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Ethno-medicinal Uses of Plants from District Bahawalpur, Pakistan

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Abstract: The present study conducted in district Bahawalpur of Southern Punjab province, Pakistan to enlist the medicinal plants and their uses among local people. Previous studies focus primarily on the exploration of medicinal plants of Cholistan desert while rest of the area remained un-explored. The ethno-medicinal survey was conducted regularly for a period of 10 years and tries to eradicate the errors in the utilizations of the plants and to finally to document ethno-medicinal uses of plant species through questionnaire and personal interviews during field trips. Plants with their correct nomenclature were arranged by family name, vernacular name, parts used and ethno-medicinal uses. For the identification of plants we used field guides and flora of Pakistan and as a result 123 plant species currently under utilization by local people were identified. Previously we collected all the plant specimens, after careful identification we preserved and mounted on herbarium sheets, were placed in the department of Botany, Govt. Sadiq Egerton College, Bahawalpur, Pakistan. The study will provide a baseline for future studies relating to pharmacological, chemical isolations, taxonomic and well as biochemical studies by giving a quick approach to the specific plant species.

Keywords: Bahawalpur, biochemical, ethno-medicine, pharmacological, plants, questionnaire

INTRODUCTION

From prehistoric times to date herbal medicines have got a distinct place. Both human and plant usage history are of the same age but the authentic evidence regarding the usage of plants is found in Rig Veda between 4500-1600 BC and Ayurveda between 2500-600 BC (Shah and Khan, 2006). The different medicinal plants historically being used from their discovery for food (Ibrar, 2002). Later spread to various other countries, Greek medicine, which then to Arabs and then spread to India and Europe but still this system of medication is serving about 80% of world population (Shah and Khan, 2006; Ahmad, 1999). Keeping in view the importance of medicinal flora, Pakistan is an enriched ecological zone, in which medicinal plants have been used as traditional medicine for human health care as well as animals (Ismail and Nisar, 2010; Rashid and Arshad, 2002). Nearly six thousand species of flowering plants have been reported in Pakistan including Kashmir (Shinwari and Khan, 1999).

While 2,000 species have been reported as medicinal plants but only a small portion is being processed on commercial bases (Cotton, 1996). Most of the allopathic drugs are being extracted from the medicinal plants (Rashid and Arshad, 2002). About 80% of the population of Pakistan is using these plants as traditional medicine (Ahmad *et al*., 2003) but due to lake of exposure these species are limited to the native area, almost 90% of the population of remote areas is dependent on these plant (Baquar, 1989). Due to their limited side effect and easily available in nature (Evans, 2002; Ismail and Nisar, 2010, Hussain *et al*., 2010).

This is indicative of the vast repository of knowledge of plant medicine that is still available for global use, provided of course that it does not get lost before it can be tapped or documented. Traditional and indigenous medical knowledge of plants, both oral and codified, are undoubtedly eroding as only a small number of people in a community are familiar with their medicinal uses. The important values of some plants have long been published but a large number of them remain unexplored as yet. Naturally plenty of plants species with medicinal properties are present which in easy access to humans (Shafi *et al*., 2001; Hameed *et al*., 2011). So there is a necessity to explore their uses and to conduct pharmacognostic and pharmacological studies to ascertain their therapeutic properties (Baquar, 1989). Various scientists reported

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various plants species with the ethanomedicinal properties in a systematic way to document the eroding folk plant usage knowledge (Shinwari, 1996; Bhatti *et al*., 2001; Qureshi *et al*., 2002, 2009, 2010; Qureshi and Bhatti, 2008; Hussain *et al*., 2010; Nisar *et al*., 2011; Arshad *et al*., 2011).

Keeping in view the importance of medicinal flora of district Bahawalpur in Southern part of Punjab province, Pakistan, the study was confined to collect and document the indigenous knowledge of local people about medicinal uses of native plants. Furthermore, we collected the data few garden plants as well to give a preliminary draft about the medicinal wealth of the area. The present study was aimed to document the traditional knowledge of plants being used to treat various diseases in Bahawalpur district excluding the Cholistan area.

