

THE ETHNOMEDICINAL ACCOUNT OF SONBHADRA DISTRICT (U.P.) - A REVIEW

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The present account deals with the total 171 angiospermic species belonging to 150 genera of 60 families, which have immediate and effective solution for making comfortable future for human population against diseases like gastrointestinal problems, fever, epilepsy, leucorrhoea, male and female contraceptives, body pain, wound, cough and cold, snake and scorpion bite, jaundice, diabetes etc. The Dicotyledons are represented by 153 species of 130 genera and 51 families, while Monocotyledons are represented by 18 species of 15 genera and 9 families. The percentage of Dicotyledons: Monocotyledons is 89.4: 10.6. It is vital and essential to integrate activities involving both biodiversity and cultural conservation into such works. Research needs to be enhanced to identify plants with medicinal value and to isolate compounds of medicinal importance.

Keywords: Biodiversity; Conservation; Diseases.

Introduction

Plants have always been the source of medicines and of the direct use to the mankind. According to the earlier workers¹⁻⁴, Ayurveda, the Science of life, dates back to the days of *Charaka Samahita* and *Sushruta Samahita* (1,200 AD). The passage of time saw the birth and development of the modern medical system. The faster pace and the need for the rapid cure led to the proliferation of the synthetic drugs. Medicinal herbs are moving from fringe to mainstream use with free from side effects caused by synthetic chemicals. Recently, considerable attention has been paid to utilize eco-friendly and biofriendly plant based products for prevention and cure of different human diseases. Considering the adverse effects of synthetic drugs, the Western population is looking for natural remedies, which are safe and effective. It is documented that 80% of the world's population has faith in traditional medicine, particularly plant drugs for their primary health^{5,6}.

India is one of the 12-megabiodiversity centres with two hot-spots of biodiversity in the Western Ghats and Northeastern Region. There are about 400 families in the world of the flowering plants; at least 315 are represented in India⁷. The district Sonbhadra is also known to have rich flora of medicinal plants and it occupies the southernmost part of Uttar Pradesh, surrounded in the north by Mirzapur and Varanasi districts of U.P. in the south by Surguja district of Chattisgarh, in the south-east by Palamu district of Jharkhand. The district lies in the Vindhyan plateau between 23°45' to 24°34'N latitude and

82°45' to 83°23'E longitude. The elevation above the mean sea level ranges between 315m to 485m⁸. The total geographical area is 6788 sq.km. Ethnobotanically, this region has remained under-explored. Vast stretches of the Sonbhadra region were once covered with thick natural forest. However, there has been rapid industrialization in the recent years which has resulted in the rapid deforestation, which is tropical dry deciduous type, and conversion of natural forest ecosystem into the marginal cropland and savanna⁹. The present review aims to create awareness about this medicinal wealth of Sonbhadra district to draw attention to phytochemists.

Ethnomedicinal exploration was conducted in the different localities of the district and number of valuable data on the uses of indigenous medicinal plants were recorded. The major tribes of the Sonbhadra district are Kols, Baigas, Ghasiyas, Gonds and Kharwars¹⁰. The district is also periodically visited by nomads such as Natts and Saperas which also have a very good mosaic culture. The list of the plants along with common name, family, part used, habit and ailments against which it is used has been given in the tabulated form (Table 1). An obvious advantage of such approach is that, we can compare the uses of plants by different tribal people located in various parts of the state. Sometimes it is found that the same plant is used for the same purpose by the people located hundred miles apart, although same part of plant may not be used or sometimes same plant is found to be used for different ailments in different region of the same state. The given percentage pie diagram (Fig. 1) represents, data of families

Table 1. Plants with the biological activity.

