SOME PLANT USED FOR URINARY TRACT DISEAES FROM SHIVNERI FORT TALUKA JUNNAR DISTRICT PUNE (M.S) INDIA

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INTRODUCTION

Formally, they were directly dependent on plants, but due to modernisation and with advancement of science and technology this as a direct source has been slightly reduced. All the same, the trends and other aboriginal people, who have traditionally lived in the forest's continue to remain fully dependent on plants for their ethnobotanical studies of different living close to the nature, the people residing in and nearby forests have so dilated Unique knowledge about plant utilization for different purposes of their centuries old experience. Therefore, clinical studies of different tribal localities may lead to find new information on spoliated natural resources and new uses of existing rescues as sources of medicine, food, etc. But at some places recent changes in tribal attitude due to habitat displacement, deforestation, modernization, etc. have led to decline and even disappearance of this rich knowledge system. Therefore, it is essential to gather their entire knowledge on plant use before king it forever. It is well understood now that in one or more ways man's life has always been intimately connected with the plants.

There is practically no human activity in which plants do not play a role. Therefore, in widest sense, ethnobotany has a linkage with almost every other faculty of science and field of knowledge. Today ethnobotany has become an important and crucial area of research and development in medicine research, conservation of biodiversity at genetic, specific and ecosystem level and well considered in socio-economic development of the region. In the recent past there has be a global trend towards revival of interest in the indigenous system of medicine. Even the developed countries equipped with modern allopathic medicines, have started realizing the potentialities.

In our in urinary of traditional system of medicine. Furthermore, the search for new herbal drugs have been strengthened by the widespread rejection of chemicals and the growing attraction for herbal remedies. There is an increasing awareness among the people about the use of herbal drugs, which are believed to be safe and do not produce undesirable side effects like most of the modern synthetic drugs and this awareness is one of the reasons, which created enormous worldwide demand for herbal drugs Presently, the importance of ethnobotanical research, mainly for medicine and food, is keenly felt as it represents one of the best avenues for searching new economic plants for food and medicine. In recent years several workers became attracted in ethnobotanical studies and a lot of information about different uses of plants prevalent among the various tribes has been gathered.

The recent rediscoveries of certain remarkable uses of plants gave new life to this ancient science of ethnobotany. Several plants (eg, cocoa, maize, rubber, etc.) used today, were originally identified and developed through indigenous knowledge, the chemical constituents like tranquilizers, rescinnamine and reserpine have been obtained from the roots of *Rauwolfia serpentina*, used in India for more than a thousand years in folk medicine for snake bite (Maheshwari, 1996). A recent drug, 'Jeevani' is being produced from the plant *Trichopus zeylanicus* ssp. travancoricus, which is having strong energy enhancing properties. The drug is seen as a rival to the South Korean root ginseng (Pinax ginseng). Other examples where ethnomedicines have provided lead in the development of drugs used in modern system of medicine are cocaine, morphine, quinine, colchicines, atropine, ephedrine, codeine, emetin, caffeine, reserpine, vinblastine, gugulin and taxol, etc. (Mehrotra Shanta, et al., 1996).

STUDY AREA

Junnar taluka is in the Pune district in the Indian state of Maharashtra. It is northernmost taluka of the district. The area is well known for two of the Ashtavinayak temples at Lenyadri and Ozar respectively. The taluka is also the home of Shivneri Fort, GMRT (Khodad), and Vikram Sarabhai Earth Station at Arvi. There is also a tomb (Samadhi) at Ale of the buffalo that recited Vedas when requested by the 12th century Sant Dnyaneshwar. The five main dams are named Yedgaon, Pimapalgaon Joga, Manikdoha, Chilhewadi and Wadaj.[1] An ancient place called Naneghat is there. It is known for historical evidence that was written in Bramhi Lipi, on the walls of the caves. Darya Ghat is 21 km from Junnar Which is famous for waterfalls.Kukdeshwar an ancient temple of lord Shiva is in Junnar.