MATERIALS AND METHODS

We initiated this project of exploring the flora of Bahawalpur district and the southern part of Punjab province in 2004 at the department of Botany, Government Sadiq Egerton College, Bahawalpur, Pakistan. Continuous field trips were arranged time to time in almost year round throughout the 10 years (2004-2013) in order to collect information about the ethno-medicinal and household uses of plants by the local people in Bahawalpur district, Punjab, Pakistan. Standard methods were opted for the collection of plant specimens, making herbarium and finally deposited in the department for ready reference following Nasir and Ali (2001). But later we initiated to develop a digital data by taking the photographs of each and every plant species almost in every season and in every stage of life history of the plant. Same area and same plant species were confirmed many times to eradicate the errors in knowledge among the people at various sites for the same plant species to omit biasness. Plants with their correct nomenclature were arranged alphabetically by family, botanical name, vernacular name, parts used and ethno-medicinal uses. The identification and nomenclature of the listed plants were based on The Flora of Pakistan (Nasir and Ali, 1970-1989) and a field guide by Chaudhary (1969, 1989, 1999). A questionnaire method was adopted for documentation of ethno-medicinal knowledge. About 250 informants have been interviewed on random basis. The indigenous medicinal plants having traditional knowledge of utilization among the people have been selected as reference specimens.

Table 1: List of various plant species used as medicines by local people

Family	Botanical name	Local name (s)	Part (s) used	Medicinal use (s)
Aizoaceae	*Trianthema portulacastrum*	It-sit	Whole plant	Anti-fungus, cough, wound-dressing, poultice, gonorrhea and venereal discharge
Amaranthaceae	*Achyranthus aspera*	Puth-kanda	whole plant	Vomiting, bronchitis, piles, itching abdominal pains, dyspepsia, dysentery, blood purification, kill intestinal worms, gum troubles, rheumatism, asthma and fever
	Aerva javanica	Bui	Flowers, leaves	Sore throat, guinea-worm, malaria, eyewash, diarrhea, help in childbirth and snakebite
	Alternanthera sessilis	Waglon	Whole plant	Vomiting, sleep promoting, headache, neuralgia, snakebite, stimulate bile flow, terminate pregnancies, fever, increase mother milk, improve male sexual potency and to treat acne
	Amaranthus spinosus	Chulai	Leaves and roots	Diuretic, internal bleeding, diarrhea, excessive menstruation, snake bites, vaginal discharges, nosebleeds, wounds, gonorrhea, eczema and fix the broken bones
	Digera arvensis	Tandla	Whole plant	Diuretic and dyspepsia
Anacardiaceae	*Mangifera indica*	Aam	Flowers, leaves, kernel, bark and fruits	Diarrhea, scabies, rheumatism, round worms vomiting, chronic dysentery, menorrhagia, diabetes, asthma, cough, diarrhea, urethritis, bleeding piles, catarrh of the bladder, chronic urethritis resulting from gonorrhea, contraction of vagina and diuretic
Apocynaceae	*Alstonia scholaris*	Chatwan	Bark	Diarrhea and dysentery
	Caraluma edulis	Seetu	Aerial parts, flowers	Emollient, diuretic, liver diseases, diabetes, hypertension healing wounds and cuts, burns, itching, skin cancer and sunburns
	Catharanthus roseus	Vinca	Leaves extract	Insect's sting, stop bleeding, chest ailments, eyewash, rheumatism, diabetes, asthma, flatulence, tuberculosis, dyspepsia, indigestion, malaria and high blood pressure
	Nerium oleander	Kaner	Leaves and roots	Heart diseases, diuretic, antibacterial, snake-bite, scabies, reduces swellings, cancer, ulcers and leprosy and scaly skin treatment
	Oxystelima esculentum		All parts	Used as an aphrodisiac, astringent, diuretic and anti-rheumatic, coughs, gonorrhea and pains, inflammations of muscles/joints, leucoderma and itching
Arecaceaes	*Phoenix dactylifera*	Khajoor, pind	Fruit, gum and seeds	Astringent for intestine, sour throat, colds, bronchial catarrh, fever, cystitis, gonorrhea, alcohol intoxication, diarrhea, genito-urinary ailments, diuretic, toothache and sexual disorders

