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### Medicinal Plants of Sariska Tiger Reserve (Rajasthan) India

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Sariska Tiger Reserve, one of the 42 Tiger Reserves of India, is located in the undulating plateau lands and wide valleys of the hill ranges of Aravalli system, near the civil district of Alwar in Rajasthan. The forest of Sariska Tiger Reserve especially undulating plateaus, lands and wide valleys of the hill ranges of Aravalli hills. Rajasthan have great diversity of flora. This paper gives an account of 99 medicinal plants found in Sariska Tiger Reserve Rajasthan state, India along with their local name, family, habit and medicinal uses.

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**Keyword:** Medicinal plant diversity, habit, uses, local name.

#### 1. Introduction

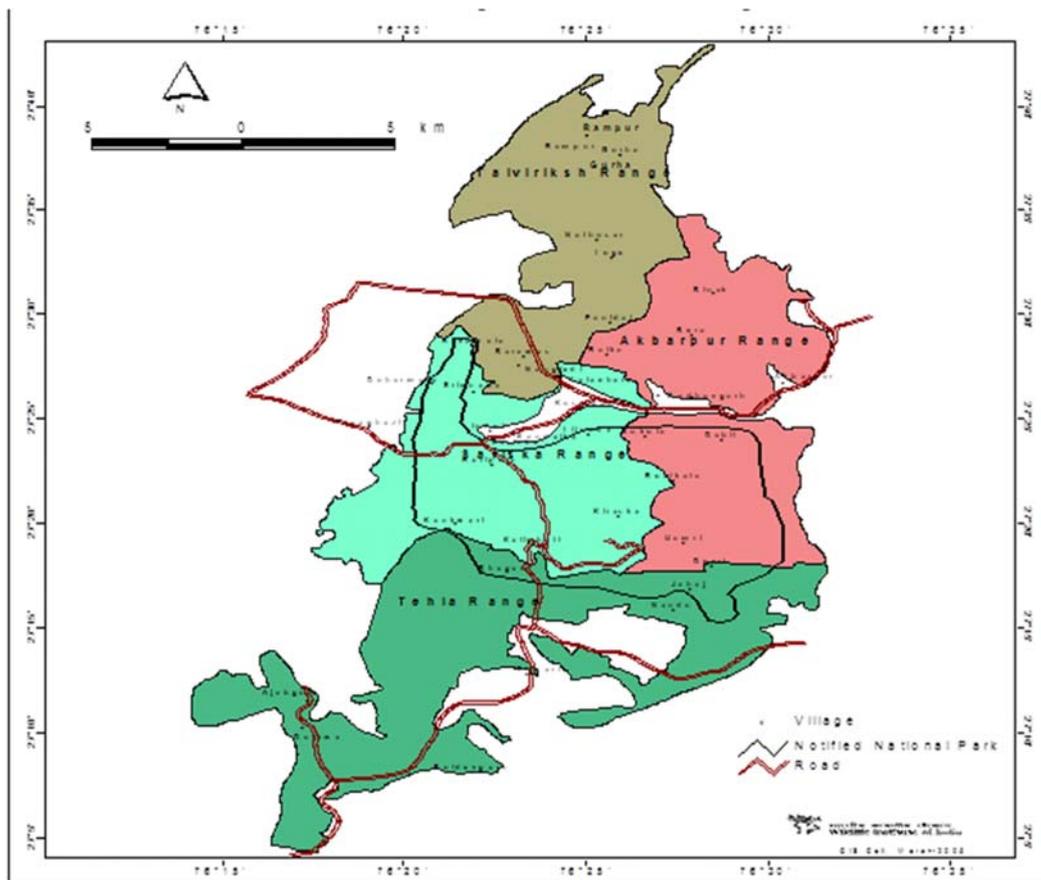
Sariska National park is situated between the latitude (76°17' -76°34' N and 27°5' -27°33' E) and longitude in the Alwar district of Rajasthan. The forest of Sariska Tiger reserve especially undulating plateaus, lands and wide valleys of the hill ranges of Aravalli hills. Rajasthan have great diversity of flora, many authors like Bhandari (1990), Sharma (2002) <sup>[9]</sup>, Sharma and Tiagi (1979) <sup>[10]</sup>, Shetty and Pandey (1983) <sup>[11]</sup>, Shetty and Singh (1987) <sup>[12]</sup>, (1991), (1993), and Prasad *et al.* (1996) have contributed to our knowledge about flora. According to Champion and Seth (1968) <sup>[1]</sup>, Sariska tiger reserve is falls under Northern tropical dry deciduas and northern dry deciduas thorn forest. Sariska is a natural grandeur housing over 404 plant species (Parmar PJ 1986) <sup>[6]</sup>, 211 bird species & 23 mammalian species (Sankar *et al.* (1993). Sariska Tiger Reserve (STR) is a total area of 881 km<sup>2</sup>, where 274 km<sup>2</sup> as a notified National Park. STR is characterized by rugged terrain, valleys and plateau with the altitudinal variation from 540 m to 777 m and divided by four Ranges Sariska, Talvriksh, Tahela and Akberpura.

