



Diversity and Ethno-Medical Uses of Plants of Kotal Wildlife Park Kohat

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ABSTRACT

Plant samples were collected and identified by experts in management of wildlife park. Data was recorded on questionnaires. Ethno medical uses and local names were identified by aged peoples of that area. Kotal wildlife park is situated on the Peshawar bypass Bawana road near Gulshan-abad Chowk Kohat. It is an isolated area well maintained for the conservation of animal and plant species. Plant samples were collected and identified by experts in management of wildlife park. Data was recorded on questionnaires. Ethno medical uses and local names were identified by aged peoples of that area. This study revealed that Family Fabaceae, Rhamnaceae and Poaceae are the more common species in Kotal wildlife park Kohat. All plant species are well conserved in this area which provide shelter and food for animal species on this Park. This study also revealed that all the 14 species of plants of Kotal wildlife park are of medical importance. People of old ages are still using these plants for many diseases.

Key Words: Medicinal Plants, Kotal Wildlife Park Kohat

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INTRODUCTION

Term "biodiversity" refers to a number of plant and animal species in a particular area [1]. Animal and plant diversity is a necessary module of environment which ensure success of human life on earth as human use them as food and shelter [2]. Use of plants as medicines to cure diseases is called herbalism. Herbalism is being practiced worldwide from around 60,000 years ago till now [3]. It is reported that Most of the patients with serious diseases like asthma, diabetes and cancer are using herbal medicines [4-6]. Looking to the above importance of plants, the current study is designed to investigate the diversity of medical uses of plants of Kotal wildlife park Kohat.

MATERIALS AND METHODS

Kotal wildlife park is situated on the Peshawar bypass Bawana road near Gulshan-abad chowk Kohat. It is an isolated area well maintained for the conservation of animal and plant species [7]. Plant samples were collected and identified by experts of management of wildlife park. Data was recorded on questionnaires. Ethno medical uses and local names were identified by aged peoples of that area.

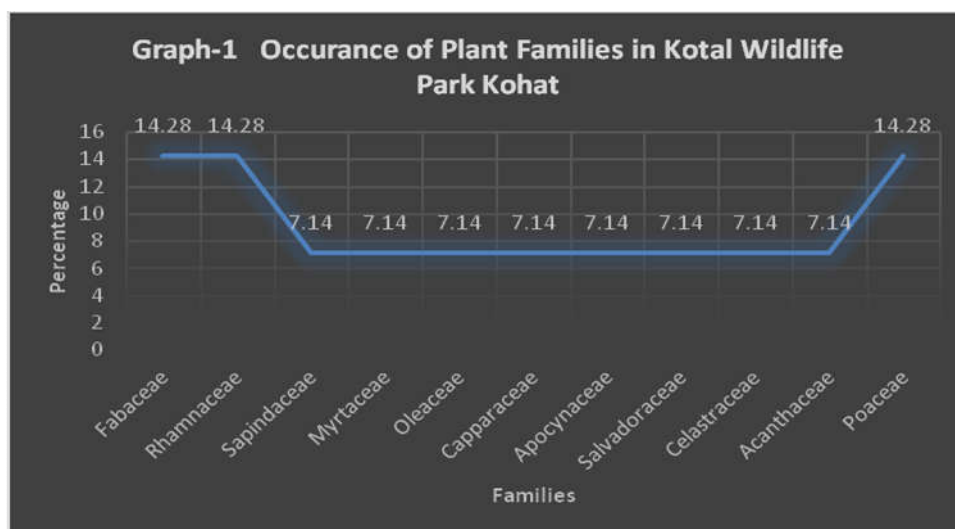
RESULTS

About 14 different species of 9 orders were found in Kotal wildlife park Kohat. All of them were of medical importance. They include *A. modesta* (Phulai), *A. nilotica* (Babool /Kikar), *Z. nummularia* (Bera), *Z. mauritiana* (SuaBera), *D. viscosa* (Sanatha), *E. camaldulensis* (Gondh), *O. europaea* (Zetoon), *C. decidua*

(Ker-ra), *P.aphylla* (Barain), *S. oleiodes* (Peelu), *G. royleana* (Sarazghy), *J. adhatoda* (Bekarr), *C. dactylon* (Kabal) and *A. jwarancusa* (Sargara). (Table-1) (Graph-1)

Table.1. Taxonomic Classificatin of Medicinal Plants in Kotal Wiildlife Park Kohat.