Table 1: Continue

Asclepidaceae	*Calotropis procera*	Aak	Roots, flowers, leaves, latex	Pain and swelling reducing, filariasis, otitis , deafness, wound healing, skin diseases, baldness, piles and tooth-ache
	Asphodelus tenuifolius	Piazi	Whole plant	Diuretic and inflammation
Asteraceae	*Conyza ambigua*	Rui	Leaves	Soreness of throat
	Carthamus oxyacantha	Pholi	Seeds, flowers and oil	Ulcers, itching, tonic, purgative, strengthening liver, joint pain reliving, diaphoretic, fevers, measles and eruptive skin treatment
	Eclipta alba	Bhringaraj	Herb, roots, leaves, oil	Hair growth, teeth, memory, sight and hearing, promote sleep, complexion, skin disorders, headache, prevent, relieve labor pain, kill worms, urinary tract infections, piles and tonic
	Launaea procumbens	Jangi gobi	Whole plant	Painful maturation and galactagogue
	Vernonia cinerascens	Simbla	Whole plant	Gingivitis, toothache and antimicrobial
	Launea nudicaulis	Dudhkal	Leaves	Constipation, fever, itching of skins, cuts, ulcers, swellings and toothache
	Sonchus asper	Asgandh	Aerial parts	Regulate menstrual cycle, alter liver function, cancer, inflammation, fever, wounds and burn
	Taraxacum officinale	Dandelion	Roots and leaves	Constipation, liver tonic, headaches, eye problems, gout, skin problems, fatigue and boils
	Xanthium strumarium	Kandiari	Leaves roots, seeds and fruits	Anodyne, appetizer, diaphoretic, diuretic, emollient, malaria, antibacterial, antifungal, antispasmodic, cytotoxic, rheumatism, constipation, diarrhea, leprosy and tumors
Bigoniaceae	*Jacaranda mimosifolia*	Jacaranda	Whole plant	Antimicrobial action against *Bacillus cereus*, *Escherichia coli* and *Staphylococcus aureus*
	Ticoma stans	Basant bara Masi	Whole plant	Diuretic, tonic, anti-syphilitic, vermifuge, stomach pain, diabetes, muscle relaxant, mild cardio tonic and choleric activity
Boraginaceae	*Cordea obliqua*	Lasoora	Gum, fruit and seeds	Lungs disorder and gonorrhea treatment, disease of the spleen chest diseases, cough, chronic fever treatment and anti-inflammatory activity
	Heliotropium strigosum	Gorakh pan	Leaves	Used to treat sore eyes, boils, sores, wounds, ulcer and snakebite. This plant is laxative and diuretic
	Heliotropium curassavicum	Lani pata	Leaves, roots	Boils and skin diseases mainly
	Heliotropium europaeum	Uth chaaro	Leaves	Pimples, skin eruptions and scaly dried skin
Capparaceae	*Capparis deciduas*	Kareer	Root, Fruit	Skin boils, eruptions, swelling, chronic, foul ulcers, cough, hiccough, asthma, vomiting, hemorrhoids, intermittent fevers, arthritis, lumbago, dyspepsia, flatulence, constipation, intestinal worms, cardiac debility, gout, dysmenorrheal, cardiac disorders and urinary infection
	Capparis spinosa	Caper	Root, bark and latex	Dropsy, anemia, arthritis, gout, increase the appetite, hepatic stimulantion, improve liver function, gastrointestinal infections, diarrhea, rheumatism, cough, eye infection, flatulence reduction, diuretic and vermifuge
	Dipterygium glaucum		Areal part	Asthma
Chenopodiaceae	*Chenopodium album*	Bathoo	Whole plants	Anthelmintic, antiphlogistic, antirheumatic, mildly laxative, insect bites, ulcer, intestinal worms, dyspepsia, urinary retention, kidney diseases, debility and sexual stimulant
Cleomaceae	*Cleome viscosa*	Kasturi	Whole plant	Kill intestinal worms, colic, cardio sympathy, diarrhea, fever and dyspepsia
Combretaceae	*Quisqualis indica*	Jhumka bail	Seeds and leaves, fruits	Anthelmintic, anti-inflammatory, tonic, astringent, headaches, diarrhea, fever and dysuria
	Terminalia chebula	Haradh	Fruits and bark	Heating, enhance digestion, excretory, nervous, respiratory and female reproductive system
	Terminalia arjuna	Arjun	Leaf, bark and Fruits	Cardio-tonic, blood dilution, reduces stress, urinary tract infections, reduces burning, spermatorrhea, relives the leucorrhea and excessive menstrual bleeding
Convolvulaceae	*Convolvulus arvensis*	Leli	Leaves, flowers and root	Spider bites, reduce profuse menstruation, fever, heal wounds laxatives and emetic
	Ipomea carnea	Chota aak	Whole plant	Anti-cenogenic and ototoxic
Cruciferae	*Coronopus didymus*	Naksari	Whole plant	Pain and inflammation reviling
Cucurbitaceae	*Citrullus colocynthis*	Tuma	Dried pulp of fruit and root	Tumor, ulcer or cancer cure, constipation and insect repellent
	Cucumis melo var. agrestis	Chiber	Fruit	Digestion and stomach disorders