#### 2. Methodology

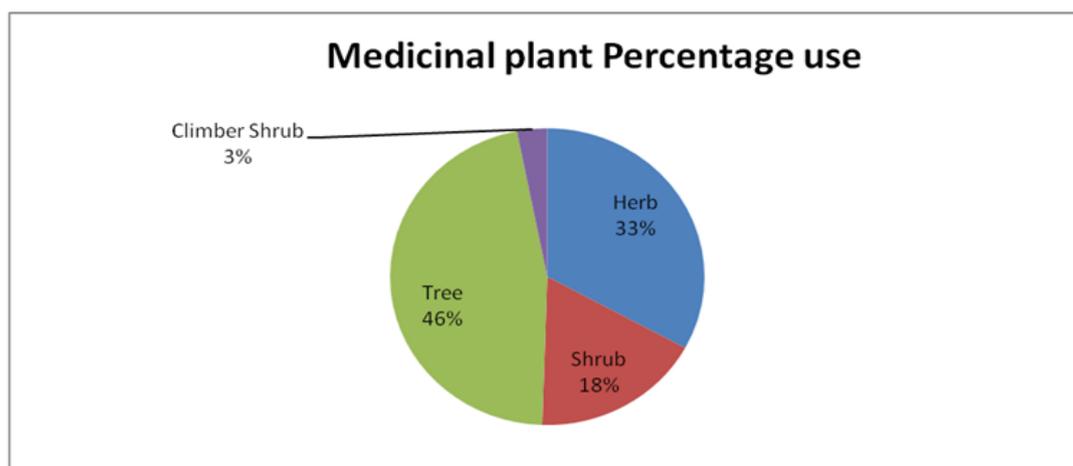
During Monitoring of tiger co-predator prey and their habitat through wildlife Institute of India. Survey was carried Out during October to January 2010-2011. Plant species were identified and a list of plant belonging to various families found in Sariska Tiger Reserve (Raj.) was prepared in alphabetical order. Identification of plant species and information of local name were generated by botanist, local Gujjer and my assistant. The medicinal importance of plant species have been described as per our knowledge of Ayurveda and after gathering information by consulting ancient literature.

#### 3. Result and discussion

This paper gives an account of 99 medicinal plants found in Sariska tiger reserve, along with their local name, family, habit and medicinal uses in brief. Total 46% trees, 33% herbs, 18% shrub and 3% climber shrub use in medicine



