and red flowers. 6522- Pindra under Barodha Forest Range, Abundant.

Leaves: Astringent, tonic.

Seeds: Anthelmintic.

Flowers: Astringent, diuretic, depurative and aphrodisiac.

Gum: Astringent, used in diarrhoea and dysentery.


Leaves: Juice given with curd and yellow zeodary in heat eruption of children.

29. *Caesalpinia bonduc* (L.) Roxb. *(Caesalpiniaceae)* $^{1,3,6,12}$, Ay. N. Kantaki karanj, L. N. Karanj. Large shrub with prickles on the stem and leaves, flower yellow, fruit pods with prickles. 6586- Gorsari under Amarpatan Forest Range, Scattered.

Seeds: Antiperiodic, antipyretic, tonic, febrifuge, in asthma and in snake bite. Oil used as emollient, and for stopping foetid discharges from the ear.

Tender leaves: Used in disorders of liver.

Leaves and seeds: Used in external application for dispersing inflammatory swellings.

Leaves and bark: Febrifuge and anthelmintic.


Root bark: Used in dysentery, substitute for ipecacuanha, diaphoretic, expectorant, emetic, in the form of paste applied to elephantiasis.

Leaves: Tincture used in intermittent fevers.

Latex: Irritant.
31. **Capparis zeylanica** L. *(Capparaceae)*\(^{1,3,6,12}\). Ay. N. Vyaghranakhi, L. N. Ardanda. Gigantic climber with paired hooked spines, fruit ellipsoid or ovoid. 6532-Barodha Forest Range, Scattered.
   Root bark: Sedative, stomachic, bitter, cholagogue and in cholera.
   Leaves: counter irritant and as a cataplasm in boils, swellings and piles.

32. **Capparis sepiaria** L. *(Capparaceae)*\(^{1,3,12}\). Ay. N. Griddhanakhi. Shrub with paired hooked spines, leaves simple ovate, flowers white, fruit small. 6643- Mukundpur Forest Range, Abundant.
   Plant: Febrifuge, alterative, tonic and useful in skin diseases.

33. **Careya arborea** Roxb. *(Lecythidaceae)* \(^{1,12}\). Ay. N. Kumbhi, L. N. Khumbi. Medium sized tree with large white flowers and globose fruit. 6618- Jharsi under Singhpur Forest Range, 6474- Chitrakoot Forest Range, Scattered.
   Bark: Astringent, demulcent, antipyretic and antipruritic in eruptive fevers particularly in small pox and snake bite.
   Flowers: Given with honey as demulcent in coughs and colds.

34. **Carissa carandas** L. *(Apocynaceae)* \(^{2,4,12}\). Ay. N. Karmard, L. N. Karonda. Profusely branched spiny shrub. Leaves oblong or subcordate, flower white. 6531-Pindra under Barodha Forest Range, 6473- Chitrakoot Forest Range, Abundant.
   Fruits: Antiscorbutic. Unripe fruits astringent.
   Root: Bitter, stomachic, anthelmintic.
   Leaves: Decoction given in remittent fevers.

35. **Cassia fistula** L. *(Caesalpiniaceae)* \(^{1,3,6,12}\). Ay. N. Aragwadh, L. N. Sonari, Shonalu. Middle sized tree with yellow flower and cylindrical fruits.6479- Chitrakoot Forest Range, Scattered.
   Root: Astringent, tonic, febrifuge, purgative. Leaves: Juice used in skin diseases.
   Fruits: Cathartic, antirheumatic.
   Seeds: Emetic.

36. **Celastrus paniculatus** Willd. *(Celastraceae)* \(^{1,3,6,12}\). Ay. N. Jyotishmati, L. N. Malkangani. Large shrub with simple leaves and small globose fruits.6506- Barodha Forest Range, Abundant.
   Stem bark: Abortifacient.
   Seeds: Bitter, laxative, emetic, stimulant, aphrodisiac, in rheumatism, leprosy, gout, fevers and paralysis. Oil used in beriberi and powerful stimulant.

37. **Centella asiatica** (L.) Urban. *(Apiaceae)* \(^{1,3,6,10,12}\). Ay. N. Mandukparni, L. N. Brahmi. Herb with reniform leaves and greenish flower and fruit.6603- Jharsi under Singhpur Forest Range, Abundant.
Whole plant: Alterative, tonic, skin diseases and blood purifier.
Leaves: Tonic, for improving memory, useful in syphilitic skin diseases.

38. *Chrozophora rottleri* (Geiseler) A. Juss. (Euphorbiaceae)\(^2,4,7,12\). Stellately hairy annual herb. 6527- Barodha Forest Range, Abundant.
Plant: Emetic and poisonous.
Root: Ash is used for the treatment of cough.
Seeds: Used as purgative.

