

Less-known Uses of some Exotic Plants from Ahmednagar District, Maharashtra: Part –I (A-D)

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ABSTRACT

The present communication deals with study of 42 exotic plants used regularly by the people of Ahmednagar district of Maharashtra for various purposes. During the investigation it has been observed that 57 less known uses of these exotic plant species are not reported earlier in the major literature published so far. Though these plants are exotic but most of them are naturalized and now they are the part of vegetation all over the country.

Key words: Exotic, plant species, uses, Ahmednagar, Maharashtra, India.

INTRODUCTION

Ahmednagar, the largest district of Maharashtra with an area of 17, 413 sq. km occupies the central position in the state of Maharashtra. It lies between 18°02' and 19°09' N latitude and 73°09' and 75°05' E longitude. The district is divided into 14 revenue Taluka's and the district share external boundaries with Nasik district on the north; north-west it is surrounded by Thane district; on the north-east by Aurangabad district; on the east by Beed and Osmanabad districts; on the south by Solapur district and on the west by Pune district.

Forests: Forests occupies 8.41% of total geographical area of the district. Type of forests in general is mixed deciduous. It mainly consist Dry-tropical forest, Moist-tropical forest and Western-subtropical hill forest. The mountainous regions of Akola taluka are rich in medicinal plant resources. Pradhan and Singh¹⁴

(1999) reported 1044 total species in Ahmednagar district.

Forest dwellers: In Ahmednagar district total twelve tribes are reported. Out of this Bhil, Mahadeo koli, Pardhi, Thakar are the major tribal groups in the area. Besides these tribal groups, several other communities are staying as forest dwellers. As per 2001 census the tribal population is 07%.

During the present exploration conducted from 2011 to 2015 it is observed that the flora of the region is rich with several exotic species. These exotic species though have native some other country but their centuries year old usage in the region shows they are naturalised since long. These species have been introduced either by human for its usefulness of distributed naturally or accidentally in the India.

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It is said that the exotics can be harmful to the natural composition of forest vegetation but as some exotics have its mention in ancient Indian literature like Ramayana, Mahabharata and Ayurveda too^{4,19}.

MATERIALS AND METHODS

The present study involved extensive ethnobotanical survey and documentation of information, collection of exotic plants which are utilized by forest dwellers in different localities for various purposes. The methodology used for procuring data and information through interviews of knowledgeable people. The data presented here is based on extensive survey and collections made in the different parts of Ahmednagar district and nearby areas during 2011-2015. During the fieldwork 2-3 voucher specimens of each plant were collected and numbered. The voucher specimens were made mostly at flowering or fruiting stage and poisoned before preparing herbarium by following standard methods¹². Plants characters were noted in the field. Collected plant specimens were identified with the help of keys to the families, genera and species provided in reputed floras like Cooke⁶, Singh *et al.*,¹⁷ and Pradhan & Singh¹⁴ etc.

Major literature consulted for confirming uses is Anonymous², Dey⁷, Kirtikar and Basu¹³, Ambasta¹, Arora & Pandey³, Chandra⁵, Jain⁹, Roy, *et al.*,¹⁵, Singh, *et al.*,¹⁸, Jain and De Philips¹⁰, Husain *et al.*,⁸, Sharma & Singh¹⁶ and for ethnoveterinary uses¹¹, etc. Besides this several journals covering papers on ethnobotany are consulted. The used of plants not found reported in the literature published earlier are provided in the paper.

Enumeration

The following list (Part –I) includes plant species which are arranged in alphabetical order (A-D). The enumeration includes botanical name followed by vernacular name in inverted comma (‘’) and name of the family in capital letter.

All voucher specimens are deposited in Herbarium, Shri Muktanand College, Gangapur, Aurangabad. Under uses detailed preparation of medicine, dosage, mode of administration, etc. is given.

1. *Acacia nilotica* ssp. *indica* (Bth.) Brenan. ‘Vedibabhul’. MIMOSACEAE
Native: N. Africa, Arab.
Use: Common cold: 5-10ml bark decoction with pinch of salt and same quantity of honey taken twice a day for 3-4 days.
2. *Achyranthes aspera* L. var. *aspera* ‘Agheda’ AMARANTHACEAE.
Native: Tropics
Uses:
 - a) Bleeding fissures: Seeds are crushed to make a paste, 10-20ml given twice a day for 5-6 days to cure bleeding fissures.
 - b) Cuts and injuries: Leaf paste is applied till cure.
 - c) Leucorrhoea: Handful of roots with 5-6 black pepper are ground together then mixed with jaggery and taken with water once a day for 15 days.
 - d) Menorrhagea: 20-30ml extract of handful of leaves with pinch of salt is given twice during menses to decrease excessive bleeding.
3. *Adiantum philippense* L. ‘Hansraj’. POLYPODIACEAE.
Native: Tropical America
Use: Throat infection: 50ml leaf decoction taken twice a day for two days.
4. *Ageratum conyzoides* L. ‘Burando’. ASTERACEAE.
Native: S. America
Uses:
 - a) Pimples: Leaves are ground to paste and applied over pimples.
 - b) Malaria: 20-30ml decoction of handful leaves given twice a day for 4-5 days to treat intermittent fever.
5. *Alangium salvifolium* (L. f.) Wangerin. ‘Ankul’. ALANGIACEAE.
Native: Tropics.
Uses:
 - a) Joint pain and swelling: Seeds crushed to make paste, lukewarm paste is applied over joints once a day till cure.
 - b) Snake bite: 20-30ml of seed extract is given to treat snake bite.