**Fig 1:** Map showing Sariska Tiger Reserve Rajasthan (Range, Village, Road).



**Fig 2:** Percentage of medicinal plant use (herb, shrub, climber shrub, tree)

Some photographs in Sariska tiger reserve



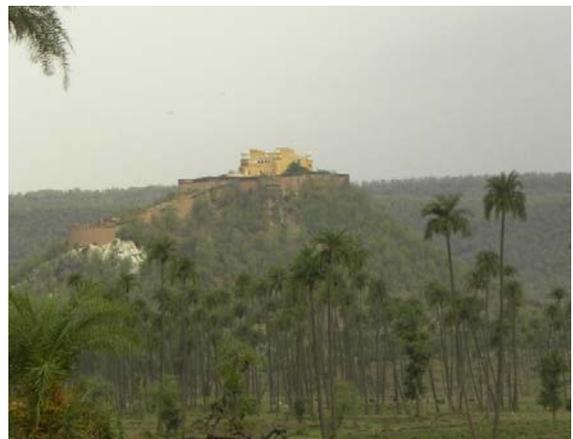
**Image 2:** Local community



**Image 3:** Leaf cutting for livestock



**Image 4:** ancient Buddhist temple in Tahela



**Image 5:** Kakwari fort



**Image 6:** View of Sariska



**Image 7:** Fodder collection of local community

**Table 1:** The plants with medicinal values, which are found in Sariska Tiger Reserve (Raj) are detailed in table.

## Medicinal plants of Sariska Tiger reserve

S. N	Species	Family	Local Name	Habit	Medicinal uses
1	<i>Abrus precatorius</i>	Fabaceae	Gunja	Twining shrub	Root is used in migraine head-ache& seed cures baldness. seed is used for sore throat inflammation of mucus membrane, stomatitis.
2	<i>Abutilon indicum</i>	Malvaceae		Herb	The plant use in cold & diarrhoea, earaches, treat diseases of the lungs.
3	<i>Acacia catechu</i>	Mimosaceae	Kala Khair	Small tree	Root in used in leprosy, skin diseases& bark in used in leucoderma
4	<i>Acacia leucophloea</i>	Mimosaceae	Rouch	Tree	Bark is given in malaria stomachache, to othache and hysteria
5	<i>Acacia nilotica</i>	Mimosaceae	Babul	Tree	Bark-astringent, spasmolytic, hypoglycemic. Gum- for inflammatory conditions of the respiratory, digestive & urinary. Pods-used in urogenitals disorders. Seeds-hypoglycemic
6	<i>Acacia senegal</i>	Mimosaceae	Safed Khair	Tree	Gum is Used for diarrhoea, catarrh.
7	<i>Achyranthes aspera</i>	Achyranthaceae	Unga, Chipchipi	Erect herb	The plant is used as diuretic in dropsy& also in skin eruption, piles, leprosy& in painful delivery.
8	<i>Aegle marmelos</i>	Rutaceae	Bel	Tree	Fruit is used dysentery, constipation, peptic ulcer& Internal hemorrhages. Root & bark is used in fever & leaves in diabetes.
9	<i>Albizia lebbek</i>	Mimosaceae	Siris	Large Tree	Oil from seeds used in leprosy& purities of skin.
10	<i>Anogeissus latifolia</i>	Crassulaceae	Dhok	Large tree	Arial part diuretic and cardiovascular stimulant.
11	<i>Anogeissus pendula</i>	Crassulaceae	Safed Dhok	Tree	Bark is used in anemia. Fruit is used in urticaria, hiccough, and constipation.
12	<i>Argemone mexicana</i>	Papaveraceae	Kateli	Erect herb	Seed-responsible for epidemic dropsy. Causes diarrhoea and induces toxicity. Oil, leaf juice and root-used externally for indolent ulcers and skin diseases.
13	<i>Azadirachta indica</i>	Meliaceae	Neem	Evergreen tree	Leaves are antiseptic used in wounds, skin disease, eczema, burn. Seed is used for hair care &dandruff. Twig is used as tooth brush and in measles.
14	<i>Balanites aegyptiaca</i>	Balanitaceae	Hingot	Tree	Seed is used in earache, pimples; bark is used in dog bite &piles.
15	<i>Barleria cristata</i>	Acanthaceae.	Vajradanti	Herb	Root extract-given in anemia. The leaves are chewed in toothache. Roots and leaves are applied to swellings. An infusion is given in cough.
16	<i>Barleria prionites</i>	Acanthaceae	Vajradanti	Herb	Leaf-juice given in stomach disorders, urinary affections; mixed with honey and given to children with fever & catarrh, mixed with coconut oil for pimples. Leaves &flowering