Table 1: Continue

Cuscutaceae	*Cuscuta reflexa*	Aakas bail	Whole plant	Anthelmintic and carminative, bilious disorders, fevers, pain killer, itchy skin, diuretic, jaundice and coughs
Cyperaceae	*Cyperus papyrus*	Japani gha	Whole plant	Widening and drying of fistula, eye diseases, ulcers, heal wounds and cancer cures
	Cyperus rotundus	Deela	Tubers	Astringent, appetizer, stomachic, anthelmintic and leprosy
Euphobiaceae	*Chrozophora plicata*	Nilakari	Whole plant	Wound thealing, improve healing, jaundice and blood purification
	Euphorbia helioscopia	Chatri dodak	Leaves, stem, roots, seeds, oil	Febrifuge, vermifuge, anthelmintic, cathartic, anticancer properties and cholera
	Euphorbia hirta	Dhoodak	Leaves and its extract	Kill intestinal worms, diarrhea, ulcer, wounds and burn healing
	Euphorbia prostata	Hazar dani	Whole plant	Wasp and scorpion sting, vagina sterility, painful menstruation, inflammations, asthma and blood purification
	Ricinus communis	Arind	Whole plant	Skin boils, swellings, increase milk production in mother, umbago, rheumatism and baldness
Fabaceae	*Albizia lebbeck*	Shirin	Stem bark	Pain reliving, skin texture improvement, string (insects) bites treatment, skin and respiratory disorders, wounds or injury treatment, blood purification and nasal infusion
	Alhagi maurorum	Jwahan	Whole plant, oil	Diaphoretic, diuretic, expectorant, laxative, rheumatism, piles and tonic
	Bauhinia purpurea	Kachnar	leaf, stem bark	Jaundice, liver disorders, smallpox, arrest diarrhoea and dysentery
	Cassia fistula	Amaltas	Fruit, leaves, bark and root	Constipation treatment, cold, running nose, reducing fever, black water fever, ageusia, skin allergy, inflammation of the hands or feet, ringworm, swellings and pain reliving
	Dalbergia sissoo	Tali	Leaves, roots, wood	Gonorrhoea, astringent, alterative, leprosy, eruptions and vomiting
	Delonix regia	Gul mohr	Whole plant	Ailment of constipation, inflammation, arthritis, hemiplagia and eyes disease
	Melilotus parviflora	Sainji	Whole plant, seeds	Antispasmodic, emollient, analgesic, insect repellent, tonic, astringent, swellings, tumors, skin rash, wounds, gastrointestinal problems, cold and genital organ diseases
	Pongamia glabra	Sukh chain	Bark, leaves, flowers, seeds and oil	Ulcers, cleaning teeth, strengthening the gums, wounds healing, swellings relief, nasal therapy, alopecia areata, arthritis, indigestion, anorexia, piles, worm infestations, flatulence, liver diseases, hepatosplenomegaly and cough
	Rhynchosia minima	Tin pinda	Leaves	Anthelmintic, wounds healing, helminthic infections, abortifacient, asthma and piles
	Vicia faba	Bakla	Seeds pods	Diuretic, lithontripic, bladder and kidney stones
	Vicia sativa	Matri	Whole plant	Metastasis and cancer (cathepsin D inhibiter)
Lamiaceae	*Osimum bacilicum*	Niazbo	Leaves, flowers, seeds, root and extract	Easing flatulence, stomach cramps, colic, indigestion, antispasmodic, aromatic, carminative, galactogogue, stomachic feverish illnesses, nausea, gastro-enteritis, migraine, insomnia, depression, exhaustion, snake bites, skin infections, gonorrhea, dysentery, chronic diarrhea, eyewash, anti-bactericidal, kill intestinal worms and aromatherapy
	Mentha longifolia	Wild mint	Leaves and stem	Colic, menstrual disorders, indigestion, flatulence, pulmonary infection, congestion, headache, fever, cough, colds and urinary tract infections, inembe, swelling, wound healing and bronchial congestion
Leguminosae	*Acacia ampliceps*	Australin kiker	Leaves	Cholesterol reduction, diabetes, cancer, gingivitis, stomatitis (mouth sores), pharyngitis and indigestion in children
	Crotalaria burhia	Chag	Whole plant	Eczema, gout, hydrophobia, swelling and cancer
	Prosopis juliflora	Kabli kiker	Branches, stems, bark, pods, gum and leaves	Eyewash, wounds or burn treatment, dermatological ailments, digestive problems, antibacterial, soothing, astringent and antiseptic, purgatives. Fever, bladder infection, measles, stings, hemorrhoids headache, bladder infection and sunburn treatment
Liliaceae	*Aloe vera chinensis*	Aloe vera	Leaves and its pulp	Wound healing, chronic, dermatitis and radiation burn treatment, cuts, burns, eczema, sunburn, dermatitis, insect stings, poison ivy, abrasions, pain and inflammation reducing
Lythraceae	*Lawsonia inerma*	Mehndi	All parts	Pain, ulcer, edema, baldness, graying of hair, burning sensation, headache, hepatitis, skin diseases and anemia