39. *Cissampelos pareira* L. (Menispermaceae)\(^1,3,6,10,12\). Ay. N. Patha, L. N. Akandi.
Annual climber with glabrous reniform leaves. Flowers in spikes. 6614- Jharsi under Singhpur Forest Range, Abundant.
Root: Bitter, antiperiodic, diuretic, purgative, stomachic, in dyspepsia, diarrhoea, dropsy, cough and urinary troubles.
Leaves: External application for itch.

40. *Clerodendrum indicum* (L.) Ktz. (Verbenaceae)\(^2,4,6,12\). Ay. N. Bharangi bhed. L. N. Bharangi. Shrub with quadrangular stem and white violet flower. 6651- Kothi under Singhpur Forest Range, Sporadic.
Root: Useful in asthma, cough and scrofulous affections.
Resin: Employed in syphilitic rheumatism.
Leaves: Vermifuge, bitter tonic.

41. *Cocculus hirsutus* (L.) Diels. (Menispermaceae)\(^1,3,6,7,12\). Ay. N. Chhilhint, L. N. Jamtibel. Gigantic climber, dioecious with variable leaves. 6510- Barodha Forest Range, Abundant.
Root: Refrigerant, laxative, sudorific, alterative, useful in chronic rheumatism and venereal diseases.
Leaves: Leaves when mixed with water forms jelly which is taken as cooling medicine for gonorrhoea.

42. *Cordia  gharaf* (Forssk.) Ehrenb. (Boraginaceae)\(^2,4,6,7,12\). Ay. N. Shleshmatak, L. N. Gondi, Labher. Erect crooked tree with oblong to oblanceolate leaves rounded at apex, fruit ovoid drupe. 6549- Guduhara under Satna Forest Range, Abundant.
Stem bark: Decoction used as astringent and as gargle.

43. *Cordia macleodii* (Griff.) Hk.f. (Boraginaceae)\(^2,4,6,12\). L. N. Dahiman. Large tree with oblong to oblanceolate leaves fruit ovoid drupe. 6649-Kothi under Singhpur Forest Range, Rare.
Stem bark: Used in jaundice.

44. *Crataeva nurvala* Buch. Ham. (Capparaceae)\(^1,3,6,12\). Ay. N. Varuna, L. N. Baruna. Small tree with trifoliate leaves, fruit brown globose on gynophore. 6638-
Mukundpur Forest Range, Abundant.

Bark: Demulcent, stomachic, laxative, diuretic, antipyretic, alterative, tonic, useful in calculus affections and urinary disorders.


Leaves: Toxic.

Plant: Used in a preparation given to children as a cure for rickets.


Plant: Purgative, used externally against itch, internally in protracted fever, infusion for washing of sores.

Seeds: Carminative, anthelmintic and alterative.

47. *Dalbergia sissoo* Roxb. (Fabaceae) \(^{1,3,6,7,12}\). Ay. N. Shinshap, L. N. Sissoo, Sheesham. Tree with pinnately compound leaves, with compressed 1-2 seeded pods. 6624- Bachhau, under Maihar Forest Range, Scattered.

Leaves: Bitter, stimulant. Decoction used in gonorrhoea.

Root: Astringent.

Wood: Alterative, useful in leprosy, boils, eruptions and to allay vomiting.

48. *Dalbergia lanceolaria* L. f. (Fabaceae) \(^{1,3,6,12}\). L. N. Bithua. Large tree with pinnately compound leaves, fruit compressed pods. 6628- Dhania under Unchehara Forest Range, Scattered.

Stem bark: Used in intermittent fevers. Infusion internally given in dyspepsia.

Seeds: Oil used in rheumatic affections.

49. *Desmodium gangeticum* (L.) DC. (Fabaceae) \(^{1,3,6,12}\). Ay. N. Shalparni, L.N. Sari-van. Undershrub with unifoliate lanceolate leaves flowers bluish. 6612- Jharsi under Singhpur Forest Range, Scattered.

Root: Astringent, tonic, diuretic, chronic fever, biliousness, cough, vomiting, asthma and in diarrhoea.

50. *Desmodium oojeinense* (Roxb.) H.Ohashi (Fabaceae) \(^{1,3,6,12}\). Ay. N. Tinish, L.N. Tinsa. Tree with trifoliate compound leaves. 6596- Sardaha under Nagod Forest Range, Scattered.

Stem bark: Febrifuge, when incised gives a kino-like exudation which is used in dysentery and diarrhoea.
Annual herb with linear leaves, flowers on terminal spikes. 6609- Jharsi under Singhpur Forest Range, Abundant.
Culms: Diuretic, used as stimulant, in dysentery and menorrhagia.

52. *Dioscorea bulbifera* L. (*Dioscoreaceae*)\(^4,8,12\), Ay. N. Varahikand. Climber, twinning to the left with cordate leaves and greenish flowers. 6648- Jharsi under Singhpur Forest Range, Scattered.
Tuber: Used in piles, dysentery, syphilis and applied to ulcers.

