

Wasteland Medicinal Plant Resources of Aligarh and Mathura

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Abstract: *The paper provides the traditional and medicinal uses of 30 medicinal, waste land self sown plant species growing abundantly in the urban and rural areas of Mathura and Aligarh district belonged to 23 families and 29 genera. These plant species are used by practitioners and local medicine men in the village area. Data was recorded for Botanical, local name, flowering and fruiting time, plant part used with the disease name. Most of the species are herbaceous in nature. Leaf (13) constituent was highest of utilization followed by Roots (8), Fruit (4), Whole Plant (4), Seed (3), Flower (3), Latex (1), Seed Oil (1) and Bark (1). These plant species have been used as medicine to cure various common diseases like amoebiasis, bronchitis, cold & cough, dropsy, whooping cough, diarrhea, dysentery, anti cancerous, wound healing, liver, kidney diseases, fever etc. Thus, the present information sets up the way for further studies on conservation, cultivation and source of extra income for farmers as many of the species are on the way of extinction due to pollution. The youth can also be encouraged to learn the indigenous knowledge and the biodiversity to preserve from lost.*

Keywords: *Medicinal, Plants, Wasteland, Aligarh, Mathura*

Date of Submission: 24-03-2019

Date of acceptance: 08-04-2019

I. Introduction

The traditional and indigenous medicines derived from various medicinal systems of plants like Ayurveda, Unani, Herbal and Homeopathy utilize medicinal plants that are of great importance as information on their alkaloids and drugs is subjected to investigation in search of new biochemicals with potential therapeutic values. Out of 121 biologically active plant-derived biochemicals, 90 have been found through indigenous knowledge records. Such information acts as a shortcut route of discovering modern drugs of importance. Topographically the Mathura and Aligarh region presents a shallow like trough appearance with ravines of the Ganga and the Yamuna. The temperature ranges from 47.5⁰ C in June (summers) to 5.6⁰ C in January (winters). The medicinal plants generally grow naturally in vicinity of cultivated and waste lands of these areas. Thus, these medicinal plants often unrecorded, underutilized, though have tremendous potential in increasing the economic condition of the grower or owner.

II. Material and Methods

It is in this context that the field trips were organized to interview the villagers and herbal medicine men to record the indigenous and scientific information of some wasteland underutilized but abundantly occurring medicinal plants of economic value at Mathura and Aligarh. The data was recorded for the vernacular names, flowering and fruiting time of plants and their parts used for diseases. As different plant species are different for the treatment of diseases. For scientific names 30 such Plant species were identified by relevant flora (Duthie, 1903-1929). The main aim of study was to bring out importance of wasteland growing medicinal plants and encourage the farmers to grow and conserve suitable medicinal plants species in this agro-climatic region.

III. Result and Discussion

The present study revealed that many plant species of different families are traditionally used by villagers and medicine men for medicinal purpose. From Table 1 it can be deduced that 30 medicinal, waste land self sown plant species belong to 23 families and 29 genera. Data clearly describes plant nature, local name, and occurrence, flowering and fruiting time, plant part used with the disease name. Leaf (13) constituent was highest of utilization followed by Roots (8), Fruit (4), Whole Plant (4), Seed (3), Flower (3), Latex (1), Seed Oil (1) and Bark (1).

The paper provides the traditional and medicinal uses of plant species. These plant species have been used by practitioners and local medicine men in the village area of Mathura and Aligarh district. Most of the

species are herbaceous in nature. These plant species have been used as medicine to cure various common diseases like amoebiosis, bronchitis, cold & cough, dropsy, whooping cough, diarrhea, dysentery, anti cancerous, wound healing, liver, kidney diseases, fever *etc.*

IV. Conclusion

The present study is very helpful to list out various wasteland self sown medicinal plants of Mathura and Aligarh, the present information sets up the way for further studies on conservation, cultivation and source of extra income for farmers as many of the species are on the way of extinction due to pollution. The youth can also be encouraged to learn the indigenous knowledge and the biodiversity to preserve from lost.

V. Acknowledgement

The author is highly thankful to College of Agriculture, Sanskriti University, Mathura and Mangalayatan University, Aligarh for providing necessary support to conduct the research.

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Table 1: Wasteland self sown Medicinal plants used as medicine by rural people of Mathura and Aligarh (U.P.).

