CHAPTER II

SHORT ACCOUNT OF TEST PLANT SPECIES AND THEIR PARTS
This chapter deals with a short account of test plant species. About 140 plant samples belonging to about 80 species of angiospermic plants were collected from 12 localities of Sagar. These localities were 1. Botanical gardens, 2. Road sides, 3. Waste places and vegetable fields, 4. Garphahra forest, 5. Ramna forest, 6. Khanpur forest, 7. Rahatgarh forest, 8. Bahroal forest, 9. Patharia hill, 10. Makronia area, 11. Cultivated fields and 12. Cantonment area and other places.

COLLECTION AND PROCESSING OF PLANT MATERIALS

For the collection of plant samples, frequent surveys of collection localities were made throughout the year. The collection of whole plant materials and/or their parts such as leaves, barks, roots etc. was made. The collected plant samples were brought to the laboratory in clean polythene bags and were washed thoroughly with sterile distilled water. The washed samples were soaked immediately with filter paper sheets for the purpose of removal of water. After soaking, the samples were shade dried by keeping them at room temperature for two to four weeks. The dried materials were suitably cut in to pieces and were kept in clean glass bottles until used.
After collection, the fresh plants/materials were identified by observing their morphological characters and by comparing them with the herbarium samples of Botany Department. The following publications were also consulted for the proper identification of various species.

5. Glossary of Indian Medicinal plants, CSIR, Chopra et al. (1956).
6. The Useful Plant of India, PID, CSIR, Ambasta et al. (1986).
TEST PLANT SPECIES

Acacia leucophloea Willd
(Renja)
Family - Mimosaceae
Sample used - Leaf, Bark

It is a medium sized grey spiny tree. The wood is hard and is used for paste. The bark is rich in tannin and is used in South India in the preparation of spirits from sugar and palm juice. The bark is astringent and is used medicinally.

2. Acacia catachu Willd
(Khair)
Family - Mimosaceae
Sample used - Leaf, Bark

It is a spiny medium sized tree with rough dark coloured bark. Stem bark is used during cough. It is also used in dysentry. Catechic acid found in the wood is useful as drug. Kaitha is largely used for masticatory with pan and supari.

3. Acacia concinna Dc
(Shikakai)
Family - Mimosaceae
Sample used - Leaf, Bark

A largely prickly climbing shurb flowers during
April and May and fruits ripens in the cold season. The pods are used as a substitute for soap as well as for dyeing and tanning and the pods and leaves are medicinal.

4. **Acacia nilotica** (Linn.) Delile
   (Babul)
   Family - Mimosaceae
   Sample used - Leaf, Bark

   Babul bark yields tannin. Leather made from this bark is firm and durable. Pods also contain tannin. Decoction of bark used as a gargle, and that of pods in urino-genital diseases.

5. **Aegle marmelos**, correa ex Roxb.
   (Bel)
   Family - Rutaceae
   Sample used - Leaf, Bark

   A small deciduous glabrous tree. Flowers greenish white, sweet scented, wild or cultivated, fruits globose oblong or pyriform. Rind grey or yellow, pulp orange coloured sweet.

   Bel is alterative antipyretic and antiscarbite, astringent, cordial, digestive, laxative, nutritive restorative, stimulent, stomatic and tonic useful in fever, hepatic or typhoid, bronchitis constipation.
Bark contains unpelliferon and coumarin. The leaves are supposed to be sacred and are offered to Lord Shiva especially on Monday in the month of Shravan.

   (Sahadei)
   Family - Compositae
   Sample used - Aerial part, Root

A softy hairy annual herb, 1-2 ft. high stem-branched. Abundant especially on the banks of streams and irrigation channels, flowers in Jan. and Feb. Distribution throughout India.

Expressed juice of the leaves is used externally on cuts and septic wounds.

7. *Allium cepa* Linn.
   (Piyaz)
   Family - Lil iaceae
   Sample used - Bulb, Leaf

The plants are cultivated for vegetable purpose. The expressed juice of the bulb is gently warmed and used to drop in ear for relieving the pain, onions considered stimulant, diuretic and expectorant, used against flatulence and dysentery. Roasted onions are applied as poultice.
8. *Allium sativum* Linn.
   (Lahsun)
   Family - Liliaceae
   Sample used - Bulb (cavoes), Leaf

   It is cultivated for vegetable purpose. Preparation of galic are used in pulmonary phthisis, gangrene of the lung, and whooping cough. Laryngeal tuberculosis lupus, and duodenal ulcers are treated by garlic juices. Juice is applied in skin troubles and used as ear drops, it is diluted with water as a vulnerary.