6. *Aloe vera* (L.) Burm. f., 'Korphad'.
LILIACEAE.
Native: North America
Uses:
a) Dyspepsia: 10-20gm of leaf pulp with same amount of jiggery taken twice a day for 7 – 8 days.
b) Skin burns: Leaf pulp is applied twice a day till cure.
7. *Amaranthus spinosus* L. 'Kateri-Math'.
AMARANTHACEAE.
Native: America.
Use: Spermatorrhoea: 20-30ml of roots extract with pinch of salt given once for 4-5 days to stop involuntary discharge of semen.
8. *Annona squamosa* L. 'Sitaphal'.
ANNONACEAE.
Native: Tropical America
Use: Diabetes: 30-40ml of decoction of handful leaves given empty stomach once a day for 15-20 days.
9. *Argemone mexicana* L. 'Piwaladhotra'.
PAPAVERACEAE.
Native: Mexico, Central America
Uses:
a) Fever: Handful of roots with 5-6 black pepper and rhizome of *Zingiber officinale* taken in same proportion, crushed and 20-30ml of extract with pinch of salt taken twice a day for 2-3 days.
b) Itching: Root paste is applied to cure itching.
10. *Artemisia maderaspatana* L. 'Davana',
ASTERACEAE.
Native: North America
Use: Itching: Juice of leaf is applied till cure.
11. *Asclepias curassavica* L. 'Haldikunku'.
ASCLEPIADACEAE.
Native: Tropical America.
Use: Urinary problems: 20-30ml of plant extract taken twice a day for 7-8 days to treat pain while urination.
12. *Azadirachta indica* A. Juss. 'Limbad'.
MELIACEAE.
Native: Persia, Burma
Uses: Scorpion sting: Leaf juice is applied.
13. *Balanites aegyptiaca* (L.) Del. 'Hingu'.
BALANITACEAE.
Native: Africa, Arab.
Use: Throat infection: Inner stem bark crushed, decoction is prepared and 10-20ml taken twice a day for 3 days.
14. *Bauhinia racemosa* Lam. 'Apata'.
CEASALPINIACEAE.
Native: Sri Lanka
Use: Dyspepsia: 15-20 ml extract of inner stem bark given twice a day for 2-3 days.
15. *Bidens biternata* (Lour.) Merr. & Sherff. ex Sherff 'Chikata'.
ASTERACEAE.
Native: South America
Uses:
a) Constipation: 40-50 ml leaf extract with pinch of salt is taken once during bed time for 15 days.
b) Fever: Roots crushed are boiled to make a decoction and 20-30ml taken twice a day for 3 days.
16. *Blumea lacera* (Burm. f.) DC. 'Buranda'.
ASTERACEAE.
Native: Tropical America.
Use: Fissure: 30-40 ml extract of fresh plant taken once a day for 3 days to treat painful fissure.
17. *Boerhavia repens* L. var. *diffusa* (L.) Hook. f. 'Punernawa'.
NYCTAGINACEAE.
Native: Tropics.
Uses:
a) Leucorrhoea: 1-2gm of root powder taken with cow milk and sugar once a day for 15 days.
b) Diabetes: 20-30ml of plant extract with pinch of salt taken once a day for 15-20 days to control the sugar level.
18. *Bombax ceiba* L. 'Katesavar'.
BOMBACACEAE.
Native: China, Malaya
Uses:
a) Wounds: Stem bark paste is applied to treat wounds.
b) Fertility: 20-30 ml decoction of root is taken once a day for 5 days of menses for conception.
19. *Brassica juncea* (L.) Czern. & Coss. 'Mohari'.
BRASSICACEAE.
Native: Tibet.

