



SOME MEDICINAL PLANTS OF NORTH 24 PARGANAS DISTRICT OF WEST BENGAL (INDIA)

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ABSTRACT

The district of the North 24 Parganas forms a part of the South-Western portion of the Presidency Division of West Bengal. It extends over 4090 sq. km. The head-quarter is situated at Barasat, established on December 1995. Present study deals with 65 medicinal plants of this district. Their uses in field observation and from authentic literature and their abundance have been incorporated in details. Present study recorded that all together 65 plant species with medicinal properties have been recorded and study has been carried out in detail from Nilgunj, Jagaddal, Thakurnagar, Bisharpara-Kodialia and Bamungachi of the North 24 Parganas district. All the herbarium specimens were kept in G.C. Bose Herbarium, Bangabasi College, Kolkata -700 009, West Bengal, India. The study was conducted by personal interview with the village people and local medicine men (Kabiraj and Hakim). They helped us providing some information according to their knowledge and experiences, about the medicinal uses of the local flora. The information collected by interviewing from the local medicinal men need clinical study for confirmation whether they are effective or not and conserve them scientifically in their original habitat. At the same time the rare plants like—*Andrographis paniculata*, *Crotalaria verrucosa*, *Derris indica*, *Hemidesmus indicus*, *Hygrophila phlomoides*, *Smilax glabra*, *S. prolifera*, *Stephania japonica* and *Terminalia arjuna* of the studied area of North 24 Parganas district need conservation and also can be recommended for plantation due to their important medicinal values.

KEY WORDS

Medicinal Plants, North 24 Parganas district, West Bengal, India.

Introduction

Though we are living in the age of synthetic drugs the uses of Crude drugs or Ayurvedic medicine are increasing day by day. The synthetic drugs are not only costly but also have some side effects. A vast population of our country living in the villages and they are belonging to backward classes of poor people and they are solely depending on the Ayurvedic medicine. Sometimes urbanized intelligentsia also depends and prefers Ayurvedic medicine to alleviate their ailments because only to avoid the undesirable side effects of

modern synthetic drugs. Due to the unscientific random use of plant wealth, they are facing threat. Hence, for the sake of mankind it is now become necessary to survey and to conserve the medicinal plants scientifically in their original habitat.

The district is bounded on the North by Nadia district and a portion of Bangladesh (Khulna division), on the East by Bangladesh, on the South by the district of South 24 Parganas and Kolkata, and on the West by the river of Hooghly,

which proceeding from North to South, separates it from the districts of Hooghly and Howrah. It extends over 4090 sq. km. The head-quarter is situated at Barasat, established on December 1995.

Present work:

During this survey, all together 65 plant species with medicinal properties have been recorded and studied in detail from Nilgunj, Jagaddal, Thakurnagar, Bisharpara—Kodalia and Bamungachi of the North 24 Parganas district. All the herbarium specimens are kept in G.C. Bose Herbarium, Bangabasi College, Kolkata -700 009, West Bengal, India.

The frequency of the species in the studied area is considered as number of species present per 100 sq.mt. and they are indicated as: Abundant (more than 100 species), Common (more than 50 species but less than 100 species), Occasional (more than 25 species but less than 50 species) and Rare (less than 25 species).

Materials and Methods:

There is no particular record on medicinal plants of the district but Ambasta *et al* (1993), Bhattacharya *et al* (1997), Dey (1896), Hazra *et al* (1995), Kirtikar and Basu (1918), Sharma *et al* (1993), Sivarajan and Balachandran (1994), Warriar *et al* (1993) have worked on medicinal plants of India.

The study was conducted by personal interview by the first author with the village people and local medicine men (Kabiraj and Hakim). They helped us providing some information according to their knowledge and experiences, about the medicinal uses of the local flora.