Table 1: Continue

Mackinlayaceae	*Centella asiatica*	Brahmi buti	Leaves	Rheumatism, extra vitality, increasing brain power, diabetes, blood circulation enhancement, arthritis, senility, varicose veins and dysentery
Malvaceae	*Abutilon indicum*	Jhumka	Leaves, roots, flower and seeds	Fevers, chest affections, gonorrhea, urethritis, eyewash, mouthwash, inflammation of the bladder, ulcers, piles and relieving strangury, haematuria and leprosy
	Bombax malabaricum	Simbal	Gum, seed, roots, bark and flowers	Aastringents for diarrhea, gonorrhea, dysentery, strangury, conjunctivitis of infants, ulceration of the bladder, treatment of genital organs, gonorrhea and inflammation
	Hibiscus rosa sinensis	Gurhal	Leaves and flower	Headache, anodyne, emmenagogue, regulate the menstruation and blood circulation, sprains, ulcers, wounds and anticancer
	Malva parviflora	Cheeseweed	Whole plant	Swellings, running sores, demulcent cough and ulcer in the bladder
	Malva sylvestris	Pick-cheese	Leaves	Inflammation, soothing activity, gastric catarrh, enteritis, indigestion, ulcers, colitis, diuretic and bladder infection
Meliaceae	*Azadirachta indica*	Dareik	Whole plant, oil and gum	Leprosy, scrofula, anthelmintic, diuretic, rheumatism, insecticidal, antiseptic for ringworm, scabies, sores and ulcers, malaria fever, leprosy, vermifuge, astringent, tonic, anti diabetic, antibacterial, antiviral and blood purification
	Melia azedarach	Neem	Whole plant, oil and gum	Hysteria, leprosy, rheumatism, spleen enlargement also has cathartic, emetic, emmenagogue, resolvent, emetic and anthelmintic properties
Mimosaceae	*Acacia nilotica*	Kiker	Fruit, bark and leaves	Ulcers, leprosy, colds, congestion, coughs, dysentery, fever, gallbladders, hemorrhages, leucorrhea, ophthalmia, sclerosis, smallpox and tuberculosis
Moraceae	*Ficus bengaalensis*	Bargad	Whole plant	Diarrhea, dysentery, piles, teeth cleaning, gum disorders, warts and female sterility
	Ficus carica	Anjeer	Leaves, fruit and latex	Piles, stomache, corns, gumboils, tonic for body dental abscesses and anticancer
	Ficus elastica	Rabber plant	Bark, fruits and leaves	Enlargement of liver and spleen, dysentery, diarrhea, diabetes, leprosy, lung complaints, leucorrhoea, heart diseases, cough, asthma, piles, ulcers, gonorrhea, rheumatism and for different skin diseases