53. *Diospyros melanoxylon* Roxb. (*Ebenaceae*)\(^2,4,6,12\), Ay. N. Tenduka, L. N. Biri-patta, Tendu. Middle sized evergreen tree with ovate elliptic leaves, fruits globose berry. 6542- Bihupur under Satna Forest Range, Abundant.
Stem bark: Astringent. Decoction used in diarrhoea, dyspepsia and as tonic.
Leaves: Diuretic, carminative, laxative and styptic.
Dried flowers: Useful in urinary, skin and blood diseases.

Plant: Used as abortifacient.

55. *Echinops echinatus* Roxb. (*Asteraceae*)\(^1,3,6,7,12\), Ay. N. Ushtrakantak, L. N. Oontkantela. Prostrate or procumbent annual pinnatifid, spinescent herb, heads compound forming spherical ball. 6554-Moruhar under Satna Forest Range.
Plant: Used as alterative, diuretic, nerve tonic, in hysteria, dyspepsia, scrofula and ophthalmia.

56. *Eclipta alba* (L.) Hassk. (*Asteraceae*)\(^1,3,6,7,12\), Ay. N. Bhringaraja, L. N. Bhangra.
Diffuse herb with white flower heads. 6626- Pannikhoh under Maihar Forest Range, Abundant.
Plant: Tonic and deobstruent in hepatic and spleen enlargement. Juice used in jaundice.

57. *Elephantopus scaber* L. (*Asteraceae*)\(^1,3,6,7,12\), Ay. N. Gojihva. Annual herb with dichotomously branched aerial stem, leaves cauline, inflorescence heads.
Plant: Astringent, cardiac tonic, alterative, febrifuge and in snake bite.
Root: Given to arrest vomiting, powdered with peeper applied to toothache.
Leaves: Bruised and boiled in coconut oil applied to ulcers and eczema.
Root and leaves: In decoction form used as emollient, given in dysuria, diarrhoea, dysentery and swellings or pains in stomach.

Fruits: Considered as acrid, cooling, refrigerant, diuretic, laxative, diarrhoea and dysentery, jaundice, dyspepsia and cough.


Plant: Bitter, stomachic, tonic, laxative, dried powder is given with honey as a blood purifier and in dropsy, rheumatism, abdominal ulcers, hernia, swellings, itches and insect poisoning.


Plant: Used in worms in children, bowel complaints and cough, juice indysentery and colic, decoction in bronchial affections and asthma.

Latex: Applied for warts.

61. *Evolvulus alsinoides* (L.) L. (*Convolvulaceae*)\(^{2,4,6,7,12}\). Ay. N. Neel Shankhapushpi, L. N. Shankhapushpi. Erect or prostrate annual herb covered with silky hairs, flowers on peduncle with white or blue corolla. 6541- Itma under Satna Forest Range, Abundant.

Plant: Bitter, tonic, febrifuge, vermifuge and in dysentery.

Leaves: Made into cigarettes smoked in chronic bronchitis and asthma.


Milky juice: Applied externally for pains, in rheumatism and lumbago.

Stem bark: Infusion given as tonic, astringent, used in dysentery, diarrhoea and diabetes.

Leaves: Applied as poultice to abscesses.

63. *Ficus hispida* L.f. (*Moraceae*)\(^{2,4,6,12}\). Ay. N. Kasth udumber, L. N. Bhuin Gular, Daduri. Medium sized tree with obovate hispid leaves, with sub-globose green coloured receptacle. 6570- Jamodi under Satna Forest Range, Scattered.

Fruits, seeds, and stem bark: Used as purgative and emetic.

64. *Ficus infectoria* Roxb. (*Moraceae*)\(^{2,4,6,12}\). Ay. N. Plaksh, L.N. Pakari. Large tree with prop root, lanceolate leaves, fruit greenish white receptacle. 6629- Patihat under Unchehara Forest Range, Abundant.
Stem bark: Decoction used as wash for ulcers, as an injection in leucorrhoea, as gargle in salivation.

65. *Ficus racemosa* L. (*Moraceae*)\(^2,4,6,11,12\), Ay. N. Udumbara, L. N. Umar, Gular. Large deciduous tree with subglobose or pyriform red coloured receptacles. 6569-Jamodi under Satna Forest Range, Scattered.

Bark: Astringent.

Root: In dysentery. Sap in diabetes.

Leaves: Powdered and mixed with honey given in bilious affections.

Fruits: Astringent, stomachic.

66. *Ficus religiosa* L. (*Moraceae*)\(^2,4,6,7,12\), Ay. N. Asvattha, L.N. Peepal. Large deciduous tree with cordate, acuminate leaves. 8499- Barodha Forest Range, Sporadic.

Bark: Astringent, used in gonorrhoea, infusion in scabies.

Fruits: Laxative.

Seeds: Cooling, alterative, purgative.

67. *Flacourtia indica* (Burm.f.) Merr. (*Flacourtiaceae*)\(^1,3,6,12\), Ay. N. Vikankat, L. N. Bilangla. Small spinous tree with subglobose black fruit. 6485- Chitrakoot Forest Range, Abundant.

