

ETHNOBOTANICAL STUDIES OF WILD HERBS OF CENTRAL PUNJAB, PAKISTAN

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Abstract

The current research work was designed to file the indigenous knowledge on the flora of eight districts of Central Punjab, *viz.*, Faisalabad, Pakpattan, Lahore, Nankana Sahib, Narowal, Sahiwal, Sialkot and Vehari. Frequent field trips were made during 2006-2008 to record ethnobotanical data by interviewing people of various age groups, mostly ranging between 30 to 70 years, including medicinal healers (herbalists/hakims). The total number of species recorded was 102 that belonged to 90 genera and 38 families and were being used by local people of respective districts for various purposes e.g. medicine, fuel, fodder, vegetables, fruits and for making mats and baskets.

Introduction

Different ethnic groups of the world possess empirical knowledge about the utilization of local flora of that area on which they are immediately and intimately dependent. Plants and plant products continue to play a fundamental part in the material culture of many of the world's indigenous communities. However, with the increased contact with industrialized world and through the erosion of their natural source base, the indigenous knowledge is gradually vanishing.

Pakistan comprising nine major ecological zones is bestowed with a unique biodiversity. About 6,000 species of wild plants are found in the country, out of which almost 400 - 600 species are considered to be of medicinal importance (Hamayun *et al.*, 2005). In Pakistan, medicinal plants are primarily used by Tibbi Dawakhanas (medical centers of indigenous physicians known as *Hakims*). The study of traditional uses of plants in Pakistan has been increasing during the last few years (Hamid *et al.*, 1996). Aboriginal remedies which are believed to be inexpensive, safe and more effective are gaining recognition among the people of both countryside and city areas. Knowledge gained from tribal groups about indigenous long-established medicine has played a very important role in the discovery of new products from plants as chemotherapeutic agents (Katewa *et al.*, 2004). People living in villages and tribal localities are using native plants for medicinal and various other purposes from time immemorial as this knowledge is based on experience and reaches them through generations (Shinwari and Khan, 1998). In an ethnobotanical study in Bangladesh the use of plants for medicinal purposes among four indigenous communities of Bandarban was recorded (Mohiuddin *et al.*, 2012). In another study Patel and Patel (2012), showed the ethnogynaecological uses of plants from Gujarat, India. In this regard 16 plant species belonging to 13 families were documented. Rawat and Kharwal (2010) provided ethnobotanical information on *Sapium insigne*, a conserved plant of Shivalik Hills, India. The plant was used by locals for fish poisoning. Pragada and Rao (2012) highlighted the ethnoveterinary uses of plants to treat common diseases in cattle and pet animals in tribal belts of Andhra Pradesh, India. In a study conducted by Sardar and Khan (2009), the indigenous knowledge of local people of Tehsil Shakargarh, District Narowal, Pakistan about medicinal and conventional uses of plants was reported.

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Punjab is ranked as Pakistan's second largest province after Baluchistan with an area of 205,344 km² and is located between latitudes 27.42° and 34.02° N and longitudes 69.81° and 75.23° E at the northwestern edge of the geological Indian plate in South Asia. The present study has been carried out to collect, identify and document the ethnobotanical plants used by the indigenous people of Central Punjab.

Materials and Methods

In order to collect the data 32 field trips were made during the year 2006-2008. The local names, traditional and medicinal uses of the herbs were recorded by interviewing the local persons of different age groups mostly between 30 to 70 years, including herbal practitioners. The collected plant specimens were pressed and identified with the help of Nasir and Ali (1970-1989), Ali and Nasir (1990-1992), Nasir and Rubina (1995) and Ali & Qaisar (1992-2007). A questionnaire was developed for documenting ethnobotanical knowledge. The collected information was also crosschecked with the available literature.

