

## Plants used in Herbal medicine of District Pilibhit Uttar Pradesh, India

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### Abstract

The phytochemical may be synthesized, compounded or altered to make pharmaceuticals. Modern medicine now tends to utilize the dynamic ingredients of plants to a certain extent than the whole plants. For example such derivatives consist of capsaicin as of red chili, digoxin as of *Digitalis* in addition to aspirin is chemically linked to the salicylic acid found in white willow. At this point at smallest amount 12,000 of these phytochemical compounds have been recorded as well as estimated to be fewer than 10% of total vegetation. Study shows bags of herbal plants and present phytochemical compounds which used in manufacturing of herbal medicine and to protect the human being from many life threatening diseases through the herbal medicine.

The ability to produce a wide variety of components that are used to act upon important biological activities, and to protect against aggression from predators similar to herbivorous insects, mammals and fungi is acknowledged as herbal drugs. A lot of these phytochemical have positive property on long-lasting health when consumed by humans, and can be used additionally effective treatments of human diseases. These phytochemical or metabolites clearly divided into two major types which are (1) primary metabolites which are establish almost in all plants e.g. sugars as well as fats, and (2) secondary metabolites – which are originate in a slighter range of flora, work as more specific such as a quantity of secondary metabolites are toxins worn to deter

predation in addition to next to be are pheromones for pollination of insects. less important metabolites can have therapeutic proceedings for humans and sophisticated to produce drugs—such as quinine as of the cinchona, inulin as of the roots of dahlias, morphine and codeine commencing the poppy plant, etc. Phytochemical of plants kick off their belongings on the human body by the processes previously able-bodied-known which are well understood for unadventurous or conventional drugs on behalf of chemicals compounds presented in it so we can say herbal medicines do not differ to a grand scope on or after unadventurous drugs in conditions of how they carry out Pharmacognosy is the stem of current medicine regarding medicines commencing

plant sources. Plants included at this point are those plants which are used medically at smallest amount one of such type of medicinal tradition. Here the research shows efficacy and probable adaptation of customary herbal treatments.

Pilibhit district of Uttar Pradesh is one of the historical place of western U.P., the Ghaghra is main river of the district. This is the agriculture based district having rich vegetation cover of herbal plants. District comes under Bareilly division, Rohilkhand geographically located between latitude 27°.35'N and longitude 79°.37'E. In the present studies the district, was divided in three Tehsils *i.e.* Bisalpur, Puranpur and Pilibhit and selected for the study. Herbal plants of this area in belong to different localities such as forest land crop lands, agricultural land, near the road side, of all Tehsils and its block like Amaria Barkheda, Poata kala and Jahanabad etc. the Herbal plants were found and recognized. The process of collection and identification of plants lasted for one and a half year. After collecting the plants, rest of work was done in the laboratory by observing their morphological characters and if any large plant was not identified in the field during survey, its clear photograph was taken and consulted with senior experts of the taxonomic field as well as with the help of published floras throughout the study, keeping in mind importance of local name as well as parts of plants which are useful, here regional names of the herbal plants as well as usable parts which are usable in herbal industry, with the help of local people's discussion on field study and information provided by locals, also consulted practitioners or herbal medicine of the area, Vaidyas and Hakeems.

The present survey and study work resulted in the collection of 65 Herbal plant species which belong to various families, such as *Acacia nilotica*, *Allium sativum*, *Allium cepa*, *Aloe vera*, *Arnica montana*, *Azadirachta indica*, *Calendula officinalis*, *Capsicum annum*, *Capsicum frutescens*, *Carica papaya*, *Cassia occidentalis*, *Citrus limon*, *Eucalyptus globulus*, *Cissampelos pareira*, *Curcuma longa*, *Euphorbia hirta*, *Fumaria officinalis*, *Jasminum officinale*, *Lawsonia inermis*, *Linum usitatissimum*, *Magnolia officinalis*, *Malva sylvestris*, *Mentha x piperita*, *Momordica charantia*, *Morinda citrifolia*, *Nasturtium officinale*, *Nelumbo nucifera*, *Nigella sativa*, *Ocimum officinarum*, *Papaver somniferum*, *Polemonium reptans*, *Psidium guajava*, *Ruellia tuberosa*, *Rumex crispus*, *Salix alba*, *Santalum album*, *Senna auriculata*, *Stellaria media*, *Triticum aestivum*, *Urtica dioica*, *Verbascum thapsus*, *Viola tricolor*, *Vitis vinifera*, *Verbena officinalis*, *Veronica officinalis*, *Withania somnifera*, *Zingiber officinale*, *Salvia officinalis*, *Saraca indica*, *Thymus vulgaris*, *Tradescantia zebrina*, *Trigonella foenum-graecum* were recorded in District Pilibhit, Uttar Pradesh, and documented. These are helpful in curing numerous human diseases like, piles, asthma, gonorrhoea, ulcers, hydrocoel, kidney and gall stones, haemorrhages, fever, ant poison of scorpion, wasps & honey bees, paralysis, leucoderma, syphilis, leprosy, malaria, anthelmintic, anti-inflammatory, antiseptic, antispasmodic, carminative, diuretic, expectorant, febrifuge, depression, menopausal disorder, menstrual disorder, migraine, neuralgia, otitis,

