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
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
   Medicinal Use: Wood is used locally for making agricultural tools and fuel wood. The leaves are used as fodder.

2. Botanical Name: *Tinospora cordifolia*
   Family: Menispermiaceae
   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:
Habit: Herb  
Part Used: Root, Fruit  
Medicinal Use: It is used in Kidney 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 a good apetiser.

7. Botanical Name: Hemidesmus indicus  
   Family: Ascalpiediaceae  
   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, anthelminthic, astringent. Also useful in skin disease and leprosy. Flowering buds are used as vegetable.

   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 antilice. 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.

    Family: Cuscutaceae
Local Name: amarvel
Habit: Parasitic climber
Part Used: whole plant
Folk Use: Its infusion is anti-llice 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.

   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 gonorrhea and scabies while fruit are edible and laxative.

   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
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 scabies and other skin disorders. Used in snakebites, eye and ear ailments. Antiseptic and insect repellent. Honey Bee species.

   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: WoodFolk 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.

   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.
   - 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.

   - 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.

   - 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
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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REFERENCES