					tops-diuretic. Bark-diaphoretic & expectorant. Roots-paste is applied over boils and glandular swellings. the whole plant, mixed with honey, is given in bronchial asthma.
17	<i>Boerhavia diffusa</i>	Nyctaginaceae	Punernava	Herb	Leaves are used in reducing swelling, diuretic & urinary burning sensation. Root is used in night blindness.
18	<i>Bombax ceiba</i>	Bombacaceae	Rogal	Tree	Root is stimulant & tonic prickles used to cure pimples.
19	<i>Boswellia serrata</i>	Burceraceae	Salar	Tree	The gum is used in rheumatism, nervous, skin diseases, urinary disorders. Bark is used in blood dysentery. Leaf juice in conjunctivitis.
20	<i>Bauhinia racemosa</i>	Caesalpiniaceae	Jhijha	Small tree	Poultice of leaves is used in swelling & headache
21	<i>Bridelia retusa</i>	Euphorbiaceae	Ungna	Small tree	Bark-astringent, used in the rheumatism. Paste of the stem bark is applied to wounds.
22	<i>Butea monosperma</i>	Fabaceae	Chhila	Small tree	Seeds are used to cure leucoderma. Fruit is used in correcting menstruation. Root is used in snake poisoning.
23	<i>Calotropis gangetica</i>	Asclepiadaceae	Aakda	Shrub	Flowers-stomachic antiasthma tic. Milky juice-Purgative, Roots-used in lupus, tuberculosis, leprosy, syphilitic ulceration. Leaves-juice poisonous. Used in external swellings. All parts-used against bronchitis and asthma.
24	<i>Calotropis procera</i>	Asclepiadaceae	Aakda	Shrub	Anti-inflammatory. Root-Hypocholesterolaemic. Poisonous to human beings in mature stages.
25	<i>Capparis decidua</i>	Cappariadaceae	Keri,Teti	Small tree	Anti-inflammatory, deobstruent to liver and spleen, diuretic, Anthelmintic, vasoconstrictive. Juice of leaves & fruits- anticystic, bactericidal & fungicidal. Dried flower buds used in scurvy.
26	<i>Capparis sepiaria</i>	Capparidaceae.	Jal	Shrub	Root bark-sedative, stomachic, anticholin, diuretic febrifuge. Leaves-applied as poultice to piles, swellings, boils.
27	<i>Cassia fistula</i>	Caesalpiniaceae	Amaltas	Small tree	Leaves used in skin diseases like psoriasis, scabies & Ringworm. Pod is purgative.
28	<i>Cassia sophera</i>	Caesalpiniaceae	Pawar	Large herb	Leaves, seeds, bark- cathartic; considered specific for equal parts of leaves and seeds is given for jaundice. Pods are used in dysentery.
29	<i>Cassia tora</i>	Caesalpiniaceae	Pawar	Herb	Root is purgative.
30	<i>Celosia argentea</i>	Amaranthaceae.	Dhudi	Herb	Flowers used in blood dysentery. Seeds used in stomatitis. Whole plant-antibacterial, antiscorbutic and cooling.
31	<i>Chlorophytum tuberosum</i>	Liliaceae	Musli	Annual herb	It is said that root tubers dissolve kidney stone. Tonic is made up of root extensively used in Ayurvedic system.
32	<i>Cissus quadrangularis</i>	Vitaceae	Harjadi	Climbing shrub	Worm infestations, piles, skin diseases, leprosy, bleeding, eye & ear diseases, chronic ulcers, tumors, epilepsy, swellings, scurvy, asthma, nose bleeding, burns, wounds, bone fractures,