Observations and Results:

A list of medicinal plants available from the district along with their medicinal values is provided in the following tables:



Table I: Showing the systematic evaluation of plants, their uses and nature of distribution

Name of the Plant	Local name	Family	Medicinal Value		Frequency in the area under consideration
			From References	Local uses	
1. <i>Achyranthes aspera</i> Linn. Sp. Pl.204.1753	Apang	Amaranthaceae	Decoction of herb diuretic, used in renal dropsy. The crushed plant has been boiled in water and is given in pneumonia.	The seeds are soaked in water and the water then taken as laxative.	Abundant
2. <i>Adhatoda zeylanica</i> Medic. Hist and Commentant. Acad. Elect. Sci. Theod. Plat. 6 : 393. 1790. <i>Adhatoda vasica</i> Ness in Well. Pl. As. Rar. 3: 103.1932.	Basak	Acanthaceae	The leaves, barks and young stems are extensively used as a remedy for cold, cough, bronchitis and asthma, Powdered leaves used for skin affections.	One cup of leaf extract together with 10 gms. Taggery and 3-4 cloves boiled down to ½ cup, prescribed for common cold and cough	Common
3. <i>Aerva lanata</i> (Linn.) Juss. in Ann. Mus.Nat. Hist. Par 2:131.1808. <i>Achyranthes lanata</i> Linn. Sp. Pl. 204. 1753.	Chaya, Daya Phul	Amaranthaceae	The plant is diuretic, used in lithiasia. The root is demulcent, diuretic, useful in the treatment of headache.	One teaspoonful plant juice is taken with few drops of honey to check cough and same without honey taken in empty stomach to control blood sugar.	Abundant
4. <i>Ageratum conyzoides</i> Linn. Sp.Pl. 839.1753	Uchunti	Asteraceae	Decoction or infusion of the plant used in diarrhoea, dysentery, colic with flatulence and other gasto-intestinal ailments.	<i>No local use</i>	Abundant
5. <i>Amaranthus viridis</i> Linn. Sp. Pl. 1405. 1753	Notey	Amaranthaceae	The plant is cooling, digestible, laxative, diuretic, stomachic,	The boiled leaves and roots given to children as a laxative.	Abundant



			antipyretic, improves the appetite.		
6. <i>Amischophacelus axillaris</i> (Linn.) Rolla Rao and Kamm in Journ. Linn. Soc. Bat. 59:306,1966. <i>Commelina axillaris</i> Linn. Sp. Pl. 42. 1753.	Baganulla Herb	Commelinaceae	Seeds may be used as food.	<i>No local use.</i>	Common
7. <i>Ammannia baccifera</i> Linn. Sp. Pl. ed. 2. 175. 1762	Dadmari	Lythraceae	The fresh leaves , bruised and applied to part intended to be blistered. The leaves are applied to cure herpetic eruptions. Herb is reported to possess anti-typhoid and anti-tubercular properties.	Leaf juice is externally applied to relief the rheumatic pain.	Abundant
8. <i>Anagallis arvensis</i> Linn. Sp. Pl. 148, 1753.	Not available	Primulaceae	Plant used for dropsy, leprosy, hydrophobia, mania and other cerebral affections; cures ophthalmia, inflammations, sores, pain in liver and kidney.	<i>No local use.</i>	Common
9. <i>Andrographis paniculata</i> (Burm.f.) Wall ex Ness in wall. Pl. As. Ras. 3:116. 1832	Kalmegh	Acanthaceae	Decoction used for sluggishness of liver and in jaundice. Leaves and roots used as a febrifuge, cholagogue and anthelmintic.	Village people are used to chew 3-5 leaves in empty stomach to prevent liver and stomach diseases. The expressed juice of the leaves together with cardamoms, cloves, cinnamon etc. is dried in the Sun and made into little globules, which are prescribed for infants to relief griping,	Rare



