

Some Useful Weeds of Baroda, its Neighbourhood, and Pavagadh

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INTRODUCTION

Weeds grow everywhere and can tolerate almost any set of climatic conditions; they usually spring up with the first showers of the monsoon and continue as long as there is enough moisture in the ground.

We have been deeply interested in the study of the weeds occurring in the city of Baroda and its neighbourhood, particularly on Pavagadh Hill, 29 miles NE. of the city; we have made ample collections and recorded plenty of data, some of which we wish to present in the present paper. In our first paper we dealt with the weeds of the University Campus (1957); we paid attention to the various uses made of these weeds from the medicinal point of view; such information was obtained in the first instance from local Ayurvedic practitioners, and in this respect our data were of interest as being first-hand and authoritative.

In successive years we have extended the field of our activities to include the whole city of Baroda and the slopes of Pavagadh Hill. In the present paper we list only such plants as we have found to be used medicinally in the district under study. We give our plants following the order of Cooke's FLORA OF THE PRESIDENCY OF BOMBAY. The names enclosed within brackets after the scientific ones are names used locally for the plants.

LIST OF USEFUL WEEDS

PAPAVERACEAE

1. *Argemone mexicana* Linn. (Darudi)

A prickly herb, in flower most of the year. The oil from the seeds is used in skin diseases and ulcers. The roots are purgative.

CAPPARIDACEAE

2. *Cleome viscosa* Linn. (Kanfuti)

An erect, glandular herb; flowering in July to September. The juice of the leaves is used for headache and poured into ears for ear-ache. The seeds are carminative and are used to kill intestinal worms.

3. *Gynandropsis gynandra* Briq. (Tanmani; Adhiyakaran; Aadiyakarson)

An erect herb, flowering in July to November. A decoction of the root is given in fever. The juice of the plant is useful for scorpion-sting and fever. It stops pains of the body and ear trouble. The oil is used for skin diseases.

CARYOPHYLLACEAE

4. *Polycarpaea corymbosa* Lamk. (Jinapan Okhrad)

A herb, flowering in September to October. The application of the vegetative parts cures poisonous bites.

PORTULACACEAE

5. *Portulaca oleracea* Linn. (Moti Luni)

A succulent prostrate herb, flowering in March to December (almost throughout the year). As a pot herb it cures the diseases of the blood and stops urinary troubles.

ELATINACEAE

6. *Bergia odorata* Edgew. (Lavariyu; Runvad)

A decumbent herb, flowering in March to November. A paste prepared from the plant is used on scorpion-sting.

MALVACEAE

7. *Sida veronicaefolia* Lamk. (Bhonyabala)

A prostrate spreading herb, flowering in September to January. The leaves are applied on cuts and bruises.

² [Mhaskar, K. S., and Caius, J. F., in 'Indian Plant Remedies used in Snake bite' (*Ind. Med. Res. Memoirs*, No. 19, Jan. 1931) write: "We have every reason to believe that our work is exhaustive, and we may safely conclude that none of the Indian plants recommended for the treatment of snake-bite has any preventive, antidotal, or therapeutic effect." The same authors, after an exhaustive study of plants or plant combinations used in the treatment of scorpion sting, write: "None of the Indian Plant Remedies popularly used in the treatment of scorpion sting has been found to have any preventive, antidotal, or therapeutic effect."—Eds.]

8. *Sida spinosa* Linn. (Kantalobal; Gangeti)

An erect herb, flowering in October to April. The plant cures wounds, ulcers, and disorders of the bile. The root is a tonic, good for heart disease and asthma.

9. *Sida acuta* Burm. (Bala)

An undershrub, flowering in September to December. The root is utilised in nervous and urinary diseases.

10. *Sida cordifolia* Linn. (Mahabala; Khapat)

A velvety herb, flowering in September to December. The juice of the roots, leaves, and bark heals ulcers and wounds. Plant is used for urinary diseases, disorders of blood, and scurvy. The roots are applied on scorpion-sting.