METHODOLOGY

List of plant is made by personal interviews of vaidu and observation. During This work area visited by 12 -13 times annually. Find the plant and its medicinal uses by using books and asking some old people. We have collect more than 150 out of them 20 plant used in urinary tract diseases During work different localities analysed. In the time of work photograph are taken for making digital herbarium also voucher specimen collected and made herbarium which is summited to Department of Botany of Annasaheb Awate College Manchar Tal- Ambegaon Dist.- Pune. Voucher Specimen collected in Flowering and fruiting stage for identification with the help of different floras.

ENUMARATION

OXALIDACAE

Oxalis corniculata L.

Herbs, with procumbents step. Leaves palmately 3-foliate; leaflets 1.2-1.5X1.0 1.3cm, obcordate ,cuneate at base petioles 3-7cm long. Flower yellow in sub umbellate, axillary cymes, peduncles 4-7cm long. Capsules ca.1.5 cm long, linear-oblong, 5-angled, shortly beaked ,tomentose. Seeds numerous, ovoid.

Fls & Frts.: September to March

Med.: 1. **Urinary tract diseases**- The whole plant is wrapped in banana leaves and cooked under steam. There after juice extracted by squeezing the sane pinch of salt is added and is taken after meals**.**

.RAHMANACAE

Ziziphus mauritiana Lam.

Shrubs or small trees, 2-3m tall. Leaves 2.0-3.5x1.5-3.0 om ovate elliptic, 1990 slightly oblique at base. Margins denticulate, glabrous above, whitish tomentose below. Flowers greenish-yellow in axillary fascicled drupes 1.0-1.5om as965, freshy. globose, orange or red when ripe edible**.**

Fls. & Frts.: September-October.

Distrib: Common in ghats and on plains.

Med

1. "Urinary disorder or blood in urine. One teacup juice of stem bark with one teaspoon Cuminum cyminum seeds and sugar taken orally twice a day for 7 days.

FABACEAE

Abrus precatorius L.

Twiners, perennial, Leaves 5-10 cm, leaflets 10-20 pairs, 0.8-1.5 x 0.4-0.5 cm, oblong, rounded at base, found and minutely apiculate at apex. Flowers pink or white, in many flowered racemes. Pods 2.5 x 3.5 x 0.9-1.2 cm, oblong, turgid, truncate at apex with a curved beak. 3-5 ca 0.4 cm across, shining, bright scarlet with a black spot.

Fls & Frts: August - December.

Distrib: Common in the forest.

Med:1. "Kidney stones: Leaf juice 3 to 4 table spoon taken early morning for 15 days to remove or dissolve kidney stones.

2. Blood purifiers: 20-30ml of leaf extract given once a day for 15 days or leaves eaten raw.

Tephrosia tinctoria (L.)

Undershrubs. 0.4 1.0, woody; stems and branches pubescent. Leaves imparipinnate compound, leaflets 3-8 x 1.2-2.5 cm, elliptic oblong, mucronate, glabrous above, silky below. Flowers bright pink, in racemes. Pods 3.5-5.5 x 0.6 cm, linear, mucronate, silky hairy, 8-12 seeded. Seeds 0.3 cm long ellipsoid.
Fls & Fits: September - October.
Distrib. Common weed along road side and wasteland.
Uses Med.: "Kidney stone: Root extract 20-25ml given to children during bed time.

MIMOSACEAE

***Acacia nilotica* (L)**
Trees 4-8 m tall, stems with longitudinally fissured bark Leaves 5-10 cm long 2-pinnae, pinnae 4-6 pairs, up to 5 cm long, leaflets 10-25 pairs. 0.3-6x0.1 0.2- 0.2 cm, liner oblong, subobtuse; stipular spine straight, up to 60 whitish. Flowers in axillary fascicles Pods 6-15x12-15 cm, 8-12 seeded, grayish downy**.**
Fls. & Frts. More or less throughout the year.
Distrib: Very common along roadsides, near fields and on wasteland.
Med:. Spermatogenesis: Leaves, bark, and fruit taken in equal amount and crushed with cow milk and sugar, 100ml extract taken twice a day for 21 days.
***Mimosa pudica* L**
Undershrub , stem diffuse, spreading prickly , leaves digitate , leafless linear oblong , acute , sensitive to touch. Flower head pink**.**

1. **Urinary tract diseases:** The whole plant with an equal amount of the leaves and stem of *Zeheria scabra*, crushed together decoction 20-25ml taken once a day for 10 days. and then boiled.