				irregular stools and loss of appetite.	
10. <i>Anisbomeles indica</i> (Linn.) O.Kuntze, Rev. Gen. Pl. 2: 512. 1891. <i>Nepeta indica</i> Linn. Sp. Pl. 571.1753.	Gobura	Lamiaceae	The herb used as an astringent carminative and tonic. The essential oil obtained from the herb is used in uterine affections.	<i>No local use</i>	Common
11. <i>Bacopa monnieri</i> (Linn.) nettstein in Engl. & Prant. Pflanzenfam. 4(36): 77.1891 (monniera).	Brahni, Brihmisak	Scrophulariaceae	The herb used for epilepsy, insanity and other nervous diseases.	The herb fried with 'ghee' and taken to improve intellect by the villagers.	Abundant
12. <i>Biophytum sensitivum</i> (Linn.) DC. Prod. 1:690 1824. <i>Oxalis sensitive</i> Linn. Sp. Pl. 434.1753.	Jhalai, Bannaranga	Oxalidaceae	Plant ash is mixed with lime juice and given for stomachache. Decoction of leaves given for diabetes and asthma.	Plant juice rubbed to cure muscle cramps and inflammatory tumours.	Common
13. <i>Boerhaavia diffusa</i> Linn. Sp. Pl. 3. 1753	Punarnava	Nyctaginaceae	Roots considered expectorant, diuretic and laxative, used in asthma. Mixed with dried ginger it is given in utricaria.	Half-tea spoonful leaf juice is given to cure Jaundice.	Common
14. <i>Brassica nigra</i> (Linn.) Koch in Rohling's Deutschl. Fl. ed. 3. IV (1833) 713 et Syn. ed. 1(1835) 59. <i>Sinapis nigra</i> Linn. Sp. Pl. ed. 1 II. 668. 1753.	Kalasarisha	Brassicaceae	Seeds are given with warm water as emetic in narcotic poisoning and edible as cooking oil, which is extracted from the seed.	Warm seed oil rubbed in the chest and back during cough and cold specially for children.	Abundant
15. <i>Cajanus cajan</i> (Linn.) Millsp. Field. Columb. Mus. Bot. 2:53. 1900. <i>Cytisus cajan</i> Linn. Sp. Pl. 739. 1753.	Arhar	Fabaceae	The seed is acrid, astringent to the bowels, anthelmintic, restores lost taste, cure leprosy, ulcers of mouth, tumours, bronchitis, vomiting, heat	Leaf juice ½ cup once daily in empty stomach is prescribed for jaundice	Abundant



			diseases, piles, cough, biliousness (Ayurveda).		
16. <i>Canscora diffusa</i> (Vahl.) R. Br. ex Roem. & Schult. Syst. Veg. 3:301. 1820. <i>Gentiana diffusa</i> Vahl. Symb. Bot. 3:47, 1794.	Dankuni	Gentianaceae	Fresh juice of the plant prescribed in insanity, epilepsy and nervous debility.	No local use.	Common
17. <i>Cardiospermum halicacabum</i> Linn. Sp.Pl. 366.1753.	Lataphatkari, sibjhul	Sapindaceae	Roots used for rheumatism, lumbago, nervous diseases. Leaves used as poultice in rheumatism.	No local use.	Common
18. <i>Catharanthus roseus</i> (Linn.) G. Don, Gen. Syst. 4:95. 1838. <i>Vinca rosea</i> Linn. Syst. Nat. ed. 10.944.1759	Nayantara	Apocynaceae	The alkaloids of the roots possess hypotensive, sedative and tranquillizing properties.	Fresh leaves (1-2) are chewed in empty stomach to check blood sugar.	Abundant
19. <i>Chenopodium ambrosioides</i> Linn. Sp. Pl. 219.1783.	Bethusag, Candan betu.	Chenopodiaceae	An infusion of herb is carminative and diaphoretic.	Juice of the herb used as an antibiotic against many forms of internal parasites including round worms, hookworms and intestinal amoebae.	Common
20. <i>Clerodendrum viscosum</i> Vent. Jard. Malm. T. 25. 1803.	Bhant, Ghentu	Verbenaceae	Paste of the roots and leaves are employed externally for treatment of tumours and skin diseases.	Root juice is used as anthelmintic specially for the children.	Abundant
21. <i>Commelina diffusa</i> Burm. f. Fl. end. 18, t. 7.f. 2. 1768	Not available	Commelinaceae	Bruised plant applied to boils, itches and burns. Leaves used for poulticing sores.	No local use	Abundant
22. <i>Corchorus aestuans</i> Linn. Sp. Pl. 715. 1753.	Titapat	Tiliaceae	Seeds used in stomachache.	No local use	Occasional