11. *Abutilon indicum* Sweet (Kansaki)

A tall herb, flowering in May to November (almost throughout the year). The roots are used for fevers, cough and leprosy. The roots and leaves are taken internally for snake bite and urinary troubles.

TILIACEAE

12. *Triumfetta bartramia* Linn. (Jipati)

An undershrub, flowering in August to September. The plant increases the secretion of milk in females. It reduces swellings. The seeds are given in cases of dog-bite. The leaves are used in dysentery.

13. *Triumfetta rotundifolia* Lamk. (Jipato)

A herb or an undershrub, flowering in August to October. Used as a demulcent.

14. *Corchorus aestuans* Linn. (Jiteli)

An erect or prostrate herb, flowering in August to October. The seeds are used in pneumonia and the roots for cough.

ZYGOPHYLLACEAE

15. *Tribalus terrestris* Linn. (Gokharu)

A spreading herb, flowering in August to October. The entire plant with its fruits is useful in kidney diseases and for ulcers.

OXALIDACEAE

16. *Oxalis corniculata* Linn. (Aamalati; Khati Luni)

A tiny creeping herb, flowering in July to October. The plant is a remedy for scurvy and is given to relieve the effects of opium. Good for head-ache.

PAPILIONACEAE

17. *Tephrosia purpurea* Pers. (Sarapankho)

An undershrub, flowering in June to November. The plant is a tonic and has the property of purifying the blood. A decoction of the root is used for urinary troubles and its smoke stops cough. Oil from the seeds is best for eczema.

CAESALPINIACEAE

18. *Cassia occidentalis* Linn. (Kasundaro)

An undershrub, flowering in August to December. Externally, the seeds and leaves are applied on skin diseases, and for swellings. The roots are used in snake bite. Leaves are good for asthma, cough, and indigestion. The fruits are also used for cough.

19. *Cassia tora* Linn. (Kunvadiyo)

An erect herb or an undershrub, flowering in July to October. Used as a pot-herb, only after the first showers of rain, and has the property of curing cough, asthma, leprosy, and gastric troubles. It kills intestinal worms. Good for headache and promotes urinary discharges. The roots and seeds are applied on swollen parts and skin diseases. The roots purify the blood. An infusion of the plant is given to the animals infested with worms.

CUCURBITACEAE

20. *Coccinia indica* Wt. et Arn. (Tindora; Gholi; Gilodi)

A climber, flowering in July to September. The juice of the leaves and roots has a cooling effect and is used in diabetes. The flowers are used in disorders of the bile and jaundice. The fruits are applied on swollen parts and are used for disorders of the blood. As a pot herb it cures anaemia.

MOLLUGINACEAE

21. *Trianthema monogyna* Linn. (Vasu)

A prostrate succulent herb, flowering in April to November. The juice of the plant is a tonic for old age. A decoction of the roots is used for fevers, swellings and scorpion-sting.

RUBIACEAE

22. *Oldenlandia corymbosa* Linn. (Pitpapdo)

A small, delicate herb; flowering in July to October. The juice of the plant has a cooling effect. Used in jaundice. It is a blood purifier.

23. *Borreria hispida* Schum. (Madhuri Jadi)

A small herb, procumbent as well as decumbent; flowering in July to October. The plant is used in toothache.

COMPOSITAE

24. *Vernonia cinerea* Less. (Shahadevi)

A herb, flowering in July to September. The plant juice cures piles. The root is useful for dropsy. The juice of the roots is used in fever.

25. *Ageratum conyzoides* Linn. (Makadmari; Ajgandha)

An erect herb, flowering in August to February. The plant is used for leprosy and diseases of the skin. The leaves heal cuts.

26. *Grangea maderaspatana* Poir. (Mundi)

A prostrate spreading herb, flowering in April to July. The juice of the plant is useful for irregular menses and pains of the ear.

