CHAPTER VII
MEDICINAL IMPORTANCE OF
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Botanical garden weeds have a large ecological amplitude, so they multiply and flourish well even in changed environmental conditions. Since they have unique potentialities for adaptation they survive almost in any environment and adjust themselves to the changed conditions (Sen 1982; Sen and Kasera, 1988) Man has been mostly indifferent towards weeds and has allowed them to create havoc by growing, spreading and disseminating their seeds at well. Fortunately, a large majority of the weeds are not very harmful to cultivated plant with which they are associated (Sen, 1979; 1990 a. b, 1997; Holzner, 1978. Kasera 1988. Sen et.al.1999, Kumar 1984.).

The Department of Botany Dr. Hari Singh Gour University, Sagar is having one of the best University Botanic Garden in India. On account of good moderate climatic conditions a large number of rare and important plants are being cultivated and maintained here. The present work related to survey the medicinal utility of weeds of Botanic Garden which grow along with the cultivated plants, from time to time. Now a days the maintenance of Botanic Garden, become the most serious problem. The weeds not only minimize the nutritional value, which ultimately effect the growth and quality of the garden plants, but also minimize the aesthetic value of the garden and plot. So weeding is one of the most important aspect. The eradication of these garden may not be necessary to get healthy and good quality of plants.

Earlier studies on weed control have largely shown that is substitute for chemicalization to control weed however the increasing use of weedicides also have some drawbacks such as: finance, regular use of weedicides will effects the nutritional value of plot, and use of weedicides in the plot also reduced the pollination percentage. Due to smell of weedicides visits of insects is arrested, which ultimately minimize cross pollination and the net result would be great loss in vigour of a plant.

To overcome this problem to some extent it is proposed to make use of these weeds for medicinal purposes. Keeping this in view such losses can be compensated by exploring the medicinal utility of very common weeds of Botanic Garden. Thus this paper is focussed on systematic medicinal evaluation of garden weeds. Instead of using
weedicides for their eradication, weeds can be uprooted and instead of throwing them they may be used for medicinal purposes.

Information on the medicinal utility of different parts of the weeds against various disorders was collected by the malies working in the garden. It has been observed that the traditional knowledge which malies of the Botanic Garden posses on the weeds and their uses is of much use which is of much use which should be explored properly. Instead of throwing them as weed, they may be used for different ailments.

Medicinal uses of garden weeds are described below. Weeds are arranged in alphabetical manner followed by family name, vernacular name and medicinal utility of plant parts.

1. *Acalypha indica* Linn. (Euphorbiaceae)
The whole plants is useful in bronchitis, asthma, pneumonia. Leaf juice is given in pneumonia treatment. Plant latex contains acalyphin alkaloids which is given in snake bite and disease of scabies. Leaf is given in ear pain and skin disease.

2. *Achyranthus aspera* Linn. (Amaranthaceae)

"Addajhara"
The root is given for easy delivery. It is also given with cold water to stop bleeding after abortion. Root paste is applied externally in scorpion sting. The whole plants is used in pains of tooth. Plant ash with a small quantity of sugar given orally for cough. Seeds cooked and eaten as rice during fast. Root is given in bronchitis, asthma, and dysentery. Leaf paste is useful in skin disease and piles.

3. *Ageratum conyzoides* Linn. (Compositae)
The flowers are used in treatment of cancer. The leaves are used in leprosy and uterine disorder. It is also used in piles and killing the lice of hairs. Leaf paste applied on cuts, wounds, boils and burns. Seeds is given diarrhea. Leaf is also useful skin disease and scabies disease.
4. *Alysicarpus monilifer* DC. (Leguminosae)
The whole plants is useful in antidote to snake bite. The mixture of crushed plants with cow dung is used for destroying the bed bugs and white ants. Paste of whole plant warmed and applied on boils.

5. *Alysicarpus tetragonolobus* Edgew. (Leguminosae)
Root is given for median antifertility. Whole plant is useful in bone fracture and also in pains in joints. Root is also useful in expectorant.

6. *Anagallis arvensis* Linn. (Primulaceae)
"Nil Krishna"
The leaf is given in treatment of leprosy and hydrophobia. Leaf is also given for median cerebral affection. Whole plant is useful in gout disease.