23. <i>Crotalaria verrucosa</i> Linn. Sp. Pl. 715. 1753.	Basan, Jhanjhana	Fabaceae	Leaves cure biliousness, dyspepsia, fever, blood impurities, heart complaints, throat and mouth diseases.	<i>No local use</i>	Rare
24. <i>Cuscuta chinensis</i> Lam. Encycl. Method. II. 229. 1786.	Swarnalata	Cuscutaceae	Crushed seeds are used as purgative.	Crushed herb is applied externally against the skin itching.	Abundant
25. <i>Derris indica</i> (Lam.) Bennet in J. Bomb. Nat. Hist. SOC. 68:302. 1971	Karonj, Karanja	Fabaceae	Root, bark, leaf and fruits are anthelmintic. Commonly bark is crushed with water (10 gms bark in 1 cup water) and given one teaspoonful with slight sugar twice daily to expel the worm. Leaves are digestive, laxative and anthelmintic and the juice is preserved in dyspepsia, leprosy and gonorrhoea.	<i>No local use.</i>	Rare
26. <i>Duranta repens</i> Linn. Sp. Pl. 637. 1753.	Duranto	Verbenaceae	Fruits contain an alkaloid analogous to narcotine. Mecerated fruits yield a juice which even in dilutions of 1:100 parts of water is lethal to mosquito larvae.	<i>No local use.</i>	Abundant
27. <i>Flacourtia indica</i> (Burm.f.) Merrill, Interpr. Rumph. Herb. Amb. 377. 1917. <i>Gmelina indica</i> Burm. f. Fl. Ind. 132.t. 39. f., 5.1768.	Bencli, Baichi, Birja, Katai.	Flacourtiaceae	Fruit used in jaundice and enlarged spleen. Bark is astringent and diuretic.	<i>No local use.</i>	Common



28. <i>Heliopropium indicum</i> Linn. Sp. Pl. 130.1753.	Hatisur	Boraginaceae	Decoction of leaf used in fever; Root juice used in cough and fever.	Plant extract commonly used for skin diseases, wounds and ulcers.	Common
29. <i>Hemidesmus indicus</i> (Linn.) R. Br. In Aiton, Hort. Kew. ed. 2, 2:75. 1811. <i>Periploca indica</i> Linn. Sp. Pl. 211.1753.	Auantamul	Periplocaceae	Dried roots used in rheumatism, gravel and other urinary diseases and skin troubles.	Root juice is taken for dysentery (one tea spoonful with sugar in empty stomach.)	Rare
30. <i>Hygrophila auriculata</i> (Schum.) Heine, kew Bull. 16: 172, 1962. <i>Barleria auriculata</i> Schum. in Schum. & thorn. Beskr. Guin. P: 285.1827.	Kulekhara	Acanthaceae	Leaves useful in diarrhea, dysentery, urinary discharges, inflammations, biliousness, diseases of eye, anaemia, constipation.	The seeds are given for gonorrhoea. Tender shoot and leaf juice, ½ cup twice daily is prescribed in severe anaemia.	Abundant
31. <i>Hygrophila phlomoides</i> Ness in Wall. Pl. As. Ras. 3.80.1832.	Not available	Acanthaceae	Leaves used in poultices for boils.	<i>No local use.</i>	Rare
32. <i>Hydrolea zeylanica</i> (Linn.) Vahl. Symb. Bat. 2:46.1791. <i>Nama zeylanica</i> Linn. Sp. Pl. 226.1753.	Isha-Langulia	Hydrophyllaceae	Leaves are used as antiseptic.	Leaves applied in form of poultices on neglected external wounds.	Occasional
33. <i>Ipomoea aquatica</i> Forsk. Fl. Aeg. Arab. 44.1775.	Kalmi	Convolvulaceae	Roots eaten in times of scarcity. Juice used as an emetic in cases of opium and arsenial poisoning.	Leaves are eaten as pot herbs.	Abundant
34. <i>Justicia gendarussa</i> Burm. F. Fl. ind. 10. 1768.	Jagat madan	Acanthaceae	Plant useful in bronchitis, inflammations, vaginal discharges, eye diseases and fever.	Leaves and tender shoots are diaphoretic and given in chronic rheumatism in the form of decoction by local people. Crushed leaf applied locally in eczema. The juice of the fresh leaf dropped into the ear for earache.	Common