S No	Botanical Name	Family	Local Name	Habit	Part Used	Ailment
1.	<i>Ranunculus sceleratus</i> L. JS: 18208	Ranunculaceae	Jaldhania	Herb	Leaf, Root	Boils, Sores
2.	<i>Cocculus hirsutus</i> (L.) Diels JS: 18139	Menispermaceae	Davan	Twining herb	Root, Leaf, Flower	Epilepsy, Fever, Gastrointestinal problem, Burns
3.	<i>Tinospora cordifolia</i> (Willd.) Hook. f. Thoms. JS: 18189	Menispermaceae	Neem gurach	Twining shrub	Whole plant	Fever, Gastrointestinal problem, Cough & cold, Mental retardation, Rheumatism Epilepsy, Typhoid, Pulmonary tuberculosis
4.	<i>Nelumbo nucifera</i> Gaertn. JS: 18220	Nelumbonaceae	Kamal	Aquatic herb	Flower, Root, Stem	Elephantiasis, Back-ache
5.	<i>Argemone mexicana</i> L. JS: 18122	Papaveraceae	Satyanashi	Herb	Root, Leaf, Seed	Epilepsy, Tooth problem, Head ache, Pyorrhoea
6.	<i>Roripa indica</i> (L.) Hiern, Cat. JS: 18209	Brassicaceae	Rorri	Herb	Root, Leaf	Mouth ulcers
7.	<i>Brassica campestris</i> L. JS: 18226	Brassicaceae	Sarson	Herb	Seed	Cough & cold, Congestion, Lip crack
8.	<i>Cleome gynandra</i> L. JS: 18122	Capparidaceae	Safed hurhur	Herb	Leaf, Flower, Root	Rheumatism Ear ache , Fever, Head -ache, Wounds
9.	<i>Cleome viscosa</i> L. JS: 18006,18111	Capparidaceae	Pila hurhur	Herb	Leaf, Root	Head ache
10.	<i>Shorea robusta</i> Gaertn. JS:18039	Dipterocarpaceae	Sal	Tree	Bark, Leaf	Gastrointestinal problem, Leucorrhoea
11.	<i>Stellaria media</i> (L.) Vill. JS: 18206	Caryophylaceae	Khatoli	Herb	Root, Flower	Contraceptive Head ache, Cholera, Gastrointestinal problem
12.	<i>Abelmoschus esculentus</i> (L.) Moench. JS: 18217	Malvaceae	Bhindi	Herb	Seed, Root, Fruit	Spermatorrhoea, Leucorrhoea
13.	<i>Abuliton indicum</i> (L.) Sweet. JS: 18207	Malvaceae	Kanghi	Undershrub	Shoot, Leaf, Seed	Gastrointestinal, Swelling, Body pain, Antiseptic
14.	<i>Sida acuta</i> Burm. JS: 18183	Malvaceae	Bariari	Undershrub	Root	Infertility, Gastrointestinal problem
15.	<i>Sida cordata</i> (Burm. f.) Bross. JS: 18001,18150	Malvaceae	Bariari	Herb	Leaf	Head ache, Gastrointestinal problem, General body health, Swelling
16.	<i>Sida cordifolia</i> L. JS: 18036	Malvaceae	Farid buti	Undershrub	Leaf	Burning feet, Menorrhagia Heart problem
17.	<i>Malvastrum coromandelianum</i> (L.) Garcke. JS: 18185	Malvaceae	Bariara	Undershrub	Leaf	Cut, Injuries Skin plaques, Dysentery

18.	<i>Urena lobata</i> L. JS: 18015	Malvaceae	Golbariani	Undershrub	Root, Leaf	Epilepsy, Leucorrhoea Fever
19.	<i>Hibiscus sabdariffa</i> L. JS: 18052	Malvaceae	Patwa	Herb	Stem, Flower	Labour pain
20.	<i>Bombax ceiba</i> L. JS: 18170,18227	Bombaceae	Semal	Tree	Bark, Flower	Boils, Sores, Impotency
21.	<i>Helicteres isora</i> L. JS: 18099,18165	Sterculiaceae	Murrerua, Marorfali	Shrub	Fruit, Leaf, Bark	Stomachache, Lactati- on, Impotency, Diabetes, Paeralysis, Cervical spondylosis
22.	<i>Corchorus capsularis</i> L. JS: 18044	Tiliaceae	Mirchighas	Herb	Leaf	Ear pain, Delivery in cattles
23.	<i>Corchorus olitorius</i> L. JS: 18074	Tiliaceae	Gudsakar	Herb	Root	Wound
24.	<i>Grewia hirsuta</i> Vahl. JS: 18117,18041,18177	Tiliaceae	Gursakari	Shrub	Root, Leaf	Leucorrhoea, Gastrointestinal problem Labour pain, Diabetes
25.	<i>Oxalis corniculata</i> L. JS: 18210,18230	Oxalidaceae	Teenpatia ghas	Herb	Leaf, Root	Fever, Cough & cold
26.	<i>Aegle marmelos</i> (L.) Correa. JS: 18231	Rutaceae	Bel	Tree	Pulp	Gastrointestinal problem
27.	<i>Azadirachta indica</i> Juss. JS: 18129	Meliaceae	Neem	Tree	Leaf, Fruit	Skin problem, Blood purifier, Contraceptive
28.	<i>Soymida febrifuga</i> (Roxb.) A. Juss. JS: 18044	Meliaceae	Rohina	Tree	Bark	Rheumatism
29.	<i>Ventilago denticulata</i> Willd. JS: 18169	Rhamnaceae	Keonti	Shrub	Leaf, Fruit	Heat stroke, Leucoderma
30.	<i>Zizyphus mauritiana</i> Lam. JS: 18173	Rhamnaceae	Ber	Tree	Leaf, Fruit	Body pain, Cough, Chest pain, Heat stoke, Antidote for alcoholism
31.	<i>Vitis indica</i> L. JS: 18100	Vitaceae	Jangliangoor	Shrub	Fruit	Vomiting
32.	<i>Cissus quadrangular</i> L. JS: 18090	Vitaceae	Hadjor	Shrub	Stem, Leaf	Osteoarthritis, Gastrointestinal problem, Arthritis, Joint pain
33.	<i>Meliosma simplicifolia</i> (Roxb.) Walp. JS: 18190	Sabiaceae	Hariara	Tree	Root, Leaf	Epilepsy, Abortion
34.	<i>Lannea coromandelica</i> (Houtt.) Merr. JS: 18168	Anacardiaceae	Jiggan, Jiggana	Tree	Bark, Leaf	Wound, Sore throat, Bleeding piles
35.	<i>Moringa oleifera</i> Lam. JS: 18069	Moringaceae	Sehjan	Tree	Leaf, Bark, Flower	General body health, Dog's bite wound, Menorrhagia
36.	<i>Abrus precatorius</i> L. JS: 18167	Fabaceae	Lalgumchi	Climbing shrub	Root, Seed	Snake bite, Gastrointestinal problem, Cough, Leucorrhoea Contraceptive,
37.	<i>Butea monosperma</i> (Lam.) Taubert. JS: 18067,18156	Fabaceae	Dhak, Palas, Litpit, Vyavhar Fadfad	Tree	Leaf, Bark, Flower	Epilepsy, Sciatica Gastrointestinal problem, Skin disease, Jaundice

