

Corrigendum

Corrigendum to “Use of Ethnomedicinal Plants by the People Living around Indus River”

Sakina Mussarat,¹ Naser M. Abdel-Salam,² Akash Tariq,¹ Sultan Mehmood Wazir,³ Riaz Ullah,⁴ and Muhammad Adnan¹

¹*Department of Botany, Kohat University of Science and Technology, Kohat-26000, Pakistan*

²*Arriyadh Community College, King Saud University, Arriyadh-11437, Saudi Arabia*

³*Department of Botany, University of Science and Technology, Bannu-28100, Pakistan*

⁴*Department of Chemistry, Government College Ara Khel, FR Kohat-26000, Khyber Pakhtunkhwa, Pakistan*

Correspondence should be addressed to Muhammad Adnan; ghurzang@hotmail.com

Received 5 September 2016; Accepted 5 October 2016

Copyright © 2016 Sakina Mussarat et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

In the article titled “Use of Ethnomedicinal Plants by the People Living around Indus River,” [1] Table 2 contained ethnomedicine recipes from previously published articles by Sarfraz Khan Marwat, which were cited in the article as references [4] S. K. Marwat, M. A. Khan, M. Ahmad, M. Zafar, and F. Rehman, “Ethnophytomedicines for treatment of various diseases in D. I. Khan District,” *Sarhad Journal of Agriculture*, vol. 24, no. 2, 2008 and [28] S. K. Marwat, F. Fazal-Ur-Rehman, M. A. Khan, M. Ahmad, M. Zafar, and S. Ghulam, “Medicinal folk recipes used as traditional phytotherapies in district Dera Ismail Khan, KPK, Pakistan,” *Pakistan Journal of Botany*, vol. 43, no. 3, pp. 1453–1462, 2011. The authors apologize for not properly quoting the recipes or citing the sources in the table. Table 2 should be corrected as follows.

References

- [1] S. Mussarat, N. M. Abdel-Salam, A. Tariq, S. Mehmood Wazir, R. Ullah, and M. Adnan, “Use of ethnomedicinal plants by the people living around Indus river,” *Evidence-Based Complementary and Alternative Medicine*, vol. 2014, Article ID 212634, 14 pages, 2014.

TABLE 2: Ethnomedicines of the study area.

Botanical name/Voucher Specimen number	Local name	Family	Habit/endemism	Status	Part used	Recipes	Dosage
<i>Acacia modesta</i> Wall. KUH-309	Kikar	Mimosaceae	Tree/nonendemic	Cultivated	Bark	The barks are water boiled and juice is extracted, which is used then orally in kidney pains	Mostly 2 or 3 times a day
<i>Acacia nilotica</i> (L.) Delile. KUH-310	Kikar	Mimosaceae	Tree/nonendemic	Wild	Bark and flowers	The barks are water boiled and the decoction is applied dentally. Moreover, the flowers are boiled in mustard oil and apply externally on the head [4]	For dental purposes its used twice a day for 10 days, while for others its used as needed
<i>Albizia lebbeck</i> (L.) Benth. KUH-311	Sirsirin	Mimosaceae	Tree/nonendemic	Cultivated	Seeds	The seeds are grinded to fine powder and collected after passing it through from a cloth having very small pores. The collected powder is then mixed with sugar in equal quantity. This mixture is an effective phytotherapy taken orally for asthma [28]	4 grams of the mixture is taken two times a day for up to 40 days duration [28]
<i>Allium cepa</i> L. KUH-312	Piaz	Liliaceae	Herb/nonendemic	Cultivated	Bulb	Grind the bulb of onion and mix it with water and taken orally for vomiting	One dose is enough for vomiting
<i>Allium sativum</i> Linn. KUH-313	Garlic	Liliaceae	Herb/nonendemic	Cultivated	Bulb and leaves	Bulb pieces are regularly used for high blood pressure. Bulb and leaves and bulb are chewed for vomiting	As needed
<i>Aloe barbadensis</i> Mill. KUH-314	Kunwar	Liliaceae	Herb/nonendemic	Wild/cultivated	Pulp of leaves	Spineless leaves are cut to two to three parts and are given orally to livestock in combination with salts. Moreover, the pulp can be directly applied on burned skin [28]	Usually 3 dose are given each after 48 hours and also depend on disease severity
<i>Avena sativa</i> L. KUH-315	Jou	Poaceae	Herb/nonendemic	Cultivated	Fruit	Partly ripen fruit are grinded and mixed with some sugar and cold water to make syrup and taken orally as laxative	As needed
<i>Azadirachta indica</i> (L.) A. Juss. KUH-316	Neem	Meliaceae	Tree/nonendemic	Wild/cultivated	Leaves	3 gm of leaves are grinded and poured in water along with common salt to make syrup and used orally for curing jaundice [4]	2 spoons of syrup each are taken two times immediately after the breakfast and before the dinner [28]
<i>Beta vulgaris</i> Linn. KUH-317	Chukandar	Chenopodiaceae	Herb/nonendemic	Cultivated	Root	Powder is used orally to treat diabetes	As needed