- Use:* Dandruff: Gentle warmed seed oil massaged over head once or twice per week for a month.
20. ***Butea monosperma*** (Lam.) Taub. 'Palas'.
FABACEAE.
Native: Myanmar.
Uses:
a) Dyspepsia: 50 ml stem bark decoction taken twice a day.
b) Antiseptic: Seed powder applied over wounds to expel worms.
21. ***Calotropis procera*** (Ait.) R Br. 'Akada', 'Rui'. ASCLEPIADACEAE.
Native: Tropical Africa.
Uses:
a) Joint pain: latex of the plant is rubbed over joints.
b) Intermittent fever: Extract of root bark with pinch of black pepper powder and sugar taken twice a day for 2 days.
22. ***Cannabis sativa*** L. 'Ganja'.
CANNABICEAE.
Native: Central Asia.
Use: Brain tonic: 2-5 gm dry leaf powder taken twice a day for a month.
23. ***Cardiospermum halicacabum*** L. 'Kapalphodi'. SAPINDACEAE.
Native: S. America
Use: Intestinal worms: 20-30ml decoction of whole plant is given to children up to the age of 12 years, once a day for 3 days.
24. ***Careya arborea*** Roxb. 'Kumbhi'.
BARRINGTONIACEAE.
Native: Malasia, Thailand.
Uses:
a) Body pain: 40-50 ml extract of handful fresh stem bark, twice a day for 3-4 days.
b) Stomach disorder in cattle: Half liter extract of fresh stem bark given orally once a day until cure.
25. ***Carissa congesta*** Wight. 'Karvand'.
APOCYNACEAE.
Native: Malasiya.
Use: Cold & fever: 30 ml leaf decoction taken once for 2-3 days to reduce temperature.
26. ***Cassia fistula*** L. 'Bahava'.
CEASALPINIACEAE.
Native: Tropical Asia.
Use: Constipation in calf: Ripe fruits are ground and given to calf with fodder for 7-8 days.
27. ***Cassia obtusifolia*** L. 'Takala'.
CEASALPINIACEAE.
Native: Tropical America.
Use: Intermittent fever: 20-30ml of leaf decoction taken twice a day for 6-7 days.
28. ***Cassia occidentalis*** L. 'Rantakala'.
CEASALPINIACEAE.
Native: S. America.
Use: Mumps: Leaves twigs and leaves crushed to paste and applied on mumps.
29. ***Cassia tora*** L. 'Takla, Tarota'.
CEASALPINIACEAE.
Native: America.
Use: Fever in infants: 1-2ml of seed paste given with mothers milk twice a day for 3 days.
30. ***Celosia argentea*** L. 'Kombada'.
AMARANTHACEAE.
Native: Tropical Africa.
Use: Fever: Whole plant paste is applied over forehead and chest to reduce body temperature.
31. ***Cissampelos pareira*** L. var. *hirsuta* (Buch.-Ham. ex DC.) Forman 'Banka teega'.
MENISPERMACEAE.
Native: S. America
Uses:
a) Wounds: Leaf paste is applied till cure.
b) Fever: 20-30 ml of extract of root and 4-5 black pepper taken twice a day for 3-4 days.
32. ***Cleome gynandra*** L. 'Pandharitilvan'.
CLEOMACEAE.
Native: Tropical America.
Use: Piles: Paste of tender shoots is applied over piles.
33. ***Cleome viscosa*** L. 'Pivalitilvan'.
CLEOMACEAE.
Native: Tropical America.
Use: Dysuria: 20-30ml extract of plant is taken twice a day for 5-6 days for treating burning sensation and pains while urination.
34. ***Cocculus hirsutus*** (L.) Diels 'Vasanvel'.
MENISPERMACEAE.
Native: Tropics.
Uses:

- a) Conjunctivities: Leaf paste is taken in muslin cloth and kept over eyelids for half an hour.
- b) Spraining of joints: Leaves are crushed to paste, mixed in coconut oil and warmed over fire. Lukewarm of this mixture is applied over joints.
35. *Commelina forsskalaei* Vahl. 'Canpet'.
COMMELINACEAE.
Native: Afro Asian.
Use: Redness and itching of eye: 1-2 drops of leaf juice instilled in eyes twice a day for 2-3 days.
36. *Convolvulus arvensis* L. 'Chandvel'.
CONVOLVULACEAE.
Native: Europe.
Use: Sunstroke: 20-30ml of root extract with pinch of salt and sugar given twice a day for 4-5 days.
37. *Crateva magna* (Lour.) DC. 'Varun'.
CAPPARACERAE.
Native: Tropical Africa
Use: Joint pain: Leaves dipped in oil and heated on fire, lukewarm leaves are kept over joints and tied by cotton cloth.
38. *Cuscuta reflexa* Roxb. . 'Amarvel'.
CUSCUTACEAE.
Native: Mediterranean.
Use: Joint swelling in cattle: Plant paste is applied over joints and tied by using cotton cloth.
39. *Cymbopogon citratus* (DC.) Stapf
'Gawaticaha'. POACEAE.
Native: Malesia.
Use: Painful urination: Plant crushed and 1-2gm paste taken with buttermilk twice a day for 3-4 days.
40. *Datura innoxia* Mill. 'Dhotra'.
SOLANACEAE.
Native: Mexico.
Use: Mumps: Fruits crushed and applied over mumps.
41. *Datura metal* L. 'Kala Dhotara'.
SOLANACEAE.
Native: Tropical America.
Use: Toothache: Stem cuttings used as toothbrush or crushed stem paste kept on affected tooth.
42. *Dioscorea bulbifera* L. 'Dukkarkand'.
DIOSCOREACEAE.

Native: Tropical America.

Use: Dyspepsia: 15-20 ml of tuber extract given with butter milk twice a day for 2-3 days.

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