27. *Sphaeranthus indicus* Linn. (Bodiyo Kalhar; Kalar; Gorakh Mundi)

A herb, flowering in December to January. The plant is a tonic used for ulcers, cough, anaemia, and asthma. The juice of the plant cures jaundice, leprosy, gastric troubles, wounds, and disorders of the bile. The fruits are applied for rheumatism.

28. *Xanthium strumarium* Linn. (Gadariun)

A herb, flowering in September to April. It is useful in malaria and improves appetite.

29. *Eclipta prostrata* Linn. (Bhangro)

An erect or prostrate herb, flowering in July to December. The root is useful for skin diseases. The plant has a cooling effect for the eyes, and keeps hair black if mixed with the oil. Used for cough, asthma, leprosy, and anaemia. It checks sexual appetite.

30. *Tricholepis glaberrima* DC. (Utkatari; Utkanti)

An erect, spinous herb; flowering in January to April. The plant is a tonic. The roots and seeds are useful. The root bark is used in urinary troubles. The roots are applied on snakebites and scorpion-stings. The roots if taken internally cure cough.

31. *Launaea nudicaulis* Hook. f. (Bhonyatri)

A prostrate spreading herb, decumbent; flowering in June to March. It checks fever.

ASCLEPIADACEAE

32. *Calotropis gigantea* R. Br. (Aakado)

A milky shrub, flowering throughout the year. The plant is a superlative remedy for leprosy, piles, intestinal worms, cough, dropsy, and skin diseases. It is good for digestion. Application of the milky juice relieves ordinary pains of the body. It is purgative. The roots are used for jaundice and its bark enhances perspiration. Oil boiled with the leaves is applied in paralysis. The leaves are used for headache and serpent bite. The flowers cure fevers and cough.

33. *Calotropis procera* R. Br. (Dholo Aakado)

A small shrub, flowering throughout the year. Its uses are the same as those of *C. gigantea* R. Br.

34. *Leptadenia reticulata* Wt. et Arn. (Nani Dodi)

A twiner, flowering in May to October. The plant is a tonic and a substitute for vegetables.

GENTIANACEAE

35. *Enicostemma verticillatum* (Linn.) Engler. (Kadavi Nai)

An erect herb, flowering in June to September. The plant purifies the blood. It is also used for hernia.

BORAGINACEAE

36. *Coldenia procumbens* Linn. (Okhrad)

A procumbent herb, flowering in August to October. The leaves are used for boils and rheumatism.

37. *Heliotropium marifolium* Retz. (Hathi Shundhan)

A decumbent herb, flowering in June to September. Tender shoots of the plant cure ulcers. The leaves are applied on scorpion-sting.

CONVOLVULACEAE

38. *Evolvulus alsinoides* Linn. (Jini Fudardi)

A prostrate herb, flowering in June to December. The plant is used in dysentery and is a good tonic for asthma.

39. *Convolvulus microphyllus* Sieb. ex Spr. (Shankhavali)

A prostrate herb, flowering in June to January. The juice of the plant with honey stops nausea, and is a tonic for delirious persons.

40. *Merremia emarginata* Hall. f. (Under Kani)

A small creeping herb, flowering in July to October. The juice of the plant is used in cases of rat-bite.

SOLANACEAE

41. *Solanum nigrum* Linn. (Piludi)

An erect herb, flowering in June to January. The juice of the plant is useful for piles and stops blood-vomits. The fruits are used in fever. An infusion of the leaves is used to remove the effects of opium. The plant is used as a pot herb for disorders of the bile.

42. *Solanum xanthocarpum* Schr. et Wendl. (Bhony Ringani)

A prostrate, spreading, spiny herb; flowering in January to May. The plant is used in asthma and relieves pains of the body. A decoction of the roots is good for cough and fevers. The fruits are smoked to relieve pain caused by decayed teeth. The application of the juice of the plant with honey is highly praised as a remedy for baldness.