Fruits: Used in jaundice and enlarged spleen.

Gum: Given in cholera.


Leaves: Juice demulcent, used in gonorrhoea, cough and to remove foetid discharges and worms from ulcers.

Plant: Used in snake bite and scorpion sting.

69. *Grangea maderaspatana* (L.) Poir. (*Asteraceae*)\(^1,3,6,7,12\), Annual prostrate herb with yellow heads. 6519- Pindra under Barodha Forest Range, Scattered.

Leaves: Stomachic, antispasmodic, deobstruent. Infusion prescribed in electuary in cases of obstructed menses and hysteria. Juice employed as instillation for earache.


Leaves: Used in diabetes, chewed to reduce glycosuria.

Root: Emetic, expectorant.
71. *Haldinia cordifolia* (Roxb.) Ridsd. (*Rubiaceae*)\(^1,3,6,7,12\). Ay. N. Haridru, L.N. Haldu. Large tree with cordate leaves, flowers in globose yellowish green head. 6500- Barodha Forest Range.

Stem bark: Febrifuge, antiseptic.
Plant: Juice used to kill worms in sores.

72. *Helicteres isora* L. (*Sterculiaceae*) \(^1,3,6,7,12\). Ay. N. Avartani, L. N. Marorphali. Large shrub, with cordate leaves, fruit twisted capsule. 6508- Barodha Forest Range, Frequent. 6594- Sardaha under Nagod Forest Range, Abundant.

Fruits: Demulcent, astringent, useful in the gripping of bowels and flatulence of children.

Stem Bark: Used in dysentery and diarrhoea.
Root: Juice used in diabetes.
Root and root bark: Expectorant, demulcent, astringent and antagalactagogue.


Root: Substitute for Sarasparilla, demulcent, alterative, diaphoretic, diuretic, tonic, loss of appetite, fever, skin diseases, as blood purifier in leucorrhoea, syphilis and rheumatism.

74. *Holarrhena antidysenterica* Wall. (*Apocynaceae*) \(^2,4,6,10,11,12\). Ay. N. Kutaj, L. N. Dudhi, Kurchi, Kuruj. Small tree with white flowers and fruit with paired follicle. 6483- Chitrakoot Forest Range, Abundant.

Stem bark: Used in dysentery, diarrhoea, ground and rubbed over the body in dropsy.

Seeds: Astringent, febrifuge, in fever, dysentery, diarrhoea, and intestinal worms.

75. *Holoptelea integrifolia* (Roxb.) Planch. (*Ulmaceae*) \(^2,4,6,12\). Ay. N. Chirvilva, L. N. Chilbil. Large tree with ovate glabrous leaves, fruits winged. 6606- Jharsi under Singhpur Forest Range, Abundant.

Stem bark: Boiled juice applied to rheumatic swellings.

76. *Hygrophila auriculata* (Schumach.) Heine. (*Acanthaceae*) \(^2,4,7,12\). Ay. N. Kok-ilaksh, L. N. Oontkatela. Annual herb with thick nodes with yellow spines and purple coloured flowers in dense cluster in leaf axils. 6529- Pindra under Barodha Forest Range, Abundant.

Root: Diuretic in decoction form.

Seeds: Given for gonorrhoea and with milk sugar in spermatorrhoea.

Leaves, roots and seeds: Diuretic, used in jaundice, dropsy, rheumatism, anasarca and diseases of the urino-genital tract.

   Plant: Pounded and applied to parasiticalcutaneous diseases.

78. *Ichnocarpus frutescens* (L.) R.Br. (*Apocynaceae*)2,4,6,10,12, Ay. N. Sariva bhed, L. N. Kali dudhi. Climbing evergreen shrub lanceolate leaves with paired follicle.6501- Barodha forest Range, Abundant.

   Root: Substitute for Sarasparilla, demulcent, alterative, diaphoretic, diuretic, tonic, loss of appetite, fever, skin diseases, as blood purifier in leucorrhoea, syphilis and rheumatism.

   Leaves: Decoction used in fevers.

79. *Indigofera tinctoria* L. (*Fabaceae*)1,3,6,7,12, Ay. N. Nili, L. N. Neel. Much branched herb, pinnately compound leaves, flowers pink. 6652- Kothi under Singhpur Forest Range, Abundant.

   Seeds: Restorative, alterative, astringent, aphrodisiac, tonic, used in rheumatism and leucorrhoea.

80. *Jatropha gossypifolia* L. (*Euphorbiaceae*)2,4,6,12, L. N. Lal bherenda. Shrub with palmately 3-5 lobed leaves, inflorescence small red cyathium. 6468-Chitrakoot Forest Range, Abundant.

   Leaves: Applied to boils and carbuncles, eczema, and itches, internally purgative.

   Seeds: Causes insanity and act as an emetic.


   Leaves: Used as antispasmodic, cough, chronic bronchitis, asthma, insecticidal.