38.	<i>Butea parviflora</i> Roxb. JS: 18176	Fabaceae	Vyavhar	Climbing shrub	Flower, Root	Skin problem, Contraceptive
39.	<i>Crotalaria triquertra</i> Dalz. in Hook. JS: 18166	Fabaceae	Nanasesu	Herb	Whole plant	Dog's bite
40.	<i>Clitoria ternatea</i> L. JS: 18257	Fabaceae	Koyalia	Twining shrub	Leaf, Root	Leprosy, Body health, Myalgia
41.	<i>Cajanus cajan</i> (L.) Huth. JS: 18158	Fabaceae	Arhar	Shrub	Leaf, Root,	Mouth ulcer, Seed Gastrointestinal problem
42.	<i>Dalbergia sisso</i> Roxb. JS: 18105	Fabaceae	Shisham, Sisso	Tree	Leaf, Flower	Gastrointestinal problem, Cough & cold
43.	<i>Desmodium triflorum</i> (L.) DC. JS: 18068	Fabaceae	Teenpatia ghas	Herb	Leaf	Body health, Weakness
44.	<i>Flemingia bracteata</i> (Roxb.) Wt. JS: 18060	Fabaceae	Galfulla	Undershrub	Flower	Cough & cold, Cattract
45.	<i>Indigofera linifolia</i> (L.f.) Retz. JS: 18210	Fabaceae	Tokri	Herb	Root, Fruit	Gastrointestinal problem Rheumatism, Ache
46.	<i>Lathyrus sativus</i> L. JS: 18211	Fabaceae	Khesari	Herb	Leaf	Gastrointestinal problem, Body pain
47.	<i>Medicago polymorpha</i> L. JS: 18215	Fabaceae	Janglighas	Herb	Leaf	Skin plaque, Gastrointestinal problem
48.	<i>Melilotus indica</i> (L.) All. JS: 18212	Fabaceae	Banmethi	Herb	Leaf	Gastrointestinal problem
49.	<i>Mucuna pruriens</i> (L.) DC. JS: 18213	Fabaceae	Kaunch	Climber	Leaf	Rabies, Dermatitis
50.	<i>Ougeinia oogeensis</i> (Roxb.) Hooklr. JS: 18009	Fabaceae	Sanan	Tree	Bark	Gastrointestinal problem, In still birth
51.	<i>Tephrosia purpurea</i> (L.) Pers. JS: 18119	Fabaceae	Sarpankal	Under shrub	Whole plant	Gastrointestinal problem, Body health, Head ache, Asthma, Vermifuge, Vomiting, Eczema, Strength & vigour
52.	<i>Pongamia pinnata</i> (L.) Pierre JS: 18214	Fabaceae	Karanja	Tree	Root, Leaf,	Breathing Bark, Seed trouble, Leprosy, Piles, Leucoderma
53.	<i>Pueraria hirsuta</i> (Thumb.) Schu. JS: 18121	Fabaceae	Patalkohda	Climbing shrub	Root	Leucorrhoea, Body pain, Gastrointestinal problem, Weakness
54.	<i>Teramnus labialis</i> (L.f.) Spreng. JS: 18080	Fabaceae	Mashoni	Twiner	Root, Leaf	Scorpio bite, Body pain
55.	<i>Vicia satva</i> L. JS: 18216	Fabaceae	Ankara	Herb	Leaf	Gastrointestinal problem
56.	<i>Bauhinia purpurea</i> L. JS: 18024	Caesalpiniaceae	Kachnar	Tree	Leaf	Fever, Body pain
57.	<i>Bauhinia variegata</i> L. JS: 18055	Caesalpiniaceae	Kachnar	Tree	Leaf	Abortion