35. <i>Kleinhovia hospita</i> Linn. Sp. Pl. Ed. 2. 1365, 1753.	Bola	Strculiaceae	Leaf juice used as an eye-wash.	Decoction of leaves prescribed for scabies and skin eruptions.	Rare
36. <i>Leonurus sibricus</i> Linn. Sp. Pl. 584. 1753.	Raktadrone	Lamiaceae	Leaves and roots febrifuge. Leaf extract effective for uterus contraction.	Root extract is given to use menstrual disorder.	Abundant
37. <i>Leucas lavendulaefolia</i> J.E. Smith in Ress. Cyclop. 20:n. 2. 1819. <i>L. linifolia</i> (Roth) spreng. Syst. 2: 743.1825.	Sweatadrone, Halkasa	Lamiaceae	Leaves are useful in piles and sore eyes. Decoction of leaves used as a sedative, stomachic and vermifuge. Poultice of fresh leaves applied to old sores and dermatosis.	Leaf juice is mixed with honey (few drops) and used in fever for children.	Abundant
38. <i>Lippia javanica</i> (Burm.f.)Spreng.Syst. 2: 752. 1825. <i>Verbena javanica</i> Burm. f. Fl. Ind. 12:t. 6, f. 2. 1768. <i>Lippia geminate</i> H.B.K. Nov.Gen.et. Sp.2:266. 1818.	Not available	Verbenaceae	Leaves used in stomachache and nervous diseases.	<i>No local use.</i>	Occasional
39. <i>Ludwigia adscendens</i> (Linn.) Hara in J. Jap. Bat. 28:290. 1953. <i>Jussiaea adscendens</i> Linn. Mant. Pl. 1:69.1767. <i>J. repens</i> Linn. Sp. Pl. 388. 1753 (<i>non-ludwigia repens</i> Forst 1771).	Kesara-dam	Onagraceae	Plant is used for ulcers and skin complaints.	<i>No local use.</i>	Common
40. <i>Ludwigia perennis</i> Linn. Sp. Pl. 519. 1753.	Bonlong	Onagraceae	Plant is boiled in oil which is applied to the body externally to bring down fever.	<i>No local use.</i>	Abundant
41. <i>Mimosa pudica</i> Linn. Sp. Pl. 518.1753.	Lajjabati	Mimosaceae	Decoction of root together with few drops of honey is prescribed for acute belly pain and also for gravel.	<i>No local use.</i>	Common



42. <i>Monochoria hastata</i> (Linn.) Solans in DC. Mon. Phan. 4:523.1883. <i>Pontederia hastata</i> Linn. Sp. Pl. 288. 1753.	Not available	Pontederiaceae	Juice of the leaves applied to boils. Rhizomes are pounded with charcoal and used for scurf.	No local use.	Abundant
43. <i>Oxalis corniculata</i> Linn. Sp. Pl. 435.1753.	Amrul	Oxalidaceae	In slight forms of chronic dysentery the leaves boiled in milk and given twice or thrice a day prove very useful; cure scurving.	Juice of the leaves is commonly used to check sore lips and also to cure skin disease, dysentery and diarrhoea.	Abundant
44. <i>Pedilanthus tithymaloides</i> (Linn.) Poit. Ann. Mus. Hist. Nat. par. 19:390. t. 19, 1812. <i>Euphorbia tithymaloides</i> Linn. Sp. Pl. 453.1753.	Belati-sij, Rangchita	Euphorbiaceae	Root powerful emetic.	Latex of root applied to leucoderma patches.	Abundant
45. <i>Phyllanthus fraternus</i> Webster. Contrib.. Gray Herb. 176:53. 1955.	Bhui amla	Enphorbianaceae	Fresh roots given in jaundice and also used as a galactagogue. Latex applied to sores. Used for stomach troubles such as diarrhoea, dysentery, dyspepsia and colic.	No local use.	Abundant
46. <i>Physalis minima</i> Linn. Sp. Pl. 183. 1753.	Bantepariya, Bontepari	Solanaceae	Fruit considered as tonic, diuretic and purgative.	Leaf juice together with mustard oil dropped into the ear to check earache.	Abundant
47. <i>Pithecellobium dulce</i> (Roxb.) Benth. in Hook, Long. Journ. Bot. 3 : 199. 1844. <i>Mimosa dulcis</i> Roxb. Pl. Cor. 1:67: t.99. 1795. <i>Inga dulcis</i> (Roxb.) Willd. Sp. Pl. 4:1105. 1806.	Dekhani babul	Mimosaceae	Bark is used as a febrifuge.	Bark soaked in water for several hours and the water is taken as a remedy of fever.	Common
48. <i>Polygonum barbatum</i> Linn. Sp. Pl. 362. 1753.	Bekh-unjubaz	Polygonaceae	Decoction of leaves and shoots used as a remedy for ulcer.	No local use.	Occasional