82. *Lagerstroemia parviflora* Roxb. (*Lythraceae*)1,3,6,12, L. N. Lendia, Jarul, Senha. Small tree with white flower and trilobed fruit.6578- Markandey Ashram under Amarpatan Forest Range, 6476- Chitrakoot Forest Range, Abundant.

   Stem bark and leaves: Purgative.

   Root: Astringent, stimulant and febrifuge.

83. *Launaea acaulis* (Roxb.) Babc. ex. Ker. (*Asteraceae*)1,12, Annual herb with radical leaves sinuate toothed at the margin, heads on dichotomously branched pani-

   cle. 6520- Pindra under Barodha Forest Range, Scattered.

   Leaves: Applied to the head of children suffering from fever.

   Root: Eaten raw in urinary complaints.
84. **Leea asiatica** (L.) Rids. (Leeaceae)\(^{1,6,12}\). Gigantic climber with trifoliate leaves with winged petioles and crenate margin. 6547- Guduhara under Satna Forest Range, Scattered.

Tubers: Used in diarrhoea, dysentery and as sudorific. Decoction given in colic, cooling and relieves thirst.

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Root: Crushed and applied on the breast when it swells and milk does not pass through the nipples.

Leaves: Decoction used as tonic.

Flower heads: Ashes applied to burns and scalds.

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86. **Loranthus falcatus** L.f. (Loranthaceae)\(^{2,4,6,12}\). Ay. N. Brikshadani bhed, L. N. Vanda. Semi-parasite on tree with greenish yellow flower. 6503- Barodha Forest Range, Abundant.

Bark: Astringent, narcotic, used in wounds and menstrual disorders.

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87. **Madhuca indica** J.F. Gmel. (Sapotaceae)\(^{2,4,6,10,12}\). Ay. N. Madhuk, L. N. Mahua. Large tree with white latex, leaves glabrous obovate to ovate, fruit berry. 6582- Markandey Ashram under Amarpatan Forest Range, Abundant.

Flowers: Yield a distilled spirit which is astringent, tonic, appetizing, regarded as cooling tonic, used in cough in forms of decoction.

Bark: Used in decoction as astringent and tonic.

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88. **Mallotus philippensis** (Lam.) Muell. Arg. (Euphorbiaceae)\(^{2,4,6,12}\). Ay. N. Kampillak, L. N. Sinduri. Small tree with young parts rusty pubescent, flowers in spikes, fruits three valved covered with bright red granules. 6492- Chitrakoot Forest Range, Abundant.

Fruits: Glands and hairs on the fruits, bitter, anthelmintic, cathartic and styptic.

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89. **Mimosa pudica** L. (Mimosaceae)\(^{1,3,6,12}\). Ay. N. Lajjalu, L.N. Chhui-mui. Under shrub with sensitive leaves and pink flower on heads. 6635- Bhamka under Unchehara Forest Range, Scattered.

Root: Decoction used in piles and fistula.

Leaves: Applied to hydrocoele.

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90. **Mitragyna parvifolia** (Roxb.) Korth. (Rubiaceae)\(^{1,3,6,7,12}\). Ay. N. Kadamb bhed, L. N. Mundi. Large tree with ovate leaves and glabrous stipules, flower heads globose creamy white. 6507- Barodha Forest Range, Sporadic.

Stem bark and root: Given in fever and colic.

Stem bark: Ground and made into a paste applied for muscular pains.

Flowers: Cooling, used as astringent in diarrhoea, cholera, in fever and diseases of liver, recommended as a cardiac tonic.

Seeds: Used to check vomiting, given to children as diuretic and refrigerant.

Filaments: Considered as astringent and cooling. Useful in burning sensation of the body, bleeding piles and menorrhagia.

Root: In powder form prescribed for piles and as demulcent, also for dysentery and dyspepsia, used as a paste in skin affections and ringworms.


Rootstock: Powder given in dyspepsia, diarrhoea and piles.

Flowers: Decoction prescribed in palpitation of heart.


Leaves: Paste applied in parasitical skin diseases and in fever.

Flowers: Used in headache.


Whole plant: Expectorant and emetic.

95. *Phoenix dactylifera* L. *(Arecales)*\(^{5,6,8,12}\). Ay. N. Kharjur, L. N. Khajur. Tall palm with trunk densely covered with bases of the fallen leaves. 6559- Jamodi under Satna Forest Range, Abundant.

Plant: Juice used as cooling, beverages.

Fruits: Tonic, and restorative.

Root: Used in toothache.


Plant: Febrifuge, diuretic, made into poultice used as maturant for boils.

Leaves and tender stalk: Infusion given to children in indigestion and to women after delivery.
97. *Pongamia pinnata* (L.) Pierre. (*Fabaceae*)\(^{1,3,6,7,12}\) Ay. N. Karanj, L.N. Karanj. Small tree with pinnately compound leaves, white flowers with 1-2 seeded flattened pod. 6617- Jharsi under Singhpur Forest Range, Abundant.