58.	<i>Cassia occidentalis</i> L. JS: 18023	Caesalpiniaceae	Badacha-kawar	Undershrub	Leaf, Root, Fruit	Leprosy, Wound, Vermifuge, Burn, Snake & Scorpion bite Numbness, Burn,
59.	<i>Cassia fistula</i> L. JS: 18256	Caesalpiniaceae	Amaltas	Tree	Whole plant	
60.	<i>Acacia catechu</i> (L.f.) Willd. JS: 18036	Mimosaceae	Khair	Tree	Anaemia	
61.	<i>Acacia nilotica</i> (L.) JS: 18070	Mimosaceae	Babul	Tree	Leaf	Body health
62.	<i>Terminalia bellirica</i> (Gaertn.) Roxb JS: 18073	Combretaceae	Bahera	Tree	Root, Leaf, Stem	Malarial fever, Pyorrhoea
63.	<i>Terminalia arjuna</i> (Roxb.ex. DC.) Wight & Arnott. JS: 18257	Comretaceae	Arjun	Tree	Fruit problem Bark	Gastrointestinal
64.	<i>Terminalia chebula</i> Retz. JS : 18257	Combretaceae	Harra	Tree	Fruit	Blood presure
65.	<i>Eucalyptus citriodora</i> HK. JS: 18030	Myrtaceae	Safeda	Tree	Gum, leaf	Gastrointestinal problem, Tooth ache, Asthma, Dysentry
66.	<i>Lagerstroemia parviflora</i> Roxb. JS: 18126,18012	Lytheraceae	Sidha	Tree	Bark	Gasrointestinal problem, Vomiting
67.	<i>Woodfordia fruticosa</i> (L.) Kurz. JS: 18112,18171,18178	Lytheraceae	Dhavai	Shrub	Root, Leaf, Buds, Flower	Gastrointestinal problem Leucorrhoea Fever, Impotency
68.	<i>Momordica charantia</i> L. JS: 18071	Cucurbitaceae	Karela	Climber	Tubers, Root, Fruit	Bleeding piles, Fever, Diabetes
69.	<i>Coccinia grandis</i> (L.) JS: 18078	Cucurbitaceæ	Kundru	Twiner	Fruit, Leaf	Body health, Head ache
70.	<i>Momordica dioica</i> Roxb. ex. Willd. JS:18250	Cucurbitaceae	Kheksa	Climber	Fruit	Body health
71.	<i>Opuntia elatior</i> Mill. Gard. JS:18107	Cactaceae	Nagphani	Shrub	Phylloclade	Leucoderma
72.	<i>Coriandrum sativum</i> L. JS: 18251	Umbelliferae	Dhania	Herb	Whole plant	Excessive bleeding
73.	<i>Catunaregam spinosa</i> (Thunb.) Trivengadum. JS: 18300	Rubiaceae	Pedar	Tree	Bark	Leucorrhoea
74.	<i>Gardenia turgida</i> Roxb. JS: 18058	Rubiaceae	Kharhar	Tree	Root, Twig	Fever, Epilepsy
75.	<i>Mussaenda glabrata</i> Hutch. JS: 18057	Rubiaceae	Babina	Climbing shrub	Root, Leaf	Leprosy
76.	<i>Pavetta crassicaulis</i> Bremek. JS: 18123	Rubiaceae	Kukari	Tree	Leaf	Cough & cold
77.	<i>Randia fasciculata</i> DC. JS: 18255	Rubiaceae	Katul	Tree	Fruit	Gastrointestinal problem
78.	<i>Catunaregam nilotica</i> (Stapf.) Trivengadum. JS: 18188	Rubiaceae	Padar	Tree	Bark	Gastrointestinal problem
79.	<i>Ageratum conyzoides</i> L. JS:18191	Asteraceae	Sarhand	Herb	Flower	Itching
80.	<i>Amberboa racemosa</i> (Roxb.) Jafri JS: 18280	Asteraceae		Herb	Whole plant	Epilepsy, Atonic sizzure
81.	<i>Blumea laciiniata</i> (Roxb.) DC. JS: 18285	Asteraceae	Phulia	Herb	Leaf	Rheumatism
82.	<i>Blumea membranacea</i> DC. JS: 18270	Asteraceae	Phulia	Herb	Whole plant	Body pain

