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STUDY OF TRADITIONAL ETHNOFLORA USED BY THE BHILLS OF KELWANDI

REGION IN AHMEDNAGAR DISTRICT, MAHARASHTRA

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Abstract: Kelwandi is a hilly landscape found in Pathardi taluka of Ahmednagar district (M.S) India. This area is inhabited by Bhill's community which has been constantly relied partly on neighboring wild ethnoflora for certain uses and also for cure of specific ailments. Collected tribal knowledge was documented, stored and spread in nearby areas in order to understand the role and importance of the ethnobotanical knowledge in the life of inhabiting bhill populace.

This research paper focuses on the traditional importance of the ethnobotanical information in routine life of residing bhills populace Kelwandi areas. In all total, 24 plant species belonging to 24 genera, 24 species having 17 families, used by the tribals in the treatment of various human ailments are reported.

Keywords: Ethnomedicine, Medicinal plants, Maharashtra, Traditional knowledge

INTRODUCTION:

In recent years, interest in ethnobotanical explorations has been increased enormously. Ancient ethnobotanical literature on global level suggests that the tribal people have been using wild plants from hundreds of years for various purposes viz.food, medicinal, fodder, healthcare needs etc.It has been found that almost all the plants were in use by the traditional healers and ethnic societies of world either as a food or as a plant based drug .Therefore all these wild plants should be scientifically investigated. From last three to four decades considerable progress has been made in the field of ethnobotany and Ethnomedicine due to recent ethnobotanical explorations.

The Ayurvedic concept appeared and developed between 2500 and 500 BC in India. The literal meaning of Ayurveda is "science of life ", because ancient Indian system of health care focused views of man and his illness. The medicinal plants are listed in various indigenous systems such as Siddha (600) , Unani (700) , Allopathy which 30 plant species for ailments. Even today , majority of the medicines are prepared from the plants and animal products , minerals and metals .

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METHODOLOGY: This field survey was carried out from pre-monsoon of 2006 to post-monsoon of 2007.During field surveys, the people from bhills community were communicated, motivated. They were informally interviewed for collection of their ethnobotanical knowledge is collected. Local name of each and every plant species has been identified with the help of them.

The collected plant specimens were identified by using standard floras, such as Flora of Presidency of Bombay (Cooke, 1967), Flora of Maharashtra (Santapau, 1953; Almeida,1990; Almeida 1996; N.P Singh and Karthikeyan, 2000), Flora of Ahmednagar district (Pradhan and Singh, 1999; Singh,2000a; Singh et al ,2000b), Hooker (1903), Patil, (2003), Naik (1998),etc

The Plant specimens were arranged alphabetically according to their scientific names, synonyms, plant family, local or vernacular names, plant parts used and ethnobotanical uses have been enumerated. Finally the herbarium specimens were deposited in the Herbarium room of Botany Department, P.V.P College Pravaranagar (Loni) Dist Ahmednagar and Botanical Survey of Pune for future reference.

ENUMERATION

Botanical Name: *Achyranthes aspera* Linn.
Family: Amaranthaceae,
Local Name: Aghada
Plant part used: Leaf
Ethnobotanical Uses: Leaf extract in water along with common salt (NaCl) is applied externally in order to cure pain from scorpion stings.

Botanical Name: *Adhatoda vasica* Nees.
Family: Acanthaceae,
Local Name: Adulsa
Plant part used:
Ethnobotanical Uses: Leaf juice is consumed as cough syrup twicely for 2-3 days to cure throat infection.

Botanical Name: *Abrus precatorius* Linn.
Family: Fabaceae,
Local Name: Gunj
Plant part used: Leaf
Ethnobotanical Uses: Leaves are eaten as raw in smoothening of throat prior to singing songs.

Botanical Name: *Actinopteris radiata* (Sw.) Link.
Family: Polypodiaceae,
Local Name: Dagad-Chatri
Plant part used: Leaf
Ethnobotanical Uses: 6-9 fresh leaves are crushed in half cup of water and filtrate obtained is taken orally along with 1 tsp sugar against mouth ulcer.

Botanical Name: *Ailanthus excelsa* Roxb.
Family: Simaroubaceae,
Local Name: Maharukh
Plant part used: Stem bark
Ethnobotanical Uses: Fresh bark pieces are crushed in cup of water and taken orally along with honey twicely for 2-3 days.

Botanical Name: *Aristolochia bracteata* Lamk.
Family: Aristolochiaceae,
Local Name: Aswali
Plant part used: Leaf

Ethnobotanical Uses: Leaf extract is consumed 1-2 times in a day for expel of intestinal worms

Botanical Name: *Asparagus racemosus* Willd.
Family: Liliaceae,
Local Name: Shatavari
Plant part used: Root
Ethnobotanical Uses: Dried root powder is given to cattle for improving lactation quality and duration.

Botanical Name: *Balanites* aegyptiaca (Linn.)Diels.
Family: Balanitaceae,
Local Name: Hingani
Plant part used: Fruit
Ethnobotanical Uses: Pulp from 3-4 fresh fruits is mixed in a bucket containing about one litre of water and used for cleaning the clothes.

Botanical Name: *Boerhaavia diffusa* Linn.
Family: Nyctaginaceae,
Local Name: Punarnawa
Plant part used: Leaf
Ethnobotanical Uses: 3-4 fresh leaves are eaten as a raw along with Adrak against urinary tract infection.