TABLE 2: Continued.

Botanical name/Voucher Specimen number	Local name	Family	Habit/endemism	Status	Part used	Recipes	Dosage
<i>Calotropis procera</i> . Ait. f., Hort. KUH-318	Akra	Asclepiadaceae	Shrub/nonendemic	Wild	Latex and flowers	Plant latex is applied topically on the region of snake bite. Flowers are taken with water for intestinal pain at one time	2-3 times daily for 5 days for intestinal pain
<i>Capparis desidia</i> (Forsk.) Edgew. KUH-319	Kareeta	Capparidaceae	Shrub/nonendemic	Wild	Fruit, young shoots and bark	Dry fruits and sugar in equal amounts are crushed to powder, which are then used orally for rheumatism. Young shoot are grinded and combined with flour, and given to livestock or other animals. Grinded bark is applied externally on wounded areas for healing purpose [4]	In case of rheumatism, a teaspoon of the powder along with water is taken two times a day for one week duration [4]
<i>Capsicum annuum</i> L. KUH-320	Green mirch	Solanaceae	Herb/nonendemic	Cultivated	Fruit	Fresh and unripe fruit is eaten against cancer	As needed
<i>Caralluma tuberculata</i> N Brown. KUH-321	Chunga	Apocynaceae	Herb/nonendemic	Wild	Whole plant	Cook it as simple vegetable for diabetics control and also eaten directly for many purposes	As needed
<i>Chenopodium album</i> L. KUH-322	Bathu	Chenopodiaceae	Herb/nonendemic	Wild	Leaves and root	Extract the juice from their leaves which take orally as a laxative. Dried leaves paste is used for urinary pain	As needed
<i>Cicer arietinum</i> Linn. KUH-323	Channa	Papilionaceae	Herb/nonendemic	Cultivated	Fruits and seeds	25 g of roasted seed coat is soaked in 250 g of water and left for overnight. In the morning, grind the seeds and filter it. The filtrate water is then orally taken for constipation [28]	As needed
<i>Cichorium intybus</i> L. KUH-324	Kasni	Asteraceae	Herb/nonendemic	Wild	Whole plant	Fresh plants are boiled. After which sugar is poured into the decoction and taken orally for stomach related problems [4]	The syrup is used 2 times a day for the duration as per need [4]
<i>Cirsium arvense</i> (L.) Scop. KUH-325	Leh	Asteraceae	Herb/nonendemic	Wild	Leaves	Extract of leaves used for abdominal pain of cattle	As needed
<i>Citrullus colocynthis</i> (L.). KUH-326	Karthuma	Cucurbitaceae	Herb/nonendemic	Wild	Fruit	Crushed the dried fruit and used orally for constipation	As needed
<i>Citrus medica</i> Linn. KUH-327	Nimbo	Rutaceae	Tree/nonendemic	Cultivated	Fruits and leaves	Fruit extract properly mixed to water, sugar and salt and orally taken to control blood pressure and vomiting. Fruit extract is mixed with honey and fresh milk to make its paste and applied on face for pimples	For skin the paste is used at night for one month, for other purposes it's used as needed

TABLE 2: Continued.

