International Multidisciplinary Research Journal 2012, 2(12):05-08
ISSN: 2231-6302
Available Online: http://irjs.info/

INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL

Some useful weeds from Ahemadnagar district , Maharashtra, India

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Abstract
Traditional knowledge has assumed great importance in enhancing our knowledge about the plants which are used by the people since time immemorial. During last few decades, sufficient research work on ethnobotany has been done in various parts of India by various workers. However, Ahemednagar district have not been given enough attention as far as ethnobotanical studies are concerned. Hence, to fill up the gap the present investigation has been undertaken. Total 30 weed species belongs to 18 families are recorded, while common diseases/ailments for which most of the plants used are Joint pains (7 species), Warts and wound (5 species) Headache, Tonic and cough (4 species each), Jaundice (3).

Keywords: Useful, Weeds, Ahemednagar, Maharashtra.

INTRODUCTION

The simplest and most common definition of weed is “any plant growing where it is not wanted”. This statement contains one very important and central idea about weeds, which is that they are exclusively associated with man and his activities. Because there is no doubt about their importance to man and nearly everybody is familiar with most of weeds.

According to Anderson (1954), “history of weeds is the history of man”. The plants, which we call today as a weed, are persistent since time immemorial but during the ancient periods the prevailing forest conditions were not suitable for the growth of weedy species, and yet these plants were apparently present in certain places and were thus able to colonize as soon as artificially disturbed sites became available to them. There must always have been small local areas of disturbance due to natural causes such as rivers, but another likely possibility is that many plants of open habitats survived this period in the regions near sea shore or on higher mountain slopes where open conditions were maintained by the general physical environment. Under modern conditions weeds and plants with weedy characteristics are frequently the pioneers of secondary successions caused by man-made or natural disturbances of the environment, but in many cases this weedy phase is quite brief.

There is ample evidence that many weed species were also used for food by early man, though this practice is by no means confined to the past. Many of our present-day weeds thus have a long history in India, but a great many others were introduced from other parts of the world much later by successive groups of colonizers. The example of the weeds came from outside are *Parthenium hysterophorus*, *Cassia* sps., *Echornia* sps., etc.

Received: Oct 10, 2012; Revised: Nov 13, 2012; Accepted: Dec 26, 2012.

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Since man began to create disturbed environments on a large scale it is clear that enormous new possibilities have been opened up for weeds, and it is a striking fact that many weeds which are a serious problem in areas to which they have spread are relatively harmless in the places from which they were introduced.

It is worth re-emphasizing that some weedy plants were certainly selected by primitive man as crops. Amongst crops thought to be have been selected and evolved from weedy ancestors are potatoes, carrots, sunflowers, barley, oats and rye; the weedy grass *Aegilops* is known to be an ancestor of modern wheat varieties. Thus weeds can be important to man in many ways, not all of them disadvantageous. The present communication will give a information about the weed plants and some of their utilities for mankind from Ahemadnagar district.

Study Area

The Ahemadnagar district is located between 18°02’N lat., 19°09’ E North latitude and 73°05’ and., 75° 05’ East longitude and is situated partly in the upper Godavari river basin and partly in the Bhima river basin It is largest district of Maharashtra occupying more or less the central position in the state and with an area of 17,413 sq. km.As regards the botanical explorations in Ahmednagar, several people have made notable contributions, such as Pradhan and Singh (1999), Santapau (1951), Santapau and Irani (1962), most of these works resulted in enrichment of the Herbaria except few publications, like Shirke (1978). Hooker et al (1872-1897), Cooke (1909-1917) have recorded plants from Ahmednagar district in their publications. However, extensive work for the flora of the Ahmednagar district has been done by Pradhan and Singh (1999). In spite such a extensive works present investigations indicates that the plant wealth of Ahmednagar city area has not been given enough emphasis and needs more attention.

People

In Ahemednagar district Thakars, Mahadevkoli, Bhills and Ramoshies are major tribal groups found, however, several other communities also reside in the vicinity of forests. Their huts are without windows and their major occupation is agriculture. Rice,

black sesame and ringer millet are some of the crops they cultivate.

MATERIALS AND METHODS

The present ethno botanical survey was done during 2010-2012 in different villages of Ahemadnagar Old experience and tribal medicine men (Vaidya) were consulted to know about the use of various plants growing in their localities. Herbariums of the useful weeds were prepared and identification was done following standard literature (Singh et al, 2000 &2001; Cooke, 1958; Pradhan and Singh, 1999). Herbarium specimens are deposited in the Botany Department Deogiri College, Aurangabad.

Enumeration of Plants

Following is the alphabetical list of plants with their scientific names, name of family and local name and distribution with the field voucher number, uses with details like plant parts used method of preparation of medicine, doses, etc.