Botanical Name: *Butea monosperma* (Lamk.) Taub.
Family: Fabaceae,
Local Name: Palas
Plant part used: Flower petals
Ethnobotanical Uses: Flowers petal extract in water is used as dye for coloration of clothes during Holi and Rang-Panchami festival.

*Botanical Name: *Cassia siamea,* Lamk.
Family: Fabaceae,
Local Name: Kashid
Plant part used: Stem
Ethnobotanical Uses: Agricultural implements are prepared from the wood of same plant.

*Botanical Name: *Cuscuta reflexa*, Roxb.
Family: Convolvulaceae,
Local Name: Amarvel
Plant part used: Stem
Ethnobotanical Uses: Fresh stem bark (about 2-3gm) is crushed in goat milk and taken orally for expel out the tapeworms.

*Botanical Name: *Cynodon dactylon* (L.)Pers.
Family: Poaceae,
Local Name: Harali
Plant part used: Stem and leaves
Ethnobotanical Uses: Fresh stem and leaves are crushed in cup of water and consumed orally to get relief from dysentery and diarrhoea.

*Botanical Name: *Eclipta prostrata* (L.) Linn.
Family: Asteraceae,
Local Name: Bhringraj
Plant part used: Seed
Ethnobotanical Uses: Seed are soaked in warm coconut oil for 12 – 18 hours and applied externally on hairs for attaining maximum strength.

*Botanical Name: *Euphorbia pulcherrima*, Willd.
Family: Euphorbiaceae,
Local Name: Lal-Dudhi
Plant part used: Leaf
Ethnobotanical Uses: Leaf latex is used curing urinogenital disorders.

*Botanical Name: Cleome *gynandra,* Linn.
Family: Capparidaceae,
Local Name: Pandhari Tilwan
Plant part used: Seeds

Ethnobotanical Uses: Seeds are crushed in coconut oil and are used as anthelmintic.

*Botanical Name: *Jatropha gossypifolia* Linn.
Family: Euphorbiaceae,
Local Name: Parshi Erand
Plant part used: Seed
Ethnobotanical Uses: Seeds are crushed in oil meal along with coconut and consumed orally (about 1 tsp) by the elders in order to cure dysentery.

*Botanical Name: *Phyllanthus fraternus* Webster
Family: Euphorbiaceae,
Local Name: Bhui Awla
Plant part used: Whole aerial plant part
Ethnobotanical Uses: Whole aerial plant parts i.e. stem and leaves are eaten as a raw are taken orally along with sucrose to cure jaundice

*Botanical Name: *Tephrosia purpurea* Pers.
Family: Fabaceae,
Local Name: Shurp-nakha
Plant part used: Root
Ethnobotanical Uses: Root decoction in warm water is used against toothache effectively

*Botanical Name:*Tinospora cordifolia* Miers
Family: Menispermaceae,
Local Name: Gulwel
Plant part used: Stem
Ethnobotanical Uses: Fresh stem and leaf extract is used against malaria fever.

*Botanical Name: *Tribulus terrestris* Linn.
Family: Zygophyllaceae,
Local Name: Sarata
Plant part used: Leaf and young stem
Ethnobotanical Uses: Plant leaves and tender stem segments are eaten as a raw in order to cure urinary and kidney troubles

*Botanical Name: *Vernonia cineraria*, Linn..
Family: Asteraceae,
Local Name: Shahadevi
Plant part used: Leaf
Ethnobotanical Uses: 3-4 Fresh leaves are crushed in a cup of water and the filtrate obtained is taken twice a day for 5-7 days along with jire in order to get relief from piles

*Botanical Name: *Vitex negundo*, Linn.
Family: Verbenaceae,
Local Name: Nirgudi
Plant part used: Leaf
Ethnobotanical Uses: Leaves are soaked in cow dung, Jaggery and human urine for 3-4 days and spread over vegetable crops as an insecticide.

*Botanical Name: *Withania somnifera* Dunal
Family: Solanaceae,
Local Name: Dhor-Gunj
Plant part used: Root tubers
Ethnobotanical Uses: Root tubers are eaten as a raw along with khajur in order to achieve muscular strength

RESULTS AND DISCUSSION:

In all total 24 plant species from 24 genera and 17 families have been reported. These plants are consumed by the Bhills in cure of certain human ailments. Out of these plant species, *Actinopteris radiata* (Dagad-Chatri) belongs to Pteridophytes group, while all other plant species belong to Angiosperms group families. Few plants of this locality possess potential of better economic exploitation. Some of the important plant species among them are *Achyranthes aspera* (Aghada), *Adhatoda*

vasica (Adulsa), *Aristolochia bracteata* (Gindhan), *Asparagus racemosus* (Shatavari), *Boerhaavia diffusa* (Punarnawa), *Butea monosperma* (Palas), *Eclipta prostrata* (Bhringraj), *Euphorbia pulcherrima* (Lal-dudhi), *Phyllanthus fraternus* (Bhui-amla), *Vitex negundo* (Nirgudi)and *Withania somnifera* (Dhor-gunj). Since all these plant species were used in more or less proportion throughout the world by the man, for completing his basic need, it is our prime duty protect and conserve and maintain them in a proper way for future use.

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