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Study of Prominent Indigenous Medicinal Plants of Village Ahmad Abad, District Karak, Kpk, Pakistan

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The research work was initiated to get information and report the prominent indigenous medicinal plants of village Ahmad Abad District Karak during 2011. The present study deals with the study of medicinal plants used by the people of village Ahmad Abad in district Karak. A total of 32 plants belonging to 23 families were collected. These plants belong to the following families Fabaceae (6 spp), Poaceae (3 spp), Amaranthaceae (2 spp), Solonaceae, (2 spp), while Liliaceae, Meliaceae, Capparaceae, Convolvulaceae, Asclepidiaceae, Rutaceae, Moraceae, Apiaceae, Boraginaceae, Apocyanaceae, Arecaceae, Euphorbiaceae, Rosaceae, Tamaricaceae, Zygophyllaceae, Cucurbitaceae, Moraceae, Astraceae and Rhamnaceae has one species each. It was found that the local inhabitants were unaware or had little knowledge about the uses of medicinal plant and their proper time of collection. Even the younger generation doesn't know about various medicinal plants, but the old people especially women have some knowledge about the wild resources of medicinal plants. The plants were identified botanically; arranged alphabetically along with their scientific names, family names, local names, habit, part used and medicinal uses.

Keyword: Indigenous Medicinal Plants, Ahmad Abad, Karak.

1. Introduction

Karak is situated to the south of Kohat and on the north side Bannu and Laki Marwat districts on the main Indus Highway between Peshawar and Karachi in the province Khyber Pakhtoon Khwa of Pakistan. Karak is said to be the single district which is inhabited by only one tribe of Khattak. It is 123 km away from Peshawar. The term ethnobotany was coined in 1895 by the North American botanist John Hershberger to describe studies of "those plants which were used by those people who living in the past ages as well local inhabitants^[3]" with the start of 18th century ethnobotany had started to develop as a separate branch of botany which is providing a new tool for various fields of science. Ethnobotany, is totally a new field of research, and this field needs complete investigation thoroughly and systematically, it will yield results of great value to the ethnologists, archaeologists, anthropologists, plant-geographers and

pharmacologists etc. Basic quantitative and experimental ethnobotany includes basic documentation, quantitative evaluation of use and management and experimental assessment^[4]. It has been realized all over the world that much In Dang region of Rajasthan, 36 plants species are used as cooling agents such as *Fagonia cretica* etc. during summer^[13]. Life and diseases are related, where there is life, diseases are will also be present. Man and animal depends on plants food, fibers and shelter, but also plants have been used to control and ease diseases, therefore the use of plants as medicines is an ancient and reliable practice. Indigenously different plants have been found which are used to cure diseases at a time^[2].

2. Materials and Methods

2.1 Area Exploration

Trips were arranged to 20 different sites of village Ahmad Abad District Karak KPK, Pakistan to explore and collect important flora of

the area during 2011. A total of 32 medicinal plants were collected. All the Plants were conserved systematically in the Department of Botany, University of Science and Technology Bannu (UST, Bannu).

2.2 Exploration of Local Flora

Map of the Karak was also obtained from concerned office for proper guidance in the collection of plants. To explore the flora of the study area, a Performa was designed for the characterization of the flora, i.e., plant name, family, local name, habit, part used, medicinal uses.

2.3 Medicinal Flora

During exploratory trips, the Medicinal flora was carefully collected by adopting the recommended procedure used by M. Ahmad and Ali, (1998) and photographs were clipped of the spots. Local inhabitants were interviewed to know about the importance and uses of the indigenous flora for curing different diseases in human beings. The local people were also interviewed for data collection by using the Questioner. Both old generation and young generation were also interviewed to compare the outlines of the local flora. The aim of the comparison is to extract the actual knowledge about the plants collected in relation to age difference. This information was then compared with each other and people of other villages of district were provoked to share and added their experiences. Such types of efforts are required to induce awareness in the local people about the conservation of the wealth of useful plants for their coming generations. Repeated queries were made to formulate the correct data. Outcome of the results were rechecked and compared with the available literature.