PMS, Sinus, peripheral neuropathy, obesity, nocturnal leg cramp, labor pain, gingivitis, hypoglycaemic, hypotensive, lithotriptic, stomachic prolapse of uterus, leucorrhoea arsenal poisoning, gonorrhoea, anti-cancer, anti-viral (pox virus), & antibacterial & blood vomiting, by using different parts (leaves, fruits, barks, roots etc.) these herbal plants cure and are very useful for human being medically as well as commercially so the worker has listed

these herbal plants of whole district from different localities with local name, usable part of plant, family and alphabetically botanical name in table 1. Which are used in making of herbal drugs available in market *e.g.* Ellura, Evening primrose oil, VP-precip, 5-HTP, *Ginkgo biloba*, Thera Cran HP, Venastat, Ora Magic Rx, Azo-Cranberry and Velerian etc. For the preparation of the manuscript relevant literature<sup>1-32</sup> has been consulted.

table-1. Shown Botanical name, Herbal use, Local name, Part used, Family, Locality and Accession no.

S. no.	Botanical	Local Name	Herbal used of Plants Name	Part	Family used	Locality	Accession no.
1	<i>Acacia nilotica</i> Linn.	Babool	diarrhea, dysentery, diabetes, gonorrhoea, vaginal discharges and prolapse of uterus. stopping bleeding from circumcission wounds. The gum is an emollient. It is particularly used in diarrhoea, dysentery and diabetes.	Bark	Mimosaceae	Puranpuma range forest	Shazia 44508
2	<i>Allium sativum</i> Linn.	Lehsun	asthma, arthritis, sciatica, lumbago, backache, bronchitis, chronic fever, tuberculosis, rhinitis, malaria, obstinate skin disease including leprosy, leucoderma, discolouration of the skin and itches, indigestion, colic pain, enlargement of spleen, piles, fistula, fracture of bone, gout, urinary diseases, diabetes, kidney stone, anemia, jaundice, epilepsy, cataract and night blindness etc. It has anti-cholesterol,	whole bulb	Liliaceae	Amariablock	Shazia 24496

			antibacterial, antiviral, antibiotics, anti-HIV and antifungal activities, hypertension and coronary heart diseases, cough, parasites, colds, tuberculosis, dysentery, digestive ailments, fungus, diabetes and heart stroke. prevent some complications of diabetes mellitus.				
3	<i>Allium cepa</i> Linn.	Piaz or Gantha	anthelmintic, anti-inflammatory, antiseptic, antispasmodic, carminative, diuretic, expectorant, febrifuge, hypoglycaemic, hypotensive, lithontripic, stomachic and tonic. When used regularly in the diet it offsets tendencies towards angina, arteriosclerosis and heart attack. It is also useful in preventing oral infection and tooth decay. Baked onions can be used as a poultice to remove pus from sores. Fresh onion juice is a very useful first aid treatment for bee and wasp stings, bites, grazes or fungal skin complaints. When warmed the juice can be dropped into the ear to treat earache. It also aids the formation of scar tissue on wounds, thus speeding up the healing process, and has been used as a cosmetic to remove freckles. Considered effective against the respiratory disease tooth disorders, anemia, skin disorders, ear disorders, cholera, urinary system disorders, bleeding piles common cold, heart disease	bulb	Liliaceae	Puranpu mala range forest, Amaria block	Shazia 24438