7. *Argemone mexicana* Linn. (Papaveraceae)
"Pili Kateli"
The paste of leaves used in ulcer, leprosy. Seed are used in cough, asthma and headache. Paste of root is given in piles. Whole plant (without root) made into fine paste and applied on white patches in lips and body. Latex is given for pains, swelling and body pains.

8. *Biophytum sensitivum* (L.) DC. (Oxalidaceae)
The leaf is used in cuts, headache. It is also useful in anti-fertility and antiseptic. Plants axis is given for malaria and diarrhea. Leaf paste with cow’s milk is useful in treatment of menstrual disorders. Leaf is also given in muscle & rheumatic pain.

9. *Blumea lacera* (Burm.f.) DC. (Compositae)
Leaf is used in burns, cuts, wounds. The whole plant is useful in bronchitis fever.

10. *Blepharis maderaspatensis* (L.) Roth. (Acanthaceae)
Leaves mixed with some garlic and ground into a paste. Given for treatment of gastric disorders.
11. *Boerhaavia diffusa* Linn.(Nyctaginaceae)
The whole plants is used in headache. Leaf is useful blood purifying. Root is
given for asthma, cough and fever. Root is given in dysentery, inflammation and
stomach complication. Root paste with cow milk is given for abortion. Tenders leaf
are eaten like vegetable for jaundice.

12. *Cassia absus* Linn.(Leguminosae)
Leaf extract is useful in cough and healing. Seed is also useful in eye infection
and skin disease. Seeds also useful in for ophthalmic disease and as a median
disease cool agent. Seed is cooked as a pulse.

13. *Cassia tora* Linn. (Leguminosae)
“Chakoda”
Leaf are useful in night blindness and paste of leaf is used in cuts, boils and
antiseptic treatment. Seed is given in stomach pain as a tonic. Root is given in
fever and abnormal child growth. Leaf also useful in bone fracture, intestinal
disease and stomach pain.

14. *Cassia pumila* Lamk.(Leguminosae)
Leaf plant axis whole plant used single or in combination with other for wound
healing fever & vomiting.

15. *Cleome viscosa* Linn.(Capridaceae)
“Hurhur”
Leaf paste is given for ear pain. Seed is used in diarrhea and skin
disease. Leaf powder and sugar each half spoon (equal amount) with one cup of
milk given in morning and evening for urinemia disease.

16. *Cocculus hirsutus* (L.) Diels.(Menispermaceae)
“Solenta”
The leaf decoction is given in fever, eczema, urine disorder. Root useful for
deforming.

17. *Commelina benghalensis* Linn.(Commelinaceae)
"Kankaua"
Leaf paste is given in scorpion bite and wounds. Leaf is used diarrhea and irritation by bristles of caterpillar.

18. *Cissampelos pariera* Linn.(Menispermaceae)
Leaf is given for treatment of jaundice and liver disorders. Paste of leaves, flowers and root is also used for itch and small pox.

19. *Cynodon dactylon* Pers.(Gramineae)

"Doob Grass"
The whole plant is used in ulcers in stomach. Paste of leaves is applied for piles and stop bleeding. Leaf also given in vomiting.

20. *Cyperus rotundus* Linn.(Cyperaceae)
Root is useful in diarrhea and dysentery. Root powder with salt is given treatment of indigestion, diarrhea and vomiting.

21. *Desmodium triflorum* (L.) DC.(Leguminosae)
The whole plant is useful in body pain. Leaf is used in dysentery, diarrhea and pain in tooth.

22. *Eclipta prostrata* Linn.(Compositae)

"Brangraj"
Root paste is applied externally for treatment of antidote to snake bite. The whole plant is useful in anti-fertility, asthma, bronchitis and jaundice. Plant powder boiled in water and used as a treatment of malaria. The whole plant is also useful to remove filarial disease. Whole plant burnt, and made into powder which is mixed with coconut oil and applied on eyelids for conjunctivitis.

23. *Euphorbia hirta* Linn.(Euphorbiaceae)

"Doodhi"
The whole plant is used in boils of mouth, cough and dysentery. It’s also given in toothache and vomiting. Leaf is given treatment of snake bite as a antidote, and also given for pains in joints. Latex is useful in scabies disease and scorpion bite.
24. *Evolvulus alsinoides* Linn. (Convolvulaceae)
   "Sankhpushpi"
The leaf is given in asthma, bronchitis and ulcers. Whole plant is given for stomach pain and scorpion sting. Ash of whole plant along with mustard oil applied externally on skin Disease. Leaf is useful in treatment of asthma, and bronchitis.