83.	<i>Blumea molis</i> (Don.) Merr. JS: 18271	Asteraceae	Phulia	Herb	Whole plant	Conjunctivitis
84.	<i>Blumea bifoliata</i> (L.) JS: 18290	Asteraceae		Herb	Whole plant	Leucoderma Skin disease
85.	<i>Blumea oxydonta</i> DC. JS: 18268	Asteraceae	Safed fuli	Herb	Whole plant	Leucorrhoea
86.	<i>Carthamus oxyacantha</i> M. Bieb. JS: 18288,18152	Asteraceae	Barre	Herb	Seed, Flower	Rheumatism Gastrointestinal problem
87.	<i>Caesulia axillaris</i> Roxb. JS: 18270	Asteraceae		Herb	Whole plant	Head ache
88.	<i>Centipidia minima</i> (L.) A.Br.& Aschers. JS: 18299	Asteraceae	Chikani	Herb	Whole plant	Epilepsy
89.	<i>Conyza canadensis</i> (L.) Cronq. JS: 18265	Asteraceae	Hodri	Herb	Whole plant	Swelling
90.	<i>Cyathocline purpurea</i> (Don.) Kuntze. JS: 18276	Asteraceae	Chotagunja	Herb	Leaf, Flower	Head ache, Fish poison
91.	<i>Echinops echinatus</i> Roxb. JS: 18278	Asteraceae		Herb	Root	Snake & Scorpion bite, Leucorrhoea
92.	<i>Eclipta alba</i> (L.) Hassk. JS: 18252,18097,18150	Asteraceae	Ilia phool	Herb	Whole plant	Boil & burn, Hair fall, Antiseptic, Jaundice, Delivery
93.	<i>Grangea maderaspatana</i> (L.) Poir. JS: 18275	Asteraceae		Herb	Leaf, Flower	Epilepsy
94.	<i>Galinsoga parviflora</i> Cav. JS: 18026	Asteraceae	Banmara	Herb	Leaf, Seed	Ear ache, Dog's bite
95.	<i>Helianthus annus</i> L. JS: 18193	Asteraceae	Surajmukhi	Herb	Leaf, Seed	Gastrointestinal
96.	<i>Sonchus asper</i> (L.) Hill. JS: 18287	Asteraceae	Akastu	Herb	Leaf	Cut
97.	<i>Tridax procumbens</i> L. JS: 18091	Asteraceae	Agya ghas	Herb	Leaf	Cuts & wounds of cattle
98.	<i>Vernonia cinerea</i> (L.) Lees. JS: 18259	Asteraceae	Hodri	Herb	Root	Leucorrhoea
99.	<i>Xanthium indicum</i> Koeing. JS: 18260	Asteraceae		Herb	Flower, Seed	Head ache, Rheumatism
100.	<i>Madhuca longifolia</i> (J. Koeing.) Macbr. 18011	Sapotaceae	Mahua	Tree	Bark, Flower	Toothache, Sedative
101.	<i>Manilkara hexandra</i> (Roxb.) Dubard. JS:18077	Sapotaceae	Khirna, Khirmi	Tree	Leaf	Fever
102.	<i>Diospyros melanoxylon</i> Roxb. JS: 18040	Ebenaceae	Bidipatta, Tendu	Tree	Fruit, Root	Gastrointestinal problem, Scorpio bite
103.	<i>Nyctanthes arbor-tristis</i> L. JS: 18017,18174	Oleaceae	Bhekshi, Harshringar	Tree	Leaf, Root	Malarial fever, Impotency
104.	<i>Carrisa opaca</i> Stapf. ex. Haines JS: 18160	Apocynaceae	Jangli karonda	Shrub	Root	Fever
105.	<i>Ichnocarpus frutescens</i> (L.) R.Br. JS: 18128	Apocynaceae	Banwar	Herb	Root	Blood purifying
106.	<i>Nerium indicum</i> Mill. JS: 18088	Apocynaceae	Kaner	Shrub	Leaf	Ear ache
107.	<i>Tabernaemontana divaricata</i> (L.) R.Br. JS: 18172	Apocynaceae	Chandni	Shrub	Bark	Gastrointestinal problem