CRASSULACEAE

***Kalanchoe pinnata* (Lam.)**
Herbs, succulent, glabrous, 0.3-1.0 cm high. Leaves decussate; lower simple to compound, upper 3- 5 foliolate; leaflets ovate elliptic, margins crenate serrate. Flowers reddish purple; pendent, in panicles. Follicles enclosed in persistent papery calyx and corolla. Seeds oblong ellipsoid.
Fls & Frts: December - February.
Uses: Kidney stone -Paste of leaves with *Eclicte cepstrata* whole plant in equal proportion made in to 1 gm pills taken orally one or two pills twice a day for 20 days to dissolve kidney stone cure.
Jain, 1981 boils Jain, 1991-) Kidney stone Chopra et al. 1956-) wounds, boils Chamarjee & Satyesh, 2003-09-(f) boils**.**

CUCURBITACEAE

***Coccinia grandis* (L)**
Perennial glabrous, climbing herbs, stem angular, tendrils slender Leaves broadly ovate minutely dentigulate along margins, rarely dissected. Flowers axillary solitary Corolla white. Fruits ellipsoid, rounded at bothends. Seeds oblong, yellowish
Kidney stone: 20-40 ml extract of handful leaves with one tea spoon Cuminum cyminum seeds sugar and made volume upto 200 ml with Phoenix sylvestris toddy, given once a day for 5days to dissolve kidney stone.

APIACEAE

***Centella asiatica* (L.)**
Slender, herbaceous, creeping herbs; stems often reddish, rooting at nodes. Leaves orbicular reniform, rather broader than long flowers in fasciled umbels Each umber consisting of 3-4 pink, sessile flowers. Fruits ovoid, greenish brown.
Fts & Frts: May- December,
Distrib: Common in moist places, Strems.
Uses
Med.:1. Urinary diseases. The decoction of leaves is given twice a day against discharge of yellowish urine.

CONVOLVULACEAE

***Argyreia nervosa* (Burm. f)**
Extensive twiner, stem densely white tomentose, with milky juice. Leaves broadly ovate to orbicular, deeply cordate at base, persistently white tomenstose beneath. Flowers in subcapitate cymes Corolla tubular-funnel shaped, pirk-purpule Stamens included filaments pilose at base Fruits globose, brown, seed 2-4 subglobuse black
Fls & Frts: September-March
1."**Urinary disorders:** One tea cup of root extract given twice a day.
2.. "Cooling effect 30-40 ml of leaf and root extract given twice a day. 4 and diabetic wounds: Leaf paste applied externally for healing wounds
Ed: leaves with salt and chilli are spread on the unlocked chapati by seed flour of Reil Cainus cajan role is made and steam cooked This is eaten as wad. Uncooked
Literature: Jain, 1991-) boils, edible; Kapoor, 2001-0) wounds

CUSCUTACEAE

***Cuscuta reflexa* Roxb**.,
Herbs, stems leafless, yellow or greenish - yellow, twining, with haustorial connections. Flowers greenish - yellow; in cymose - paniculate cluster. Capsules 0.6-0.8 cm across, depressed-globose, circumscissile near the base. Seeds 2 - 4, glabrous.
Fls & Frts: January - April.
Distrib: Very common parasite.
Uses:
Med.:1. "Urinary tract diseases: Consumption of the 20-30ml decoction of whole plant once a day for 4-5 days promotes easier flow of urine.
Literature: Sharma and Singh, 2001-(wp) chickens diseases.