3. Results and Discussion

The study revealed that 32 medicinal Plants belonging to 23 families were identified in the research area. The plants were found both wild types as well cultivated. The plants examined included *Allium sativum* Linn, *Azadirachta indica* Juss, *Acacia nilotica* L, *Acacia jacquimontii* Benth, *Acacia Senegal* Linn, *Aerva*

javanica (Burm F) Juss, *Achyrenthes aspera* Linn, *Aloe barbadensis* (Linn) Burm, *Albizia lebbek* (L) Benth, *Alhaji mararum* Medic, *Capparis deciduas* (Forssk) Edgew, *Citrullus colocynths* Linn, *Cuscuta campestris* Yuncker, *Calotropis procera* Forst, *Citrus aurantifolia* Linn, *Cymbopogon citrates* (D.C) Staf, *Dilbergia sisso* Roxb, *Echinops echinats* Roxb, *Ficus bengalensis* Linn, *Foeniculum vulgare* Mill, *Heliotropium europium* Linn, *Leptedenia pyrotechnica* Forssk, *Phoenix dactylifera* Linn, *Ricinus communis* Linn, *Rosa indica* Linn, *Tamarix aphylla* Linn, *Tirabulus terristrs* Linn, *Triticum aestivum* Linn, *Wathinia coagulans* (stock) Dunal, *Zea mays* Linn and *Zizipus nummularia* (Burm.f.). The present study brings some interesting medicinal plants to the screen like *Acacia nilotica*, the whole plant is used for diarrhea. Similarly *Calotropis procera* is exploited in many life saving medicines for human beings as well as animals. Some common plants have common uses like *Allium sativum* for the control of cholesterol in blood. Traditionally many plants are used as veterinary medicines. *Calotropis procera* show very good result in domestic animal. The fruits of *Citrullus colocynths* are extensively used in curing diabetes, reported from different areas of Tehsil Takht-e- Nausriti, similarly *Ficus bengalensis* is used for jaundice and Hepatitis. The gum of *Acacia nilotica* is used as tonic, stimulant and demulcent. Root of is used in jaundice, leaves are used against typhoid. Leaves of *Solanum surrattense* are used in toothache and headache. The fruits of *Phoenix dactylifera* are edible. All members of community in the area use medicinal plants. Some wild medicinal plants like *Solanum surrattense* aerial parts are not only used for “Digestive problems” but fruit and aerial parts are also used to cure “Skin diseases”. Root extract of *Withania coagulans* is used as tonic for general and sexual debility and juice of aerial parts is used as “Diuretic” and also for “Rheumatism” by different communities of the area.

Table 1: List of selected Plants and their ethonobotanical uses

S.N	Name of plant	Family	Local name	Habit	Part used	Uses
1	<i>Allium sativum</i> Linn	Alliaceae	Yeza	Herb	Bulb and Leaves	Condiment, Flavorous agent, Salad, Vegetables, Laxative, Blood purifier, Digestive, Stimulant, Heart diseases, Ear pain
2	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Bakana	Tree	Whole plant	Fuel, Fodder, Infertility in women, Mouth blister, Heat stroke, Hepatitis, Toothache, Itching, Hemorrhoid, Hair dandruff, Skin infection, Retention of urine, Kidney pain, helminthes infection, Improving eye sight, Eye infection, Malaria, Fever, Diabetes, Bronchial asthma, Bone pain, Mouth blister
3	<i>Acacia nilotica</i> (Linn.) Wid. ex Delile	Fabaceae	Kikar	Tree	Whole plant	Diarrhea, Dysentery, Stomachache, Astringent, Tooth brush, Fuel, Removal of kidney stones
4	<i>Acacia jacquemontii</i> Benth	Fabaceae	Kikrai	Tree	Whole plant	Diarrhea, Dysentery, Stomachache, Astringent, Tooth brush, Fuel
5	<i>Acacia Senegal</i> Linn.	Fabaceae	Kikar	Tree	Whole plant	Diarrhea, Dysentery, Stomachache, Astringent, Tooth brush, Fuel, Arthritis, Sexual Weakness in male
6	<i>Aerva javanica</i> (Burm. f.) Juss	Amaranthaceae	Khoso beta	Herb	Whole plant	,Skin dryness and self cracking of skin, Hemorrhoids
7	<i>Achyranthes aspera</i> Linn.	Amaranthaceae	Shpozoka	Herb	Whole plant	Asthma, Pneumonia
8	<i>Aloe barbadensis</i> (L.) Burm	Liliaceae	Zargoya	Shrub	Whole plant	Diabetes, Urine problems in males and females, Joint pain, Diabetes, Hepatitis, Hair dandruff
9	<i>Albizia lebeck</i> (L.) Benth	Fabaceae	Sreen	Tree	Wood, flower, Bark	Timber, Furniture, Honey Bee Spp, Ornamental, Diarrhea, Tuberculosis, Trauma, eyes Reddishness
10	<i>Alhaji maurorum</i> Medik	Fabaceae	Tandah	Shrub	Whole plant	Blood purifier, Expectorant, Fuel, Hotness of body
11	<i>Cappris dcidua</i> (Forssk.) Edgew	Capparaceae	Taph	Tree	Whole plant	Laxative Honey Bee Spp. Fuel, Anthelmentic, Fracture bones, Asthma, Skin infection, Diabetes, Impotency in males, Ear pain, Toothache
12	<i>Citrullus colocynthis</i> Linn.	Cucurbitaceae	Maragenye	Herb	Fruits & Leaves	Constipation, Intestinal problems, Asthma, Infection, Diabetes, Strengthen eye sight, Wound healing, Hepatitis, Abdominal pain, Ear pain, Toothache
13	<i>Cuscuta campestris</i> Yuncker	Convolvulaceae	Chambal	Climber	Whole plant	,Harmful to plants, Hepatitis, Retention of urine, Hair fall and dandruff, Diabetes, Laziness
14	<i>Calotropi sprocera</i> Forst	Asclepiadaceae	Spalmaka	Shrub	Stem, Leaves & milky	Used as bandage for Rheumatic joints & swellings, Pneumonia, Gal bladder problems in animals, Toothache,