25. *Hypitis suaveolens* (L.) Poit. (Labiatae)
   "Ban Tulsi"
Leaf juice is dropped in eye for conjunctivitis Root is given as the median antidote to poison. Plant axis used as tooth brush for toothache & also used in headache.

26. *Indigofera cordifolia* Heyne. (Leguminosae)
Leaf is useful in swelling in mouth.

27. *Lagasca mollis* Cav. (Compositae)
Leaf paste is given in cuts and wounds. Flowers are given for ear complaints.

28. *Launea asplinfolia* Hook. (Compositae)
Leaf is used in median fever and also used as vegetable.

29. *Oxalis corniculata* Linn. (Oxalidaceae)
   "Khatti Butti"
Leaf is given in cough, digestion, dysentery, and fever. Leaf is also useful in insect bite and skin disease. Extract of plant for stomach complaints. Whole plant mixed with black pepper used for skin eruption, alpaca and wounds.

   "Khatti Butti"
Leaf is useful in gastric fever. Bulb is given as tonic.

31. *Parthenium hysterophorus* Linn. (Compositae)
   "Gajar Grass"
Flowers are useful in nasal block in cold season. Leaves mixed with two or three pieces of garlics and made into fine paste, the paste is squeezed juice put in ear to stop pus flow.

32. *Sida acuta* Burm.f. (Malvaceae)
Paste of flowers are given in boils and burns. Root paste is useful in snake bite, pain in back. Leaf is also given in gastric disorder and stomach pain.

33. *Sida cordifolia* Linn. (Malvaceae)
The whole plant is used in Dysentery and Gonorrhea. Root paste is given in Boils and Wounds.

34. *Solanum nigrum* Linn. (Solanaceae)
   "Makoi"
Leaf used in Dysentery, Skin disease and Stomach pain. Whole plant useful in Urine complint and also in Jaundice.

35. *Sonchus arvensis* Linn. (Compositae)
Leaf paste is given in cuts and injuries. Stem & whole plant used as vegetable.

36. *Rungia pectinata* (L.) Nees. (Acanthaceae)
Mixture of leaf paste and milk is useful in treatment of small pox.

37. *Tridax procumbens* L. (Compositae)
Paste of leaf is given in boils, cuts & wounds. Leaf is also useful in diarrhea, dysentery and leprosy.

38. *Vernonia cinerea* (L.) Less. (Compositae)
The whole plants in useful in Fever, Piles and Wounds. Plant axis is useful in cholera's and dysentery. Powder of whole plant is given with cows milk to facilitate removal of kidney stones.

39. *Abutilon indicum* Sweet. (Malvaceae)
   "Kanghi"
The root are given for cough, leprosy and also as colling agent. Leaves juice are given for boil, bronchitis & headache & ulcers. Plant axis used in bone fracture, dysentery & cough. Leaves juice applied on the body of cattle to kill lice & other parasites.

40. *Fumaria indica* Pugley. (Fumariaceae)

“Pit Papra”
The whole plant is good purifier also given for treatment of fever, body pain, in various skin diseases. Mixture of leaf & stem is given for treatment of diarrhoea. Seed is used in body pain.

41. *Tribulus terrestris* Linn.(Zygophyllaceae)
Fruits are useful in asthma, cough, diuretic diseases & liver complaints. Fruits are also given for treatment of leucorrhoea & urine complaints.

42. *Cleome gynandra* Linn.(Capparidaceae)

“Hurhur”
Leaf paste is given for ear pain & boil. Seed is useful in cough, skin diseases & headache. Leaf is useful as vermicide, in pyorrhoea. Paste of plant axis is given in wounds.

43. *Polygala arvensis* Willd.(Polygalaceae)
Root is useful in treatment of cough & nervous disorder, & asthma complications. The whole plant is given in bronchitis. Leaf paste is given in swollen joints.

44. *Portulaca oleracea* Linn. (Portulacaceae)
The whole plant is good blood purifying. Paste of whole plant is also useful in for treatment of headache, fever, burns & burning sensation. Leaves are useful in fever & headache.

45. *Sida rhombifolia* Linn. (Malvaceae)
Root paste is applied on boils & cuts. Leaves are very useful in dysentery, swelling & wounds. Root extracts is given for treatment of fever and as a tonic. Seed used as gum insecticide.
46. *Malvastrum coramandelianum* Garke. (Malvaceae)
Leaves paste is applied on wounds, cuts, sores & sprain. Leaf is also given for jaundice.