	Ficus lyrata	Beeri patta	Whole plant	Gastrointestinal problems, anthelmintic, diabetes, anti-tumor activity, asthma, cough, sexual disorders, diarrhea, ear-ache and toothache, migraine, eye troubles, scabies, gonorrhea, bleeding, paralysis, bone fracture, antiseptic and astringent
	Ficus religiosa	Peepal	Whole plant	Ear drops, heart diseases, constipation, vomiting, wounds healing, inflammations, stomatitis, ulcers, gout, gum diseases, digestion, foul taste, asthma and urinary troubles
	Morus nigra	Black mulberry	Whole plant	Antibacterial, fungicidal, astringent, diaphoretic, odontalgic, ophthalmic, colds, influenza, eye infections, nosebleeds, antirheumatic, diuretic, hypotensive, pectoral, toothache, expectorant, hypotensive, asthma, coughs, bronchitis, oedema and diabetes
Molluginaceae	*Limeum indicm*		Leaf and stem	Vomiting, indigestion, heart burning, fevers and cold
	Gisekia pharnecioides	Balu ka sag	Whole plant	Anthelmintic and strength restorative, e.g., after miscarriage
Myrtaceae	*Callistemon viminalis*	Botal brush	Leaves	Antibiotic, antibacterial, insect repellent and to kill intestinal parasites
	Euclyptus citriodora	Safeda	Leaves and oil	Antiseptic and fumigant, cold, lung disorders, ulcers, cough, diabetes and Hypoglycemia
	Syzygium jambos	Jaman	Bark and fruits	Liver complaints, diabetes and brain tonic
Nyctaginaceae	*Boerhavia procumbens*	Bashkhira	Roots	Rheumatism, blood purification, cough, asthma, hernia, dropsy, chest-pain, piles, swellings, gonorrhea and internal inflammations
Oleaceae	*Jasminum grandiflorum*	Chanbeli	Flowers, roots, stem and bark	Beneficial in stress relief, anxiety and tension, exhaustion, easing depression, dry skin, dermatitis, cancer (bone, lymph nodes and breast), headaches and diuretic
Oxalidaceae	*Oxalis corniculata*	Khati booti	Flowers, leaves	Anthelmintic, astringent, antiscorbutic, diuretic, stomachic, febrifuge, styptic, fever, influenza, diarrhea, traumatic injuries, urinary tract infections, snakebite, kill hookworms, skin rashes, eruptions, insect bites and burns
Papaveraceae	*Argemone mexicana*	Satyanashi	Roots, leaves, seeds and juice	Diuretic, purgative, destroys worms, leprosy, skin-diseases, inflammations, bilious fevers, anthelmintic, ophthalmia, opacity of cornea and kill tape-worm