43. *Physalis minima* Linn. (Popti)

A herb, somewhat procumbent; flowering in August to September. The plant is a tonic. It increases secretion of milk.

44. *Withania somnifera* Dunal. (Ghoda Aasun)

A small hairy undershrub, flowering in September to March. The plant cures weakness and is good for fever.

45. *Datura metel* Linn. non auct. plur. (Dhanturo)

A small, succulent shrub; flowering in September to March (almost throughout the year). The fruit boiled in sweet oil is a superlative remedy for skin diseases. All parts of the plant are smoked in to cure cough. The juice of the plant is used for mumps and guinea-worm. The leaves and roots are applied on scorpion-sting and swollen parts.

SCROPHULARIACEAE

46. *Bacopa monnieri* Pennell. (Jalnevari; Bam)

A prostrate, spreading, succulent herb; flowering in August. Useful as a tonic in nerve weakness, asthma, and rheumatism.

47. *Striga euphrasioides* Benth. (Dholo Aagiyo)
An erect herb. Root parasite on grasses. Flowering in July to October. The plant improves appetite.
48. *Lindenbergia indica* O. Kuntze (Bhint Chatti)
A small, glandular herb. Lithophyte. Flowering in August to November. The juice of the plant is used in chronic bronchitis.

OROBANCHACEAE

49. *Orobanche nicotianae* Wight (Vakunbo)
A herb. Root parasite on tobacco plants. Flowering in December to February. A fodder for cattle.

ACANTHACEAE

50. *Peristrophe bicalyculata* Nees. (Kali Anghedi)
A herb, flowering in August to January. Used in snake bite.
51. *Rungia parviflora* Nees. (Khadsheliyo)
A decumbent herb, flowering in August to October. Used in fever and cough.

VERBENACEAE

52. *Phyla nodiflora* Greene (Ratveliyo)
A prostrate, creeping herb; flowering in June to October. An infusion of the leaves is given to children suffering from indigestion.

LABIATAE

53. *Ocimum gratissimum* Linn. (Aavachi-Bavachi)
A herb, flowering in July to October. The seeds are used for headache and dysentery. The juice of the plant stops nausea.
54. *Anisomeles indica* O. Kuntze (Chodharo)
An erect herb, flowering in June to October. The plant is used as a tonic in uterine affections and fevers.
55. *Leucas aspera* Spreng. (Kubo)
An erect herb, flowering in August to November. The juice of the leaves is used for scabies, jaundice, fevers, and swellings.

NYCTAGINACEAE

56. *Boerhavia diffusa* Linn. (Punnarnava ; Satodo)
A decumbent herb, flowering in March to November (almost throughout the year). The plant is applied on swollen parts and

cures ulcers of animals. The plant is highly praised for its property of curing dropsy. It promotes urinary discharges. The roots are used in ophthalmic troubles, jaundice, and asthma. It stops disorders of the brain and fever.

AMARANTACEAE

57. *Digera muricata* Mart. (Kanajero)

A small herb, flowering in July to September. The plant is used as a vegetable and has a laxative effect.

58. *Amarantus spinosus* Linn. (Kantalo Dabho)

An erect, spinous herb; flowering in August to September. The root is used in eczema. The leaves are sometimes used as a vegetable and have a cooling effect.

59. *Amarantus gracilis* Desf. (Dhimado)

An erect herb, flowering in August to September. Young shoots are eaten.

60. *Amarantus polygamus* Linn. (Tandalajo)

A herb, flowering in August to September. Used as a vegetable and cures bowel trouble. The leaves have a cooling effect. It stops cough and purifies blood. Used on scorpion-sting. A good tonic for dropsy.

61. *Aerva lanata* Juss. (Kapuri Madhuri)

A herb, in flower most of the year. The root is useful for headache.