9. *Argemone mexicana* Linn.
   (Bramha dandi)
   Family - Papaveraceae
   Sample used - Leaf, Root

   A robust herb, 1-2 ft high, stem simple or sparingly branched, leaves 3-7 in. long, flowers are sessile, yellow in colour. A common weed on waste ground distributed throughout India. Introduced from America within historic times.

   Yellow gelatinous silky tonic is used in jaundice, skin diseases, ulcer. The weed contains the alkaloid. Its juice is diuretic and alterative. The oil is valued in painting purpose.
10. **Azadirachta indica** A. Juss
   (Neem)
   Family - Meliaceae
   Sample used - Leaf, Bark

   It is large tree either planted or self sown. Almost every part of the tree possesses some medicinal properties. The drug consists of dried stem bark, leaves and root bark. The bark is useful in malaria fever and in skin diseases. The antibiotic activity of leaves and roots of the tree have been reported.

   Bark used in skin diseases. Leaves considered antiseptic, applied to boils in the form of poultice; decoction given for ulcer and eczema. Flowers tonic and stomachic. Odour of burning leaves kills insects.

11. **Bauhinia racemosa** Lam.

   Family - Caesalpiniaceae
   Sample used - Leaf, Bark

   A small crooked tree with thick rough brownish bark and drooping branches. Leaves 1-2 inch, broader than long. Flowering time March to June. The bark yield useful fibre. The leaves are used medicinally. The tree regarded sacred by the Hindus. Bark astrigent, used in
dysentery. Leaves given with onion for diarrhoea and as an anthelmintic. Decoction of leaves used in malaria.

12. *Brassica juncea* (Linn)
- Czern and coss
- Family - Cruciferae
- Sample used - Leaf, Root

A tall erect shrub, annual 3-6 ft. height leaves are green and flowers are bright yellow in short corymbs. Largely grown during the cold weather months. The oil yielded by the seeds chiefly used as an article of food.

- Dhanamantari
- Family - Crassulaceae
- Sample used - Leaf

Toasted leaves are applied to wounds, bruises, boils and bites of venomous insects; swelling and discolouration of the affected part are prevented and the healing of injured portion's is accelerated. In the form of poultice and powder they are applied to sloughing ulcers.

14. *Butea monosperma* (Lam.) Kuntze
- (Palas)
- Family - Papilionaceae
- Sample used - Leaf, Bark

It is a small or medium sized tree which is highly
ornamental. Different parts of plant are medicinally important. Leaves are used in flaulence and colic, worms and piles. Gum and bark both contain kino, galic acid. Bark astrigent used for piles, tumours and menstrual disorders. When the seeds are pounded with lemon juice, they act as a powerful rubefacient and have been successfully used as a cure for a form of herpes called Dhobie's itch.

15. **Cassia fistula** Linn.
   (Amaltas)
   Family - Caesalpiniaceae
   Sample used - Leaf, Bark

   The plants which are medium sized trees are highly ornamental when in flower. The fruits are used for cattles suffering. The leaves are emolient, their juice and paste is useful for ring worm irritation, swellings and paralysis. The root barks, seeds and leaves are used as a laxative. The fruits are cathartic and are applied in rheumatism and snake-bite. The juice of leaves is used in skin diseases.

16. **Cassia tora** Linn.
   (Panwar)
   Family - Caesalpiniaceae
   Sample used - Leaf, Root

   It is a common weed herb abundantly grow by road
side and waste grounds after rainy season. The paste of roots, prepared with lime juice is a specific remedy for ring worms. The root is used in snake bite and seeds in skin diseases.

17. *Callistemon lanceolatus* Dc.
   (Bottle brush)
   Family - Myrtaceae
   Sample used - Leaf, Bark

   Introduced from Australia. Leaves yield an essential oil.