4	<i>Aloe vera</i> (L.) Burm f.	Aloe vera	Leaves are broadly used to heal burns, skin ailments and wounds	Leaves	Asphodelaceae	Pilibhit, puranpur, Bisalpur	Shazia 24968
5	<i>Arnica montana</i> L.	Arnica	Used as an anti-inflammatory and osteoarthritis.	Whole plant	Asteraceae	Puranpur, forest area	Shazia 24867
6	<i>Azadirachta indica</i> A. Juss.	Neem	To treat malaria, rheumatism and skin infections, worms many others.	Leaves	Meliaceae	Puranpur Road Amaria road	Shazia 24867
7	<i>Calendula officinalis</i> L.	Marigold	Treat soothing skin and wounds	Whole plant	Asteraceae	Pilibhit city	Shazia 24457
8	<i>Capsicum annuum</i> L.	Mirch	pain and swelling reliever, reducing cholesterol and triglyceride levels and viruses and harmful bacteria fighting	Whole plant	Solanaceae	Amaria crop fields	Shazia 24898
9	<i>Capsicum frutescens</i> L.	Mirch	Reduce incidence of heart attack in Thais may be connected to capsaicine's fibronolytic action.	Whole plant	Solanaceae	Amaria crop fields	Shazia 28768
10	<i>Carica papaya</i> L.	Papita	Treat stomach and wound problem	Fruit	Caricaceae	Pilibhit Bisalpur	Shazia 24567
11	<i>Cassia occidentalis</i> (L.) Link	Cassia	Interior and exterior antimicrobial, intended for liver disorder, for intestinal worms with added vermin along with as an immune-system stimulant	Leaves Bark Stem	Fabaceae	Barkheda road	Shazia 26567
12	<i>Citrus limon</i> (L.) Osbeck	Nimbu	Cough & sore of throat	Fruits and Leaves	Rutaceae	Bisalpur Puranpur	Shazia 21167
13	<i>Cissampelos pareira</i> L.	Velvet leaf	Digestion as well as liver function, relieve arthritis soreness, and normalize menstruation	Whole plant	Menispermaceae	Puranpu mala range forest	Shazia 24227
14	<i>Curcuma longa</i> L.	Haldi	As a soreness reliever and in favor of wound	Roots and Leaves	Zingiberaceae	Amria poata kala	Shazia 24567
15	<i>Eucalyptus globulus</i> Labill.	Eucalyptus	Cough and cold medication, and intended for an analgesic	Whole Plant	Myrtaceae	Amaria road, Bisalpur road	Shazia 23467

16	<i>Euphorbia hirta</i> L.	Asthma-plant	The latex used for warts, painful joints, skin diseases, rheumatism maggot, snake bite plus infested wounds	Whole plant	Euphorbiaceae	Bisalpur, Barkheda	Shazia 27867
17	<i>Fumaria officinalis</i> L.		For treatment of conjunctivitis, as well as excellent for the eyes bathe the kidneys,	Whole plant	Fumariaceae	Puranpura mala range forest	Shazia 24887
18	<i>Jasminum officinale</i> L.	Jasmine	Antiseptic or anti-inflammatory reaction.	Whole plant	Oleaceae	Puranpur	Shazia 26787
19	<i>Lawsonia inermis</i> L.	Henna	The alcoholic extraction of root shows the quality of antibacterial due to the being there of alkaloids and flavonoid, Antibacterial, antipyretic, anti-inflammatory, and analgesic belongings in investigational animals.		Lythraceae	Pilibhit	Shazia 24777
20	<i>Linum usitatissimum</i> L.	Alsi	Flax seed oil is used for dissimilar circumstances, counting arthritis and laxative	Seed	Linaceae	Jahanbad, Amaria Puranpur	Shazia 24358
21	<i>Magnolia officinalis</i> Rehder & Wilson	Magnolia	Antioxidant anti-inflammatory, antitumor, as well as antimicrobial	bark	Magnoliaceae		Shazia 26567
22	<i>Malva sylvestris</i> L.	Mallow	Demulcent and diuretic, and the leaves made into poultices for emollient as external applications	Leaves and Seeds	Malvaceae	Barkheda, Bisalpur	Shazia 24838
23	<i>Mentha x piperita</i> L.	Peppermint	Nausea and indigestion	Whole Plant	Lamiaceae	Jahanbad, Amaria Puranpur	Shazia 22367
24	<i>Momordica charantia</i> L.	Karela	Reduces glucose level in blood	Leaves and Fruits	Cucurbitaceae	Barkheda, Bisalpur	Shazia 24557
25	<i>Morinda citrifolia</i> L.	Noni	joint pain relief in addition to skin conditions	Whole Plant	Rubiaceae	Jahanbad Amaria Puranpur	Shazia 26547