  Stem bark: In bleeding piles.

  Seeds: Used in skin diseases like herpes and scabies. Oil used in rheumatism.

98. *Pterocarpus marsupium* Roxb. (*Fabaceae*)\(^{1,3,6,12}\) Ay. N. Bijak, L. N. Bija. Large tree with pinnately compound leaves, fruit compressed pod. 6625-Hanuman tekri under Maihar Forest Range, Rare.

  Gum: Used as astringent, in diarrhoea and pyrosis, used for toothache.

  Stem bark: Astringent.

  Leaves: Useful in external application for boils, sores and skin diseases.


  Root: Stimulant, tonic, given in impotence.

  Root bark: Emetic.

  Gum: Aphrodisiac, demulcent, haemostatic, astringent, tonic, alterative, used in diarrhoea and dysentery and menorrhagia.


  Dried stem: Emetic.

  Plant: Bitter, cooling, alterative.


  Stem bark: Astringent, rubbed up with oil as a cure for itch.

  Seeds: Powder applied to ulcers of animals for removing maggots. Oil used for cure of itch and acne, efficient and stimulating agent for the scalp.


  Leaves: Laxative.

  Seeds: Skin diseases like ringworm and itch.

  Root: In snake bite.
103. **Shorea robusta** Gaertn. f. (Dipterocarpaceae)\(^1,6,12,\) Ay. N. Shal, L. N. Sal, Sarai.
Large evergreen tree with simple leaves, inflorescence axillary or terminal panicle. 6640- Aamin under Mukundpur Forest Range, Abundant.
Resin: Astringent, detergent, in dysentery, aphrodisiac, gonorrhoea, weak digestion and also for fumigation.

104. **Sida acuta** Burm f. (Malvaceae)\(^1,3,6,7,12,\) L. N. Bariar.Undershrub with ovate acute leaves, yellow flowers.6560- Jamodi under Satna Forest Range, Scattered.
Root: Astringent, cooling, tonic, useful in nervous and urinary diseases and blood disorders.

105. **Sida cordata** (Burm. f.) Borss. (Malvaceae)\(^1,3,6,7,12,\) Ay. N. Bhumibala.Prostrate trailing herb with yellow flower.6470-Chitrakoot Forest Range, Frequent.
Flowers and fruits: Given with sugar for burning sensation in micturition.
Leaves: Given in diarrhoea.

106. **Solanum incanum** L. (Solanaceae)\(^2,4,6,7,12,\) Ay. N. Brihati bhed, L.N. Jangali Bhanta.Tall shrub with sparingly armed leaves, flowers blue, fruit yellow globose berry. 6471- Chitrakoot Forest Range, Abundant.
Plant: Used as remedy for toothache and sore throat, decoction taken for chest troubles.

107. **Solanum virginianum** L. (Solanaceae)\(^2,4,6,7,12,\) Ay. N. Kantakari, L. N. Bhatkatai-ya. Diffuse prickly zigzag branched annual herb, Flower purplish with yellow globose berry fruit. 6540- Itma under Satna Forest Range, Abundant.
Root: Expectorant, used in cough, asthma, fever and pain in chest.
Fruits: Juice useful in sore throat.
Stem flowers and fruits: Bitter, carminative, prescribed in burning of the feet.
Plant: Used as diuretic, dropsy, decoction given in gonorrhoea.
Leaves: Applied locally to relieve pain.

108. **Soymida febrifuga** (Roxb.) A. Juss. (Meliaceae)\(^1,3,6,12,\) Ay. N. Mansrohini, L.N. Rohan. Large sized tree with pinnately compound leaves. 6563- Jamodi under Satna Forest Range, Rare.
Stem bark: Astringent, bitter tonic, febrifuge, used in general debility, intermittent fevers, diarrhoea and dysentery.

109. **Sphaeranthus indicus** L. (Asteraceae)\(^1,3,6,7,12,\) Ay. N. Mundi, L. N. Mundi. Annual procumbent ascending aromatic herb with globose purplish heads. 6533-Pindra under Barodha Forest Range, Abundant.
Plant: Tonic, deobstruent, alterative and aphrodisiac. Decoction used a diuretic in urethral discharges.
Root and seeds: Anthelmintic.
Flowers: Alterative, cooling, tonic.
110. *Spilanthes calva* DC. (*Asteraceae*)\(^{1,3,6,12}\), L. N. Akarkarha. Herb with yellow heads on terminal peduncles. 6637- Bhamka under Unchehara Forest Range, Scattered.

Flower heads: Tincture used to relieve toothache and mosquito larvicide.

Seeds: Chewed for salivation during dryness of mouth.

111. *Sterculia urens* Roxb. (*Sterculiaceae*)\(^{1,3,6,12}\), L. N. Kulloo. Large tree with palmately lobed large leaves. 6583- Markandey Ashram under Amarpatan Forest Range, Abundant.