   (Madar)
   Family - Asclepadiaceae
   Sample used - Leaf, Root

   A large shrub, 6-8 ft. high very similar in foliage and general appearance to the preceding flower. All parts of plants are used medicinally. The dried bark of the root is used in the treatment of dysentery. Fresh leaves are used in the formation for swellings. The tincture of leaves is used in intermittent fevers. The latex is used as a strong purgative.
19. *Capsicum annuum* Linn.
(Lalmirch)
Family - Solanaceae
Sample used - Fruit

Herbaceous, annual. Fruits carminative, extensively used as a spice. The chief source of commercial chillies. The fruits are used in hoarseness and dyspepsia, yellowfever, neuralgia, and rheumatism. They are also applied in snake bite. Pungent principle is capsaicin.

20. *Citrus medica* Linn.
(Bara Nimbu)
Family - Rutaceae
Sample used - Fruit

The plants are shrub or small tree. The fruits is large with thick rind, yellowish colour. It is cultivated through out warm moist regions of India. The juice is refrigant and astrigent. Fruits used mainly for pickling, also candied. Peel made into marmalades and other preserves. Preserved rind used in dysentery.

(Rusalla)
Family - Boraginaceae
Sample used - Leaf, Bark

It is a medium sized tree, largely cultivated for
sake of fruits. Spritous liquous are prepared from it. The fruit is astrigent and is used in affections of urinary passages, disease of lungs and spleen. The decoction of bark is used in fever, leaves are applied to ulcers and headache. The plant is used as an antidote to snake bite.

22. *Datura innoxia* Mill.

(Datura)

Family - Solanaceae

Sample used - Leaf, Root, Fruit

Low branched shrub, leaves broadly ovate acuminate entire to pinnately lobed base unequal. Flower large white on short peduncle. Fruits globose covered with short spines, seeds compressed smooth. Fruits are crushed with mustard oil and used for rheumatism. A source of scopolamine, a cerebral depressant.


(Shisham)

Family - papilionaceae

Sample used - Leaf, Bark

It is a deciduous tree. It is planted on road sides as shade tree, in tree plantation programme. Sissowood resembles Indian rose wood. Like Indian rose wood it is a high class furniture and calnnnet wood, widely
used throughout north India. A decoction of leaves is useful in gonorrhoea. The powdered leaves are applied on eyes in conjunctivities.


(Tendu)

Family - Ebenaceae

Sample wood - Leaf, Bark

Source of coromandel Ebony, which consists of the black heartwood, substituted for true ebony. Fruit edible leaves esteemed for wrapping bidis. Leaves diuretic, laxative, carminative and styptic dried flowers used in urinary and skin troubles. Decoction of the bark used in diarrhoea and dyspepsia.

25. *Dillenia* sp. Linn.

Family - Dilleniaceae

Sample used - Fruit

Fruit used as a condiment. Wood used as fuel. Ash from the wood mixed with clay used for making fire resistant crockery. A paste from the bark recommended for thrush and week gums.


Family - Liliaceae

Sample used - Bark

Exudes a red resin, Zanzibar Drop or Socotra
Dragon's Blood, used in varnish; also used as an astringent and to stop haemorrhage.

27. *Emblica officinalis* Gaertn
(Amla)
Family - Euphorbiaceae
Sample used - Leaf, Bark.

Fruit sour and astringent, cooling, diuretic laxative: eaten raw or cooked, also picked; a rich source of vitamin C. Fruit used in hair dyes, dried ones are detergent and used for shampooing hair. Seeds yield a fixed oil, fruits, bark and leaves are rich in tannin, their tannin content being 28%, 8.21% and 22% respectively.

28. *Eucalyptus lanceolata*
Family - Myrtaceae
Sample used - Leaf, Bark

Eucalyptus is among the world's important hard woods and principle source of timber in Australia. The oil is antiseptic and is used in infections of the upper respiratory tract and certain skin diseases. The dried leaves in form of tincture are used in asthma and chronic bronchitis. The roots are used as purgative.
29. **Euphorbia thymifolia** Linn.

   (Chhotidudhi)

   Family - Euphorbiaceae

   Sample used - Aerial part, Root

   It is a latexiferous herb. The extract of leaves and seeds is used as a strong purgative. The juice of plant is given in ringworm and skin disease. It is an antidote for snake bite. Aqueous extract of the plant is used for the treatment of piles.

30. **Euphorbia hirta** Linn.

   (Badi dudhi)

   Family - Euphorbiaceae

   Sample used - Aerial part, Root

   It is also a latexiferous herb. The plant is used in disease of children in worms bowel, cough etc. the juice of plant is given in dysentery and colic. The decoction of the plant is given in bronchial affections and asthma. The latex is used as application for warts.

