



Ethno- Medicinal plants of Jhunjhunu district, Rajasthan

Kaushal Bhargava,

Zakir Husain Delhi College,

University of Delhi.

Abstract

Man has been dependent on plants from ages. Ethnobotany is the branch which shows the direct relationship of man with the plants. Ethnobotany has given rise to many subdisciplines, like Ethnoecology, Ethnotaxonomy, Ethnomycology, Ethnotoxicology, Ethnonarcotics, Medico-ethnobotany etc.

The present study talks about the ethnomedicinal uses of plants found in Jhunjhunu district of Rajasthan. The data was collected by different tribes and plant healers through interviews with them. The purpose of this study is to make aware local people about the uses of plants growing in their vicinity and conserving our traditional knowledge.

Introduction

Ethnobotany is the study of a region's plants and their practical uses through the traditional knowledge of a local culture and people. An Ethnobotanist thus strives to document the local customs involving the practical uses of local flora for many aspects of life, such as plants for medicine, food and clothing. Richard Evans Schultes often referred to as 'Father of Ethnobotany' explained this discipline.

Since the time of Schultes the field of Ethnobotany has grown from simply acquiring Ethnobotanical knowledge to that of applying it to a modern society primarily in the form of pharmaceuticals. Intellectual property rights and benefit-sharing arrangement are the important issue in the ethnobotany.

Ethnobotany studies plant diversity across different regions and it studies the plants which have medicinal value only. This field incorporate techniques and research from many fields, especially Anthropology, Archaeology, Biology, Botany, Chemistry, Entomology, Geography, History, linguistics, Medicine and Zoology. The primary aim of this research article is to make aware people about the medicinal properties or uses of the plant growing in their area.

Material and methods

Jhunjhunu is a district in the shekhawati region located at the border of Rajasthan and touching its boundary with state of Haryana. Most of the part of the district has sand dunes but some part has hills also. Jhunjhunu is situated between 27° 21' to 28° 12' north latitude and 74° 44' to 75° 25' east longitude. The study of the area was done during different seasons all over the year winters (December to February), Summer (march-June), monsoon (July-September) and post monsoon (October-November). Interviews were carried out of the herbal healers, vendors, physicians, local people etc. Field trips to the different part of the districts were done and many plants were selected and the species were identified by the help of herbarium and literature sources (Shetty & Singh 1987, Shetty & Singh 1991, Shetty & Singh 1993, Bhandari 1995). Different medicinal books were also referred (kirtikar & Basu, 1993; Sukh Dev 2005, Prajapati et al., 2003) ayurvedic books were also cross referred namely Vanoshadhi Chandrodaya (Chandrodaya, 1953). One of the local floras was also checked for identification of plants (kirtikar & Basu, 1993).

Result and Discussion

The present paper reveal that Jhunjhunu is rich in ethnomedicinal plant diversity. Plants belonging to 35 families was collected from the study area. All the plants have some medicinal property and used in curing many diseases like kidney disorder, urinary disorder, diabetes, jaundice, arthritis, skin disorder, fever, respiratory diseases, anaemia, constipation, liver diseases, leprosy, rheumatism, dysentery, eye diseases, tooth ache etc. The ethnomedicinal plants were first dried and stored then they are used by plant healers for further use. Jhunjhunu is rich in medicinal plants. Some of the species are rare and threatened like *Ephedra foliata* Boiss & Kotschy ex. Boiss. These species are found in abundance in Jhunjhunu but due to their high demand these species are found in abundance in Jhunjhunu but due to their high demand these species are now rare and threatened. Some plants such as *Prosopis juliflora* which is exotic is seen everywhere so it has become a threat to indigenous or local plants species. So, this research article main aim is to create awareness among people about the local medicinal plants.

Table 1. List of ethnomedicinal plant species of Jhunjhunu .

