

Medicinal Flora of Sawans Valley Mianwali, Punjab Pakistan

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Abstract - Salt range of Pakistan has significant floral diversity which is contributing for Health. Medicinal Flora plays important role in respect to plant kingdom and shows a significant effects on ecological, environmental, economic and social values of mankind. It is obvious that systematic and appropriate conservation of floral diversity is very important for the sustainability, improvement and maintenance of an area which is declared as protected Keep In view the current situation, Extensive survey was conducted to explore the medicinal values of plants found in the Sawans Valley (Salt range of Pakistan) in district Mianwali, which is mountainous area. Different Medicinal plant species were explored, more than 50 plant species are not only used for curing ailments ranging from mild infections to the chronic ulcers but are also helping in rural economy of the area.

Keywords - Floral Diversity, Medicinal Plants, Salt Range, Sawans Valley.

I. INTRODUCTION

Plants have a countless influences on environment of the biosphere (Ali, 2008). Plants have key role in the social and economic conditions of the human populace. Floral diversity of plants and their environmental standards are very important due to the deprivation of lands and destruction (Ahmad *et al.*, 2010).countless ultimatum to cover up increasing strains of industrial plants. Medically significant plants not only supplied to the native use but also for the biosphere markets Almost 70% of medications are allopathic medicines are acquired through diverse plants bases (Pattanaiket *et al.*, 2006).

Plants are contributing and have essential importance for fit life of human beings and their medicinal use is healthy along with minimum side effects. Plants production a key role for our lives as compared to faunas, generally due to

biochemical's performing biological activities (Ajaib *et al.*, 2010).

Salt Range in Pakistan has **distinctive** kind of plant diversity which is very appreciated due to its medical and economically significant plant species. Mostly three diverse kinds of forest in Salt Range named as Thorny ever green forest with spiky plants, sub-tropical semi ever green forests and scrubs forest. Dry tropical perennial forest mostly *salvadora oleides*, *capparis deciduous* and *acacia nilotica* .Sub tropical ever green forests are found at high elevation nearly 750 m and plants are *acacia modesta* , *dedonaea viscose* and *olea ferruginea*. Scrub species are also found in this part which is facing extreme ecological and grazing pressure. (Ahmad *et al.*, 2010).

Salt Range in Pakistan is rich with different types of habitations which is main cause of different types of important species in this zone. Different kinds of

environments are **found** in this part as very high hilly peaks like sakesar. And the sakesar in the Salt Range is very cold place is the Soone valley, on the western side of the Salt Range is That Desert while potohar plateau is in the North Eastern side. In Soon Valley; uchali complex comprises very hyper brackish water lakes. Mangla reservoir is at the east side and Kalabagh hills in District Mianwali at the west side which is bounded by dry mountains. (Ahmed *et al.*, 2002).

Salt Range of Pakistan facing many constraints like drought and the salinity stress. Salt Range of Pakistan is the habitat for the population of many plant species as grasses, herbs and shrubs. **Salt** tolerance plant species are found which have resistant to survive in different environmental conditions. (Ashraf *et al.*, 2004).

Salt Range of Pakistan is enriched with the plants species they are important due to their medicinal and economic importance, also source of food dyes and many other needs. *Buxuss papillosa*, *Eclipta prostrata*, *Acacia nilotica*, *Galium aparine*, *Woodfordia fruticosa*, *Vernonia anthelmintica*, *Zanthoxylum armatum*, *Martynia annua*, *Dedonaea viscosa*, *Calotropis procera*, *Viola cineria*, *Zizyphus numularia*, *Onosma hispidum*, *Lallemantia viscosa*, *Withania coagulans*, *Trigonella incise* are the main locally found medicinal plants of that area. (Ahmad *et al.*, 2002).