62. *Achyranthes aspera* Linn. (Anghedo)

A herb, flowering in September to February. The entire plant and the seeds are useful. It is highly praised for stopping nausea. It cures fever, cough, indigestion, toothache, dropsy, swellings, and skin diseases. Its stem is very good for cleaning the teeth. The bark or the roots are applied on scorpion-sting. The leaves cure piles. An infusion of the young shoots or the seeds with honey is used for rat-bite.

63. *Alternanthera sessilis* R. Br. (Jal Jambvo; Panini Bhaji)

A prostrate, spreading herb; flowering in July to September. The plant is a good tonic and is used for dropsy.

CHENOPODIACEAE

64. *Chenopodium album* Linn. (Chilni Bhaji)

A herb, flowering in January to April. Used chiefly as a vegetable. It is laxative and purifies the urine. The juice of the plant is applied on burns.

ARISTOLOCHIACEAE

65. *Aristolochia bracteata* Retz. (Kidamari)

A prostrate herb, flowering in June to September. The plant juice is applied for ulcers in animals. Cures fevers and intestinal worms. Applied on swollen parts.

EUPHORBIACEAE

66. *Euphorbia hirta* Linn. (Nagala Dudheli)

An erect herb, flowering in June to November (almost throughout the year). The plant is used in bowel troubles.

67. *Phyllanthus niruri* Linn. (Bhonya Amlī)

A small, erect herb; flowering in June to September. The entire plant is used in fever. It cures disorders of the blood and bile. The leaves are used for jaundice, anaemia, and cough.

68. *Chrozophora prostrata* Dalz. (Betho Okhrad)

A prostrate herb, flowering in May to June. It is used for cold and cough. The seeds are purgative.

69. *Acalypha indica* Linn. (Dadaro; Vinchhi Kanto)

An erect herb, flowering in July to November. The plant is useful in bronchitis and pneumonia.

COMMELINACEAE

70. *Commelina nudiflora* Linn. (Aakhalo-Bokhalo)

An erect herb, flowering in July to October. Its application is good for burns.

CYPERACEAE

71. *Cyperus rotundus* Linn. (Moth)

An erect, glabrous herb; flowering in July to October. The tubers are used for disorders of the stomach.

GRAMINEAE

72. *Eragrostis* sp. (Dabha; Darbha)

A slender, glabrous grass; flowering in July. Very good fodder grass. The roots are used in fevers and cough, and promote urinary discharges.

73. *Cynodon dactylon* Pers. (Daro)

A perennial grass, flowering in July to October. It is used in Hindu pujas for Lord Shri Ganesh. It is best for lawns. A good

fodder grass. An infusion of the plant stops bleeding from piles. Used in haemorrhage, eczema, and brain troubles. Stops nausea and fevers. It is a very good remedy for irregular menses. It is said, and believed by the public, that the roots tied with cotton thread to the hand stop fevers.

SUMMARY

The present paper puts on record the useful weeds occurring in the city of Baroda and on the Pavagadh Hill mentioning their medicinal properties. Such information was obtained in the first instance from local Ayurvedic practitioners. This paper is based on the collections made during the years 1954 to 1957. The names used locally for all the weeds occurring in these areas are also given.

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REFERENCES

1. Cooke, T. (1901-1908): The Flora of the Presidency of Bombay. London and Bombay.
2. Watt, G. (1889-1893): Dictionary of Economic Products of India. London and Calcutta.
3. Santapau, H. (1935): Contributions to the Botany of the Dangs Forest, Bombay State. *Journ. Gujerat Res. Soc.* 16: 285-320 and 17: 1-59.
4. Sutarra, R. N. (1949): A text-book of Systematic Botany. Bombay.
5. Pattnaik, H. (1956): Some useful weeds in and around Cuttack. *JBNHS* 54: 140-152.
6. Phatak, V. G. and G. M. Oza (1957): Studies on the weeds of Gujerat. (1) Observations on the weeds of the M. S. University Campus. *Journ. M. S. Univ. Baroda* 6: 93-111.