S. No.	Botanical Name	Vernacular Name	Nature	Family	Plant parts	Medicinal Uses
1	<i>Abrus precatorius</i> Linn.	Ratti	Shrub	<i>Fabaceae</i>	Leaves Root Seeds	Bronchitis Cold & Cough. Purgative tonic, nervous disorder, cattle poisoning and for abortion.
2	<i>Argemone maxicana</i> Linn.	Peeli kateeli, Satyanasi	Herb	<i>Papaveraceae</i>	Latex Seed Oil	Dropsy, Jaundice and eye troubles. In burning, whooping cough.
3	<i>Calotropis procera</i> Linn.	Madar	Shrub	<i>Asclepiadaceae</i>	Leaves	Warmed leaves covered with cotton cloth to cure pain and swelling.
4	<i>Cannabis sativa</i> Linn.	Bhang	Herb	<i>Cannabinaceae</i>		Paste is used for curing piles, narcotic purposes in tribal areas. Anticancerous.
5	<i>Datura metel</i> Linn.	Datura	Herb	<i>Solanaceae</i>		Warmed leaves with castor oil for pus release, wound healing, Diarrhoea., Amoebiosis.
6	<i>Withania somnifera</i>	Ashwagandha			Root Paste Leaves	Anti-inflammatory, ulcers and scabies. Antioxidant And Anticancerous.
7	<i>Solanum xanthocarpum</i> Schrad.	Kateri			Flower Fruit, Root	Whooping cough. Cold & Cough
8	<i>Solanum nigrum</i> Linn.	Makoi			Leaves Fruits	Jaundice, fever, liver and Dysentery.
9	<i>Abutilon indicum</i> Linn.	Atibala		<i>Malvaceae</i>	Leaves Root	Dysentery. Amoebiosis.
10	<i>Sida cordifolia</i> Linn.	Khirainti	Shrub		Leaves	Dysentery.
11	<i>Achyranthes aspera</i> Linn.	Chirchitta	Herb	<i>Amaranthaceae</i>	Bark Seed	Blood Dysentery, Cold & Cough.
12	<i>Amaranthus spinosus</i> Linn.	Kanta Chouli			Root	Amoebiosis.
13	<i>Rungia repes</i> (L.) Nees.	Manga		<i>Acanthaceae</i>	Whole Plant	Cough.
14	<i>Adhatoda vasica</i> Nees.	Adusa	Shrub		Leaves Flower	Bronchitis
15	<i>Eclipta prostrata</i> Linn.	Kala Bhangra	Herb	<i>Asteraceae</i>	Leaves	Bronchitis, Cough, Dysentery
16	<i>Vernonia cinerea</i> Linn.	Phulni			Root	Cold & Cough, Diarrhoea.
17	<i>Bacopa monnieri</i> Linn.	Vermin		<i>Scrophuliaceae</i>	Whole Plant	Bronchitis

18	<i>Cynodon dactylon</i> (L.) Pers.	Doob Ghass		<i>Poaceae</i>	Whole Plant	Diarrhoea, Dysentery.
19	<i>Cyperus rotundus</i> Linn.	Motha		<i>Cyperaceae</i>	Root	Dysentery
20	<i>Sisymbrium irio</i> Linn.	Khumbkalan		<i>Brassicaceae</i>	Seed	Diarrhoea
21	<i>Euphorbia prostrata</i> Sims.	Gonemchi		<i>Euphorbiaceae</i>	Whole Plant	Diarrhoea
22	<i>Evolvulus alsinoides</i> Linn.	Vishnukanta		<i>Convolvulaceae</i>	Leaves	Cold & Cough
23	<i>Mimusops elengi</i> Linn.	Maulsari		<i>Sapotaceae</i>	Fruit	Dysentery
24	<i>Ocimum basilicum</i> Linn.	Vantulsi		<i>Lamiaceae</i>	Leaves Flower	Dysentery, Whooping cough. Cold & Cough
25	<i>Oxalis corniculata</i> Linn.	Khati mithi, Khati booti		<i>Oxalidaceae</i>	Whole Plant	Diarrhoea, Dysentery
26	<i>Tribulus terrestris</i> Linn.	Gokhru	Herb	<i>Zygophyllaceae</i>	Fruit	Bronchitis
27	<i>Phyllanthus niruri</i> Linn.	Bhoomi amla		<i>Phyllanthaceae</i>	Whole Plant	Stomach problems, Genitourinary system, liver, kidney and spleen and chronic fever.
28	<i>Rauwolfia serpentina</i> (L.) Benth.	Chotachand rare	Shrub	<i>Apocynaceae</i>	Root	Diarrhoea
29	<i>Triumfetta rhomboidea</i> Jacq.	Kasni		<i>Tiliaceae</i>	Root	Bronchitis
30	<i>Zyzyphus nummularia</i> Burn f.	Jhar Ber		<i>Rhamnaceae</i>	Leaves	Cold & Cough

Ranjana. " Wasteland Medicinal Plant Resources of Aligarh and Mathura." IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT) 13.3 (2019): 53-55.