



An Ethnomedicinal Survey of Plants Used in Traditional Medicine in arid and Semi-arid Zone of Bahadur Khel, District Karak, Khyber Pakhtunkhwa, Pakistan

Siraj Khan^{1,*}, Gul Jan¹, Hameeda Bibi¹, Waheed Murad¹, Kifayat Ullah², Ihsanullah¹

¹*Department of Plant Sciences, Abdul Wali Khan University, Mardan, Khyber Pakhtunkhwa, Pakistan*

²*Department of Biosciences, COMSATS Institute of Information Technology, Park Road, ChackSahzad, Islamabad 44000 Pakistan*

³*Department of Plant Sciences, Faculty of Biological Sciences, Quaid-i-Azam University, Islamabad, Pakistan*

Received January 2, 2018; accepted May 11, 2018; published online June 5, 2018

*For correspondence: siraj_bot@gmail.com

Ethnomedicinal studies have been carried out for the first time in Tehsil Bahadur Khel of District Karak, Khyber Pakhtunkhwa, Pakistan. Following the ISE (International Society of Ethnobiology) code of ethics, 150 local informants were interviewed. The interviewed persons used 68 plant species belonging to 58 genera in 41 plant families, mainly Amaranthaceae, Fabaceae, and Asteraceae (Table 1). The most frequent ailment (16%) was gastrointestinal disorder (diarrhea, constipation, stomachache).

© 2018, Asian Society of Pharmacognosy. All Rights Reserved.

Keywords: Medicinal plants; Pakistan

DECLARATION OF CONFLICT OF INTEREST

No conflict of interest is associated with this research work.

ACKNOWLEDGMENTS

The authors are very thankful to the local inhabitants and Traditional Health Practitioners (THPs) for sharing their knowledge during the study. We are also thankful to the Curator of Herbarium, Abdul Wali Khan University, Mardan, Khyber Pakhtunkhwa, Pakistan for their help and assistance in plant identification and plant specimens voucher submission for reference record.

REFERENCE



International Society of Ethnobiology, 2006. International Society of Ethnobiology Code of Ethics (with 2008 additions).

Table 1: Medicinal Uses of Wild Plants of Tehsil Bahadur Khel, District Karak, Khyber Pakhtunkhwa