Gum: Used as substitute for tragacanth and in throat affection.

Leaves and tender branches: when steeped in water yield a mucilaginous extract which is useful in pleuro-pneumonia in cattle.

112. *Stereospermum chelonoides* (L.f.) DC. (*Bignoniaceae*)\(^{2,4,10,12}\), Ay. N. Patla, L. N. Andhi, Padhar. Large tree with pinnately compound leaves, pinnae 3-4 pairs, fruit cylindrical triangular capsule. 6599-Salaiya under Nagod Forest Range, Rare.

Root bark: Considered as cooling, tonic, diuretic, forms an ingredient of dashamool.

Flowers: Rubbed up with honey given to check hiccough, taken in the form of a confection as aphrodisiac.

113. *Streblus asper* Lour. (*Moraceae*)\(^{2,6,12}\), Ay. N. Shakhotak, L. N. Sheora. Small stiff tree with simple lanceolate hispid leaves, fruit small globose. 6491- Chitrakoot Forest Range, Frequent.

Bark: Decoction given in fever, dysentery and diarrhoea.

Root: Used in ulcers sinuses and antidote to snake bite.

114. *Syzygium cumini* (L.) Skeels (*Myrtaceae*)\(^{1,3,6,12}\), Ay. N. Jambu, L.N. Jamun. Large evergreen tree with greenish white flowers. 6494- Chitrakoot Forest Range, Abundant.

Bark: Astringent, juice in diarrhoea, decoction in gargles.

Leaves: Juice is used in dysentery.

Fruits: Useful astringent in bilious diarrhoea.


Stem bark: Astringent.

Leaves: Boiled and used for sore eyes.

Fruits: Used in liver complaints.

Fruits: Refrigerant, digestive, carminative, laxative.

117. *Tectona grandis* L.f. (Verbenaceae)\(^2,4,6,12\), Ay. N. Shak, L.N. Sagwan. Large deciduous tree with quadrangular stem with large obovate leaves. Sardaha under Nagod Forest Range, Abundant.

Wood: Powdered and taken internally in dyspepsia in burning of stomach, vermifuge.

Bark: Astringent.

118. *Tephrosia purpurea* (L.) Pers. (Fabaceae)\(^1,3,6,7,12\), Ayd. N. Sharpunkha. Profusely branched undershrub with pinkish red flower. Chitrakoot Forest Range, Abundant.

Plant: Tonic, laxative, used as anthelmintic for children, used internally as a purifier of the blood and considered as cordial.

Root: Bitter, given in tympanitis, dyspepsia and chronic diarrhoea.


Fruits: Astringent, stomachic, febrifuge, used in nerve diseases, paralysis and rheumatism.

120. *Terminalia arjuna* (Roxb. ex. DC.) W. & A. (Combretaceae)\(^1,3,6,10,12\), Ayd. N. Arjun, L. N. Arjun. Large tree with elliptic leaves white stem bark and greenish white flowers in panicle. Barodha Forest Range, Abundant, Jharsi under Singhpur Forest Range, Abundant.

Bark: Tonic, astringent, febrifuge, used in cardiac diseases as tonic, bilious affections and sores, ash prescribed in scorpion sting.

Fruits: Tonic, deobstruent.

121. *Terminalia bellirica* (Gaertn.) Roxb. (Combretaceae)\(^1,3,6,12\), Ayd. N. Bibhitaki, L. N. Bahera. Large deciduous tree with globose fruit. Barodha Forest Range, Sporadic.

Fruits: Bitter, astringent, tonic, laxative, antipyretic, used in piles, dropsy, diarrhoea, leprosy, biliousness, dyspepsia and headache.

Kernel: Narcotic.


Fruits: Astringent, laxative, alterative, as gargle in stomatitis.
123. *Tinospora cordifolia* (Willd.) Miers. (*Menispermaceae*)\(^1,3,7,12\), Ayd. N. Guduchi, L. N. Guruch. Large climber with cordate leaves and globose red fruit. 6644-Saria under Mukundpur Forest Range, Rare.

Stem: Bitter, stomachic, antiperiodic, antipyretic. Juice used as diuretic, and also useful in gonorrhoea.


Fruits: Cooling, diuretic, tonic, used in painful micturition, calculus affections, urinary discharges and impotence, in form of infusion useful as a diuretic in gout, kidney diseases and gravel.


Plant: Diuretic, poultice used as an emollient.

Leaves: In a cold infusion considered as depurative.

Root: Pounded and made into a paste applied to reduce swellings particularly of the joints.

126. *Urena lobata* L. (*Malvaceae*)\(^1,3,6,12\), L.N. Bachita, Kunguya. Undershrub with stellolate hairy leaves, flower pinkish white. 6526- Barodha Forest Range, Scattered.

Root: Diuretic, used as an external remedy for rheumatism.


Root: Useful in rheumatism and allied disorders, used into the composition of various medicated oils for external application in diseases of the nervous system and rheumatism.