					muscular pains, bites of poisonous insects, purgative
33	<i>Cordia dichotoma</i>	Ehretiaceae	Lisoda	Small tree	Useful in the cough, chest disease it relief, severe colic.
34	<i>Cynodon dactylon</i>	Poaceae	Dubghas	Grass	Juice is used as a nasal drops for migraine. Paste is applied to scalp for dandruff treatment.
35	<i>Dalbergia latifolia</i>	Fabaceae	Shisam	Tree	Juice of leaves cure aphthalus ulcer and used as gargles in sore throat. Root is used in gonorrhoea.
36	<i>Dendrocalamus strictus</i>	Bambusaceae	Bas	Tree	Used in haematemesi, jaundice, leucoderma.
37	<i>Diospyros melanoxylon</i>	Ebenaceae	Tendu	Tree	Dried flowers used in urinary, skin & blood diseases.
38	<i>Eclipta alba</i> (Linn.)	Asteraceae	Bringaraa	Herb	Deobstruent, antihepatotoxic, anticatarrhal, febrifuge. Used in hepatitis, spleen enlargements, chronic skin diseases. Leaf-promotes hair growth. Its extract in oil is applied to scalp before bed time in insomnia.
39	<i>Emblica officinalis</i>	Euphorbiaceae	Amla	Tree	Fruit is blood purifier used in jaundice. It is one of the ingredients of triphala churn a. source of vita. C, given in diabetes it is good for hair.
40	<i>Euphorbia hirta</i>	Euphorbiaceae	Dudhiya Rokdi	Herb	Used for asthma, laryngitis, chronic nasal and bronchial catarrh; diarrhoea, dysentery, intestinal parasitosis. Latex-Vermifuge. Used in diseases of Urinogenitory tract.
41	<i>Ficus benghalensis</i>	Moraceae	Bargad	Tree	Leaves-a moderate sterilizer, given to women after menses. Leaves and bark-used in skin diseases.
42	<i>Ficus racemosa</i>	Moraceae	Gular	Tree	Astringent and antiseptic, used in abortions, menorrhagia, leucorrhoea, urinary disorders, skin diseases, swellings fruits digestive, used in diarrhea, dyspepsia, dysentery, and hemorrhages. Ripe fruits-antiemetic, used in haemoptysis. Root and fruit-hypoglycemic. Bark-decoction is used in skin diseases, inflammations, boils and ulcers.
43	<i>Ficus religiosa</i>	Moraceae	Pipal	Tree	Bark-astringent, antiseptic, alterative, laxative, haemostatic, (used in diabetes, diarrhoea, leucorrhoea, menorrhagia, nervous disorders; also in skin diseases.) Applied externally on unhealthy ulcers and wounds. Leaves and twigs- laxative
44	<i>Grewia flavescens</i>	Tiliaceae	Chapun	Shrub	Leaves use in stomach disorders.
45	<i>Helicteres isora</i>	Sterculiaceae	Maror falli	Shrub	Pods & bark-antidiarrhoeal, Astringent, antibilious. Bark & root-used in cough & asthma. Leaf-paste used against, skin diseases. Pods Used in fever due to cold. Seeds-aqueous extract administered in colic and dysentery.
46	<i>Holoptelea</i>	Ulmaceae	Papdi	Tree	inflammation, worm infestations, vomiting, skin