SOLANACEAE

***Solanum virginianum* L**
Herbs, diffuse, prickles up to 2 cm long leaves 5-10 x 2.5-7 cm, lacerate, attenuate at base, acute at apex, prickly. Flowers light to deep purple in extra axillary, pedunculate racemes, berries ca 1.5 cm across, globose, yellow or orange -red when ripe. Seeds subspherical or spherical, compressed, minutely rugose.
Fix & Frts: December-May.
Distrub: Common in wastelands and open areas
Uses
1. **Kidney stone:** Root powder is mixed with a curd and taken once a day for up to 7 days for dissolving kidney stones.

VERBINACEAE

***Cherodendrum calamitosum* L**.
Erect shrubs or small trees with drooping or subscandent branches. Leaves deeply and coarsely crenate-serrate. Flowers in lax, cymose panicles. Corolla tubuler, often white, pubescent outside, much longer than lobes. Stamens exserted. Drupes globose, black. Fls & Frts: September-December.
Med: Kidney stone: Plant extract 20-30ml is given to dissolve kidney stone for
10-15 days.
***Clerodendrum philippinum* Schuer**
Tall erect shrubs, Flowers in compact corymbose panicles. Calyx 5-partite, shortly pubescent, reddish purple, often enlarged. Corolla white to pink. Stamens elighty exserted. Fruits drupaceous, bluish - black, Fls & Frts: July - October,
Distrib.:
Use: Med.: "Burning in urination: Root extract 20-30ml taken twice a day for 3 days.
Literature: jain1991(If) wounds.

AMARANTHACEAE

***Achyranthes aspera* L. var. porphyristachya**.
Herbs, stems erect, woody, 30-60 cm high. Leaves 3.5-11.0 x 2-5 cm, broadly elliptic to elliptic - lanceolate, acuminate at apex. Flowers greenish - purple, in elongated, terminal spikes. Utricles ca. 0.2 cm long, oblong - cylindric.
Fls & Frts: September - December.
Distrub: Common along roadsides and in open places, associated with *Amaranthus spinosus*, *Bidens biternata. Lagascea mollis* etc.
Uses:
Med:1. "**Urinary disorders:** The whole plant extract (20-30ml) for 15 days is taken for burning sensation in urine.
***.Aerva lanata* (L.)**
Herbs, 60-90 cm high; stems and branches tomentose. Leaves 0.5-1.5 x 0.2-1.0 cm, linear- oblong. Spikes forming terminal panicles. Utricles orbicular, thin. Seeds. ca 0.1 cm across, shining.
Fls & Frts: December- February.
Distrub: Common
Uses Med.1. Kidney stone: Curry of leaves eaten twice a day for 10-12 days.
***Digera muricata* (L.)**.
Herbs, 30-60 cm high. Leaves 1.5-7.0x1.0-4.5 cm, ovate or elliptic, rounded at apex Flowers in threes, in tax, axillary, peduncled, 5-12 cm long spikes. Fruits 0.25-0.3 cm across, globose, muriculate.
Fls & Frts: August - November.
Distrub: Common in moist places and waste place.
Med: Urinary tract diseases: The flowers and seeds extract about one tea cup taken once a day for 15 days..
Literature: Jain, 1991 (f) urine complaints, edible.

LILIACEAE

***Asparagus racemosus* Willd**. var.
Extensive, armed, scandent tuberous shrubs; tubers fasciculata, fusiform. Stems and branches angled. Leaves liner - subulate, straight or recurved. Cladodes slender, spinous, pointed. Flowers numerous, sweet scented, in simple or rarely branched, axillary

racemes Perianth lobos linear- lanceolate or elliptic lanceolate, white, distinct. Stamens 6. Fruits fleshy, globose, red at maturity. Fis & Frts: June - January,
Distrib. Common on barren, rocky soil..
Med.:1. Kideny stones. Decoction of leaves 20-30ml is taken for dissolving or expelling kidney stones,
Literaturo: Jain, 1991 (1) Arthiritc pain.