Botanical name/Voucher Specimen number	Local name	Family	Habit/endemism	Status	Part used	Recipes	Dosage
<i>Cleome brachycarpa</i> Vahl. KUH-328	Gandi booti	Capparidaceae	Herb/nonendemic	Wild	Whole plant	Dried plants are crushed to powder and then taken orally for abdominal pain [28]	As needed
<i>Convolvulus arvensis</i> L. KUH-329	Wanvehri	Convolvulaceae	Herb/nonendemic	Wild	Whole plant	Five kilograms of dried plants are combined with 12 liters of water and left for overnight for making a sap, which is then taken orally for skin related diseases [4]	1 cup of the sap taken before breakfast. Also one can use it three times a day till needed [4]
<i>Cordia dichotoma</i> Forster. f. KUH-330	Lasora	Boraginaceae	Tree/nonendemic	Wild	Fruit	Before lunch or dinner, eat fruit as per need. Good for sex related weakness [28]	As needed
<i>Coriandrum sativum</i> L. KUH-331	Dhania	Apiaceae	Herb/nonendemic	Cultivated	Leaves and fruits	Used as decoction, that is, dried fruits of 50 g are water boiled (1 liter) till the water evaporates to half left. This is then used for asthma and cough. Fresh leaves are grind with mint to make powder and used orally for diuretic purposes [28]	Depend upon disease severity
<i>Cucumis sativus</i> Linn. KUH-332	Kheera	Cucurbitaceae	Herb/nonendemic	Cultivated	Fruits	During severe fever their pieces is rubbed on the sole of the feet and also good for digestion	As required
<i>Cuscuta reflexa</i> Roxb. KUH-333	Loot booti	Convolvulaceae	Herb/nonendemic	Wild	Whole plant	Dried plants are burnt and used on the affected areas [4]	As needed
<i>Cymbopogon jawarancus</i> a (Jones) Schult. KUH-334	Khawi	Poaceae	Herb/nonendemic	Wild	Root	Roots upper parts being water boiled and filtered. The filtrate water along with sugar is orally given to children for curing dyspepsia and typhoid [4]	2-3 times daily
<i>Daucus carota</i> L. KUH-335	Gajar	Apiaceae	Herb/nonendemic	Cultivated	Root	Edible portion increase sight vision	As needed
<i>Dalbergia sissoo</i> Roxb. KUH-336	Tali	Fabaceae	Tree/nonendemic	Cultivated	Leaves	Young leaves of 70 g are grinded and mixed with water. The filtrate can be used against jaundice, piles and feet soles burning [28]	The filtrate is taken daily for 10 days [28]
<i>Datura metel</i> L. KUH-337	Datura	Solanaceae	Herb/nonendemic	Wild	Whole plant	Roost their leaves and inhale their smoke for the treatment of asthma. Their seeds are used as expectorant, do not eat it in excess amount otherwise it will be lethal	As needed

TABLE 2: Continued.