	<i>integrifolia</i>				diseases, leprosy, diabetes, bleeding, rheumatism, obesity
47	<i>Ipomoea nil</i>	Convolvulaceae	Kaladana	Herb	The seeds used as a purgative. Over of the drug cause irritation.
48	<i>Ipomoea pes-tigridis</i>	Convolvulaceae	Kaladana	Herb	The root is purgative.
49	<i>Lannea coromandelica</i>	Anacardiaceae	Gurjan	Tree	Leaves used in chronic rheumatism.
50	<i>Lantana camara</i>	Verbenaceae	Lalten	Shrub	Leaves are used in piles, sprain and respiratory diseases.
51	<i>Mallotus philippensis</i>	Euphorbiaceae.	Rohni, Roli	Small Tree	Gland & hair of fruit- purgative, anthelmintic, styptic. Used for the treatment of tapeworm Infestation; in scabies, ringworm, herpes. Fruit- hypoglycemic, spasmolytic, antibacterial.
52	<i>Mangifera indica</i>	Anacardiaceae	Aam	Tree	Fruit contains vitamins A,B,C. Leaves are used in blood dysentery, soreness of voice. Raw fruit for prickly heat.
53	<i>Miliusa tomentosa (rox)</i>	Annonaceae	Bakayan	Small tree	Fresh or mature fruits are given for during summer to cur weakness in children.
54	<i>Mitragyna parvifolia</i>	Rubiaceae	Kalam	Tree	Bark used in muscular pain. Bark & root- febrifuge, antispasmodic.
55	<i>Momordica balsamina</i>	Cucurbitaceae	Karela	Herb	Fruit -applied to burns, hemorrhoids & chapped hands. Internally, cathartic, hypoglycemic
56	<i>Morus alba</i> Linn.	Moraceae	Sahtut	Small tree	Fruit-cooling, mild laxative. Used for sore throat, dyspepsia and melancholia. Leaves and root bark-expectorant, diuretic, hypotensive. Bark extract- hypoglycemic. Leaf-anti-inflammatory, emollient, diaphoretic. Use d as a gargle in inflammations of the throat.
57	<i>Mucuna pruriens</i>	Fabaceae	Kouch	Climber shrub	Seeds used as nervine tonic, Root are used in skin diseases and Parkinson syndrome.
58	<i>Naringi crenulata</i>	Rutaceae	Banasa Kaith	Small tree	Stomach troubles, diarrhea, vomiting , cough, bronchitis, hiccough, cardiac debility, dysentery, diseases of mouth , tumours', asthma, consumption, eye diseases, headache, leucorrhoea, wounds, ulcers, bleeding, diabetes
59	<i>Nicotiana tabacum</i>	Solanaceae	Tambaku	Herb	Leaves- locally applied for muscle relaxation in dislocation, hernia and orchitis. Also for rheumatism. Not used internally as a medicine.
60	<i>Nyctanthes arbor-tristis</i>	Nyctanthaceae	Har singar	Small tree	Leaves-bitter tonic, anti inflammatory, antispasmodic, hypotensive, respiratory stimulant. Used for fevers, rheumatism, obstinate sciatica.
61	<i>Ocimum bacillacum</i>	Lamiaceae	Manbawchi	Herb	Plant is useful in fever, cough, worms, skin diseases and piles.
62	<i>Ocimum sanctum</i>	Lamiaceae	Tulsi	Herb	The leaves juice used in bronchitis, skin diseases, earache, colds, seeds are useful of urinary system, root is given in malarial fever.
63	<i>Opuntia elatior</i>	Cactaceae	Takna thour	Srub	The useful in diabetes, that readily dislodge and cause severe skin irritation and eye damage.
64	<i>Phoenix sylvestris</i>	Arecaceae	Khajur	Small tree	The fruit is cooling, oleaginous, cardio tonic,

					good in heart complaints, abdominal complaints, fevers, vomiting and loss of consciousness.
65	<i>Phyllanthus niruri</i>	Euphorbiaceae	Hajardane	Herb	Infusion of young shoots given in dysentery. Milky juice used on offensive sores.
66	<i>Pinus roxburghii</i>	Coniferaceae	Chir	Tree	Oil uses in chronic, bronchitis, typhoid ,enema.
67	<i>Pongamia pinnata</i>	Fabaceae	Karanj	Tree	Seed powder is applied scalp for dandruff treatment. Leaf juice as a nasal drops for migraine.
68	<i>Prosobis julifera</i>	Mimosaceae	Vilayati babul	Small tree	The branches, stems and in bark can be used as purgatives. Treat fever. Bladder infection, measles or fever. The leaves can be used for are diarrhoea.
69	<i>Ricinus communis</i>	Euphorbiaceae	Arandi	Shrub	The seeds are poisonous can be fatal, oil used as a purgative, castor- oil is used in making contraceptive jellies and creams.
70	<i>Sida cordifolia</i>	Malvaceae	Krasti	Herb	Root is used in facial paralysis and in healing wounds.
71	<i>Sida rhombifolia</i>	Malvaceae	Krasti	Herb	Leaves given in diarrhea during pregnancy. Leaves are pounded and applied cuts.
72	<i>Solanum xanthocarpum</i>	Solanaceae	Kateri, Ringni	Herb	The drug is used in cough, asthma, pain in chest, & certain kinds of fevers. It is diuretic and useful of stones in bladders.
73	<i>Soymida febrifuga</i>	Meliaceae	Rohan	Shrub	Bark is used in tonsillitis, stomatitis.
74	<i>Sterculia urens</i>	Sterculiaceae	Katira, Kaday	Large tree	Bark is used in dysentery, cough and sinus.
75	<i>Syzygium cumini</i>	Myrtaceae	Jamun	Tree	The bark is astringent & used in sore throats, bronchitis, asthma, ulcers & dysentery, purifying blood the fresh juice of bark with goats milk is given in diarrhoea.
76	<i>Tephrosia pumila</i>	Fabaceae	Chhota Pawar	Herb	A root useful for piles and hydrocoel. seed oil is used in ringworm & cough.
77	<i>Terminalia arjuna</i>	Combretaceae	Tal	Large tree	Bark is used as a heart tonic. Juice of fresh leaves is used for earache.
78	<i>Terminalia bellirica</i>	Combretaceae	Baheda	Large tree	Fruit wall is used for cough, sore throat and headache. Fruit is used in the preparation of trifala churn a.
79	<i>Tribulus terrestris</i>	Zygophyllaceae	Gokhru	Prostrate herb	The fruits are used in urinary complaints & sexual weakness it is cooling.
80	<i>Tridax procumbens</i>	Asteraceae	Ghavpala	Herb	Leaves are antiseptic applied to fresh wound.
81	<i>Vernonia cinera</i>	Asteraceae	Nili rokdi	Herb	Used in chronic fiver, malaria and indigation.
82	<i>Vetiveria zizaniodes</i>	Poaceae	Khas	Shrub like grass	Root is used in sunstroke, fever, acidity, urinary diseases, sprain and hepatitis.
83	<i>Vitex nigrundo</i>	Verbenaceae	Nigad	Large shrub	Leaves used in rheumatism, lumbago & graying of hair.
	<i>Withania somnifera</i>	Solanaceae	Asawagandha	Srub	The plant useful in sexual and general weakness and rheumatism, diuretic the root powder is applied locally on ulcers and inflammations the antibiotic and antibacterial activity of the root.
85	<i>Woodfordia fruticosa</i>	Lythraceae	Ladokadi	Shrub	leprosy, skindiseases, burning sensation, bleedings, leucorrhoea, wounds, diarrhoea,