					juice	Chest congestion, Malaria, Fever, Sexual weakness, Hepatitis
15	<i>Citrus aurantifolia</i> (Linn.)Christman	Rutaceae	Nimbo	Tree	Fruits, stem	,Edible, Bleeding , Removal of kidney stone, Chronic fever, Hepatitis
16	<i>Cymbopogon citrates</i> (D.C.) Stapf	Poaceae	Sargarayah	Herb	Whole plant	Insulating agent in rooms & mosques, Chronic fever, Fuel
17	<i>Dalbergia sissoo</i> Roxb	Fabaceae	Shawa	Tree	Whole plant	Astringent, Tooth brush, Fuel, Furniture, Snuff preparation, Hotness of body
18	<i>Echinops nechinatus</i> Roxb	Asteraceae	Azghai	Herb	Whole plant	Skin itching, Fuel
19	<i>Ficus benghalensis</i> Linn	Moraceae	Brrh	Tree	Whole plant	Female prolonged menses, Asthma, Sexual weakness, Jaundice, Hepatitis
20	<i>Foeniculum vulgare</i> Mill	Apiaceae	Soop	Herb	Whole plant	Flavoring agent, Gas troubles, Throat infection, Vermicide, Fuel, Honey Bee Spp, Abdominal discomfort, Constipation
21	<i>Heliotropium uropeum</i> Linn	Boraginaceae	Harponayah	Herb	Whole plant	Grazed by camels, Hemorrhoids
22	<i>Leptadenia pyrotechnica</i> Forssk.	Apocynaceae	Baralla	Shrub	Whole plant	Skin Diseases, Fuel
23	<i>Phoenix dactylifera</i> Linn	Arecaceae	Khajeera	Tree	Fruit, Leaves & Stem	Nutritive, Laxative, Tonic, Fuel, Honey bee spp., Reddishness of eyes in birds like cock and hens, Toothache
24	<i>Ricinus communis</i> Linn	Euphorbiaceae	Randah	Shrub	Seeds Leaves	Purgative, Ornamental, Fuel, Pain killer, Bronchial Pneumonia, Bone strike
25	<i>Rosa indica</i> Linn.	Rosaceae	Ghulab	Shrub	Flowers, Fruits& seeds	Fragrance, cooling agent, Asthma, Laxative, Nutritive, Ornamental, Honey bee spp., Removal of kidney stones, Removal of gal bladder
26	<i>Solanum surattense</i> Burm.	Solanaceae	Azghai	Herb	Whole plant	Toothache, Expectorant, Cough, Asthma Scabies, Chronic fever, Chest congestion Prolonged menses, skin diseases
27	<i>Tamarix aphylla</i> Linn.	Tamaricaceae	Ghaz	Tree	Whole plant	Germicide, Soil binder, Fuel, Agriculture tools, Removal of kidney stones, Retention of urine, Wound and injuries
28	<i>Tribulus terrestris</i> Linn	Zygophyllaceae	Maklenye	Herb	Whole plant	Fodder, Fuel, Itching, Retention of urine, Male sexual weakness