II. MATERIALS AND METHODS

The Sawans Valley (in the southwestern side of the Salt Range in Mianwali District) **was** extensively explored for Medicinal flora studies. Data were **collected** round the year in all four seasons, i.e., summer, spring, autumn and winter during 2017-2018. Data was recorded from different sites of the Valley throughout the years with a regular interval of three month thus each season has a representation. Plant samples were collected for herbarium record and placed in the Herbarium, Department of Botany, University of Agriculture, and Faisalabad. **Afterwards**, the collected plants species were identified with the help of flora of Pakistan (Ali and Qaiser. 2009), Flora of British India (Hooker., 1890), Flora of Lyallpur and adjoining Canal Colony Districts (Chaudhary, 1969), and other internet resources. High-resolution photograph of individual species and their habitats were taken with the help of SLR digital camera (Cannon) along with close-up of inflorescence and flowers.

III. OBSERVATION ON MEDICINAL PLANTS

Present study was conducted in Sawans Valley in District Mianwali which **is** very **important** area in the Salt range of Pakistan due to its geographical location. A total of 60 plant species belonging to different families have been recorded as being medicinally used by native people of that valley and commonly known to all. These plant species were arranged in order of botanical name followed by Vernacular name and their medicinal uses.

Scientific Name	Vernacular Name	Medicinal Uses
1. <i>Capparis decidua</i> (Forssk.)	Karil, karir.	Anti-diabetic
2. <i>Justicia adhatoda</i> L.	Baikar Vasaka.	Respiratory disorders.
3. <i>Periplocaaphylla</i> Decne.	Bata	Purgative,
4. <i>Withania coagulans</i> (Stocks)	Panir, Khamjira	Diabetes.
5. <i>Withania somnifera</i> (L.)	Aksan	Therapeutic uses
6. <i>Solanum surattense</i> Burm. f.	Kundiari, Mokri	Antibacterial and antimicrobial
7. <i>Salvadora oleoides</i> Decne.	Jaal, Peelo	Antimicrobial activity
8. <i>Solanum nigrum</i> L.	Mako, Kach	Anti-ulcerogenic
9. <i>Tamarix dioica</i> Roxb. ex Roth	Rukh, Khagal	Bactericidal activity
10. <i>Peganum harmala</i> L.	Isband, Harmal	Curing stomach ache

11. <i>Anagallis arvensis</i> L.	Pimpernel	Antimicrobial properties
12. <i>Saccharum bengalense</i> Retz.	Kana	Antimicrobial and antioxidant
13. <i>Dicliptera bupleuroides</i> Nees	Dicliptera	Antioxidant
14. <i>Malcolmia Africana</i> (L.) R. Br.	Malcolmia	Antimicrobial and antioxidant
15. <i>Rhazya stricta</i> Decne	Sihar, Hisawarg	Antioxidant properties
16. <i>Datura stramonium</i> L.	Dhatura	Antibacterial properties
17. <i>Prosopis glandulosa</i> Torr	Kikri	Antidiabetic properties
18. <i>Calotropis procera</i> (Aiton).	Akra	Anthelmintic activity
19. <i>Salvia moorcroftiana</i> Wall.	Thuth	Pharmacological activities
20. <i>Agave cantalavar. cantala</i>	Kantala.	Skin diseases
21. <i>Amaranthus viridis</i> L.	Pigweed	Antidiabetic, antioxidant
22. <i>Aerva javanica</i> (Burm.f.)	Kapok	Antioxidant
23. <i>Chenopodium album</i> L.	Batho	Anthelmintic
24. <i>Calendula arvensis</i> (Vaill.) L.	Field marigold	Healing of wounds
25. <i>Centaurea iberica</i> Trevir. ex Spreng.	Iberian star thistle.	Anti-inflammatory
26. <i>Parthenium hysterophorus</i> L.	Bitter weed	Antibacterial
27. <i>Sonchus arvensis</i> L.	Milk thistle	Medicinal purposes
28. <i>Xanthium strumarium</i> L.	Woolgarie bur	Anti-inflammatory
29. <i>Convolvulus arvensis</i> L.	Verri	Antidiarrhoeal
30. <i>Euphorbia helioscopia</i> L.	Helioscopia	Antibacterial
31. <i>Euphorbia prostrata</i> Aiton	Prostrate sandmat	Wound healing agent
32. <i>Oxalis corniculata</i> L.	Creeping oxalis	Antibacterial activity
33. <i>Solanum incanum</i> L.	Sour-apple	Antimicrobial
34. <i>Agave sisalana</i> Perrine	Hemp-plant	Antimicrobial agent
35. <i>Amaranthus viridis</i> L.	Pigweed	Antidiabetic
36. <i>Malva neglecta</i> Wallr.	cheeseweed	Antioxidant
37. <i>Fagonia indica</i> Burm.	Shokai	Blood purifier
38. <i>Stellaria media</i> (L.) Vill.	Chickweed	Plasters on broken bones
39. <i>Otostegia limbata</i> (Benth.)	Koi booi	Antibacterial agent