Results and Discussion

A total of 102 species under 90 genera and 38 families were recorded which were being used by local inhabitants for various purposes such as fodder, furniture, fuel, medicine, edible fruits and vegetables (Table 1). Most of the species are reported to have multipurpose use by the inhabitants of the respective areas. They use them as medicinal plants (74 species), fodder (50 species), vegetables (9 species), wild fruits (2 species), reclamation of saline soils (1 species), multifarious use (8 species), herbal veterinary medicines (3 species), fuel wood (2 species), crop weeds (2 species), poisonous (1 species), religious value (1 species), condiments (1), narcotic (4) and cosmetic (1) etc. Majority of the herbs present in the study area have medicinal use and in order to treat various diseases a variety of plant parts are used. The local people use plants for a number of ailments like bronchial disease (19 species), blood purifier (9 species), fever (19 species), hepatic problems (5 species), arthritis (5 species), sexual diseases (11 species), digestive disorders (43 species), general tonic (6 species), diabetes (4 species), urinary diseases (4 species), eye diseases (7 species), ear problems (3 species), hair fall (2 species), toothache (4 species), skin problems (18 species), piles (7 species), wound healing (6 species), jaundice (4 species) and cardiac problems (3 species).

Population of the Punjab Province estimated to be 70 million is comprised of about half the total population of Pakistan (Punjab World Gazetteer in 2009). Central Punjab with a good number of renowned cities is the hub of industrial, agricultural, educational and business activities. In the process of urbanization construction activity consisting of multistoried buildings, industrial units and roads in the area is therefore more compared to the other parts. These developments have greatly influenced the plant biodiversity (Cubizolle *et al.*, 2003). Central Punjab is quite rich in plants of economical importance, with record of 102 species of herbs confirming the fact. Local people have depended upon indigenous plants since long for their means of living like food, medicine, shelter, trade besides the needs of fuel and animal feed etc. Most of the herbs because of their great medicinal value have remained under heavy anthropogenic pressure in the form of cutting, harvesting and grazing. With the support of fertile land and a vast irrigation system majority of the land owners in Central Punjab use pesticides and herbicides to obtain higher yields, which create pollution and destroy vegetation in the adjoining areas. Pollution of gasoline containing heavy metals also causes damage to plants on road verges (Gracia-Miragaya *et al.*, 1981; Gjessing *et al.*, 1984). In all this situation people's awareness about the sustainable use and conservation of these species is primarily essential to control indiscriminate cutting and damaging process before many of these become non-existent.

Table 1. Wild herbs used for ethnobotanical uses in central Punjab, Pakistan.

No.	Botanical name	Local name	Family	Part used	Local use
1	<i>Abutilon indicum</i> (Linn.) Sweet	Kanghi Booti	Malvaceae	Whole plant	Leaves are used in the treatments of inflammation and toothache.
2	<i>Achyranthes aspera</i> Linn.	Puth kanda	Amaranthaceae	Whole plant	Plant is purgative, diuretic and emetic. The plant is used to cure piles, stomach and skin diseases.
3	<i>Aerva javanica</i> (Burm. f.) Juss.	Booien	Amaranthaceae	Whole plant	Decoction is used against body swelling.
4	<i>Ageratum houstonianum</i> Mill.	Berokan	Asteraceae	Whole plant	Shoots are used as a decoction for cough, cold and skin diseases. Plant is used as fodder.
5	<i>Ajuga bracteosa</i> Wall. ex Benth.	Kauri Booti	Lamiaceae	Leaves	Used in stomach acidity, headache, curing pimples and measles. It is also recommended in sore throat and blood pressure.
6	<i>Alhagi maurorum</i> Medic.	Jawaian	Fabaceae	Whole plant	Plant is diuretic and laxative.
7	<i>Alternanthera pungens</i> Kunth.	Khaki Booti	Amaranthaceae	Whole plant	Plant is used as fodder by cattle.
8	<i>A. sessilis</i> (Linn.) DC.	Kachari	Amaranthaceae	Whole plant	Decoction is taken orally to remove fever.
9	<i>Amaranthus viridis</i> Linn.	Chulai	Amaranthaceae	Whole plant	Whole plant is medicinal. Roots are useful in leucorrhoea and piles.
10	<i>Anagallis arvensis</i> Linn.	Dhabar	Primulaceae	Whole plant	Cures inflammation, pain in liver and kidney, improves eye sight. Plant is used as fodder by grazing animals.
11	<i>Anethum graveolens</i> Linn.	Soya	Umbelliferae	Seeds	Used for the treatment of dysentery and abdominal pains.
12	<i>Argemone mexicana</i> Linn.	Darudi	Papaveraceae	Whole plant	It cures skin diseases, inflammations, leprosy and bilious fevers. Plant juice is used to cure eye diseases.
13	<i>Artemisia annua</i> Linn.	Jaho	Asteraceae	Leaves	Leaves are used for the treatment of jaundice, fever and blood purifier.
14	<i>A. vulgaris</i> Linn.	Tatwan	Asteraceae	Whole plant	The plant infusion is given to cure cardiac problems.
15	<i>Asphodelus tenuifolius</i> Cavan.	Piazi	Asphodelaceae	Whole plant	Cooked with maize bread and used as condiment. Plant paste is used for wound healing.