31. **Ficus beng(h)alensis** Linn

   Family - Moraceae

   Sample used - Leaf, Bark

   The tree regarded as extremely sacred by Hindus and it is largely grown near villages.

   The timber is used for making of furniture, doors
etc. The milky juice is applied externally for pains in rehumatism and lumbago. The infusion of bark is used in dysentery diarrhoea and diabetes. The leaves are applied as poultice.

32. *Ficus glomerata* Roxb.
   (Gular)
   Family - Moraceae
   Sample used - Leaf, Bark

   It is a large tree upto 60 feet in height, tree planted for the purpose of fruits. The bark is astringent and is given to cattle when suffering from rinderpest disease. The root is used in dysentery and diabetes. The milky juice is given in piles and diarrhoea.

33. *Ficus religiosa* Linn.
   (Pipal)
   Family - Moraceae
   Sample used - Leaf, Bark

   It is a large tree chiefly planted in villages road sides, and near the temples. It is sacred tree to the Buddhists. The bark is astringent and used for gonorrhoea. Young shoots are used as purgative. The bark contains some tannins and used for preparing lather and for dying.
34. *Grevillea robusta* A.Cunn
   (Silver Oak)
   Family - Proteaceae
   Sample used - Leaf, Bark

   Bark contains, a gum and tannin. Leaves are the source of green manure. Wood used for ornamental panelling, toys etc.

35. *Holoptelea integrifolia* Planch
   (Chirhol)
   Family - Ulmaceae
   Sample used - Bark

   Wood used for brush - backs and handles of dusting brooms: also used for indoor building purpose, cheap furniture, cabinet work, combs, shoe heels, match boxes and paper - pulp. Seed contain a fatty oil.

36. *Impoea palmata* Forsk
   (Railway creeper)
   Family - Convolvulaceae
   Sample used - Leaf, Root

   Tuberous roots and stems, though bitter, are used as food in Hawaii; roots and leaves and slightly cyanogentic seeds purgative, contain a fatty oil.
37. *Jasminum grandiflorum* Linn.
(Chameli)
Family - Oleaceae
Sample used - Leaf

The plants are very ornamental, climbers with beautifully smelling flowers. Plant accreted with anthelmintic and diuretic. Fresh juice of leaves applied to corns; leaves chewed in ulceration of the month.

Family - Verbenaceae
Sample used - Leaf

This species largely cultivated as a hedge plant. The decoction of *L. camara* is given in tetanus and rheumatism. Expressed juice is used in cuts and wounds.

(Mehndi)
Family - Lythraceae
Sample used - Leaf

The plant is largely cultivated in the form of hedges. The leaves yield a well known dye. The bark is given in jaundice, enlargement of spleen and skin diseases. The leaves are used for external application in headache and are rubbed over the roles of feet in the burning of
feet. Decoction of leaves is used as a gargle in sore throat. The powdered leaf forms the cosmetic 'Henna' used to stain skin.

40. *Malvastrum tricuspidatum* A. Gray
   Family - Malvaceae
   Sample used - Leaf, Root

   A common weed in cultivated grounds. An erect branching herb, 2-3 ft. high, leaves irregularly toothed, flowers are yellow.

   Emollient and resolvent; decoction given in dysentery. Flowers used as a pectoric and diphoretic.

41. *Mangifera indica* Linn.
   (Am)
   Family - Anacardiaceae
   Sample used - Leaf, Bark

   The plants are large trees which are largely cultivated for their fruits. The leaves are used in Scorpian sting. The ripe fruits is laxative and is useful in haemorraghe from uterus, lungs and intestine. The unripe fruits are useful in eruptions. Powder of leaves is given in diarrhoea and diabetes. The bark is used for making ointment of skin disease.
42. *Madhuca indica* Gamel  
(Mahua)  
Family - Sapotaceae  
Sample used - Leaf, Bark  

Seeds are a source of Mahua oil, used in rheumatism and skin affections, and as laxative in cases of habitual constipation and piles. It possesses insecticidal and piscicidal properties. Mahua flowers used in the preparation of distilled liqueurs and vinegar. Also used for making syrup.

43. *Miliusa tomentosa* (Roxb.) J. Sinclair  
(Kari)  
Family - Annonaceae  
Sample used - Leaf, Bark  

A large tree. The leaves are used as fodder. Tree yield a gum, kari gum used as a substitute for tragacanth.