1. *Achyranthes aspera* L. (Amaranthaceae) 'Aghada'.
   Distribution: Very common on wasteland, Shendi, near Bus stand, DCH- 1756
   Use: Rheumatism and joint pain: Plant decoction is used as poultice in treating rheumatism and joint pain.

2. *Argemone Mexicana* L. (Papaveraceae) 'Pivala dhotra'.
   Distribution: Very common weed along roadside, Aurangabad road near Sai Lawns, DCH-1612.
   Uses- Wounds: Plant paste applied externally for healing wound. Jaundice: Watery latex applied externally on eyes once a day for 5 days.

3. *Asclepias currasavica* L. (Asclepiadaceae) 'Haldi kunku'.
   Distribution: Very common in waste lands, Karanji, DCH -1675.
   Use- Root extract 20-30ml given to children during night to eradicate intestinal worms.

4. *Boerhhavia rapens* L. var. *diffusa* (L.) Hook. (Nyctaginaceae) 'Punrnava'.
   Distribution: Common weed along roadsides, BTR regiment, DCH -1734.
   Use- Kidney stone: 10 to 20 ml leaf decoction taken for 10-15 days in treating kidney stone and other urinary troubles.

5. *Calotropis gigantea* (L.) R.Br (Asclepiadaceae) 'Rui, Mandar'.
   Distribution: Very common weed in and around villages and along roadsides, Burhanagar, DCH – 1758.
   Uses-
   Headache: Flowers and leaves are kept on head and massage is given by warmed utensil to reduce headache.
   Cough: Flowers with honey and *Semecarpus anacardium* seed cotyledons, taken in proportion of 1:1:2 and made small 1 gm pills, taken orally twice a day until cure.

6. *Calotropis procera* (Ait.) R.Br. (Asclepiadaceae) 'Aak, Rui'.
   Distribution: Very common weed in waste places around villages and along roadsides, DCH -1729.
   Uses-
   Asthma and cough: Dried leaves smoked to cure asthma and cough.
   Cough: Dried leaves mixed with jagary are also given for treatment of cough.

7. *Cassia sophera* L. (Fabaceae) 'Chilhar'.
   Distribution: Common throughout the district during rainy season, DCH – 1668.
   Uses:
   Arthritis: Leaves half fried in *Sesamum orientale* oil and applied externally over joints in treating arthritic pain.
   Edible: 'Chutney' is made by leaves.

8. *Cassia tora* L. (Fabaceae) 'Charota'.
   Distribution: Common throughout the district during rainy season, DCH – 1668.
   Use:
   Itch: Fresh leaf juice is applied for treating itch.
   Ringworm: Paste of roots with lemon juice applied externally over ringworm.

9. *Catharanthus roseus* Don. (Apocynaceae) 'Sadaphuli'.
   Distribution: Common in Karangi ghat DCH – 1763.
   Use: Jaundice: Half glass juice of leaves taken orally once a day empty stomach for 5 days.

10. *Centella asiatica* (L.) Urb, (Apiaceae) 'Brahmi'.
    Distribution: Common on moist places in forest undergrowth, Mula chari, DCH – 1807.
    Uses:
    Urinary Problem: The decoction of plant is given in treating burning sensation while urination.
    Brain tonic: The leaves are used to increase memory.

11. *Chenopodium album* L. (Chenopodiaceae), 'Bathua, chakvat'.
    Distribution: Common amongst crops, Devgan, DCH –
    Use: Leaves used as vegetable for treating anemia

12. *Cocculus hirsutus* L. (Menispermaceae), 'Vasanvel, Jaljamni '.
    Distribution: common, Imampur ghat, DCH – 1727.
    Use: Spermatogenesis: Leaves consumed directly said to be effective in enhancing spermatogenesis.

13. *Cuscuta reflexa* Roxb. (Cuscutaceae) 'Amarvel'.
    Distribution: Common parasite of hedges and other plants, DCH – 1777.
    Use- Arthritic pain: Paste of whole plant applied externally on joints.

14. *Datura innoxia* Mill. (Solanaceae) 'Dhotra'.
    Distribution: Frequent in open places, Shendi, DCH – 1817.
    Use- Wounds: Root paste with, *Ricinus communis* roots, *Brassica nigra* seeds in equal proportion and small amount of salt applied externally on wounds until cure.

15. *Datura metal* L. (Solanaceae) 'Kala Dhotra'.
    Distribution: Frequent in open places, Burhanagar, DCH – 1718.
    Uses-
    Cough: Leaves smoked to cure asthma and whopping cough.

Wounds: The fruit roasted in warm ash, crushed and paste applied to treat wounds.
Pimples: Root paste applied externally.

16. *Eclipta alba* L. (Asteraceae) 'Maka'.
Distribution: Frequent in moist places near water bodies, Kapurwadi talav, DCH – 1761.
Use: Jaundice: Leaves curry is eaten to purify blood and also used to treat jaundice.