	Order	Family	Genus	Species	Local Name
1	Fabales	Fabaceae	Acacia	<i>A. modesta</i>	Phulai
2	Fabales	Fabaceae	Acacia	<i>A. nilotica</i>	Babool /Kikar
3	Rosales	Rhamnaceae	Ziziphus	<i>Z. nummularia</i>	Bera
4	Rosales	Rhamnaceae	Ziziphus	<i>Z. mauritiana</i>	SuaBera
5	Sapindales	Sapindaceae	Dodonaea	<i>D. viscosa</i>	Sanatha
6	Myrtales	Myrtaceae	Eucalyptus	<i>E. camaldulensis</i>	Gondh
7	Lamiales	Oleaceae	Olea	<i>O. europaea</i>	Zetoon
8	Brassicales	Capparaceae	Capparis	<i>C. decidua</i>	Ker-ra
9	Gentianales	Apocynaceae	Periploca	<i>P.aphylla</i>	Barain
10	Brassicales	Salvadoraceae	Salvadora	<i>S. oleiodes</i>	Peelu
11	Celastrales	Celastraceae	Gymnosporia	<i>G. royleana</i>	Sarazghy
12	Lamiales	Acanthaceae	Justicia	<i>J. adhatoda</i>	Bekarr
13	Poales	Poaceae	Cynodon	<i>C. dactylon</i>	Kabal
14	Poales	Poaceae	Cymbopogon	<i>C. jwarancusa</i>	Sargara



Traditional uses of plants of Kotal wildlife Park

A wide range of plants is being used traditionally for the treatment of different diseases. Herbal treatment is considered to be very effective and without no apparent side effect. These plants are mostly used by people of old ages. *A. modesta* is used for the remedy of Back Pain and enhanced sexual ability. Paste of *A. nilotica* is used for Erectile Dysfunction of male genitalia, tonsillitis and also for oral infections. *Z. nummularia* is used for Scabies and other Skin Diseases. *Z. mauritiana* is used as Pain killer, it is said to be an effective treatment for Stomach pain. *D. viscosa* is used for Dysentery treatment and also to Stimulate lactation in female after giving birth. *E. camaldulensis* is used as Antioxidant and Antibacterial. *O. europaea* is used to cure Stomach and intestinal disorders and also for Asthma. *C. decidua* is used as Antidiabetic, anti-Asthmatic, anti-Inflammation and also as an analgesic. *P.aphylla* is used as Antioxidant and Antimicrobial agent. *S. oleiodes* is used for rheumatic pains and relieving cough. *G. royleana* is used as an effective remedy for toothache. *J. adhatoda* is used for cough and asthma. *C. dactylon* is used for Healing wounds while *C. jwarancusa* is used for Cough, Gout and Fever. (Table-2)

Table.2. Kotal Wildlife Medicinal Plants Medical Uses

S.no	Plant Species	Medical uses
1	<i>A. modesta</i>	Enhanced Sexual ability / Back Pain
2	<i>A. nilotica</i>	Paste as Erectile Dysfunction / tonsillitis and oral infections
3	<i>Z. nummularia</i>	Scabies / Skin Diseases
4	<i>Z. mauritiana</i>	Pain killer / Stomach pain reliving
5	<i>D. viscosa</i>	Dysentery treatment / Stimulate lactation in mother
6	<i>E. camaldulensis</i>	Antioxidant / Antibacterial
7	<i>O. europaea</i>	Stomach disorders, intestinal / Asthma
8	<i>C. decidua</i>	Antidiabetic / anti-asthmatic / Anti-inflammation / analgesic
9	<i>P.aphylla</i>	Antioxidant / Antimicrobial
10	<i>S. oleiodes</i>	rheumatic pains / Relieve Cough
11	<i>G. royleana</i>	Toothache.
12	<i>J. adhatoda</i>	Cough / asthma
13	<i>C. dactylon</i>	Healing wounds
14	<i>C. jwarancusa</i>	Cough / Gout/ Fever

CONCLUSIONS AND DISCUSSIONS

This study revealed that Family Fabaceae, Rhamnaceae and Poaceae are, the more common species in Kotal wildlife park Kohat. All plant species are well conserved in this area which provide shelter and food for animal species on this Park. This study also revealed that all the 14 species of plants of Kotal wildlife park are of medical importance. People of old ages are still using these plants for many diseases. Herbal treatment is considered to be very effective as well as without any side effect.

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