Plant Name/ Voucher number	Family	Local Name	Part Used	Form	Diseases Treated
<i>Acacia modesta</i> Wall.SJ QAU 118	Fabaceae	Palosa	Stem, leaves	Decoction, Paste	Abdominal pain, Skin diseases, Cough, Throat infection
<i>Acacia nilotica</i> (L.) WildSJ QAU 115	Leguminosae	Kikar	Roots,	Decoction, Extract	Leucorrhoea, Anemia, Weakness, Wound healing, Diabetes, Dysentery, Cough, Chest complaints, Eye disease, Stomach pain, body tonic, Skin disease
<i>Aerva javanica</i> (Burm.f.) SJ QAU 114	Amarhantaceae	Herhsasai	Leaves, Flowers,	Powder, Juice,	Gastric ulcers, Arthritis, Healing wounds
<i>Alhagi maurorum</i> Medik. SJ QAU 160	Fabaceae	Her Gandarai	Leaves	Infusion	Blood purifier, Kidney stone, Pain relief, Body tonic
<i>Allium carolinianum</i> DC. SJ QAU 123	Alliaceae	Piazakai	Whole plant	Juice,	Weakness, Anemia, Cough
<i>Amaranthus viridis</i> L. SJ QAU 120	Amranthaceae	Rhanzakai	Whole plant	Powder, Juice	Blood purifiers, Piles, Constipation, Diuretic
<i>Asphodelu tenuifolius</i> Cav.SJ QAU 151	Xanthorrhoeaceae	Pyazakai	Whole Plant	Juice, Powder	Vomiting, Arthritis, Constipation
<i>Astragalus mongholicus</i> Bunge,SJ QAU 136	Fabaceae	Aghzikai	Seeds, Leaves	Decoction	Body tonic
<i>Bassia indica</i> (Wight) SJ QAU 117	Amaranthaceae	Korashka	Whole Plant	Decoction	Vomiting, Blood pressure, Constipation, Intestinal worms
<i>Blutaparon vermiculare</i> (L.) SJ QAU 173	Amaranthaceae	Sorgolai	Stem, Leaves	Decoction, Infusion	Dysentery, Diarrhea, Stomach problem, Kidney problem
<i>Boerhavia diffusa</i> L. SJ QAU 125	Amaranthaceae	Panderwas h	Whole plant	Powder,	Cooling agent
<i>Calligonum polygonoides</i> L. SJ QAU 126	Polygonaceae	Balanza	Whole plant	Powder	Blood purification, Anti- inflammatory, Pain killer, Diuretic & Expectorant
<i>Calotropis procera</i> (Aiton) SJ QAU 157	Asclepidiaceae	Spalmaka	Whole plant	Powder, Juice	Skin disease, Dysentery, Kidney stones, Gastritis, Wound healing, Arthritis, Vomiting, Diarrhea, Cough, Constipation
<i>Cannabis sativa</i> L. SJ QAU 127	Cannabaceae	Bangey	Flowers, Leaves	Decoction, Paste	Vomiting, Diarrhea
<i>Capparis spinosa</i> L. SJ QAU 156	Capparaceae	Kikrai	Seeds, Leaves	Decoction	Wound healing, Diabetes, Dysentery, Cough, Chest complaints. Eye trouble, Pain killer, Constipation, Arthritis
<i>Cleome brachycarpa</i> Vahl ex DCSJ QAU 143	Capparaceae	Soormaka	Whole Plant	Powder, Paste	Body tonic, Piles, Wounds
<i>Cleome viscosa</i> L. SJ QAU 150	Cleomaceae	Hulhul	Whole plant	Juice	Asthma, Carminative, Dysentery, Piles Jaundice
<i>Convolvulus arvensis</i> L. SJ QAU 108	Canvolvulaceae	Perwatye	Whole plant	Juice, Powder	Piles ,Vomiting, Diuretic, Body tonic
<i>Corchorus trilocularis</i> L.SJ QAU 175	Malvaceae	Betai	Seed, Leaves	Decoction, Paste	Cough, Asthma, Eye disease,Constipation, Pile,Painful urination,Snakebite
<i>Cortaderia selloana</i> (Shult. &Schult.f.) SJ QAU 121	Poaceae	Kaana	Whole plant	Paste	Anemia