17. *Euphorbia hirta* L. (Euphorbiaceae) 'Dudhi'.
Distribution: Frequent in moist and waste places, Mahalaxmi garden, DCH – 1618.
Use: Wounds: Crushed leaves are applied on wounds of cattle.

18. *Euphrobia nerlifolia* L. (Euphorbiaceae) 'Dudi'.
Distribution: Common in waste places, DCA- 1841.
Use- Warts: latex applied externally twice a day.

19. *Jatropha gossipifolia* L. (Euphorbiaceae). 'Erand'.
Distribution: Common along road side, Pandharipul, DCH – 1649.
Use: Tooth problems: Stem used as brush for tooth problems.

20. *Justica adhatoda* L. (Acanthaceae), 'Adulsa'.
Distribution: Commonly occur nearby villages, Police headquarter Ahemadnagar, DCH – 1739.
Use- Cough: 50-60ml decoction of tender leaves with *Zingiber officinale* rhizome, and *Piper nigrum* seeds in equal proportion, taken orally daily thrice for three days.

21. *Lantana camara* L. var, *aculeata* (L.) Moldenke (Verbenaceae), 'Ghaneri'.
Distribution: Common along road side, camp area, lakadipool, DCH – 1753.
Use: Swelling in cattle: Handful leaves add in 100ml *Sesamum orientale* oil and two eggs mixed and given orally 2 times only to cattle.

22. *Parthenium hysterophorus* L. (Asteraceae) 'Gajar gavat'
Distribution: Common weed along road side and waste land& garden DSP Office. DCH – 1725.
Use: Dysentery: Root extracts about 20-30 ml taken twice a day for two days.

23. *Pergularia daemia* (Forsk.) Choiv. (Asclepiadaceae).
Distribution: Common weed of waste land, Dahigoan. DCH – 1778.
Use: Fever and respiratory disorders: Roots with sugar and *Cuminum cyminum* seeds taken in 2:1:1 proportion crushed and mixture made in to pills of 2 gm each, two pills taken twice a day for 3 days.

24. *Solanum surratense* Burm. f. (Solanaceae) 'Bhuiringini'.
Distribution: Frequet in open lands, Chandbibi mahal, DCH – 1747.
Use: Itch and ringworm: Leaf paste mixed with turmeric powder and applied to cure itch and ring worm twice a day until cure.

25. *Tephrosia purpurea* (L.) Pers. (Fabaceae) 'Unahali'
Distribution: Common weed along road side and waste land Chandbibi mahal, DCH – 1607
Use- Jaundice: Whole plant powder with curd taken 20-30 ml orally for treating jaundice.

26. *Tribulus terrestris* L. (Zygophyllaceae) 'Sarata'.
Distribution: Common weed along road side and waste land & fallow field Dahigoan, DCH – 1644.
Use: Urinary disorders: 5 gm powder of fruits with one tea cup of milk taken orally twice a day for 2 weeks to treat urinary problems.

27. *Tridax procumbens* L. (Asteraceae) 'Ekdandi'.
Distribution: Common weed along road side and waste land near civil hospital, DCH – 1626
Use: Wounds: Leaf paste used in wounds and cuts.

28. *Urginea indica* (Roxb.) Kunth. (Liliaceae) 'Janglikanda'
Distribution: Frequent in open places near villages,DCH-1902
Use: Cough: 10-20ml decoction of tuber is taken orally once early in the morning to cure cough.

29. *Vitex negundo* L .(Verbanaceae) 'Nirgudi'.
Distribution: Common weed along road side and waste land Karanji ghat. DCH – 1720.
Use- Leaf boiled lukewarm water poured over joints in joint pain.

30. *Withania somnifera* (L.) Dunal . (Solanaceae) 'Ashavaganda'.
Distribution: Common weed along road side and waste land Nagar-Manmad road Civil hospital. DCH – 1602
Use:
Tonic: One table spoon powder of root with sugar similar proportion taken orally twice a day for 41 days.

RESULTS AND DISCUSSION

The study revealed in all 30 weed species of 18 families used for medicinal purposes have been documented. Majority of the species used are from familiesAsclpiadaceae and Solanaceae (4 each), Asteraceae, and Euphorbiaceae, Fabaceae(3each) and majority of preparations from Leaves (18), Underground parts (6), Stem bark (01), Fruits (01), Flower(1), Whole plant (04) and Latex (01) etc. Generally weeds have never been given much importance. As they are species unwanted in the place and being ignore or thrown away. Present communication may give leads to the researchers about the utility aspect of the weeds.

ACKNOWLEDGEMENTS

Mrs. J. R. Mulay is thankful to University Grant Commision, New Delhi for granting facilities and F. I. P. Authors are thankful to Principal of the Colleges for support and facilities.

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