108.	<i>Calotropis procera</i> (Aiton) R.Br. JS: 18096, 18148	Asclepiadaceae	Aak, Madar	Shrub	Bud, Root, Leaf pain Root, Bark	Gastrointestinal problem, Fever, Body
109.	<i>Marsdenia tenacissima</i> (Roxb.) Moon, Cat. JS: 18022	Asclepiadaceae	Chinhaur	Twiner		Fever, Menorrhgia
110.	<i>Enicostoma axillare</i> (Lam.) Raynal JS: 18137	Gentianaceae	Damjadi	Herb	Leaf, Root	Fever
111.	<i>Convolvulus prostratus</i> Frossk. JS: 18136	Convolvulaceae	Dhurfuli	Herb	Whole plant	Leucorrhoea
112.	<i>Evolvulus alsinoides</i> (L.) L. JS: 18016	Convolvulaceae	Shankh pushpi	Herb	Whole plant	Urine infection, Brain tonic
113.	<i>Ipomea alba</i> L. JS: 18073	Convolvulaceae	Behaya	Twiner	Leaf	Swelling
114.	<i>Ipomea obscura</i> (L.) Ker-Gawl. JS: 18203	Convolvulaceae	Lata dudhiya	Twiner	Flower	Lactation
115.	<i>Cuscutta reflexa</i> Roxb. JS: 18103	Cuscutaceae	Amarbel	Twiner	Whole plant	Leucoderma Epilepsy
116.	<i>Datura metel</i> L. JS: 18301	Solanaceae	Datura	Undershrub	Whole plant	Asthma, Epilepsy, Rabies, Cough & Cold
117.	<i>Solanum innoxia</i> Mill. Gard. JS: 18112	Solanaceae	Kaladatura	Undershrub	Root	Body pain
118.	<i>Solanum nigrum</i> L. JS: 18310	Solanaceae	Makoi	Herb	Leaf, Root, Seed, Fruit	Stomach ulcer, Toothache, Rheumatism Leech bite, Feet crack Toothache
119.	<i>Solanum surratense</i> Burm. f. JS: 18043	Solanaceae	Bhatkattaya	Herb	Seed	
120.	<i>Withania somnifera</i> (L.) Dunali in DC. JS: 18303	Solanaceae	Ashwa-gandha	Undershrub	Root	Rheumatism
121.	<i>Mazus pulmilus</i> (Burm.f.) Steens JS: 18315	Scrophulariaceae	Nakhchikan	Herb	Whole plant	Swelling
122.	<i>Scoparia dulcis</i> L. JS: 18135	Scrophulariaceae	Mithipatti	Herb	Leaf	Diabetes
123.	<i>Elytraria acaulis</i> (L.f.) Lindau. JS: 18235	Acanthaceae	Sasamula	Herb	Whole plant	Softening of mammary glands
124.	<i>Barleria prionitis</i> L. JS: 18307	Acanthaceae	Kanbasa, Vajradanti	Undershrub	Whole plant	Gum problem, Piles, Rheumatism
125.	<i>Peristrophe bicalyculata</i> (Retz.) Nees. JS: 18248	Acanthaceae	Atrilal	Herb	Root	Rheumatism
126.	<i>Lepidogathis hamiltoniana</i> Wall. JS: 18320	Acanthaceae	Agachiya	Herb	Root	Gastrointestinal problem
127.	<i>Rungia repens</i> (L.) JS: 18321	Acanthaceae	Kharmor	Herb	Flower	Urine complaints
128.	<i>Lantana indica</i> Roxb. JS: 18247	Verbenaceae	Ghaneri papardani	Shrub	Flower	Wound
129.	<i>Hyptis suaveolens</i> (L.) Poit. JS: 18002	Lamiaceae	Bantulsi	Herb	Whole plant	Wound
130.	<i>Leucas aspera</i> (Willd.) link. JS: 18163	Lamiaceae	Gomb	Herb	Inflorescence, Root, Leaf	Snake bite, Wound, Loss of appetite, Nasal passage infection