Table 1 Contd.

No.	Botanical name	Local name	Family	Part used	Local use
16	<i>Atriplex crassifolia</i> C.A. Mey.	Aambokh	Chenopodiaceae	Whole plant	Plant is used as fodder by grazing animals.
17	<i>Blumea lacera</i> (Burm.f.) DC.		Asteraceae	Whole plant	Used as fodder for cattle.
18	<i>Boerhavia procumbens</i> Banks ex Roxb.	Snati	Nyctaginaceae	Whole plant	Leaf extract is used to remove iron deficiency. Plant is used as fodder.
19	<i>Cannabis sativa</i> Linn.	Bhang	Cannabaceae	Leaves	Leaves are used for medicinal and spiritual purposes. Whole plant is narcotic.
20	<i>Capparis spinosa</i> Linn.	Kabar	Capparidaceae	Fruit	Fruit is used as food by insects and man.
21	<i>Carissa opaca</i> Stapf.	Garanda	Apocyanaceae	Fruit	Fruit is edible.
22	<i>Carthamus oxycantha</i> M. Bieb.	Poli	Asteraceae	Seeds	Roasted seeds are used as staple food, as well as for the treatment of intestinal worms in children.
23	<i>Cassia absus</i> Linn.	Chaksoo	Caesalpinaceae	Seeds	Its seeds cause constipation. Used in eye diseases.
24	<i>Chenopodium album</i> Linn.	Bathoo	Chenopodiaceae	Leaves	Courtyards in village houses are coated with fresh leaves crush. Moreover its extract is used for improving appetite, purifies blood and is used for piles.
25	<i>C. murale</i> Linn.	Krund, Bathu	Chenopodiaceae	Whole plant	It is rich source of minerals. Leaves and shoots are used as a vegetable/ pot herb. The plant is anthelmintic and stomachic.
26	<i>Chrozophora tinctoria</i> (Linn.) Raf.	Chisik	Euphorbiaceae	Seeds	Seeds cause vomiting. Plant yields the colouring matter.
27	<i>Cichorium intybus</i> Linn.	Kashni	Asteraceae	Flowers, roots	Flowers used in hepatic enlargement, fever, vomiting and abdominal pain. Root is used as stomachic and is found to be diuretic.
28	<i>Cirsium arvensis</i> (Linn.) Scop.	Barham dandi	Asteraceae	Whole plant	Its soft tissues are grazed by cattle.
29	<i>Citrullus colocynthis</i> (Linn.) Schrad.	Kor Tumba	Cucurbitaceae	Fruit, Roots	Fruit is used in the medicines for the treatment of stomach problems, ulcer, urinary discharge, skin problems, tetanus and ulcer. It is used for treatment of diabetes.

Table 1 Contd.

