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Ethnobotanical Studies of Some Useful Herbs, Shrubs and Trees of Shirala tahsil of Sangli District, M.S., India

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ABSTRACT: The present study was carried out to assess and document ethno botanical knowledge of herbs,shrubs and trees from Shirala tahasil; as this area has diverse flora and high ethno botanical potential. It was found that different plant species are used for medicinal, timber, fuel wood, fodder, ornamental, agricultural tools, Thatching, fencing, naming (folk lore) and fruit yielding purposes.

Many plant species show multiple medicinal uses like various plant parts are used for making herbal products and natural medicines. Such as leaves of Neem are used as an old and popular remedy for variety of disorders. *Emblica officinalis* is useful in diseases, burning sensation, hair fall etc. *Acacia nilotica*, *Terminalia arjuna*, *T. bellarica*, are used by local peoples for various purposes.

KEYWORDS: Ethnobotany; Medicinal herbs, shrubs, trees, Shirala tahsil .

I INTRODUCTION

In India medicinal plants are utilized directly in folk remedies or indirectly in modern medicines. The herbal treatment has very deep roots in Indian culture. Importance of traditional and folk medicines in the treatment of various human ailments is well known from ancient time. Rural people from Shirala region uses plants in folk medicines, timber, fuel, fodder, agricultural tools, fencing and fruit yielding purposes A number of such plants have become endangered. The present study highlights the plants used by rural people for making herbal products and natural medicines.

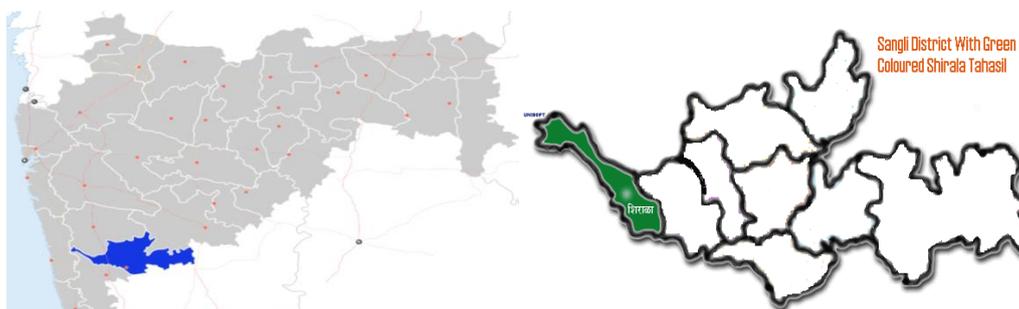
II STUDY AREA

Shirala tahsil is located at hilly edges of sahyadri in Sangli district near the Chandoli dam, between longitude 73° 40' E and 73° 53' E and latitude 17° 03' N and 17° 20' N near Sangli in Western Maharashtra. It is one of the hot spot for biodiversity from Western Ghat

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III MATERIAL AND METHODS

The study area was visited several times for collection of data during the year 2011 to 2014. The plants were collected, pressed and later on identified. Questionnaires were adopted for documenting ethno botanical knowledge of the area. The data obtained was cross checked with available literature (2, 3, 4, 5, and 6).

IV RESULT AND DISCUSSION

The ethno botany of various plant species were documented during the present investigation. The results follow:

1. Botanical Name: *Acacia catechu* L.
Family: Mimosaceae
Local Name: khair
Habit: Tree
Part Used: Wood, Leaves
Folk use: Wood is used locally for making agricultural tools and fuel wood. The leaves are used as fodder.
2. Botanical Name: *Tinospra cordifolia*
Family: Menispermaceae
Local Name: Gulvel
Habit: Climber
Part Used: Leaves
Medicinal Use: It is used as tonic in general debility.
3. Botanical Name: *Acacia nilotica* (L) Delile
Family: Mimosaceae
Local Name: Babhul
Habit: Tree
Part Used: Wood, Leaves, Gum
Medicinal Use: It is used as tonic, also for curing diarrhoea, dysentery and diabetes.
4. Botanical Name: *Oxalis coniculata*
Family: Oxalidaceae
Local name: Amboti
Habit: Herb
Part Used: Leaves
Medicinal use: The leaves are used in indigestion, insomnia dysentery etc.
5. Botanical Name: *Solanum xanthocarpum*
Family: Solanaceae
Local Name:

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Habit: Herb

Part Used: Root,Fruit

Medicinal Use:It is used in Kidny stone,fever, heart diseases ,cough and in throat infection.

6. Botanical Name:Solanum indicum

Family: Solanaceae

Local Name: Ringanimul

Habit: Herb

Part Used: Root

Medicinal Use:It is used in toothache, cough,fever etc.It is also used as good apetiser.

7. Botanical Name:*Hemidesmus indicus*

Family: Ascalpediaceae

Local Name: Anantmul

Habit: Climber

Part Used:Root

Medicinal use:

8. Botanical Name: *Bauhinia variegata* L.

Family: Caesalpinaceae

Local Name:

Habit: Tree

Part Used: Wood, Bark, Flowering buds

Folk Use: Wood is used as timber and fuel wood. Bark is tonic, anthelmintic, astringent.