S.N.	Botanical Name	Family	Local Name	Parts Use	Ethnomedicinal uses
1	<i>Abrus precatorius</i> L.	Fabaceae	Chirmi/ Ratti	Leaves, seed, root	Joint pain, paralysis, skin disease, tetanus, rabies, fever, cough, cold, jaundice, nerve tonic, leprosy, anti-allergic
2	<i>Abutilon indicum</i> (L.) Sweet	Malvaceae	Kanghi	Root, bark, leaf, seed	Uterine haemorrhagic discharges, febrifuge, anthelmintic, diuretic, alexiteric. toothache, boils, lumbago, chest troubles, bronchitis, piles, gonorrhoea
3	<i>Acacia catechu</i> (L. f.) Willd.	Mimosaceae	Katha	Leaves, stem, bark, root	Tumours, gonorrhoea, asthma, menorrhoea, vomiting
4	<i>Acacia nilotica</i> (L.) Delile	Fabaceae	Babul	Bark, latex, gum, pods, leaves and seeds	Cholera, on burn, urine-genital diseases, toothache, colic pain, scorpion sting, ulcers.
5	<i>Acacia senegal</i> willd	Fabaceae	Kumbat	Bark, flower, gum	Demulcent, emollient, inflammation, haemorrhage, intestinal mucous, diabetes
6	<i>Achyranthus asper</i> L.	Amaranthaceae	Chirchita/ Latjira	Leaves, root, seed, whole plant	Diuretic, astringent. laxative, skin diseases. astringent, dropsy, piles, eruption, colic, gonorrhoea, pneumonia, hydrophobia, urinary problems, stomach ache, rheumatic pain, stones of bladder
7	<i>Aegle marmelos</i> (L.) Corr.	Rutaceae	Beal	Bark, leaf, fruit	Abdominal pain, heart palpitation, urinary troubles, hypochondriasis, laxative, febrifuge, ophthalmic, dysentery, diarrhoea, deafness
8	<i>Aerva javanica</i> (Burm. f.) Shult	Amaranthaceae	Bui	Whole plant	Decoction for swelling, digestive disorders, promote urination
9	<i>Agave americana</i> L.	Agavaceae	--	Root, Leaf, gum	Diuretic, diaphoretic, anti- syphilitic
10	<i>Aloe vera</i> (L.) Burm. f.	Liliaceae	Gheeganwar	Whole plant	Digestive disorders, arthritis, rheumatism, skin disorder, asthma and chronic bronchitis
11	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Choulai	Leaves, roots	Laxative, abort faint, constipation, stomach ache, wounds, boils, diarrhoea, diuretic, gonorrhoea, eczema, leucorrhoea
12	<i>Argemome mexicana</i> L.	Papavaraceae	Satyanasi	Whole plant	Diuretic, purgative, aphrodisiac, strangury, leucoderma, cure piles, ring worm, eczema, scorpion bite, constipation flatulence, abdominal colic pain, respiratory diseases, blood purifier, joint pain
13	<i>Asparagus adscendens</i> Roxb.	Liliaceae	Safed musli	Rhizome	Rejuvenate, blood vitalising disorder, burning sensation properties
14	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Satavari	Tuber	Rejuvenate, cold, tonic, galactagogue, anaemia, weakness, aging debility, dysentery, tuberculosis, burring micturition, joint pain, epilepsy, tuberculosis, cure piles
15	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Neem	Leaf, flower, fruit, bark, seed, oil	Blood purifier, antitoxin, antibacterial, antiviral herb, skin diseases, blood disorder, rheumatism, diabetes, scabies, malarial fever