49. <i>Psidium guajava</i> Linn. Sp. Pl. 470. 1753.	Peyasa	Myrtaceae	Leaves used as astringent for bowel troubles. Decoction of bark given in diarrhoea.	Tender leaves often chewed with salt to check gum bleeding and other tooth troubles.	Not very common in the studied area but commonly planted in the other area of the district.
50. <i>Rumex vesicarius</i> Linn. Sp. Pl. 336. 1753.	Chak, chuk, chuka, Chukapalang.	Polygonaceae	The herb is useful in heart troubles, pain, tumours, alcoholism, bronchitis, piles, vomiting. Leaves cooling, diuretic. Roasted seeds used in dysentery.	<i>No local use.</i>	Abundant
51. <i>Rungia pectinata</i> (Linn.) Ness in DC Prods. 11:469. 1847. <i>Justicia pectinata</i> Linn. Amoen. Aced. 4:299.1759. <i>Rungia parviflora</i> (Retz.) Ness Var. <i>pectinata</i> (Linn.) C.B. Clarke in FBI 4:550.1885.	Pindi	Acanthaceae	Fresh leaf juice prescribed for the children suffering from small-pox, one tablespoonful twice daily.	Few drops of root extract together with honey is prescribed for fever, especially for children;	Abundant
52. <i>Sida cordata</i> (Burm.f.) Borss., Blumea 14:182. 1966. <i>Melochia cordata</i> Burm. f. Fl. Ind. 1768.	Besela, Junka	Malvaceae	Leaves applied to cuts and bruises	Leaf juice is given to the pregnant women when they suffer from diarrhoea.	Common
53. <i>Sida rhombifolia</i> Linn. Sp. Pl. 684. 1753.	Lalberela	Malvaceae	Leaf Juice used in rheumatism and tuberculosis. Roots and leaves contain ephedrine.	An infusion of root is given in dysentery.	Abundant
54. <i>Smilax glabra</i> Roxb. Fl. Ind. III. 792.1832.	Harina-shulke-china.	Smilacaceae	Decoction of wood used for venereal diseases.	A decoction of fresh root used to cure sores and venereal complaints.	Rare



55. <i>Smilax prolifer</i> Roxb. Fl. Ind. II.795, 1832.	Not available	Smilacaceae	Roots ground with old molasses or with coagulated cow's milk, is mixed with water and drink as a remedy against blood-mixed stools in dysentery and against 'aradaud', a urinary complaint in which the urine is dark and reddish.	Commonly the root is used for urinal diseases.	Rare
56. <i>Solanum indicum</i> Linn. Sp. Pl. 187.1753.	Byakura, gorkamai	Solanaceae	Fruits laxative and digestive. Roots useful in cough and catarrhal affections.	Leaves and fruits rubbed up with sugar and used as an external application to itch.	Occasional
57. <i>Solanum nigrum</i> Linn. Sp. Pl. 186, 1753.	Gorkamai, Kakmachi	Solanaceae	Herb used as diuretic and laxative. Leaves used as an adulterant of belladonna.	Leaves and tender shoots are boiled and eaten like spinach. Freshly prepared extract of herb is used as a remedy of cirrhosis of liver.	Abundant
58. <i>Sonchus arvensis</i> Linn. Sp. Pl. 793, 1753.	Banpalang	Asteraceae	Juice of roots used in cough, bronchitis and asthma.	Latex from root often used to cure eye irritation.	Common
59. <i>Spermocoe articularis</i> Linn. f. Suppl. Pl. 119. 1782.	Madana-banta-kadu	Rubiaceae	The seeds are crushed and mixed with leaf juice of <i>Andrographis paniculata</i> and used against dysentery.	The vapour of the herbs is inhaled to kill the tooth worms.	Common
60. <i>Spilanthes paniculata</i> Wall. ex De. Prodr. 5:625.1836	Marhati tiga	Asteraceae	Decoction of herb used in scabies and psoriasis.	Pungent flowers chewed to relief in throat affections and paralysis of tongue. Also, used for stammering in children.	Abundant
61. <i>Stephania japonica</i> (Thunb.) Miers., Ann. Ma. Nat. Hist. Ser. 3, 18:14.1866. <i>Menispermia japonicum</i> Thunb., Fl. Jap. 193-1784.	Agandnemuka, Akanadi, Nimuka.	Menispermaceae	Bitter root used in many Ayurvedic preparations.	Few drops of decoction of root with a cup of water is prescribed in fever for children and also used in urinary troubles.	Rare