Also useful in skin disease and leprosy. Flowering buds are used as vegetable.

9. Botanical Name: *Calotropis procera* (Wild) R. Br.

Family: Asclepiadaceae

Local Name: Rui

Habit: Shrub

Part Used: Whole plant, Latex

Folk Use: All parts are used for making paste, which along with raw sugar is applied over the dog bitten wounds. The dry leaves are smoked for curing asthma and cough; large doses are poisonous for human beings. The latex is commonly used for ringworm and skin diseases.

10. Botanical Name: *Cannabis sativa* L.

Family: Canabidaceae

Local Name: Bhang

Habit: Shrub

Part Used: Leaves, Flowering tops, whole plant, Seeds

Folk Use: Leaves are used as green manure. Paste is made from fresh leaves which in anti-lice. Flowering tops are sedative, anodyne and narcotic. "THANDAI" a cold drink is prepared from its leaves and resinous deposits which give sedation and produce a pleasant excitement. Charas or hashish is also prepared from it which is used within the country as well as exported abroad. Plant is used for fuel wood purposes. Seeds are used as feed for poultry and pigeons. In some cases oil is also extracted from seeds.

11. Botanical Name: *Azadirachta indica*

Family: Meliaceae

Local Name: Neem

Habit: Tree

Part Used: Bark, Leaves

Folk Use: Stem and root bark is specialized for curing round worms while leaves decoction is excellent hair wash. The juice is administrated in diabetes and it also produces body coldness.

12. Botanical Name: *Cuscuta reflexa* Roxb.

Family: Cuscutaceae

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Local Name: amarvel
Habit: Parasitic climber
Part Used: whole plant
Folk Use: Its infusion is anti-lice and used for washing sores.

13. Botanical Name: *Dendrocalamus strictus* (Roxb.) Nees

Family: Poaceae
Local Name: Bamboo.
Habit: Tree
Part Used: Leaves, Branches, Stem
Folk Use: Leaves are given to horses for curing cough and cold. Branches are used as building material, for making ladder, thatching huts, carts and pipes. The splits stem is woven into baskets and mats.

14. Botanical Name: *Dodonaea viscosa* (L.) Jacq.

Family: Sapindaceae
Local Name: Ghwaraskay
Habit: A shrubby plant of exposed dry habitat.
Part Used: Leaves, seeds, wood
Local Uses: Astringent, ant rheumatic, aromatic, ornamental and hedge plant. It is used in swelling, burns, thatching and fencing. Its shoots are tied to make brooms.

15. Botanical Name: *Ficus carica* Forssk.

Family: Moraceae
Local Name: Anzir
Habit: Tree
Part Used: Wood, Leaves, Fruit, Latex
Folk Use: wood is used for fuel purpose. Leaves are fodder for goats. Fruits are edible and laxative while latex soothes the bee sting by simply rubbing on the skin. Some time its is used for naming a person (Enzar Gul meaning F. carica flower).

16. Botanical Name: *Ficus glomerata* L.

Family: Moraceae
Local Name: Oormal
Habit: Tree
Part Used: Wood, Leaves, Latex, Fruits
Folk Use: Fuel wood. Leaves infusion is astringent .Useful mouthwash for spongy gums. Stem latex is applied in piles and diarrhea. Fruits are edible, astringent, stomachache and carminative.

17. Botanical Name: *Ficus religiosa* Roxb.

Family: Moraceae
Local Name: Peepal
Habit: Tree
Part Used: Wood, Bark, Fruits
Folk Use: Low cost fuel wood. Bark decoction is given in gonorrhoea and scabies while fruit are edible and laxative.

18. Botanical Name: *Grewia robusta* Drum. Ex Burret.

Family: Tiliaceae
Local Name: silver oak
Habit: Tree
Part Used: Leaves, Bark of branches
Folk Use: Bark from branches is used for fiber and making ropes.

19. Botanical Name: *Jasminum humile* L.

Family: Oleaceae
Local Name: ranjai

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Habit: Wild ornamental climbing shrub
Part Used: Flowers, whole plant
Local Uses: Ornamental. Root decoction is used for curing ringworms.

20. Botanical Name: *Adhatoda zeylanica* Nees .

Family: Acanthaceae

Local Name: Adulsa

Habit: shrub

Part Used: Root and leaves

Local Uses: Roots are used in rheumatism, pneumonia and cough. Leaves are applied to reduce swelling. The decoction of leaves is antispasmodic, expectorant, abortifacient and also used for curing dysentery in cattle. It is also used in scabbies and other skin disorders. Used in snakebites, eye and ear ailments. Antiseptic and insect repellent. Honey Bee species.

21. Botanical Name: *Luffa aegyptiaca* Mill.

Synonym: *L. cylindrica* Roem.