44. *Mimusops elengi* Linn.  
(Bakauli, Maulshree)  
Family - Sapotaceae  
Sample used - Leaf, Bark  

Small sized tree, very ornamental with beautifully smelling flowers largely cultivated in parks and road
sides. The bark is astringent tonic and useful in fever. Leaves are antidote to snake bite. The pulp of ripe fruit is used in curing chronic dysentery.

45. **Millingtonia hortensis** Linn.
(Akash neem)
Family - Bignoniaceae
Sample used - Leaf, Bark

Wood suitable for furniture, ornamental work, tea-boxes, drawing boards and plane tables etc.

Bark yields an inferior type of cork, contains a bitter substance and tannin used as an antipyretic.

46. **Moringa oleifera** Lam.
(Munga)
Family - Moringaceae
Sample used - Leaf, Bark

Small tree, leaves usually 3 pinnate, flowers white in terminal penicles, fruits linear oblong ribbed, 35-50 cm. long, seeds frigous, winged on the angle. Cultivated for its fruits popularly called drum sticks. The leaves and fruits are used as vegetables. The extract of stem bark used for the treatment of itch and eczema.

All parts of the tree used in the treatment of ascites, venomousbites rheumatism, and as cardiac and circulatory stimulants.
47. *Morus laevigata* Wall. ex Brandis
   (Shah-tut)
   Family - Moraceae
   Sample used - Leaf

   Milky juice of the plant applied to sores. Wood used for house - building purpose and for oars, stocks, spokes, poles, shafts of carriages and carts, Yokes, furniture, and planking also suitable for tennins rackets panelling, carving, turnery, tea-boxes and toys.

   (Karela)
   Family - Cucurbitaceae
   Sample used - Fruit

   Herbacious plant climbing with simple tendrils, leaves cordate, flowers yellow white. The fruits are used as vegetable the fruits and other parts of the plant are also used medicinally. The leaves are locally applied to the burning of soles of the feet. Fruits tonic, stomachic, carminative and cooling; used in rheumatism, gout and diseases of liver and spleen, also for diabetes.

49. *Murraya koenigii* (Linn) Spreng
   (Mitha neem)
   Family - Rutaceae
   Sample used - Leaf, Bark

   A deciduous strong - scented pubescent or small tree with brownish bark.
The leaves are applied to check vomiting. It is also taken in fever, dysentery and diarrhoea. The leaves also yield an essential oil used as a fixative for heavy type of soap perfume. Leaves, root and bark tonic, stomatic and carminative. Juice of roots taken for relief from renal pain.

50. *Nerium indicum* Mill.
   (Kaner)
   Family - Apocynaceae
   Sample used - Leaf

Leaves contain oleandrin, a cardio-tonic. Roots resolvent and attuivant. An oil extracted from root-bark used in skin diseases.

51. *Nyctanthes arbor-tristic* Linn.
   (Harsingar)
   Family - Oleaceae
   Sample used - Leaf, Bark

A small tree with rough 4 angular branches leaves 4-5 inch long flowers very fragrant. The fragrant flowers which open during the night and fall on the ground. It is used by Hindus in ceremonies. The plants are distributed in forest and also cultivated in gardens far ornamental purpose.
The aqueous extract of the leaves is used in malarial fever. The bark is a cholagogue and laxative. Bark contains two alkaloids, of these the water soluble one stimulates the ciliary movement of oesophaga.

52. *Ocimum sanctum* Linn.
(Tulsi)
Family - Labiatae
Sample used - Leaf, Root

The plant is profusely branched herb, largely cultivated by Hindus in the garden, homes and near the temples. The fresh roots, stem and leaves are bruished and are applied to bites of mosquitoes. The plant is used as antidote far snake - bite and scorpion sting. Powdered leaves and seeds are used as poultice on boils.

53. *Ocimum basilicum* Linn.
(Babui tulsi)
Family - Labiatae
Sample used - Leaf, Root

The leaf juice is a well known remedy for ringworm, the leaves are expectorant, stomach and carminative. The roots are given in complaints of children.
54. *Parthenium hysterophorus* Linn.
(Gazar Grass)
Family - Compositae, Asteraceae
Sample used - Aerial part, Root

Plant used as tonic, febrifuge, emmenagogue, and analgesic, decoction of roots given in dysentery.