26	<i>Nasturtium officinale</i> W.T. Aiton	Watercress	Diuretic as well as antibacterial	Whole plant	Cruciferae	Amria poata kala	Shazia 28797
27	<i>Nelumbo nucifera</i> Gaertn.	Loctus	Antioxidant hepatoprotective, hyperlipidemic, immunomodulatory, anti-infective, and psychopharmacologic problems	Stem and Root	Nelumbo-naceae	Pilibit Jahanabad	Shazia 24908
28	<i>Nigella sativa</i> L.	Black-cumin	Lowers the blood pressure	Whole plant and oil	Ranunculaceae	Puranpuma range forest	Shazia 27657
29	<i>Ocimum basilicum</i> L.	Tulsi	In herbal cosmetics and used as herbal tea	Whole plant	Lamiaceae	Bisalpur, Puranpur Amaria	Shazia 27547
30	<i>Papaver somniferum</i> L.	Poppy Plant	Used as sedative	Whole plant	Papaveraceae	Bisalpur, Puranpur Amaria	Shazia 27623
31	<i>Polemonium reptans</i> L.	Abscess root	Reduce fever, cough, and inflammation	Whole plant	Polemoniaceae	Jahanbad, Amaria Puranpur	Shazia 27487
32	<i>Psidium guajava</i> L.	Guava	Diarrhoea treatment	Fruits and leaves	Myrtaceae	Bisalpur, Puranpur Amaria	Shazia 23797
33	<i>Ruellia tuberosa</i> L.	Snap dragon root	Anti-diabetic, antipyretic, gastro protective anti-hypertensive, analgesic, gonorrhoea and for diuretic	Whole plant	Acanthaceae	Jahanbad, Amaria Puranpur	Shazia 23452
34	<i>Rumex crispus</i> L.	Curly docks	Skin condition, scrofula, sores and Itching.	Whole plant	Polygonaceae	Bisalpur, Puranpur Amaria	Shazia 27856
35	<i>Salix alba</i> L.	White willow	Pain reliever	Leaves, root	Salicaceae	Forest renga Puranpur	Shazia 22337
36	<i>Salvia officinalis</i> L.	Sage	To treat problem of Alzheimer	Whole plant	Lamiaceae	Forest range Puranpur	Shazia 26305
37	<i>Santalum album</i> L.	Santal Wood	Wood of plant used as powder incredibly useful for many skin action	Stem and root	Santalaceae	Puranpuma range forest	Shazia 27009

38	<i>Saraca indica</i> Sensu Bedd. non L.	Asoka	Decoctions next to Pre-menstrual pain or urinary system, constipation and abortion.	Leaves and young buds	Fabaceae	Puranpu mala range forest	Shazia 28764
39	<i>Senna auriculata</i> (L.) Roxb.	Avaram senna	The decoction of root useful for against, diabetes, fevers, laxative properties, constipation and urinary system. The dried flowers and buds used as replacement for tea for diabetetic person. The seed powder is applied to the eye to protect from chronic purulent conjunctivitis	Whole plant	Fabaceae	Puranpu mala range forest	Shazia 28576
40	<i>Stellaria media</i> (L.) Vill.	Common chick weed	Itchy skin problem and iron-deficiency pulmonary diseases, anemia, arthritis skin diseases, rheumatic pains, bronchitis and period problem.	Whole Plant	Caryophyllaceae	Amaria Jahanabad, Majhola	Shazia 22958
41	<i>Thymus vulgaris</i> L.	Thyme	Treat cough and bronchitis and serves as an expectorant and antispasmodic	Whole Plant	Lamiaceae	Amaria Jahanabad, Majhola	Shazia 27657
42	<i>Tradescantia zebrina</i> (Schinz) D.R. Hunt	Inch plant	Cold herbal tea	Leaves	Comme- linaceae	Bisalpur, Barkheda Puranpur	
43	<i>Trigonella foenum-graecum</i> L.	Fenugreek	For many diseases connected to stomach	Whole Plant	Fabaceae	Amaria Jahanabad, Majhola	Shazia 27559
44	<i>Triticum aestivum</i> L.		It may restrain compounds of antioxidant and anti-inflammatory	Whole Plant	Poaceae	Crop fields of Pilibhit dist.	Shazia 23006
45	<i>Urtica dioica</i> L.	Common nettle, stinging nettle	kidneys and urinary tract, locomotors, gastrointestinal, tract system, skin, hemorrhage, gout, cardiovascular system, influenza and rheumatism,	Leaves	Urticaceae	Puranur forest range	Shazia 23022