Botanical name/Voucher Specimen number	Local name	Family	Habit/endemism	Status	Part used	Recipes	Dosage
<i>Eruca sativa</i> Mill. KUH-338	Usoo	Brassicaceae	Herb/nonendemic	Cultivated	Aerial parts	A total of five kilogram of young branches and leaves are water boiled (15 kg) till getting a concoction. Afterwards, five kilogram flour is combined to the concoction before giving it to horses [4]	As needed
<i>Eucalyptus camaldulensis</i> Dehnh. KUH-339	Safeda	Myrtaceae	Tree/nonendemic	Cultivated	Leaf and bark	Tender shoot and young leaves are crushed and smelled give temporary relief in cough	As needed
<i>Eugenia jambolana</i> Linn. KUH-340	Jaman	Myrtaceae	Tree/nonendemic	Cultivated	Bark and fruit	Dry the non edible portion of their fruit and then grind it and take 1-2 spoon daily for 3 days it will stop the severe stomach problems, and also this powder is used for the treatment of diabetics	Twice a day
<i>Fagonia cretica</i> L. KUH-341	Dhaman	Zygophyllaceae	Shrub/nonendemic	Wild	Whole plant	The plant is grinded to powder and can be taken along with water. Helpful in curing piles and urinary infection [4]	1 tea spoon powder is taken 3 times a day along with the bread [4]
<i>Ficus benghalensis</i> L. KUH-342	Bohir, bargad	Moraceae	Tree/nonendemic	Cultivated	Fruit	The dried fruits are crushed into powder and then orally taken for abdominal pains [28]	Taken with water twice in a day
<i>Ficus carica</i> L. KUH-343	Anjeer	Moraceae	Tree/nonendemic	Cultivated	Fruit	The fruits are soaked in milk or water and leave for overnight. Effective in curing piles. Fruits are also used to remove kidney s tone [28]	The decoction can be taken at morning before the breakfast for 10 days [28]
<i>Ficus religiosa</i> L. KUH-344	Peepal	Moraceae	Tree/nonendemic	Cultivated	Fruit and bark	Burn the bark and make powder from this coal bark take orally 5 gram of it with water for diarrhoea. Fruit are used for wound healing	As needed
<i>Foeniculum vulgare</i> Mill. KUH-345	Saunf	Apiaceae	Herb/nonendemic	Cultivated	Fruit	Fruits of fennel and coriander along with sugar are combined in equal amount and crushed to powder. This is recommended as carminative. Fennel fruit, fresh mint leaves and green tea are boiled used for vomiting [28]	The powder is taken two times a day after lunch or dinner as carminative. For vomiting and menses pain the mixture is used twice a day [28]
<i>Grewia asiatica</i> L. KUH-346	Phalsa	Tiliaceae	Herb/nonendemic	Wild	Leaves, fruit and bark	One kilogram of fruits is grinded and mix with water and then take the filtrate. Sugar is poured then into the filtrate for making a sap, which is orally taken for blood purifying, fever and gastrointestinal disorders [28]	As needed

TABLE 2: Continued.