62. <i>Streblus asper</i> Lour. Fl. Cochinch. 2:615.1790.	Sheora	Moraceae	Bark extract is prescribed for diarrhoea and dysentery. Seeds used in piles and diarrhoea. Externally the paste applied in leucoderma.	Root extract is given in ulcers.	Common
63. <i>Terminalia arjuna</i> (Roxb.) Wt. & Arn. Prodr. 314. 1834. <i>Pentaptera arjuna</i> Roxb. Fl. Ind. 2:438. 1824.	Arjun	Combretaceae	The bark is antidysentric, diuretic, gives relief in symptomatic hypertension.	Dried bark powder eaten with rice in lunch to check the high blood pressure. Bark extract is used for tooth-ache.	Rare
64. <i>Tridax procumbens</i> Linn. Sp. Pl. 900. 1753.	Tridakshya	Asteraceae	Leaf juice mixed with equal volume of the juice of <i>Centella asiatica</i> and taken twice daily (teaspoonful) for diarrhea.	Leaf juice given for the treatment of dysentery and diarrhoea.	Abundant.
65. <i>Vernonia cinerea</i> (Linn.) Less in Linnaea 4:291. 1829. <i>Conyza cinerea</i> Linn. Sp. Pl. 862. 1753.	Kukursonka, Kukshim.	Asteraceae	Plant possesses strong diaphoretic properties and used to produce perspiration in fever.	Plant juice commonly used to cure asthma.	Abundant.

The above mentioned 65 plants may be categorized in the following way:

Table II: Different Parts of Plants Used for Medicinal Purposes

Name of the Parts	Number of Plants
Whole Plant	22
Leaf	35
Roots and Rhizomes	23
Stem and Bark	11
Flowers	01
Fruits	05
Seeds	10

It is evident from the field survey that out of 65 plants, most of the cases leaves (35) are used followed by roots and rhizomes (23), whole plant (22), stem and bark (11), seeds (10) and fruits are used only in five cases. Only one case flowers are used.