16	<i>Barleria prionitis</i> L.	Acanthaceae	Bajradanti	Leaf, root, Whole plant	Cust, rat poisoning, nervous system, diuretic, fever, rheumatism, liver disease, indigestion, constipation, jaundice, toothache, joint pain, toothache
17	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Sata/ Punarnava	Whole Plant	Astringent, biliousness, anaemia, leucorrhoea, inflammation, blood purifier, scorpion bite, kidney troubles, promote urination, diarrhoea, diarrhoea, vomiting, night blindness
18	<i>Calotropis procera</i> (Ait) Ait. F.	Asclepidaceae	Aak	Roots, bark, flowers, latex, leaf	Malarial fever, tuberculosis, asthma, cough, abdomen pain, antitode, diabetes, malaria fever, destroy guinea worm in intestine, rheumatic joints, cure migraine, cure leprosy, scorpion sting, cure deafness, indigestion
19	<i>Capparis decidua</i> (Farssk.) Edgew	Capparidaceae	Kair	Root, bark, flowers, fruit	Rheumatism, toothache, cardiac complaints, cure piles, improve digestive system, toothbrush, anti-cholesterol, joint pain, cough, asthma, respiratory problems
20	<i>Cassia occidentalis</i> L.	Caesalpiniaceae	Kesundo	Root, Bark	Skin diseases, astringent. anthelmintic, diabetes and urinary disorders, ophthalmic, conjunctivitis, heart disease, jaundice, cure filariasis
21	<i>Chenopodium album</i> L.	Chenopodiaceae	Bathua	Seeds	Skin diseases, urinary trouble, colic worms, cardiac disorders, jaundice, anaemia
22	<i>Citrullus colocynthis</i> (L.) Schard.	Cucurbitaceae	Gartoomba/ Tumba	Roots, fruits	Jaundice, purgative, cure scrotal enlargement, cure warts, premature ejaculation, cure osteo-arthritis, earache, constipation, stomach-ache, cure scrotal enlargement, kidney pain, cure jaundice, relive mastalsia
23	<i>Cleome gynandra</i> L.	Capparidaceae	Safed hullul	Leaves, seeds, root	Typhus fever, cough, headache, skin disease, scorpion sting, cure earache
24	<i>Commelina benghalensis</i> L.	Commelinaceae	Moriya bati	Whole plant	Leprosy, liver complaints, sunstroke, malarial fever
25	<i>Cucumis melo</i> L.	Cucurbitaceae	Kachri	Fruits, seeds	Digestive, increase immunity, ophthalmic, bronchitis, chronic fever, burning sensation
26	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Dubghas	Whole plant, roots	Piles, Chronic gleet, stomach-ache, Menstrual disorders, dysentery. skin disease, jaundice, astringent
27	<i>Cyperus rotundus</i> L.	Cyperaceae	Nagarmoth	Tuber	Menstruation, problem, scabies, eczema, dyspepsia, in worms, Fragrant, astringent, diuretic, fever, cough, diarrhoea, galactagogue, stimulant, diuretic, stomach complaints
28	<i>Cyperus triceps</i> (Rottb) Endl.	Cyperaceae	Chuhe ki Dadi	Roots	Liver stimulation, decoction for fever
29	<i>Datura stramonium</i> L.	Solanaceae	Kantawala- datura	Leaf, Flower, Seed	Asthma, in ophthalmology, snake bite, fever, worms, cure rabies, breast pain
30	<i>Desmostachya bipinnata</i> (L.) Stapf	Poaceae	Dab/Kusha	Whole plant, Root	Dysentery, menorrhagia, diuretic
31	<i>Emblica officinales</i> Gaertn	Phyllanthaceae	Amalaki	Dried fruit	Hyperacidity, bleeding disorder, urinary ailments, anaemia, antioxidants which contain vitamin-C, rejuvenator
32	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Laldhudi	Aerial part	Worms, asthma, bronchial infection, typhoid, vomiting, ulcers, eczema, scabies, pimples, galactagogue
33	<i>Evolvulus alsinoides</i> L.	Convolvulaceae	Vishnukranta	Whole plant	Febrifuge, enhance memory, asthma, brain tonic, psychosomatic disorder, epilepsy, hysteria, fever, syphilis, cooling properties, intestinal amoebiasis, leucorrhoea, enlargement of spleen
34	<i>Fagonia indica</i> L.	Zygophyllaceae	Dhamaso	Whole plant	Anti-oxidant, anti-microbial, astringent, anti-tumor, wound healing, analgesic, anti-allergic, skin disease, sores, leprosy, fever