47. *Indigofera linifolia* (L.f.) Retz. (Leguminosae)
The paste of whole plant is applied on sores & wounds. Seeds are edible.

48. *Tephrosia purpurea* Pers. (Leguminosae)
Leaf paste applied on wounds on goats & sheep. The plant axis is used in treatment of antidote to snake bite in blood purifying, tumor. Root extracts is given for fever, stomach pain & toothache.

49. *Centella asiatica* (L.) Urban. (Umbelliferae)
"Brahmi"
Five to six leaves are chewed four time a day to treat mouth sore. Leaves are very useful in fever, cough, eczema, gastric disorder. Leaves used as brain tonic. Fruits used in skin diseases.

50. *Borherria auriculata* (L.f.) Will. (Rubiaceae)
Root extracts are given in snake bite, bleed in child birth & for antifertility. Leaves used in skin diseases, scabies, ulcers. The whole plant is useful in body pain & swelling.

51. *Vicoa indica* (Willd.) DC.( Compositae)
Mixture of leaf & root is applied on headache. Leaves are given in stomach, kidney complaints. The whole plant is used in jaundice. Root used in tooth pain & gum complaints.

52. *Tricodesma indicum* (L.) Br. (Boraginaceae)
The paste of whole plant is applied on boils. Leaves are useful in eczema & also edible. The whole plant used as tonic for brain. Root extract is given in stomach pain. Fruits paste applied on swelling.

53. *Cuscuta reflexa* (Roxb.) Cuscutaceae
"Amarbel"

The whole plant is used in body pain, fever, skin diseases. The paste of whole plant is applied on burns, cuts, swelling of legs, wounds & killing of lice. Seed as purgative in nature.

54. *Ichnocarpus fruticiscens* (L.) Br. (Apocynaceae)

Plant axis is useful in bronchitis, cough, cholera, dysentery. Root used in skin diseases, fever, blood purifying, as a tonic. Leaf is given fever & stomach pain.

55. *Solanum surattense* Burme.f. (Solanaceae)

"Bhatkataiya"

Flowers with stamens are given in cough & cold. The whole plant used in heart disorders & in swelling. Root is used in cold fever, scorpion bite. Seeds are used in pain in jaw & pyrrhoea.

56. *Datura annoxia* Mill. (Solanaceae)

"Datura"

Leaves paste applied on boils. Seeds extracts used in pyorrhea. Leaves also used in asthma. The whole plant is useful in anti-hydrophobia.

57. *Physalis minima* Linn.( Solanaceae)

"Rasbhary"

It fruits is given as a tonic. Mixture of leaf & stem is given in gastric disorder, also given in stomach pain. The whole plant is used in ear pain. Leaf used in fever.

58. *Hygrophylla auriculata* (Schum.) Heine. (Acanthaceae)

Paste of leaves is used in body pain & jaundice. Plant axis is used in cancer, induces flow of urine. The whole plant extracts given in malaria. Seeds used as tonic.

59. *Anisomeles indica* (L.) O. Kuntze. (Labiatae)

The root is ground with water and the decoction is orally administered. The lotion is also massaged over the bitten part by snake-bite.
60. *Alternanthera sessilis* (L.) R.Br. ex. DC. (Amaranthaceae)
Plant axis used in various disorders such as dysentery, malaria, diarrhea. Leaf paste applied on the treatment of bone fracture. Leaves also edible.

61. *Chenopodium murale* L. (Chenopodiaceae)
“Bathua”
Leaf used in veterinary asthma. Leaf & stem used as vegetable.

62. *Phyllanthus virgatus* Forst.f. (Euphorbiaceae)
“Bhui-Amla”
The whole plant is useful in cold & fever. Paste of whole plant in piles. Leaves are applied in treatment of irritation on skin. Mixture of leaf, flowers & fruits is given in gonorrhoeal disorder.

63. *Phyllanthus niruri* Auct. (Euphorbiaceae)
“Bhui-Amla”
The whole plant is used in dysentery, jaundice. Paste of whole plants on boils, sores, swelling & ulcers. Roots extracts is given in gastric disorder & indigestion.