No.	Botanical name	Local name	Family	Part used	Local use
30	<i>Cleome glaucescens</i> DC.	Parhar	Capparidaceae	Seeds	The decoction of seeds is given orally in cough, cold and fever.
31	<i>Coccinia grandis</i> (Linn.) Voigt.	Kanduri	Cucurbitaceae	Whole plant	Paste of the plant is applied for the cure of skin disease.
32	<i>Commelina benghalensis</i> Linn.	Kana Keerai	Commelinaceae	Leaves	Leaves are used as vegetable and for treating pimples.
33	<i>Convolvulus arvensis</i> Linn.	Lehli	Convolvulaceae	Whole plant	Plant is used as fodder. Whole plant is purgative, extract having cathartic properties.
34	<i>Conyza bonariensis</i> Linn.	Ram Devi	Asteraceae	Whole plant	Whole plant is used as fodder for animals. Decoction is used to cure diabetes mellitus.
35	<i>Coronopus didymus</i> (Linn.) Smith.	Jangli Hala	Brassicaceae	Whole plant	Plant is used as fodder by grazing animals. Used as cooling and refrigerant.
36	<i>Cotula hemisphaerica</i> (Roxb.) Wall. ex Benth. & Hook.f.	Button	Asteraceae	Whole plant	Used as fodder for cattle.
37	<i>Croton bonplandianus</i> Baill.	Kala bhangra	Euphorbiaceae	Leaves, seeds	Whole plant is used to treat different ailments like fever. Leaf paste is applied on wounds.
38	<i>Cuscuta reflexa</i> Roxb.	Akas Bail	Cuscutaceae	Whole plant	Used as purgative. Decoction of stem is used to cure diarrhoea and jaundice. Warm plant is tied on the knee to cure pain.
39	<i>Dicliptera bupleuroides</i> Nees	Chaning	Acanthaceae	Leaves	Powder of plant is used as general tonic.
40	<i>Digera muricata</i> (Linn.) Mart.	Tandala	Amaranthaceae	Whole plant	Leaves are used as vegetable and plant as a whole is used as fodder for cattle. The plant is laxative in large doses.
41	<i>Eclipta alba</i> (L.) Hassk.	Bhangra	Asteraceae	Whole plant	Whole plant is used for treatment of hair, eyes and teeth problems. Cures piles, inflammation, hernia, bronchitis, asthma, leucoderma, anaemia and night blindness.
42	<i>Eruca sativa</i> Mill.	Tara Mira	Brassicaceae	Seeds, leaves	Oil extract from seeds is used to kill the lice in the head and cure skin diseases. Young leaves of plants are diuretic, stimulant and stomachic.
43	<i>Euphorbia helioscopia</i> Linn.	Dhodhak	Euphorbiaceae	Whole plant	Latex from plant is used for treating skin diseases. Oil extracted from seeds is used as laxative.

Table 1 Contd.

No.	Botanical name	Local name	Family	Part used	Local use
44	<i>E. hirta</i> Linn.	Dudhi	Euphorbiaceae	Whole plant	It is used as fodder by grazing animals. Herb is expectorant and anthelmintic, used in bronchial infection.
45	<i>E. prostrata</i> Ait.	Hazaar dani	Euphorbiaceae	Whole plant	It is used as fodder by grazing animals. Paste from plant used to stop bleeding and pain.
46	<i>Fagonia indica</i> Burm.f.	Dhamian	Zygophyllaceae	Whole plant	The extract of plant is administered for both man and woman sexual vitality. Ash is given to the children against anemia. Soft branches are grazed by animals.
47	<i>Fumaria indica</i> (Hauskn.) Pugsley	Shahtra-Papara	Fumariaceae	Whole plant	Plant is used in diarrhoea, as cooling agent, poultice and blood purifier. Its bath is recommended for skin allergy.
48	<i>Galium aparine</i> Linn.	Grip grass	Rubiaceae	Whole plant	Diuretic, used for treating skin diseases.
49	<i>Heliotropium crispum</i> Desf.	Pipat booti	Boraginaceae	Whole plant	Plant is given after snake bite, also used as cure for camel's eye infection.
50	<i>H. europaeum</i> Linn.	Hathi Sondi	Boraginaceae	Whole plant	Powder of dried plant roasted in oil of Till and oil is then used for hair fall prevention.
51	<i>Herniaria hirsuta</i> Linn.	Patrai	Caryophyllaceae	Whole plant	Used as fodder for cattle.
52	<i>Lathyrus aphaca</i> Linn.	Rewari	Fabaceae	Seeds, flowers	Mature seeds are narcotic. Plant is used as fodder by grazing animals.
53	<i>Launaea procumbens</i> (Roxb.) Ramayya & Rajagopal.	Sufaid bhathal	Asteraceae	Whole plant	Leaves are applied on head of children suffering from fever. It is used as fodder for cattle.
54	<i>Lepidium sativum</i> Linn.	Haloon	Brassicaceae	Whole plant	Administered boiled with milk to cause abortion. Cures dysentery, pain in abdomen, blood and skin diseases.
55	<i>Malva parviflora</i> Linn.	Sonchal	Malvaceae	Whole plant	Decoction of plant is used to cure fever.
56	<i>Malvastrum coromandelianum</i> (Linn.) Caske	Damhni	Malvaceae	Leaves, flower	Leaves paste used to relieve pain. Plant is used as fodder by grazing animals.
57	<i>Mazus goodenifolius</i> Horn.	Tapuru	Salvadoraceae	Whole plant	Plant is used as fodder by grazing animals.
58	<i>Medicago polymorpha</i> Linn.	Maina	Fabaceae	Whole plant	Plant is used as fodder by grazing animals.
59	<i>Mellilotus indica</i> (Linn.) All.	Senji	Fabaceae	Whole plant	Hot plant is externally used as poultice on swellings. Plant is used as fodder by grazing animals.