40. <i>Lantana camara</i> L.	white-sage	Widely used for the folk medicines
41. <i>Cirsium arvense</i> (L.) Scop.	Canadian thistle.	Antimicrobial and antioxidant
42. <i>Calendula arvensis</i> (Vaill.) L.	Field marigold	Antioxidant
43. <i>Tetrapogon villosus</i> Desf.	Lama gha	Fodder purposes for livestock
44. <i>Ziziphus jujube</i> Mill.	Bairi	Antimicrobial activity
45. <i>Cenchrus ciliaris</i> L.	Buffel-grass	Antibacterial activity
46. <i>Cymbopogon jwarancusa</i> (Jones) Schult.	Tanda	Antioxidant activities
47. <i>Pennisetum orientale</i> Rich.	Fountain grass	Cardiac diseases.
48. <i>Nerium oleander</i> Linn.	Ganira	Antifungal activities.
49. <i>Phragmites karka</i> (Retz.) Trin.	Narki	Antioxidant properties
50. <i>Maytenus royleanus</i> (Wall. ex Lawson)	Pataki.	Gastrointestinal disorders.
51. <i>Lespedeza floribunda</i> Bunge	Bush clovers	Herbal medicines
52. <i>Opuntia monacantha</i> (Willd.) Haw.	Thor	Anti-diabetic.
53. <i>Dodonaea viscosa</i> (L.) Jacq.	Sanatha	Antibacterial and antioxidant
54. <i>Lantana indica</i> Roxb.	Ghaneri.	Anti-bacterial and anti-fungal
55. <i>Olea ferruginea</i> Royle	Kao	Used for diabetes.
56. <i>Hordeum murinum</i> L.	wall barley	Constipation treatments
57. <i>Eragrostis pilosa</i> (L.) P.Beauv.	Nika sanwak	Antioxidant properties
58. <i>Cenchrus pennisetiformis</i> Steud.	Slenderbuffel	Antibacterial activity
59. <i>Acrachneracemosa</i> (B.Heyne ex Roth)	Goose grass	Skin diseases
60. <i>Citrullus colocynthis</i> L.	Gharoba	Antibacterial

IV. DISCUSSION

It is fact that man from ancient time is dependent directly or indirectly on plants for its better health, shelter, food and his daily requirements for life. **Present** study was conducted in Sawans Valley in District Mianwali which is very important area in the Salt range of Pakistan due to its geographical location. A total of 60 plant species belonging to different families have been recorded as being medicinally used by native people of that valley and commonly known to all.

It was noted that many of the **plants** have similar medicinal values and uses as described by Ahmad *et al.* (2003) For example *Capparis decidua* (Karil) and *Withania coagulans* (Panir) have antidiabetic properties. *Rhazya stricta* has antioxidant qualities, while *Salvadora oleoides* has antimicrobial activities. Wild medicinal plants of the valley are collected by poor native people and are used effectively for **various** diseases and earning source. This is now time that such medicinal knowledge should be documented. In order to stop the loss of such natural resources that are helping mankind since ancient time, in-

situ and ex-situ conservation methods should be practiced for long term conservation program.

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