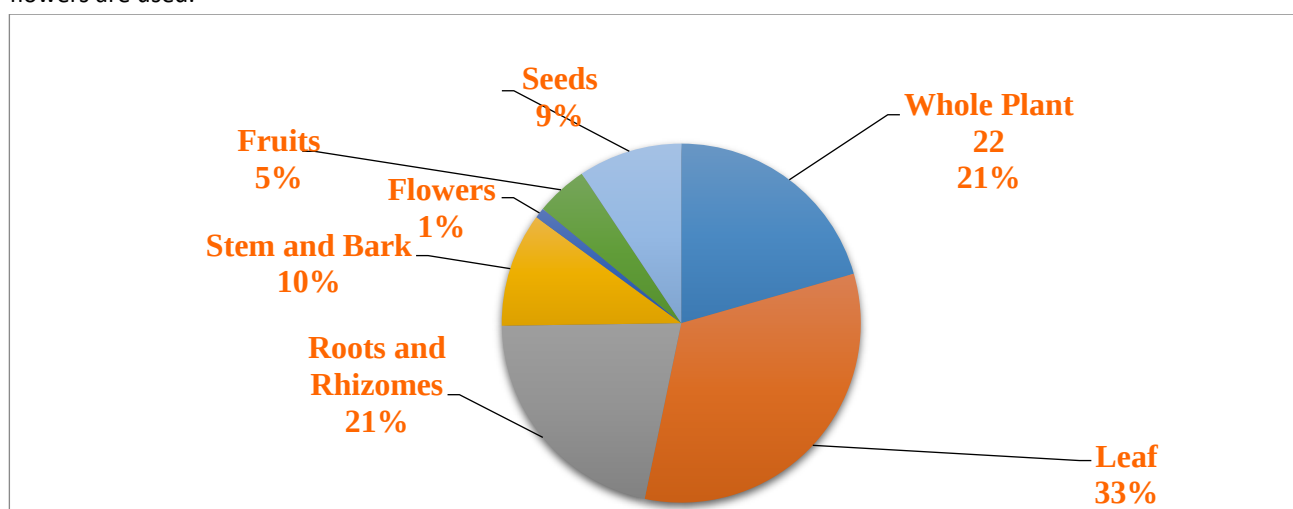


Figure I: Different Parts of Plants Used for Medicinal Purposes

Maximum percentage of leafy parts is used for medicinal purposes and minimum percentage of flower is used for this purposes.

Table III: Plants used in different Diseases

Name of the Disease / Affected Organ	Number of Plants
Stomach Trouble	08
Liver Trouble	01
Renal Problem	01
Nervous Problem	03
Heart Problem	04
Anaemia	01
Rheumatism	01
Uterine Trouble	05
Jaundice	01
Cold, Cough, Fever & Asthma	10
Constipation	02
Skin Diseases	13
Liver Trouble	01
Eye Problem	03
Ear Problem	02
Tooth Problem	02
Tongue & Throat Problem	01
Various Types of Diseases	15

This work suggests that maximum number of plants (13) are used for dermal diseases. Next prevalent diseases are cold, cough, fever and asthma etc which are treated by 10 plant species and the next prevalent

disease is stomach trouble, can be cured by eight different plant species. Other diseases can be prevented by one to four number of plant species.

Table IV: Number of plants distributed in different Families.

Name of the Family	Number of Plants
Amaranthaceae	03
Acanthaceae	06
Asteraceae	05
Commelinaceae	02
Lythraceae	01
Primulaceae	01
Lamiaceae	03
Scrophulariaceae	01
Oxalidaceae	02
Nyctaginaceae	01
Brassicaceae	01
Fabaceae	03
Gentianaceae	01
Sapindaceae	01
Apocynaceae	01
Chenopodiaceae	01
Verbenaceae	03
Tiliaceae	01
Cuscutaceae	01
Flacourtiaceae	01
Boraginaceae	01
Periplocaceae	01
Hydrophyllaceae	01
Convolvulaceae	01
Sterculiaceae	01
Onagraceae	02
Mimosaceae	02
Pontederiaceae	01
Euphorbiaceae	02
Solanaceae	03
Polygonaceae	02
Myrtaceae	01
Malvaceae	02
Smilacaceae	02
Rubiaceae	01
Menispermaceae	01
Moraceae	01
Combretaceae	01

Surveyed 65 angiospermic plants are distributed in 38 families. Heights number of plants (6) are recorded from Acanthaceae, followed by Asteraceae with 5 plants and 5 families, Amaranthaceae, Lamiaceae, Fabaceae, Verbenaceae and Solanaceae, each of them has 3 plants species. Remaining 8 families with 2 plants each and 23 families with 1 plant each are used to treat

the diseases by the people of North 24 Parganas district of West Bengal.

Discussion and Conclusion:

The information collected by interviewing the local medicinal men need clinical study for confirmation whether they are effective or not and conserve them

scientifically in their original habitat. At the same time the rare plants like—*Andrographis paniculata*, *Crotalaria verrucosa*, *Derris indica*, *Hemidesmus indicus*, *Hygrophila phlomoides*, *Smilax glabra*, *S. prolifer*, *Stephania japonica* and *Terminalia arjuna* of the studied area of North 24 Parganas district need conservation and also plantation for their important medicinal values.

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