Table 1 Contd.

No.	Botanical name	Local name	Family	Part used	Local use
60	<i>Merremia aegyptia</i> (Linn.) Urban.	Kaan Kati	Convolvulaceae	Seeds	Used in jaundice, intestinal pain, swelling and worms.
61	<i>Mukia maderaspatana</i> (Linn.) M.J. Roem.	Chiratia	Cucurbitaceae	Root	Decoction of root is given for gases in stomach.
62	<i>M. scabrella</i> (Linn.) Arn.	Melon-gubat	Cucurbitaceae	Seeds, leaves	Seeds extract relieves tooth aches. Tender shoots and bitter leaves are used as gentle aperients.
63	<i>Nicotiana plumbaginifolia</i> Viv.	Jangli Tambakoo	Solanaceae	Whole plant	Leaves are sun dried, finely cut and smoked. Plant is used as fodder by grazing animals.
64	<i>Ocimum basilicum</i> Linn.	Niazbo	Lamiaceae	Whole plant	Fresh leaves are chewed to treat sore throat. <i>Chatni</i> of leaves is added in the curd to raise the taste. Infusion of seeds is given in gonorrhoea. Flowers are found to be diuretic.
65	<i>Otostegia limbata</i> (Benth.) Boiss.	Blanseer	Lamiaceae	Leaves	Paste of leaves used to treat sore throat.
66	<i>Oxalis corniculata</i> Linn.	Khatkal	Oxalidaceae	Whole plant	Plant sap cures skin diseases. Leaves act as cooling agents in stomach disorders, fever and acute headache. Used in animal diseases.
67	<i>Parthenium hysterophorus</i> Linn.	Chatak Chandni	Asteraceae	Whole plant	This plant causes itching on touching. It has stimulating activity and act as flue repellent.
68	<i>Pentanema vestitum</i> (Wall. ex DC.) Ling	Javin	Asteraceae	Whole plant	It is used in diabetes.
69	<i>Peristrophe paniculata</i> (Forssk.) Brummit	Atri lal	Acanthaceae	Whole plant	Herb is macerated into an infusion of rice and is given as an antidote in snake bite.
70	<i>Phyla nodiflora</i> (Linn.) Greene	Jal-booti	Verbenaceae	Whole plant	It is grazed by animals. Its cold decoction is used against indigestion.
71	<i>Physalis divaricata</i> D. Don	Kakang	Solanaceae	Leaves	Leaf juice is used in earache.
72	<i>Polygonom aviculare</i> Linn.	Tout	Polygonaceae	Whole plant	Plant is used as fodder by grazing animals.
73	<i>P. plebeium</i> R. Br.	Hazardani	Polygonaceae	Whole plant	Powder of the plant is used for treatment of pneumonia. Root is used for bowl complaints. Plant is used as fodder.

Table 1 Contd.