29	<i>Triticum aestivum</i> Linn	Poaceae	Ghanum	Herb	Whole plant	Food, Nutrition, Stimulant, Fodder, Pimples of checks, Fungus of skin
30	<i>Withania coagulans</i> (Stocks) Dunal	Solanaceae	Sperkai	Herb	Shoots Fruits & seeds	Diuretic, Tonic, Astringent, Fuel, Constipation, Blood purification
31	<i>Zea mays</i> Linn	Poaceae	GhatJawar	Shrub	Whole plant	Food, Fodder, Fuel, Kidney pain, Removal of Kidney stones, Retention of urine
32	<i>Ziziphus nummularia</i> (Burm. f.	Rhamnaceae	Karkana Beera	Tree	Whole plant	Nutritive, Cooling agent, Digestive, Honey bee spp. Diabetes, Chronic fever

Table 2: Percentage of Families and spp Distribution among the Families

Family	Plants	%
Fabaceae	6	18.75
Poaceae	3	9.38
Amaranthaceae	3	9.38
Solonaceae	2	6.25
Liliaceae	1	3.13
Meliaceae	1	3.13
Capparaceae	1	3.13
Convolvaceae	1	3.13
Asclepidiaceae	1	3.13
Rutaceae	1	3.13
Moraceae	1	3.13
Apiaceae	1	3.13
Boraginaceae	1	3.13
Boraginaceae	1	3.13
Apocyanaceae	1	3.13
Arecaceae	1	3.13
Euphorbiaceae	1	3.13
Rosaceae,	1	3.13
Tamaricaceae,	1	3.13
Zygophyllaceae,	1	3.13
Cucurbitaceae,	1	3.13
Moraceae,	1	3.13
Astraceae	1	3.13
Rhamnaceae	1	3.13
Totle 23 family	32 plants	

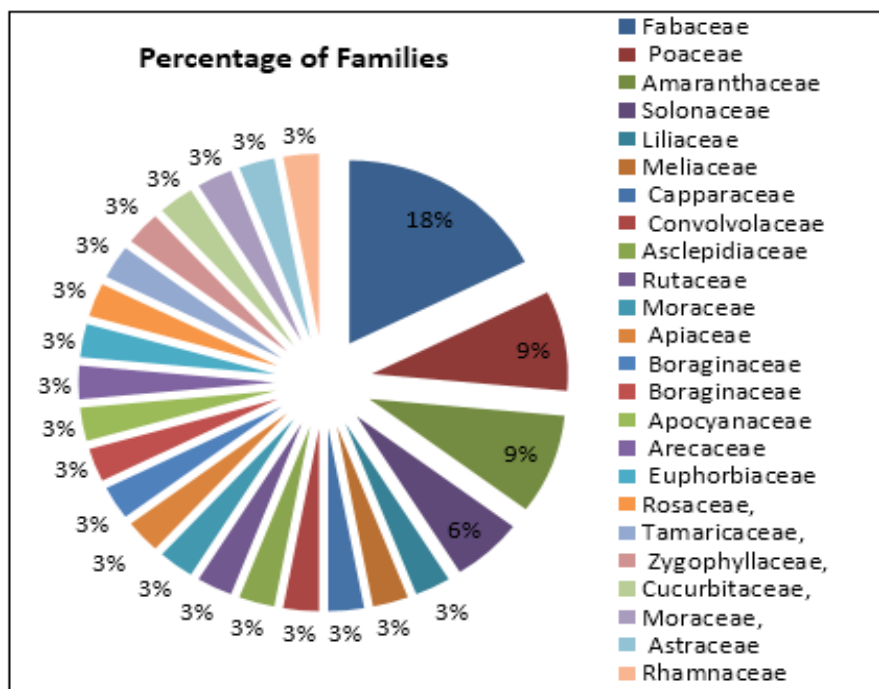


Fig 1: Graphic representation Percentage of Families

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