Family: Cucurbitaceae

Local Name: Torai

Habit: A cultivated climbing vegetable

Part Used: Fruits

Folk Use: Fruits are used as vegetable, good for stomach and ulcer problems. Dried fruit case is used for cleaning utensils.

22. Botanical Name: *Mallotus philippensis* (Lam.) Muell.

Family: Euphorbiaceae

Local Name: Kunkuphal

Habit: Tree, Fruits.

Part Used: Wood Folk Use: Used as fuel wood, fruits used to prepare red dye.

23. Botanical Name: *Melia azedarach* L.

Family: Meliaceae

Local Name: Limbara

Habit: Tree

Part Used: Wood, Leaves, Fruit, Bark

Folk Use: Timber wood, used for making furniture and building materials. Medicinally used for curing fever. Leaves are used as fodder for goats and are carminative. Fruits are eaten by Nightingales in winter, also grind and fed to the goats. Bark is anthelmintic and poisonous with bitter taste.

24. Botanical Name: *Morus alba* L.

Family: Moraceae

Local Name: Spin Toot

Habit: A cultivated or wild deciduous tree

Part Used: Fruits, leaves, branches, trunk

Folk Use: Fruits are eaten both fresh and dry. They are laxative, purgative. Leaves are emollient, used for cleaning throat, cooling agent, anthelmintic and astringent. Baskets are also made from the flexible branches. Wood is used in furniture. Leaves were once used in rearing silkworms. Leaves are eaten by goats and sheep. Planted as shade tree.

25. Botanical Name: *Nerium odoratum* Mill.

Family: Apocyanaceae

Local Name: kanher

Habit: Shrub

Part Used: Whole plant

Folk Use: Ornamental but poisonous. The leaves decoction in the form of paste is applied externally on the skin to prevent skin diseases.

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26. Botanical Name: *Opuntia dillenii* Haw.
Family: Cactaceae
Local Name: Nivdung
Habit: Shrub
Part Used: Phylloclades, Fruits
Folk Use: Phylloclades poultice is used for extracting guinea worms. Fruits are edible, demulcent and expectorant. The ripe fruits juice is useful remedy for asthma and whooping cough
27. Botanical Name: *Ricinus communis* L.
Family: Euphorbiaceae
Local Name: Arand.
Habit: A perennial herbaceous shrub
Part Used: Leaves, seeds, oil
Folk Use: Leaves are emetic, narcotic, poisonous and purgative. Poultice is applied to swellings. Castor oil is purgative, oil is given in constipation before and after child birth to mother. Seeds are sedative.
28. Botanical Name: *Rosa* spp.J.Herm.
Family: Rosaceae
Local Name: Jangaley Gulab
Habit: Climbing shrub of hilly areas
Part Used: Flowers, branches
Folk Use: Ornamental, aromatic, used in fencing and hedges, Honey bee species. Used in naming i.e., Gulab Khan.
29. Botanical Name: *Vitex negundo* L.
Family: Verbinaceae
Local Name: Nigadi
Habit: A medium sized shrub of water courses and graveyards
Part Used: Leaves, roots and branches
Local Uses: Fresh roots are used as bandage to relieve pain of chest and back, branches are used as toothbrush (Miswak), leaves are aromatic, febrifuge, diuretic and anthelmintic. Leaves are smoked to relieve headache. Flowers are astringent and tonic. Non-palatable, used for making shelters for tobacco seedlings.
30. Botanical Name: *Withania somnifera* (L.) Dunal.
Family: Solanaceae
Local Name: Ashwagandha
Habit: Shrub
Part Used: Leaves fruits and roots
Local Uses: Leaves and roots are used as poultice to swellings, ulcers and carbuncles. The fruit is diuretic. The root is an aphrodisiac tonic, diuretic, narcotic and used in rheumatism.
31. Botanical Name: *Woodfordia fruticosa* (L) Kurz
Habit: Shrub
Part Used: Wood
Folk Use: Used as fuel wood species.
32. Botanical Name: *Zizyphus jujuba* Mill.
Family: Rhamnaceae
Local Name: Bor
Habit: Tree
Part Used: Wood, leaves, roots, bark, fruits
Folk Use: Fuel wood. Fodder for goats. Edible, bloods purifier and cure indigestion. Fruit decoction is excellent hair wash and also used for bronchitis. Bark macerated in milk is

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given along with honey in diarrhea and dysentery.

V CONCLUSION

Plants provide us readymade food, medicines for ailment, fodder and forage for our domestic animals, fuel wood for burning, flowers for aesthetics and celebration, raw materials for many industries, timber for construction and many more useful items. Local people of Shirala tahsil are using these natural resources. However, it is now time to realize that the traditional knowledge and management system are as important as the need to introduce modern innovative approaches to sustainable development and management of natural resources in order to sustain the livelihood of traditional societies. People use plants in many ways such as medicinal, timber wood, fuel wood, food, fodder etc. So there is a great impact of human life on local vegetation as well as local vegetation influence human life (1).

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