Botanical name/Voucher Specimen number	Local name	Family	Habit/endemism	Status	Part used	Recipes	Dosage
<i>Helianthus annuus</i> L. KUH-347	Suraj mukhii	Asteraceae	Shrub/nonendemic	Cultivated	Seeds, leaves and flowers	Leaves and seeds are grinded to powder and orally or dermally taken for fever treatment	For 2 days
<i>Heliotropium europaeum</i> L. KUH-348	Peepat booti	Boraginaceae	Herb/nonendemic	Wild	Whole plant	The plant is grinded to a paste, which is then dermal applied on to the areas affected [28]	Can be used for 3 days
<i>Jasminum grandiflorum</i> L. KUH-349	Chambeli	Oleaceae	Herb/nonendemic	Cultivated	Whole plant	Whole plant juice is orally taken against diabetes and heart related diseases	As needed
<i>Lawsonia inermis</i> L. KUH-350	Mehndi	Lythraceae	Tree/nonendemic	Cultivated	Leaves	Leaves are grinded to paste, which is then applied on foot soles and hairs	As needed
<i>Momordica charantia</i> Linn. KUH-351	Karela	Cucurbitaceae	Herb/nonendemic	Cultivated	Leaf, flower and fruits	Leaves are crushed and boil and taken as tea, some salt is also mixed and used for skin diseases and blood purifier. Fruit is used as vegetable and used for diabetics	As needed
<i>Mentha viridis</i> L. KUH-352	Podima	Lamiaceae	Herb/nonendemic	Cultivated	Leaves	Fresh leaves of mint, niazboo, Fennel fruit and green tea are boiled and used orally for multi-purposes vomiting and stomach disorders	As needed
<i>Moringa oleifera</i> Lam. KUH-353	Sohanjina	Moringaceae	Tree/nonendemic	Cultivated	Whole plant	Cut their root and boil in water after these add milk into this water and drink which break the kidney stone	As needed
<i>Morus alba</i> L. KUH-354	Toot	Moraceae	Tree/nonendemic	Cultivated	Fruit	Eat their fruits, which provide the energy to the heart	As needed
<i>Nannorrhops ritchieana</i> Griff. KUH-355	Mazri	Palmae	Shrub/nonendemic	Wild/cultivated	Leaves	Mostly their leaves are used to boil and then this juice is used orally for carminative and veterinary treatment	As needed
<i>Ocimum basilicum</i> L. KUH-356	Niazbo	Lamiaceae	Herb/nonendemic	Cultivated	Seeds and leaves	Fresh leaves of mint, niazboo, Fennel fruit, and green tea are boiled and used for gastrointestinal and respiratory infections	As needed
<i>Oxalis corniculata</i> L. KUH-357	Khatti boti	Oxalidaceae	Herb/nonendemic	Wild	Whole plant	Extract of whole plant is used orally for blood purification	As needed
<i>Peganum harmala</i> L. KUH-358	Harmal	Zygophyllaceae	Herb/nonendemic	Wild	Leaves and seeds	Little quantity of seeds with table salt is taken along water for expectorant. May be taken up to few days [4]	Dose depends on disease severity
<i>Phoenix dactylifera</i> L. KUH-359	Khajoor	Palmae	Tree/nonendemic	Cultivated	Leaflets (spines)	Leaflets are grinded to powder and water boiled. The filtrate is orally taken in case of pain [4]	As needed
<i>Plantago ovata</i> Forsk. KUH-360	Ispaghula	Plantaginaceae	Shrub/nonendemic	Wild	Seeds	At night, seeds (approx 12 g) are orally taken along with milk for constipation. Seeds (approx 12 g) along with sugar and a glass water are thoroughly mixed and is effective for jaundice [4]	Twice a day

TABLE 2: Continued.

Botanical name/Voucher Specimen number	Local name	Family	Habit/endemism	Status	Part used	Recipes	Dosage
<i>Polygonum barbatum</i> L. KUH-361	Karaveera	Polygonaceae	Herb/nonendemic	Wild	Whole plant	The plants are grinded to form a paste, which is then applied on the area affected [28]	Three days
<i>Portulaca oleracea</i> L. KUH-362	Lunrak	Portulacaceae	Herb/nonendemic	Wild	Seeds	Seeds of this plant along with <i>Argyreia speciosa</i> and <i>Coriander</i> are taken in equal amount. Further a table spoon sugar is also mixed with it and is crushed to powder, which is effect for night emission [28]	10 gram of this powder is taken along water two times a day [28]
<i>Punica granatum</i> L. KUH-363	Anar	Punicaceae	Tree/nonendemic	Cultivated	Fruit	Crushed dried fruits are mixed with water and orally given to children	Two times a days
<i>Raphanus sativus</i> L. KUH-364	Mooli	Brassicaceae	Herb/nonendemic	Cultivated	Roots and edible parts	Paste of root is formed and used for skin infections	Two times a day
<i>Ricinus communis</i> L. KUH-365	Hernoli	Euphorbiaceae	Shrub/nonendemic	Wild	Leaves and fruit	Heat the leaves and fruits and then they release the oil, which is leaped on the desired place or organs where pain is feeling	As needed
<i>Rosa indica</i> Lindl, Ros. Monogr. KUH-366	Gulab	Rosaceae	Shrub/nonendemic	Cultivated	Flower	Fresh petals are mixed with sugar to make <i>gulqand</i> and kept in bottle and used for stomach disorders	As needed
<i>Saccharum bengalense</i> Retz. KUH-367	Kana	Poaceae	Herb/nonendemic	Wild	Leaves	Leaves ash is combined with water and left for one hour so as the ash become settle into bottom. The water filtrate is orally given to livestock and animals suffering from the disease of urine retention [28]	As needed
<i>Salvadora oleoides</i> Decne. KUH-368	Jal	Salvadoraceae	Tree/nonendemic	Wild	Fruit	The fruits of this plant are taken before the breakfast. It has been observed that before or after eating of <i>Salvadora</i> , eat water melon as it is useful [4]	For one week
<i>Salvadora persica</i> L. KUH-369	Peelu	Salvadoraceae	Shrub/nonendemic	Wild	Bark	Bark is boiled in water taken as tea commonly used as a purifying agent	As needed
<i>Solanum surattense</i> Burm. f. KUH-370	Kandari	Solanaceae	Herb/nonendemic	Wild	Whole plant	Dried fruits' powder is consumed with water for in treating piles. Moreover, fresh plants are water boiled (3 times more than fresh plant weight). Water filtrate combined with sugar is forming a sap, which is used as blood purifier and for Eczema [4]	Sap is used two times a day for an extended period of two months [28]
<i>Solanum nigrum</i> L. KUH-371	Makko	Solanaceae	Herb/nonendemic	Wild	Leaves and fruits	Ripe fruit is orally given particularly if one has constipation. Moreover, past from this plant is used dermally in case of headaches and rheumatism. Juice from this plant is effective in dysentery and fever	As needed