POACEAE

***Cynodon dactylon* (L)**
Perennial herbs. Clums terete, stolon widely creeping, rooting at the nodes leaves linear-lanceolate, usually distichous; apex acute or pungent. Spikes 2-8, whorled, erect or spreading. Spikelets sessile, olong, laterally compressed, 1flowered, geen or purple
Fls. & Frts. Throughout the year.
Distrib: Common throughout inirrigated field along road side, on wetlands
Med.: Urinary tract diseases: The fresh juice extracted from whole plant. 30-40ml
***Heteropogon contortus* (L.)**
Annual or perennial herbs, Culms terete, tufted. Leaves Flat, linear- lanceolate, glabrous or sparsely hairy. Raceme solitary, terminating the culms and branches, upper awned heteropgamous
Fis & Frts: July - January.
Distrib. Common in open grasslands, along roadsides and in dry rocky plac
Med:1. "Urinary tract diseases: 20-25ml of roots decoction taken once a day early morning for 8 days.

RESULTS AND DISCUSSION

Present work is the result of intensive and exhaustive ethnobotanical explorations of Junnar Taluka made during the period from 2020 to 2022 in Pune district few workers have done ethnobotanical work on some selected and small parts of the district The district with the area of 17,035 sq km is rich as far as the plant wealth is concerned. Several people in the district stay in a nearby forests and still depending on plant for their basic requirements. Considering these facts it was decided to undertake the district for extensive ethnobotanical studies

In the present study, ethnobotanical information is collected on 150 species used by forest trible of Pune district for different purposes. Out of the total of 150 species collected, 20 species included in 19 genera of 13 families and useful in urinary tract.

Table 1:Plant list .

Sr.No	Local Name	Botanical Name	Family	Plant part used	Modes of Administration
1.	Aghada	*Achyranthes aspera* L. var. porphyristachya	Amaranthaceae	Leaf \, seeds	Internal and External
2.	Shatavari	*Asparagus racemosus* Willd.	Liliaceae	Root, Leaf	Internal and External
3.	Kusali Gavat	*Heteropogon contortus* (L.)	Poaceae	Leaf	External
4.	Harali	*Cynodon dactylon* (L)	Poaceae	Leaf, Stem	External, Internal
5.	Kunjuru	*Digera muricata* (L.)	Amaranthaceae	Leaf	Internal
6.	-	*Aereva lanata* (L.) Hook	Amaranthaceae	Leaf	External
7.	Hajari Mogra	*Clerodendrum philippinum* Schuer	Verbenaceae	Whole plant	Internal
8.	Bharangi	*Cherodendrum calamitosum* L	Verbenaceae	Leaves	Internal
9.	Kateringani	*Solanum virginianum* L	Solanaceae	Root	Internal
10.	Amarvel	*Cuscuta reflexa* Roxb	Cuscutaceae	Whole plant	Internal
11.	'Samudrashok.	*Argyreia nervosa* L.	Convolvulaceae	Root	Internal
12.	Tondali	*Coccinia grandis* (L)	Cucurbitaceae	Leaves	Internal
13.	Ambushi	*Oxalis corniculata* L.	Oxalidaceae	Whole plant	Internal
14.	Bor	*Ziziphus mauritiana* Lam,	Rahmanaceae	Stem Bark	Internal
15.	Gunj	*Abrus precatorius* L.	Fabaceae	leaf	Internal
16.	Gulinil	*Tephrosia tinctoria* (L.) Pers	Fabaceae	Root	Internal
17.	Bathur	*Acacia nilotica* (L)	Fabaceae	Leaves,bark, fruit	Internal
18.	Lajalu	*Mimosa pudica* L	Mimoceae	Whole plant	Internal
19.	Panphuti	*Kalanchoe pinnata* (Lam.)	Crassulariaceae	Whole plant	Internal
20.	Mandukapam	*Centella asiatica* (L.)	Apiaceae	Whole plant	Internal

The forest dwellers on account of their distant location from cities as well as absence of modern medical facilities depend on plants for health care, shelter and food and prefer the use of local plants for food and in various ailments. Several plant species have more than one use and the belief is also substantiated by local people, as some of the plants used as food also have medicinal values. For such reasons plants used especially for food and medicine are discussed in detail.

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