46	<i>Verbascum thapsus</i> L.	Common mullein	Bactericide in addition to potential anti-tumor action	Flower	Scrophulariaceae	Puranp mala range forest	Shazia 27306
47	<i>Verbena officinalis</i> L.	Verbena	Throat & respiratory tract disease, ear infections and for sinus	Whole plant	Verbenaceae	Amaria Jahanabad, Majhola	Shazia 22330
48	<i>Veronica officinalis</i> L.	Veronica	The active ingredient viburnin and tannins	Whole plant	Scrophulariaceae	Amaria Jahanabad, Majhola	Shazia 22040
49	<i>Viola tricolor</i> L.		Used to treat cancers	Whole plant	Violaceae	Amaria Jahanabad, Majhola	Shazia 23400
50	<i>Vitis vinifera</i> L.		Used with pepper in case of cough and cold	Leaves	Vitaceae	Pilibhit city	Shazia 49047
51	<i>Withania somnifera</i> (L.) Dunal		Used in tumors, tubercular glands, ulcers carbuncles and medicine	berries and leaves	Solanaceae	Amaria Jahanabad, Majhola Barkheda	Shazia 49994
52	<i>Zingiber officinale</i> Roscoe		Used as stimulant, expectorant stomachic, piles rubefacient, carminative, pulmonary disorders rheumatism, catarrhal diseases, cold influenza and vomiting etc.	Root and Leaves	Zingiberaceae	Amaria Jahanabad, Majhola Bisalpur	Shazia 27009

It is concluded that whole study and survey based on herbal property of plants of District Pilibhit Uttar Pradesh. According to study district is a very important to its richness of herbal plants by the use of plant parts in herbalism and to establishment of herbal drugs industry too here we observed according to the knowledge and information of local persons and also local practitioner of herbal drug or herbalist for treatment of many types of human diseases like, tuberculosis lumbago arthritis, asthma sciatica, backache, bronchitis, chronic fever, malaria, rhinitis, adamant skin disease, together with discoloration, leucoderma

of the skin leprosy and itches, colic pain, enlargement of spleen, indigestion, piles, fracture of bone, urinary diseases, fistula, gout, kidney stone, diabetes, jaundice, cataract, epilepsy, anemia and night blindness etc. It has anti-cholesterol, antibacterial, antiviral, antibiotics, anti-HIV and antifungal activities, hypertension and coronary heart diseases, cough, parasites, colds, tuberculosis, dysentery, digestive ailments, fungus, diabetes and heart stroke. Put off some complications of diabetes anthelmintic, anti-inflammatory, carminative, antispasmodic, antiseptic, expectorant, and febrifuge, angina arteriosclerosis hypotensive,

hypoglycaemic, stoachic, lithontripic, diuretic, mellitus, tonic and heart attack etc. It must be to collect their information and to promote using herbal drugs due to its least harmful side effect on human being as well as their surrounding environment. At the time of survey and study its realized that the district already very rich of these type of plants which can be easily used in herbal industry with low cost and low man power and therefore, to the success of study here we need only to utilize the information in right path on herbal drug making. And to see the importance of these herbal plants for treatments of diseased, conservation and sustainable use of these plants are very imperative and required for the growth of our country growth, economy and wealth and also knowledge of these plant for future next generation to educating and as well as to healthy life span with no so much fear of side effects of chemical based medicine which are not natural and nor environmental friendly as like plant based medicine.

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