<i>Cymbopogon distans</i> (Nees ex Steud.) SJ QAU 128	Poaceae	Sergari	Whole plant	Decoction	Asthma, Flu, Cough
<i>Cyperus esculentus</i> L. SJ QAU 172	Cyperaceae	Teezaa	Whole Plant	Powder	Asthma, Jaundice, Anemia, Fever, Dysentery, Pile, Constipation
<i>Cyperus srotundus</i> L. SJ QAU 147	Cyperaceae	Della	Whole plant	Powder	Constipation, Jaundice
<i>Cyperus scariosus</i> R.Br. SJ QAU 149	Cyperaceae	Della	Whole plant	Powder	Fever, Asthma
<i>Digera muricata</i> (L.) Mart. SJ QAU 132	Amaranthaceae	Ranzaa	Whole plant	Powder, Paste	Jaundice, Body tonic
<i>Ephedra foliata</i> Boiss SJ QAU 141	Ephedraceae	Mawa	Whole plant	Extract	Piles, Constipation, Blood purifier
<i>Eucalyptus globulus</i> Labill. SJ QAU 130	Myrtaceae	Lochia	Leaves	Powder	Flu, Cough
<i>Euphorbia granulata</i> Forssk. SJ QAU 180	Euphorbiaceae	Purpoai	Whole Plant	Juice	Wound healing, Asthma, Body tonic, Fever
<i>Euploca strigosa</i> (Wild.) SJ QAU 134	Boraginaceae	Sheraana	Whole plant	Paste	Constipation, Flu
<i>Fagonia cretica</i> L. SJ QAU 148	Zygophyllaceae	Spelaghzai	Whole plant	Juice	Stomach disease, Skin diseases, Diarrhea, Body tonic, blood Purification
<i>Fagonia indica</i> Burm.f. SJ QAU 159	Zygophyllaceae	Spelahzai	Whole plant	Juice	Stomach problem, Diarrhea, Skin disease, Immune system disorders, Disorders of blood circulation
<i>Ferula persica</i> Will. SJ QAU 152	Apiaceae	Sasai	Leaves	Eaten raw form	Carminative
<i>Grewia tenax</i> (Forsk.) Fiori. SJ QAU 170	Tiliaceae	Inzar	Fruits	Juice	Asthma, Abdominal pain, Cough, Dysentery, Flu
<i>Haloxylon griffithii</i> Boiss. SJ QAU 181	Amaranthaceae	Bungy	Whole plant	Powder, Juice	Skin disease, Fever, Diarrhea, Body tonic
<i>Heteropogon contortus</i> (L.) SJ QAU 106	Poaceae	Sermal	Whole plant	Powder	Pneumonia, Pelvic pain, Dysentery, Obesity
<i>Jacobaea maritima</i> (L.) SJ QAU 107	Asteraceae	Sezai	Whole plant	Juice	Stomach pain, Wound healing, Antiseptic
<i>Launaea procumbens</i> (Roxb.) SJ QAU 140	Asteraceae	Trezha	Whole plant	Powder	Skin disease, Chest pain, Cough, Constipation, Obesity
<i>Leptadenia pyrotechnica</i> (Forssk.) SJ QAU 144	Asclepiaceae	Sargara	Stem, Leaves	Infusion	Snake biting, Constipation, Wound healing, Asthma, Flu
<i>Maytenus royleanus</i> (Wall. ex Lawson) SJ QAU 119	Celastraceae	Seragzai	Whole plant	Juice, Extract	Skin diseases, Arthritis, Cough, Blood purifier, Asthma, Pneumonia, jaundice, Diarrhea
<i>Nanorrhops ritchiana</i> (Griff.) Aitch. SJ QAU 103	Arecaceae	Mazari	Leaves	Decoction	Skin diseases, Diarrhea, Dysentery, Stomach disease
<i>Oxalis corniculata</i> . SJ QAU 146	Oxalidiaceae	Ziaraietai	Whole plant	Juice, Powder	Asthma, jaundice, Diarrhea, Dysentery,
<i>Peganum harmala</i> . SJ QAU 111	Nitrariaceae	Sponda	Seeds	Powder, Decoction	Fever, Wounds, Skin disease, Antiseptic, Colic, Fever, Chest pain, Body tonic
<i>Periploca aphylla</i> Decne. SJ QAU 154	Asclepiaceae	Barara	Fruits, Bark	Powder, Juice, Decoction	Arthritis, Blood purifier, Pneumonia, Jaundice
<i>Phoenix sylvestris</i> (L.) Roxb. SJ QAU 133	Arecaceae	Kajor	Fruits, Root	Powder	Fatigue, Sexual weakness, Cough, Pneumonia, Jaundice, Diarrhea, Liver disease, Kidney problem
<i>Prosopis juliflora</i> (Sw.) SJ QAU 131	Fabaceae	Sangaa	Seeds, Leaves, Gum	Paste, Powder, Decoction	Cough, Chest complaints, Wound, Diarrhea, Dysentery
<i>Pycnanthemum polystachys</i> (Rottb.) SJ QAU 129	Cyperaceae	Tezai	Whole plant	Powder, Decoction	Diarrhea, Dysentery