64. *Nicotiana tabacum* Linn.(Solanaceae)
“Tambaaku”
Juice of green leaves is used as insecticide & germicide. Paste of flowers is applied to cure eczema, ringworm, Hot leaves are tied over pesticides to treat & over boils for hastening their suppression.

65. *Commelina diffusa* Burm.f. (Commelinaceae)
“Kankaua”
Roots used in antidote in snake bite, bilious affect. Extracts of root is given fever.

66. *Cymbopogon martini* (Roxb.) Wats. (Gramineae)
Oil is used in skin diseases, & also in bilious affect. Leaves are given in rheumatism.

67. *Trichosanthes cucumerina* Linn. (Cucurbitaceae)
"Rambel"
Mixture of leaf & root is given in treatment of heart disorders. Fruits used in jaundice & as purgative. Root used stomach complaints.

68. *Heteropogon contortus* (L.) P. Beauv. (Gramineae)
Roots are chewed by the victim of snakebite and also pounded. Leaves useful in snakebite.

69. *Basella alba* L. (Basellaceae)
"Poi"
Plant axis is given syphilis, ulcers in nose. Leaf used in constipation. Mixture of shoots & leaves used as edible vegetable.

70. *Ranunculus scleratus* L. (Ranunculaceae)
Leaf paste is applied in treatment of inflammation of skin. The whole plant is used in symbolic destroys enemies.

71. *Enicostema verticillatum* (L.) Engl. (Gentianaceae)
Fresh leaves of whole plant produced fall in fasting blood sugar in diabetic patients. The whole plant is also useful in treatment of malaria, & snake bite.

72. *Aerva lanata* (L.) Juss. (Amaranthaceae)
The whole plant is given to increase milk in cows & buffaloes. The paste of whole plant is applied on cuts, wounds, burns & skin diseases. The whole plant also useful in malaria & headache. Plant axis used in cholera, dysentery & snake bite.

73. *Psoralea coryfolia* Linn. (Leguminosae)
Seeds are very useful in leprosy, skin diseases & veterinary injuries & leucodermal treatment.

74. *Bryopsis lacinoisa* Naud. (Cucurbitaceae)
"Shivlingi"
Seeds used in sex determination of children. Also useful in menses. The plant axis is useful in snakebite.
75. *Ricinus communis* Linn. (Euphorbiaceae)
   "Arandi"
   Hot leaves with coating of oil and applied on swelling leg. Extract of roots showed significant hygycæmic activity in albino rats.

76. *Sphaeranthus indicus* Linn. (Compositae)
   The whole plant used in blood purifying, cough, gastric disorders & headache. Leaves given in malaria treatment. Mixture of leaf & stem is given in fever. Flowers in given tonic & in cool.

77. *Caesulia axillaris* Roxb. (Compositae)
   Leaves are used given goiter. The whole plant is used in stomach complaints & also used as vegetable. Plant axis is used in baldness.

78. *Eichhornia crassipes* Solm. (Pontederiaceae)
   "Water Hyacinth"
   Leaves are used in ear disorders. Paste of whole plant is applied on swelling.

79. *Convolvulus arvensis* Linn. (Convolvulaceae)
   Seeds are purgative. The whole plant used in detergent.

80. *Datura Metal* Linn. (Solanaceae)
   "Kala Dhatura"
   Seeds paste mixed with turmeric powder is applied locally to treat skin diseases. Leaf used in treatment of cough, snake bites. Mixture of leaf, seed & root used in skin diseases. The plant axis given in madness, mumps & small Pox.

81. *Zornia gibbosa* Span. (Luguminosae)
   The whole plant is used in dysentery. Paste of whole plant is applied on healing of wounds, & sores. Root used as sedative properties & spermatorrhoea.

Total 81 weeds belonging to 59 genera and 31 families were found medicinally important. Various parts of all the weeds have been analyzed for their medicinal utility. Leaves were supposed to be the most useful part of the weeds. Out of 81 weeds,
shoots/leaves of 64 plants are found useful for various disorders. This is followed by root where roots of 25 plants are found medicinally important.

The analysis reveals that whole plants of 31 weeds are found useful against various disorders. Seeds of 17 plant species used in various diseases. Plant axis of 18, flower of 9, fruits of 6, and latex of 3 plant species are used in various diseases.

Disease wise analysis has also been carried out. Analysis reveals that for cut wounds, boils and burn, maximum few weed plants are used. Few species each for asthma and skin diseases are used for different ailments.