131.	<i>Nepeta hindostana</i> (Heyne ex Roth.) Haines. JS: 18141	Lamiaceae	Fulwari	Herb	Whole plant	Cough & cold, Fever, Pneumonia, Mouth ulcer
132.	<i>Oscimum basilicum</i> L. JS: 18184	Lamiaceae	Ramtulsi	Herb	Whole plant	Cough & cold, Head ache, Ring worm, Fever, Wound, Impotency
133.	<i>Boerhavia diffusa</i> L. JS: 18000	Nyctaginaceae	Punarnava, Gadapurna	Herb	Whole plant	Snake bite, Inflammation, Jaundice
134.	<i>Achyranthes aspera</i> L. JS: 18005	Amaranthaceae	Chirchiri	Herb	Whole plant	Epilepsy, Piles, Toothache, Skin problem
135.	<i>Amaranthus spinosus</i> L. JS: 18133	Amaranthaceae	Kateli-chaulau	Herb	Whole plant	Burning urination, Anaemia
136.	<i>Gomphrena celosioides</i> Mart. JS: 18330	Amaranthaceae		Herb	Whole plant	Skin problem
137.	<i>Chenopodium album</i> L. JS: 18301	Amaranthaceae	Bathua	Herb	Whole plant	Anaemia, Gastrointestinal problem
138.	<i>Polygonum barbatum</i> L. JS: 18091	Polygonaceae	Agya ghas	Herb	Whole plant	Wound
139.	<i>Rumex dentatus</i> L. JS: 18302	Polygonaceae	Janglipalak	Herb	Leaf	Gastrointestinal problem
140.	<i>Litsea glutinosa</i> (Lour.) Robinson in Philipp. JS: 18059	Lauraceae	Meda	Tree	Bark, Fruit	Gastrointestinal problem, Abortion
141.	<i>Dendrophthae falcate</i> (L. f.) Ething. JS: 18399	Loranthaceae	Banda	Parasite	Bark	Menstrual disorder
142.	<i>Acalypha indica</i> L. JS: 18325	Euphorbiaceae	Khokhala	Herb	Root	Blindness
143.	<i>Euphorbia hirta</i> L. JS: 18085,18141,18166	Euphorbiaceae	Dudhiabawa, Dudhiaghas, Laldudhia, Dudhia	Herb	Whole plant	Leucorrhoea Bleeding piles, Rabies, Lactation Gastrointestinal, problem Rheumatism
144.	<i>Euphorbia nivula</i> Buch-Ham. JS: 18104	Euphorbiaceae	Thohar	Tree	Leaf	
145.	<i>Jatropha gossypifolia</i> L. JS: 18106	Euphorbiaceae	Baghleda	Shrub	Stem	Mouth ulcer
146.	<i>Phyllanthus fraternus</i> Webster. JS: 18196,18194	Euphorbiaceae	Bhuiamla	Herb	Whole plant	Jaundice
147.	<i>Putranjiva roxburghii</i> Wall. JS: 18193	Euphorbiaceae	Putranjiva	Tree	Fruit	Antifertility
148.	<i>Ricinus communis</i> L. JS: 18051	Euphorbiaceae	Redi	Tree	Leaf, Root, Seed	Delivery
149.	<i>Phyllanthus emblica</i> L. JS: 18054,18127	Euphorbiaceae	Ambla	Tree	Fruit	Gastrointestinal problem
150.	<i>Atrocarpus gomezianus</i> ssp. <i>zeylanicus</i> Jarret JS: 18337	Moraceae	Barhal	Tree	Fruit	Skin problem
151.	<i>Atrocarpous heterophyllus</i> Lam. JS: 18338	Moraceae	Kathal	Tree	Stem sap	Boils
152.	<i>Ficus bengalensis</i> L. JS: 18130	Moraceae	Bar, Bargad	Tree	Sap	Blindness, Gastrointestinal

153	<i>Ficus racemosa</i> L. JS: 18150	Moraceae	Gular	Tree	problem Hypanthodium	Urine infection, Gasstrointestinal- problem	
154	<i>Vanda tessellata</i> (Roxb.) Hook. ex G.Don. JS: 18089	Orchidaceae	Archid	Herbb	Whole plant	Rheumatism	
155	<i>Zingiber officinale</i> Rosc. JS: 18340	Zingiberaceac	Adrak	Herb	Rhizome	Gastrointestinal problem, Fever, Epilepsy	
156	<i>Musa paradisica</i> L. JS: 18018	Musaceae	Kela	Herb	Bract, Stem	Hydrocoel, Pyorrhoea, Bleeding gums	
157	<i>Allium cepa</i> L. JS: 18337	Liliaceae	Piyaj	Herb	Bulb	Gastrointestinal problem, Snake bite, Hair loss, Dandruff, Impotency, Loss of sexual desire	
158	<i>Allium sativum</i> L. JS: 18338	Liliaceae	Lahsun	Herb	Bulb	Impotency, Bloat, Ear pain, Ring worm, Tuberculosis	
159	<i>Aloe vera</i> (L.) Burm. JS: 18081	Liliaceae	Ghritkumari	Herb	Leaf	Cough & cold, Diabetes, Skin problem, Mental retardation, Retention of urine	
160	<i>Asparagus racemosus</i> Willd. JS: 18162	Liliaceae	Satavar, Satavari	Climber	Root	Lactation, Nervous disorder	
161	<i>Chlorophytum tuberosum</i> (Roxb.) Baker. JS: 18063	Liliaceae	Safed musli	Herb	Root	Rheumatism	
162	<i>Urgenia indica</i> (Roxb.) Kunth. JS: 18114	Liliaceae	Vanpiyaj	Herb	Bulb	Dry cough, Body pain,	
163	<i>Elchnhorbia crassipes</i> (Mart.) Solms. JS: 18143	Pontederiaceae	Jalkumbhi	Aquatic herb	Leaf	Rheumatism Cattract	
164	<i>Phoenix acaulis</i> Buch.Ham. ex Roxb JS: 18062	Arecaceae		Tree	Fruit	Paralysis	
165.	<i>Phoenix sylvestris</i> (L.) JS: 18120	Arecaceae	Khajuri	Tree	Fruit	Impotency	
166	<i>Typha angustifolia</i> L. JS: 18122	Typhaceae	Ghadvach	Marshy herb	Root,	Mental Inflorescence retardation	
167	<i>Cyperus rotundus</i> L. JS: 18092	Cyperaceae	Motha	Herb	Root	Urine infection, Vermicide, Skin problem	
168	<i>Cyperus cyperoides</i> (L.) Kuntze. JS: 18013	Cyperaceae	Hanthipaon	Herb	Root	Snake & scorpion bite	
169	<i>Bambusa arundinacea</i> Retz. Willd. JS: 18157	Poaceae	Bans	Herb	Culm	Cattract, Wound, Cut, Vermicide	
170	<i>Desmostachya bipinnata</i> (L.) JS: 18102	Poaceae	Kush	Herb	Inflorescence	Acidity,	
171	<i>Oplimenus burmanii</i> (Retz.) P. Beauv. JS: 18020	Poaceae	Aliar	Herb	Root Whole plant	Amenorrhoea Fever, Epilepsy	