Leaves: Made into a paste by pounding applied to the body during fever.


Root bark: Powder used as carminative, stomachic, stimulant, useful in atonic dyspepsia, debility and mild fever.

Stem bark: Powder mixed with gingelly oil used as an application for skin diseases and itch.

129. *Vernonia cinerea* (L.) Less. (*Asteraceae*)\(^1,3,6,7,12\), Ay. N. Sahadevi. Annual erect or decumbent herb with flowers in heads on umbellate cyme. 6539- Itma under
Satna Forest Range, Scattered.
Plant: Considered as diaphoretic, decoction used to promote perspiration in febrile conditions, used as a remedy for spasm of the bladder and strangury. Juice given in piles.
Root: Given in dropsy.
Flowers: Administered for conjunctivitis.
Seeds: Used as anthelmintic and alexipharmac.

Small tree with trifoliate leaves, flowers blue. 6512- Barodha Forest Range, Abundant.
Leaves: Aromatic, tonic, vermifuge, dried one smoked for relief of headache and catarrh, used in rheumatism, decoction with long peeper given in fever.
Root: Expectorant, febrifuge, tonic.
Dried fruits: Vermifuge.
Flower tops: Astringent, leucorrhoea and chronic diarrhoea.

131. *Woodfordia fruticosa* (L.) Kurz. (Lythraceae)\(^{1,3,6,12}\). Ay. N. Dhataki, L.N. Dhai.
Much branched shrub with spreading branches, flowers numerous bright red in dense axillary clusters. 6525- Barodha Forest Range, Abundant.
Dried flowers: Used as astringent, in dysentery, derangements of liver, disorders of mucous membrane and in haemorrhoids.

Stem bark and seeds: Used in dysentery, diarrhoea, ground and rubbed over the body in dropsy.
Seeds: Aphrodisiac.

133. *Xanthium strumarium* L. (Asteraceae)\(^{1,3,6,7,11,12}\). Ay. N. Artagal, L.N. Gokhru.
Coarse hispid herb, flowers white clustered in axillary heads. 6564- Satna river bank, Scattered.
Plant: Diaphoretic, sedative, sudorific, useful in malaria.
Root: Bitter tonic, useful in strumous diseases and cancer.
Fruits: Cooling, demulcent, given in small pox.

134. *Ziziphus mauritiana* Lamk. (Rhamnaceae)\(^{1,3,6,7,12}\). Ay. N. Badar, L.N. Ber. Deciduous tree with spines and greenish yellow flowers. 6571- Jamodi under Satna Forest Range, Scattered.
Leaves: Form a plaster in strangury.
Fruits: Mucilaginous, styptic, purify blood, and aid digestion.
Root: Decoction used in fever and powder applied to wounds and ulcers.
Bark: Considered to be a remedy in diarrhoea.

Fruits: Cooling, astringent, used in bilious affections.
Leaves: Applied in scabies and to boils.

136. *Zizyphus xylopyrus* (Retz.) Willd. (Rhamnaceae)\(^{1,3,6,7,12}\), Ay. N. Ghonta, L.N. Ghont. Small tree, greenish flowers with brown globose stony fruit. 6477- Chitra-koot Forest Range, Abundant.
Root bark: Decoction used to heal fresh wounds.
Fruits: Stomachic.

Discussion:


*Sterculia urens* Roxb., *Stereospermum chelonoides* (L.f.)DC. *Holarrhena antidysenterica* Wall., *Hemidesmus indicus* (L.) R.Br., *Tribulus terrestris* L., *Vanda tassellata* (Roxb.) Hook. ex. G.Don., *Wrightia tinctoria* R.Br., *Woodfordia fruticosa* (L.) Kurz., etc. are most common in this division.

Conclusions:

Satna forest division of Satna distt. Madhya Pradesh is very rich in medicinal plants. This information on the medicinal plant wealth of the area will serve as basic material for various research studies, besides being an important source of information for the pharmaceutical industries at large scale.

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प्रस्तुत रोध पत्र में मध्यप्रदेश राज्य के सतना वनमण्डल क्षेत्र के अन्तर्गत आने वाले महत्वपूर्ण वनौषधीय रोधों के सर्वेक्षण कार्य का विस्तृत विवरण प्रस्तुत किया गया है। सर्वेक्षण के दौरान 136 वनौषधीय पादप का चयन एवं संग्रह किया गया है जोकि आयुर्वेदिक चिकित्सा औषधि निर्माण में अत्यन्त महत्वपूर्ण है।

प्रस्तुत लेख में वनौषधियों का वर्णन करते समय उनका वास्तविक नाम के साथ उनके कुल, संस्कृत, हिंदी एवं स्थानीय नाम, पहचान के सामान्य लक्षण प्राप्ति स्थान के साथ-साथ उनकी प्रचुरता एवं वितरण तथा प्रयोग अंग एवं उनके उपयोग के विषय में प्रकाश डाला गया है।

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