					dysentery, foul ulcers, diabetes, fever, fracture, liver diseases, thirst, leprosy, diseases of blood, stimulant in pregnancy
86	<i>Wrightia tinctoria</i>	Apocynaceae	Dudhi, Khirni	Tree	Seed is used in chronic fever. Root purifying blood. Seed and bark is used in kidney stone, diarrhoea and anemia.
87	<i>Ziziphus mauritiana</i>	Rhamnaceae	Beri	Tree	Fruits is used in mental retardation, cold, flu, stomachic, piles, mouth ulcer, conjunctivitis and for hair care.
88	<i>Ziziphus nummalaria</i>	Rhamnaceae	Jhad	Shrub	The fruits are good source of vitamin c. and this tree is called wildlife tree.
89	<i>Centella asiatica</i> (L.)	Apiaceae	Brahmi-buti	Herb	Blood purifier, tonic, diuret leprosy, syphilis, wounds, mental disorders, cooling, b nourisher, improves memor
90	<i>Cleome viscosa</i> L.	Cleomaceae	Jakhya, Hulhul	Herb	Rheumatic, arthritis, otorrho and wounds
91	<i>Desmodium heterocarpon</i> (L.)DC	Fabaceae	Sarivan	Herb	Fever, cough, tonic
92	<i>Desmodium gangeticum</i> (L.) DC.	Fabaceae	Salpalnu	Herb	Astringent, tonic, bronchitis, asthma, dysentery, eye infec vomitting and fever
93	<i>Abelmoschus manihot</i> (L.) Med.	Malvaceae	Jangli Bhindi	Herb	Pneumonia
94	<i>Sida acuta</i> Burm.f.	Malvaceae	Kristi	Herb	Gastric diseases, vermifuge stomachabe, gonorrhoea, bu abortifacient, antiemetic, anthelmintic, tonic
95	<i>Corchorus aestuans</i> L.	Tiliaceae	Titpatti		Dyspepsia
96	<i>Corchorus oltorius</i> L.	Tiliaceae	Kosta		Fever.
97	<i>Kydia calycina</i> Roxb.	Malvaceae	Phuilau, Pulao	Tree	Body swellings, body pain, boils, diabetis, febrifuge, increases saliva, inflamatio rheumatism
98	<i>Acanthospermum hispidum</i> DC.	Asteraceae	Gokhru, Gondhichedi	Herb	Skin diseases and fever
99	<i>Blumea lacera</i> (Burm.f.) DC.	Asteraceae	Kakranda	Herb	Vermifuge, piles, cuts and wounds, burns, urinary complaints,

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