TABLE 2: Continued.

Botanical name/Voucher Specimen number	Local name	Family	Habit/endemism	Status	Part used	Recipes	Dosage
<i>Tamarix aphylla</i> (L.) Karst. KUH-372	Khagal	Tamaricaceae	Shrub/nonendemic	Cultivated	Bark, leaves and twigs	Leaves ashes are water mixed. Soon after some times, a filtrate is taken then and boiled, which after complete evaporation gives salt left. One gram of this salt is consumed along with <i>Shurbat-e-Bazoori</i> . Effective against jaundice. Secondly, leaves are water boiled and the water is thrown away while the hot leaves are applied to the wounded area [28]	Two times a day for a period needed towards recovery of jaundice. For wound healing it used for one week [28]
<i>Thuja occidentalis</i> L. KUH-373	Thuja	Cupressaceae	Tree/nonendemic	Cultivated	Leaves	Boil their leaves in the water and then wash the mouth with this water it provide rapid relief in dental pain. Fresh leaves are burned and their smoke decrease temperature in fever	As needed
<i>Tribulus terrestris</i> L. KUH-374	Bhakra, Gokkhu	Zygophyllaceae	Herb/nonendemic	Wild	Fruit	The fruits are grounded to powder and then mix sugar as per the need. It is used orally for urinary infection [4]	Four times in a day for 3 months
<i>Viola stocksii</i> Boiss. KUH-375	Makhanr booti	Violaceae	Herb/nonendemic	Wild	Whole plant	Whole of this plant along its seeds are crushed to powder and use for sex related issues [4]	2 g of its powder and butter (one tea spoon) is taken before breakfast till needed [4]
<i>Withania coagulans</i> (Stocks) Dunal. KUH-376	Akri	Solanaceae	Herb/nonendemic	Wild	Fruit	Fruits are soaked in water and left for overnight. The soaked fruits are squeezed in the morning and the water is filtered, which is used for blood purification. One dried fruit is kept in teeth having pain. 5-6 fruit are taken with water like tablet for abdominal pain [4]	A cup of water is taken before breakfast for a duration as per need [4]
<i>Zea mays</i> Linn. KUH-377	Makkai	Poaceae	Herb/nonendemic	Cultivated	Fruit	Dry fruit is crushed and make flour, which is used for digestion	As needed
<i>Ziziphus jujuba</i> Mill. KUH-378	Ber	Rhamnaceae	Tree/nonendemic	Wild/cultivated	Leaves and fruits	Eat their fruit which is helpful in treatment of diarrhoea as well as for blood purification. Paste of leaves is used for hair growth	As needed