No.	Botanical name	Local name	Family	Part used	Local use
74	<i>Portulaca oleracea</i> Linn.	Lunak	Portulacaceae	Whole plant	Plant is used to cure constipation.
75	<i>Pseudognaphalium luteo- album</i> Linn. Hilliard & B.L. Burtt.	Balraksha	Asteraceae	Leaves	Leaves are used as astringent and vulnerary.
76	<i>Ranunculus muricatus</i> Linn.	Buttercup	Ranunculaceae	Whole plant	Plant is used as fodder for animals. Plant is administered for treatment of fever and asthma.
77	<i>Rhynchosia minima</i> (Linn.) DC.	Turvel	Fabaceae	Whole plant	Plant is used as fodder by grazing animals.
78	<i>Ruellia tuberosa</i> Linn.	Traino	Acanthaceae	Whole plant	An infusion of plant is given for purifying blood.
79	<i>Rumex dentatus</i> Linn.	Jangli Palak	Polygonaceae	Whole plant	Plant is used as fodder by grazing animals. Roots are used to treat skin diseases.
80	<i>Salvia plebeia</i> R. Br.	Samundar Sokh	Lamiaceae	Seeds	Seeds are used in diarrhoea, gonorrhoea and menorrhoea. Plant is eaten by grazing animals.
81	<i>Silene conoidea</i> Linn.	Dabbari	Caryophyllaceae	Leaves	Leaves are used as vegetable.
82	<i>Silybum marianum</i> Gaertn.	Holy basil	Asteraceae	Whole plant	Whole plant is diuretic, hepatic and stomachic.
83	<i>Sisymbrium irio</i> Linn.	Khoob kalan	Brassicaceae	Seeds	Seeds used in dropsy. Plant is used as fodder by grazing animals.
84	<i>Solanum nigrum</i> Linn.	Mako	Solanaceae	Shoots, leaves	Shoots of plant are taken for gastric troubles and ulcer. Powdered leaf along with fire fly is recommended for night blindness.
85	<i>S. virginianum</i> L.	Mamoli	Solanaceae	Fruits, flowers	Fruit powder is taken for abdominal pain and gastric trouble. Plant is used in cough, asthma and fever. It reduces uric acid.
86	<i>Sonchus arvensis</i> Linn.	Dodahak	Asteraceae	Stem, leaves	Used in phthisis and as cool tonic.
87	<i>S. asper</i> (Linn.) Hill	Garwa	Asteraceae	Whole plant	Powder of the dried plant is applied on wounds and boils. It is used as fodder for cattle.
88	<i>Spergula rubra</i> (Linn.) J. & C. Presl.	Jangli booti	Caryophyllaceae	Whole plant	Plant is diuretic.
89	<i>Stellaria media</i> (Linn.) Vill.	Maruns	Caryophyllaceae	Whole plant	Plant paste is added in plasters, used for broken bones and swellings.

Table 1 Contd.

No.	Botanical name	Local name	Family	Part used	Local use
90	<i>Suaeda fruticosa</i> Forssk.	Lunak	Chenopodiaceae	Whole Plant	Ash of the plant is used for cloth washing. Camels use it as fodder.
91	<i>Trianthema portulacastrum</i> Linn.	It- sit	Aizoaceae	Whole plant	Fresh plant is utilized as fodder for cattle. The leaves of the plant are used as vegetable. Plant is used in powdered form to purify blood and to cure pain and swelling of joints.
92	<i>T. triquetra</i> Rottl. & Willd.	Loonaki	Aizoaceae	Whole plant	This plant reduces salinity of the soil and used as fodder for cattle.
93	<i>Tribulus terrestris</i> Linn.	Gokhru	Zygophyllaceae	Whole plant	Its seeds and fruit are administered as aphrodisiac and diuretic, used in the medicines of heart. It is grazed by animals.
94	<i>Trifolium alexandrianum</i> Linn.	Barsin	Fabaceae	Aerial parts	Plant is used as fodder by grazing animals. Recommended for increasing milk production from animals
95	<i>T. resupinatum</i> Linn.	Shatala	Fabaceae	Whole plant	Plant is used as fodder by grazing animals.
96	<i>Typha domingensis</i> Pers.	Dib	Typhaceae	Whole plant	Plant is used as fodder by grazing animals. Mature dry leaves are used for mats, packing purposes.
97	<i>Verbascum thapsus</i> Linn.	Gidar tombacco	Scrophulariaceae	Seeds	Seeds have necrotic properties and used for hunting.
98	<i>Verbena hybrida</i> Voss.	Pamukh	Verbenaceae	Leaves, roots	Leaves are used as febrifuge and tonic. Roots used to cure asthma.
99	<i>Veronica undulata</i> Wall. ex Jack.	Water speed well	Scrophulariaceae	Leaves	Leaves are appetizer. Leaves are used in scurvy and impurity of blood.
100	<i>Vicia sativa</i> Linn.	Ankra	Fabaceae	Seeds	Seeds are used in fever. Plant is used as fodder by grazing animals.
101	<i>Xanthium strumarium</i> Linn.	Bhangara	Asteraceae	Leaves	Leaf decoction is used for curing fever. Plant is emollient, diuretic and astringent.
102	<i>Zaleya pentandra</i> (Linn.) Jeffrey	Kali-it-sit	Aizoaceae	Whole plant	Plant extract is used for abortion in females and to cure snake bite.

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