35	<i>Ficus benghalensis</i> L.	Moraceae	Bargad	Tender ends of the aerial roots, latex fruits, buds leaves, bark	Obstinate vomiting, piles, boils and blisters, sexual debility, spermatarrhoea, diarrhoea, cough, toxæmia, diabetes, rheumatism, lumbago, eye tonic, fractured bone, vomiting, leucorrhoea, gonorrhoea, skin diseases, wound, female infertility, astringent, ophthalmic
36	<i>Leptadenia pyrotechnica</i> (Farssk.) Decne	Asclepidaceae	Khimp	Whole plant	Wound healing, skin disease, rheumatoid arthritis, diabetes, gastric problems, constipation
37	<i>Leucas aspera</i> (Willd.) Link	Lamiaceae	Paniharin	Leaves, flowers	Jaundice, fevers, ulcers, intestinal, painful swelling, eczema, warts, headache, migraine, abdominal pain, gastric complaints, leprosy, chicken pox, cough, colds
38	<i>Momordica balsamina</i> L.	Cucurbitaceae	Karela	Fruits	Cathartic, diabetes
39	<i>Ocimum sanctum</i> L.	Lamiaceae	Tulsi	Whole plant	Cough, cold, fever, burns, wounds, skin disease, forehead, ringworm, respiratory tracts infection, indigestion, wound, earache, conjunctivitis, anti-poisoning
40	<i>Pedaliium murex</i> L.	Pedaliaceae	Bada Gokhru	Fruits, leaves, root	Gonorrhoea, dysuria, renal calculi, haematuria, growth of hair, rheumatoid arthritis, sexual debility, lumbago, dysuria, tonic, urinary disorders, burning micturition
41	<i>Phyllanthus niruri</i>	Euphorbiaceae	Bhui-anwla	Whole plant	Urine-genital disease, gonorrhoea, dropsy
42	<i>Prosopis cineraria</i> (L.) Druce	Feabaceae	Khejri/janti	Inflorescence, flowers, bark, fruit	Rheumatism, miscarriage, fruits in pregnancy, piles, increase memory power, infertility, against abortion, injury
43	<i>Ricinus communis</i> L.	Euphorbiaceae	Erand	Leaves, seeds, carbuncle, oil, root	Rheumatism, healing properties, cure paralysis, rheumatism, joint pain, backache, jaundice, cure piles, wounds, eczemas, contraceptive
44	<i>Salvadora persica</i> L.	Salvadoraceae	Jhal/ Chotapilu	Roots, bark, seed, leaf, fruit	Asthma, gonorrhoea, gastric problems, rheumatism, scurvy, blisters, constipation, stomach-ache, piles, tumours, ascites, joint pain, indigestion, pyorrhoea, protect sunlight
45	<i>Solanum indicum</i> L.	Baigan Kateli	Seeds		Toothache, anorexia, dysuria, alopecia, digestion, cough
46	<i>Solanum nigrum</i> L.	Solanaceae	Makoy	Whole plant	Dysentery, fever, narcotic, psoriasis, blood purifier, cure fever, cure vomiting, cough, cold, skin disease, greying hair, rejuvenator, swelling, body pain, liver and spleen, enlargement, antiseptic, diuretic, anti-diabetic, cough, eye, ear and nose disease, throat burning, liver inflammation, chronic fever
47	<i>Tecomella undulata</i> (Sm.) Seem	Bignoniaceae	Rohida	Bark	Syphilis and leucorrhoea, jaundice, eye disease, cough, cold, fever, skin disease, eczema, abscesses, tooth brush, fever
48	<i>Tinospora cordifolia</i> (Willd.) Miers	Menispermaceae	Guduchi	Stem	Most versatile Rejuvenate, herb, diabetes, malaria fever, vomiting, urinary problems, gout, leucorrhoea, chronic fever, gastritis disorder, pneumonia, rheumatism, jaundice
49	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Bhankari	Roots, leaves, fruits	Stomach-ache, tonic, urinary complaints, diuretic, anti-gout properties, dysuria, anuria, urinary stones, increase sexual power, gonorrhoea, haematuria, growth of hair, rheumatoid arthritis, diuretic, tonic, cough, scabies, stomachic problems, diabetes
50	<i>Withania somnifera</i> Dunal	Solanaceae	Ashawgandha	Roots, leaves	Sexual weakness, cough, dropsy, diuretic, inflammatory, anti- arthritis,

					rejuvenator, tonic, analgesic and trauma, anxiety, heart disease, diabetes, asthma, bronchitis, swelling, boils eczema, rheumatic pain, skin disease, leucorrhoea, rickets, tumours, anti-bacterial, respiratory, urino-genital disorders, diuretic, blood purifier, promote urination, ulcers
51	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Ber/ bordi	Whole plant	Pain, wound healing, blood purifier, constipation, pyorrhoea, fever, skin disease, cold, dysentery, cough inflammation in gums, indigestion
52	<i>Ziziphus nummularia</i> (Burm.f.) Wt. Arn	Rhamnaceae	Jhadi-ber	Leaves, fruits	Biliousness, astringent, cooling, vigour, asthma, eye disease, bone joining, toothache, cold, cough, paralysis, pyorrhoea, dysentery, hair fall, skin disease, regularize menstruation., rodents

Conclusion

It can be concluded that district has highly indigenous vegetation which has vast medicinal uses. So, this district has immense potential for the cultivation of these medicinal plants. These plants grown under the tremendous stress of drought and unfavourable conditions throughout the year.

The rural people of Jhunjhunu have a rich traditional knowledge of medicinal plant. This knowledge not only help in conservation of such rare and threatened species which are vanishing rapidly but also provide new vision for better health care system.

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