55. *Pithecellobium dulce* Benth.
(Vilayati imli)
Family - Alimosaceae
Sample used - Bark

Very suitable for hedges and as fuel as it has fast rate of growth, pods use as fodder. Seeds eaten raw or in curries. Saline extract of seeds shows a hemo-lytic agglutinating reaction with human blood. Bark contains tannin. Leaves serve as fodder. Wood used for general construction.

(Asoka)
Family - Annonaceae
Sample used - Leaf, Bark

Wood used for barrels, drum etc. Tall straight trunks were used for masts. Bark febrifuge.
57. *Pongamia pinnata* Pierre  
(Karanja)  
Family - Papilionaceae  
Sample used - Leaf, Bark

A common tree species on the road sides very often displaying ovarian galls. Leaves alternative, bark carminative and seeds are antiseptic. The seed oil is useful for the treatment of scabies, itch, herbes, eczema, ulcer and other skin diseases.

(Bijasal)  
Family - Papilionaceae  
Sample used - Leaf, Bark

A medium sized deciduous tree, leaves 7-9 inch, flowers in large, much branched. Flowering during rainy season. The bark of this plant yield astringent gum, which is known as Indian kino. The foliage offered excellent fodder for cattle.

The kino used in diarrhoea and dysentery; also finds application in dyeing, tanning and printing. Aqueous extract of wood given to diabetes and water stored in vessels made of this wood is reputed for its antidiabetic qualities.

(Muchkund)
Family - Stercaliaceae
Sample used - Fruit

Wood used for planks, packing cases and turnery articles. Flowers edible used for inflammations, ulcers, tumours, and leprosy.

60. *Putranjiva roxburghii* Wall.

(Putvanjiva)
Family - Euphorbiaceae
Sample used - Leaf, Bark

Wood used for house - building, agricultural implements, tool - handles, and turney.

Leaves given in decoction for cold, fever and rheumatism. Leaves also lopped for fodder. Stones stung into rosaries and necklaces. Seeds yield a fatty oil used for burning. Kernels also yield an essential oil.


(Mulli)
Family - Cruciferae
Sample used - Leaf

Mostly cultivated during winter for the fleshy tuberous roots leaves roughly pilose, flowers white with purple veins, pods erect.
The juice of leaves is diuretic and laxative. The roots are also used for urinary complaints, piles and gastrodynia.

62. Ricinus communis Linn.
    (Erand)
    Family - Euphorbiaceae
    Sample used - Leaf, Root

    The plants are often grow in hedges as a shelter for other crops. The seeds yield the well known castor oil which is largely used as a strong purgative. The leaves are applied to the head to relieve headache and as poultice for boils. Decoction of roots given in lumbago

63. Ruta graveolens Linn.
    Family - Rutaceae
    Sample used - Aerialpart, Root

    It is strongly smelling ornamental herb with yellow flowers.

    The leaves are used in rheumatism pains, in treating hysteria and colic.

    Yields an essential oil called Garden Rue oil. Rue oil used as an anthelmintic, antispasmodic, antiepileptic, rubefacient and emmenagogue; employed mostly for veterinary purposes.
64. Salmalia malabarica (D.C.) Schott and Endl.
   (Semal)
   Family - Bombacaceae
   Sample used - Leaf, Bark

   Tree attaining 12-15 m. trunk grey initially prickly, branching high up. Leaves digitally 5-7 foliate flowers are red, capsule large woody oblong ovoid.

   The bark is applied over inflammation and skin eruptions. The gum contains tannins and gallic acids.

65. Sontalum album Linn.
   (Chandan)
   Family - Santalaceae
   Sample used - Leaf, Bark

   The trees generally occurs in south India but also cultivated in other places. An oil is distilled from heart wood is largely used in soap industry and perfumery. The wood is sacred to Hindus and used on religious occasions. The wood is bitter, seadative cooling, astringent cardiac tonic and diuretic. It is given in bilioness fever and Marbid thirst.

66. Sapindus trifoliatus Linn.
   (Reetha)
   Family - Sapindaceae
   Sample used - Leaf, Bark

   Commonly it is wild tree, but also cultivated in
many parts of this country. The fruit containing saponin and are largely used as a substitute for soap. Commonly used in asthma, indigestion, diarrhoea and cholera.

Fruits emetic, tonic, astringent, and anthelmintic, used in asthma, colic due to indigestion, diarrhoea, cholera, tubercular glands, paralysis of limbs and lumbago. Roots and bark is saponaceous and used as a detergent like fruits.