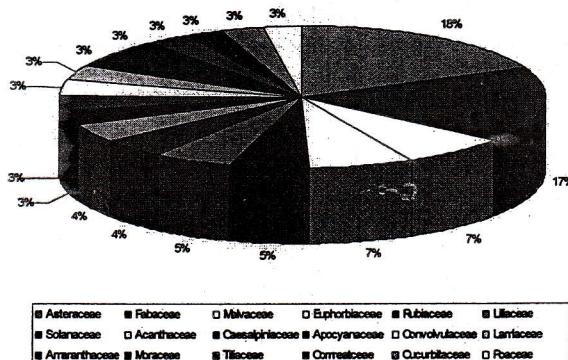


Fig. 1. Families with 3 or more useful plant species.

with 3 or more useful plant species, pie diagram (Fig. 2) represents the data of group-wise contribution of plants. Among the list of ailments the gastrointestinal problem stands 1st, followed by fever at the 2nd position, epilepsy, rheumatism, skin problem at the 3rd position, cough, cold, leucorrhoea at 4th position, wound and body pain at consecutive positions. The rate at which diseases like gastrointestinal problem, epilepsy, rheumatism, skin problem, cough and cold, leucorrhoea wound and body pain have immediate and effective solution for making comfortable future for human population against such diseases. Hence, there is an urgent need to study plants with medicinal efficiencies against such diseases. Accordingly, an effort has been made to describe plants with such uses but has to be explored for their claimed activities.

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References

- Chopra R N, Nayar S L and Chopra I C 1956, *Glossary of Indian Medicinal plants*. Council of

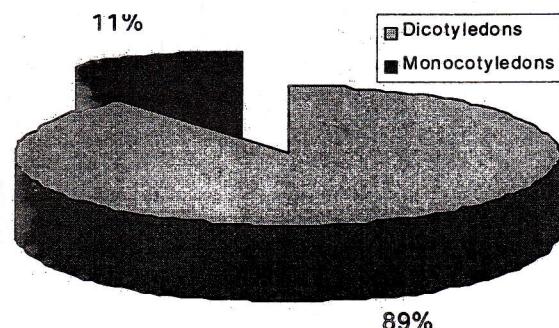


Fig. 2. Groupwise contribution of plants.

- Scientific and Industrial Research, New Delhi.
- Jain S K 1965, Medicinal Plant lore of tribals of Bastar. *Econ. Bot.* **19** 236-250.
- Kritikar KR and Basu B D 1999, *Indian Medicinal Plants*. I-IV Vols. International Book Distributors Booksellers and Publishers, Dehradun.
- Nadkarni 2001, Indian Plants and Drugs with their Medicinal Properties and uses. Asiatic Publishing House, New Delhi.
- Gijtenbeek J M M, Vaden Bent M J and Vecht C J 1999, Cyclosporine neurotoxicity. *J. Neurol.* **246** 339-346.
- Johnson W C and William O W 2002, Warfarin toxicity. *J. Vasc. Surg.* **35** 413-421.
- Sharma R 2003, Medicinal Plants of India- An Encyclopedia. Daya Publishing House. New Delhi.
- Singh J S and Singh V K 1992, Phenology of seasonally dry tropical forest. *Curr. Sci.* **63** 684-688.
- Singh J S, Singh K P and Agarwal M 1991, Environmental degradation of Obra- Renukoot-Singrauli area, India and its impact on natural and derived ecosystems. *The Environmentalists* **11** 71-80.
- Singh A K, Raghuvanshi A S and Singh J S 2002, Medical ethnobotany of tribals of Sonaghati of Sonbhadra district, Uttar Pradesh, India. *81(1) Jour. of Ethnopharmac.* Elsevier.