Table 1: Continue

Papilionaceae	*Tephrosia lupinifolia*		Leaves, roots, extract of plant	Insecticide, rodenticide, anthelmintic, abortifacient, to induce menses, diarrhea, ear and tooth ache, tuberculosis, typhoid fever and localized fungal infections
Pinaceae	*Pinus roxburghii*	Chir	Areal part	Antiseptic, diuretic, vermifuge treatment of kidney and bladder complaints, coughs, colds, influenza, tuberculoses, wounds, sores, burns, boils and ulcers
Poaceae	*Cymbopogon jawarancusa*	Khavi	Whole plant	Chicken pox
	Arundo donax	Narha	Roots, leaves	Dropsy, cancer, headaches, condyloma, indurations of the breast, diuretic and emollient
	Cymbopogon citratus	Lemon ghaas	Oil of whole plant	Headaches, tonic for the body and nervous system, stimulate glandular secretions, respiratory infections, fever, infectious diseases, indigestion, gastro enteritis and insect repellent
	Cynodon dactylon	Khabbal gha	Whole plant	Eyewash, epitasis, nasal drops, inflammation, stop bleeding, scabies, fungal infections, piles, nervous disorder, hyperactivity disorder, fits and blood purification
	Dichanthium annulatum	Darib	Whole plant	Dysentery and manorrhagia
Polygonaceae	*Polygonum plebejum*	Kheer wal	Whole plant	Cardion-tonic, haemetonic and cholera
	Polygonum glabrum		Leaves	Astringent, diuretic, relieve pain, rheumatism and treatment of poison ivy rash
Portulacaceae	*Portulaca quadrifida*	Loonak	Whole plant	Nutritive, irritable bowel, ulcerative colitis, inflammations, diarrhea, pre-menstrual bloating, anti-oxidant for chronic health problems and diuretic
Primulaceae	*Anagallis arvensis*	Billy booti	Whole plant	Colagogue, diaphoretic, diuretic, expectorant, nervine, purgative, stimulant, vulnerary, poultice, dropsy, skin infections and disorders of the liver and gall bladder
Punicaceae	*Punica grantum*	Anar	Bark, seeds and seed extract	Diarrhea, dysentery, stomachache, hyperacidity, colitis, constipation, inflammation, teeth and gum disorder, bleeding, fever, skin and ulceration of colon
Rhamnaceae	*Ziziphus jujuba*	Beri	Leaves, root, fruit, bark, seed	Cough, heart tonic, anti-poison, anxiety, insomnia, dizziness, night sweats, diarrhea, fever and hair growth
	Zizyphus numularia	Paindu beri	Fruits, leaves	As a tonic expectorant
Rosaceae	*Rosa indica*	Gulab	Leaves and oil	Eyes and skin treatment, stomach disorder, fever and diabetes
Rutaceae	*Citrus limon*	Nimboo	Whole plant	Anxiety, depression, cholesterol, antiseptic and lightens hair
	Citrus medica	Khatti	Leaves, seeds and latex	Pulmonary troubles, intestinal ailments, dysentery, sedative, anti-poison, antibiotic, pains and inflammation, itching, scorpion bite, improve digestion, liver problems, nausea, piles, epitasis cough, cold, asthma, menstrual disorder like, rehabilitating alcoholics and drinking habits
	Murraya exotica	Marva	Leaves and roots	Pain reducing, snake bite, diarrhea, dysentery, toothaches, antitoxic, antispasmodic, antagonizes muscular spasms, rheumatic pain, skin eczema and to improve blood circulation
Salvadoraceae	*Salvadora oleoides*	Peelu	Whole plant	Tryponosomosis, toothache, gum inflammation, mouthwash, gonorrhoea, spleen trouble, epilepsy, skin diseases, stomach ulcers, decoctions reduced cholesterol, LDL plasma levels, tonic to increase fertility and rheumatism
Sapindaceae	*Dodonaea viscosa*	Aliar	Leaves bark and roots	Astringent, diaphoretic, febrifuge, odontalgic, vulnerary, toothache, sore throats, wounds, skin rashes, stings and poultices
Solanaceae	*Datura alba*	Dhatura	Leaves and seeds	Asthma, intoxication, emetic, digestion, inflammation, spasm of the bladder, muscular rheumatism, neuralgia, haemorrhoids pain, fistula, abscesses and inflammation
	Solanum nigrum	Mako	Whole plant	Sleep enhancing, ringworm, gout, earache, gargle, mouthwash and cutaneous disorders
	Withania coagulans	Paneer doda	Leaves, fruit and roots	Chronic fatigue, dehydration, bone and muscle weakness, tension, loose teeth, thirst, impotency, premature ageing, emaciation, debility, constipation, senility, rheumatism, nervous exhaustion, memory loss, spermatorrhoea, tumors, tubercular glands and ulcers
	Withania somnifera	Asgandh	Root, leaves, green berries and seeds	Aphrodisiac, tonic, anthelmintic, inflammations, psoriasis, bronchitis, asthma, ulcers, scabies, insomnia, senile debility, arthritis, hypertension, diabetes and general debility