<i>Rhazya stricta</i> Decne. SJ QAU 101	Apocynaceae	Gandai	Leaves	Decoction	Diarrhea, Constipation, Influenza
<i>Rumex dentatus</i> L. SJ QAU 167	Polygonaceae	Sorranzakh a	Whole plant	Eaten raw form	Purgative, Urinary Complaints, Piles
<i>Rydingia limbata</i> (Benth.) SJ QAU 155	Lamiaceae	Herhssai	Fruits, Leaves	Eaten raw form	Piles, Body tonic, Fever
<i>Salicornia virginica</i> L. SJ QAU 168	Amaranthaceae	Mazaey	Whole Plant	Juice	Eye disease, Skin disease
<i>Salvadora oleoides</i> Decne. SJ QAU 182	Salvadoraceae	Maswk	Seed, bark, root	Powder	Antiseptic, Urinary Complaints, Cough, Body tonic
<i>Salvia plebeia</i> R.Br. SJ QAU 139	Lamiaceae	TorBobrai	Whole Plant	Powder, Juice	Asthma, Dysentery, Cough, Fever
<i>Senna alexandrina</i> Mill. SJ QAU 184	Fabaceae	Zergull	Seeds, Stem, Leave	Powder	Stomach problem, Dysentery, Diarrhea, Blood purification, Liver disease
<i>Solanum nigrum</i> L. SJ QAU 142	Solanaceae	Makoo	Whole plant	Juice, Powder	Skin diseases, dysentery, cough, asthma, chest pain, body tonic
<i>Solanum virginianum</i> L. SJ QAU 135	Solanaceae	Maragnai	Seeds	Powder, Dried seed	Abdomen pain, Eye disease, Diabetes, Gastric problems, Stomach pain, Cough, Urinary complaints
<i>Sonchus asper</i> (L.) Hill. SJ QAU 164	Asteraceae	Tareza	Whole plant	Decoction	Fever, Cough, Jaundice, Vomiting, Body tonic
<i>Tamarix aphylla</i> (L.) H.Karst. SJ QAU 179	Tamaricaceae	Ghaz	Stem	Juice, powder	Influenza, Stomach pain, Dysentery, Diarrhea, Cough, Vomiting, Abdomen pain, Diuretic
<i>Tamarix dioica</i> Roxb. ex Roth SJ QAU 163	Tamaricaceae	Sorghz	Leaves, bark	Powder, Juice, Paste	Antiseptic, Constipation, Skin diseases, Arthritis, Cough,, Asthma
<i>Teucrium stocksianum</i> Boiss. SJ QAU 102	Lamiaceae	Qastori	Seeds ,leaves	Powder	Arthritis, Cough, blood purifier, Asthma, Pneumonia, Jaundice, Diarrhea
<i>Tribulus terrestris</i> L. SJ QAU 176	Zygophyllaceae	Maklidai	Whole Plant	Powder, Juice	Kidney stone, Cough, Jaundice, Influenza
<i>Trigonella corniculata</i> (L.) L. SJ QAU 122	Papilionaceae	Maklidai	Whole plant	Juice	Stomach pain, Influenza, Cough
<i>Vachellia farnesiana</i> (L.) SJ QAU 116	Fabaceae	Kikrai	Stem	Powder, Decoction	Wound Healing, Pneumonia, Blood purifier
<i>Withania coagulans</i> (Stocks) SJ QAU 112	Solanaceae	Shapyanga	Seeds	Powder	Skin problem, Blood purifier, Cough, Diarrhea, Asthma
<i>Withania somnifera</i> (L.) SJ QAU 137	Solanaceae	Asgand	Leaves, Seeds	Paste, Juice	Dysentery, Stomach disease, Pneumonia, Arthritis
<i>Xanthiumstrumarium</i> L. SJ QAU 166	Asteraceae	Karhska	Whole plant	Decoction	Arthritis, Blood Purifier, Diarrhea
<i>Ziziphus mauritiana</i> Lam. SJ QAU 105	Rhamnaceae	Berra	Fruits	Eaten raw form	Body tonic, Stomach disease, Wounds
<i>Ziziphus nummularia</i> (Burm.f.) SJ QAU 153	Rhamnaceae	Karkara	Fruits	Eaten raw form	Body tonic, Diabetes, Asthma, Cough
<i>Ziziphus oxyphylla</i> Edgew. SJ QAU 161	Rhamnaceae	Badabra	Fruits	Eaten raw form	Diabetes, dysentery, chest pain