Traditional use of medicinal plants of Kelwandi area of Ahmednagar district, Maharashtra

R.M. KADAM, SUMIA FATIMA, MUMTAZ BAIG AND A.P. SALVE

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.

Key words: Ethnomedicine, Medicinal plants, Traditional knowledge

How to cite this paper: Kadam, R.M., Fatima, Sumia, Baig, Mumtaz and Salve, A.P. (2012). Traditional use of medicinal plants of Kelwandi area of Ahmednagar district, Maharashtra, *Ann. Pharm. & Pharm. Sci.*, 3 (1): 42-44.

Article chronicle: Received: 10.11.2011; Revised: 28.02.2012; Accepted: 10.03.2012

In recent years, interest in ethnobotanical explorations has been increased enormously. Ancient ethnobotanical literature on global level suggests that the tribal aboriginal 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.

This field survey was carried out from pre-monsoon of 2006 to post-monsoon of 2007. During field surveys, the people

- MEMBERS OF THE RESEARCH FORUM

Address for correspondence:

R.M. KADAM, Department of Botany, Mahatma Gandhi Mahavidyala, Ahmedpur, LATUR (M.S.) INDIA E-mail: rmk76@rediffmail.com

Coopted auhors:

SUMIA FATIMA AND MUMTAZ BAIG, Department of Botany, Dr. Rafiq Zakaria College for Women, AURANGABAD (M.S.) INDIA

A.P. SALVE, Department of Botany, Shri Dnyaneshwar Mahavidyala, Newasa, AHMEDNAGAR (M.S.) INDIA

from bhills community were communicated, motivated. They were informally interviewed for collection of their ethnobotanical knowledge. 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 Maharashtra (Singh *et al.*, 2000 and Karthikeyan, 2000), flora of Ahmednagar district (Pradhan and Singh, 1999) and flora of Marathwada (Naik, 1998).

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.

The findings of the present study have been discussed in detail as under:

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: Leaf

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 twice 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.

Plants with ethnomedicinal uses by the indigenous

communities of Vizianagaram district revealed usage of about 42 plant species that are found to be distributed across 27 families and 42 genera. Among them were 14 herbs, 12 trees, 11 shrubs and 5 climbers, The most cited families are Apocynaceae, Caesalpiniaceae, Lamiaceae (3spp. each), followed by Arecaceae, Combretaceae, Fabaceae, Rutaceae, Sapindaceae, Solanaceae and Verbenaceae (2 spp. each).

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 to protect and conserve and maintain them in a proper way for future use.

Acknowledgement:

I extend my special thanks to principal, Dr. G. D. Bagde and Head, Shri. R. K. Kalme, Aerobiology Research centre, Mahatma Gandhi Mahavidyalaya, Ahmedpur for inspiration and providing facilities to carry out these investigation.

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