67. *Syzygium cumini* (Linn.)
(Jamun)
Family - Myrtaceae
Sample used - Leaf, Bark

The plants are largely cultivated for the fruits which are eaten and are very nourishing specially for diabetes. The juice of leaves is given in dysentery. The bark is largely used in tanning and is also given as a medicine in and dysentery. Decoctions of bark are used in diabetes.

68. *Tagetes erecta* Linn.
(Genda)
Family - Compositae
Family used - Aerial part, Root

These herbaceous plants are extremely ornamental and are largely cultivated in gardens, homes and various other places. The flower juice is given for bleeding
piles and purification of blood. Infusion of herb used against rheumatism, cold and bronchitis. Root extract laxative.

69. *Tamarindus indica* Linn.

(Imli)

Family - Caesalpinadeae

Sample used - Leaf, Bark

It is largely applied during the inflammation in cytes. It is also useful in jaundice. The seeds are useful in dysentery. The bark is astringent tonic and febrifuge.

Leaves and flowers used in dyeing, bark contains tannin. Leaves eaten by goats and cattle, may also be tried as green manure.

70. *Tectona grandis* Linn.

(Sagona, Teak)

Family - Verbenaceae

Sample used - Leaf, Bark

Tree largely cultivated in this country for its timber wood which is extremely hard and lasting. Powdered wood made in to a plaster is used in headaches and for swelling. The bark is powerfully astringent, the wood is given in dysentery and beat burn and as an anthelmintic. The oil extracted from fruits is hair tonic.
   (Bahera)
   Family - Combretaceae
   Sample used - Leaf, Bark

   A large deciduous tree with thick dark grey bark. It is distributed in plains and lower hills through India. Fruits are used for dyeing and largely exported. The wood is used for various purposes. Fruits are useful to diarrhoea and dysentery. Bark diuretic and gum yielded by the tree, demulcent and purgative.

72. *Terminalia tomentosa* Wight and Arn.
   (Saj)
   Family - Combretaceae
   Sample used - Leaf, Bark

   A tall deciduous tree with dark deeply cracked bark leaves 5-9 inch long. Distributed in forests of India. Bark is styptic and cardiotonic.

73. *Tridex procumbens* Linn.
   (Bahuna)
   Family - Compositeae
   Sample used - Aerial part, Root

   A week struggling pubescent or hispid herb. 1-2 ft high. Abundent by road sides in grassy places and on old
walls, flowers during the greater part of the year. Distributed throughout India.

Expressed juice of the leaves is applied externally to cuts and septic wounds. Leaves used in bronchial catarrh, dysentery, and diarrhoea. Leaf juice insecticidal and piscicidal, also need to check hemorrhage of wounds.

74. **Vinca rosea** Linn.
   (Sadabahar)
   Family - Apocynaceae
   Sample used - Leaf

   This is very ornamental perennial herb. Flowering almost throughout the year. The plant is used as a remedy for diabetes.

75. **Xanthium strumarium** Linn
   (Gokhuri)
   Family - Compositae
   Sample used - Aerial part, Root

   A coarse 4 armed herb. stem short stout slightly branched, spotted, with brushy hairs. The plant is distributed throughout India.

   Powdered fruits are prescribed for oral administration during eye affections. The plant contains the Glycoside, Xanthestrumarin, the leaves yield a dye and
seeds yield oil which is used medicinally. Leaves are astringent, diuretic and antisyphilitic. Roots bitter and tonic, used against cancer and scrofula; extract applied to ulcers, boils and abscesses.

76. *Zingiber officinale* Rosc.
   (Adarakh)
   Family - Zingiberaceae
   Sample used - Rhizome

   It is a herb with thick, creeping, horizontal, jointed, tuberous and branched rhizome and slender aerial stems having long lanceolate leaves. The plants are cultivated for the sake of rhizomes. Rhizomes are used as a stimulant, carminative and flavouring agent. It is given in dysentery and colic and diarrhoea.

77. *Ziziphus jujuba* Mill.
   Family - Rhamnaceae
   Sample used - Leaf, Bark

   It is spiny shrub or moderate sized tree which is largely cultivated for the fruits.

   The fruits are mucilaginous and are supposed to purify blood and acid digestion. The decoction of root is used in fever. In powder form it is applied to old wounds and ulcers. Expressed juice of the leaves is used during dysentery. The bark is used as a cure for diarrhoea.