Table 1: Continue

Tamaricaceae	*Tamarix aphylla*	Ukan, Frash	Bark, leaves and twigs	Jaundice, rheumatism, wound and abscesses, rheumatism, wound and abscesses
Tiliaceae	*Chorchorus depressus*	Bahuphali	Whole plant	Heat surges
Verbenaceae	*Phyla nodiflora*	Bukhan booti	Whole plant	Anodyne, antibacterial, deobstruent, diuretic, emmenagogue, parasiticide, treatment of hookworm and gastric troubles, fever, cough and cold
Zygophyllaceae	*Fagonia cretica*	Dhamasa	Whole plant	Fever, thirst, vomiting, dysentery, asthma, urinary discharges, liver trouble, typhoid, toothache, stomach troubles, skin diseases, smallpox, tumours, snakebite, possess potent anti-bacterial activity, breast cancer and antitumor
	Tribulus longipetalous	Tirkindi	Whole plant	Increase male infertility, low libido and impotence
	Tribulus terrestris	Bakhra	Whole plant	Gout, impotence, calculus affections, urinogenital diseases, eye infection, anti-inflammatory, anti-bacterial, antifungal, endurance and stamina

RESULTS

In the present study, 123 plant species belonging to 52 families were collected and identified during our field trips. The plant species include sedges, grasses, forbs, shrubs and tree species. The various plant species summarized in tabulated form (Table 1) along with their ethno-medicinal uses, local names, family and the parts being used to cure different diseases.

DISCUSSION

A vast knowledge of how to use the plants against different illnesses may be expected to have accumulated in areas where the use of plants is still of great importance (Diallo *et al*., 1999). The present study was carried out to assess record and report the Ethno botanical knowledge about the plant species of district Bahawalpur excluding the Cholistan desert and Lalsohanra National Park. These plants are used to treat various types of disorders either in the form of direct intake of plant parts, or in ground form, or in decoctions. Due to the lack of modern communications, as well as poverty, ignorance and unavailability of modern health facilities, most people especially rural people are still forced to practice traditional medicines for their common day ailments (Azaizeh *et al*., 2003). Many of the plants has been found to be administered in combination with milk or some specialized foods and various plant species have been found to cure such illness across different ethnic communities (Ismail and Nisar, 2010; Nisar *et al*., 2011; Arshad *et al*., 2011). An alarming point we observe and to lay stress that due to year round droughts, increases constructions, enhanced grazing, uncontrolled utilization and poor management posed a great threat to the native flora of Bahawalpur district. However, the study will provide a baseline study for the conservation f the local flora, familiarization to the local people and authorities to traditional knowledge of these medicinally important plants (Hussain *et al*., 2010; Ismail and Nisar, 2010; Qureshi *et al*., 2010) but only a small group of people in a community form a link in the trade of medicinal plants (Khan, 2002). We strongly stress to initiate certain projects in cooperation with the pharmacuitical companies and academia to establish the cultivation of such medicinal plants to fulfill the local industry demand as well as by export to add great revenue to government as reported by various authors (Shinwari and Khan, 1999; Kate and Laird, 1999). The present paper will prove a key to identifying those elements in a plant with a pharmacological value that is ultimately destined for the international markets. Indeed, such traditional knowledge is very valuable. In this way the local communities of Bahawalpur district will get the better chances of employment, native flora will be conserved in a proper way for future utilizations and the retain its natural glory.

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