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# Ethnobotanical Study of Food Value Flora of District Bannu Khyber Pakhtunkhwa, Pakistan

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The present research work deals with preliminary contribution to ethnobotany of food value flora of the district Bannu in the weather of winter 2012. As a whole 50 food value plants belonging to 22 families were collected, documented and preserved in the herbarium of Bannu Department of Botany UST, Bannu. The plants were identified botanically, arranged alphabetically along with their systematic Position including family names, local names, English names, part used, flowering seasons, methods of applications of their parts and medicinal importance. Most of plants belong to family Cucurbitaceae (8Spp), Poaceae (5Spp), Papilionaceae (5Spp), while Apiaceae, and Rutaceae has three species each. These plants are mostly used for curing some common diseases such as, diarrhoea, dysentery, gastric ulcer, intestinal worms, abdomen pain, fever, malaria, cough, bronchitis, asthma, headache, toothache, wounds and sores, skin diseases, snake bite and some other diseases. The local inhabitants are ignorant and had little knowledge about the medicinal value of these plant and proper time of collection. Younger generation is forgetting about indigenous knowledge of various medicinal plants, but the old people especially woman still possess knowledge about the wild resources. A survey conducted shows that medicinal plants collectors include women folk (48.26%), men folk (27.0%) and children (24.74%). Almost 90% of these medicinal plants are sold in the local market in fresh form as the collectors are poor and needy. The vegetation of the area is under high biotic pressure such as overgrazing. Ruthless collection of medicinal plants had threatened their existence and more plants are becoming vulnerable due to the destruction of their habitat. *Eriobry japonica* Lindley and *Eugenia jambolana* Lam are rare plants. There is a dire need of careful conservation of the endemic plant resources of the region otherwise many plants may be lost forever and become extinct.

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**Keyword:** Ethnobotany, Food, Flora, Bannu.

### 1. Introduction

District Bannu is situated in the Khyber Pakhtunkhwa Province of Pakistan. It lies between 32.43 to 33.06 North latitude and from 70.22 to 70.57 East longitudes. It is bounded in the North by the Tribal Area and in the East by Karak district, while in the South by Lakki Marwat of Bannu district. The total area of the district is 1227 square kilometers. In Pakistan the field of ethnobotany is quite virgin<sup>[10]</sup>. Gathered some preliminary ethnobotanical information from six districts of Balochistan<sup>[5]</sup>. Conducted ethno botanical study in Balochistan province of southwestern Pakistan. They collected

information of about 114 plant species used by the village dwellers for nutritional, utilitarian and medicinal purposes<sup>[9]</sup>. Studied 27 medicinal plants ethno botanically in Makran, South Waziristan<sup>[6,7]</sup>. wrote a series of papers on medicinal plants of Pakistan<sup>[14]</sup>. conducted ethno botanical research project in Margalla Hills National Park to record the native uses of these herbs. In view of this fact, an attempt has been made in this research work to record ethnobotanically important food flora of the district of Bannu.

## 2. Materials and Methods

### 2.1 Area Exploration

Trips were arranged to 20 different sites (Table 1) of the Bannu to explore and collect important flora of the area during 2012. A total of 50 food value plants were collected and were conserved systematically in the herbarium of Botany Department, University of Science and Technology Bannu. During exploratory trips, the flora was carefully collected by adopting the

recommended procedure used by M. Ahmad and Ali, (1998) and photographs were clipped of the spots. Such types of efforts are required to induce awareness in the local people about the conservation of the wealth of useful plants for their coming generations. Repeated queries were made to formulate the correct data. Outcome of the results were rechecked and compared with the available literature.

**Table 1:** Different Sites of Plant Collection

S. No.	Plant Collection
1.	Khujari, Bharat,
2.	Kakki
3.	Mandan,
4.	Mira Khel,
5.	Ismail Khel,
6.	Sokari,
7.	Bada Mir Abas,
8.	Surani,
9.	Mandew,
10.	Mamash khel,
11.	Bazar ahmad khan,
12.	Towen ship Bannu,
13.	Domail
14.	Marghali pirkakhel,
15.	Manja khel (ghoriwala)
16.	Paienda Khel
17.	Fathma Khel Khurd
18.	Hati Khel Banochi
19.	Mosa Khel
20.	Azim Kalla

### 3. Results and Discussion

The present study was carried out to assess record and report the Ethno botanical knowledge about the food value species of district Bannu in winter months. Medicinal outlines of about 50 plants were recorded through interview local people i.e. farmers, herbalists, hakims and Medicinal plants dealers. These plants are used to treat approximately 25 types of disorders. Among these various plant species have been discovered to cure such illness across different ethnic communities<sup>[1,2]</sup>. It was reported by<sup>[14]</sup>, that *Tribulus terrestris* is effective in urino-genital inflammation, *Acacia nilotica* in cancerous and

syphilitic infections and *Mentha spicata* leaves powder in toothache while<sup>[8]</sup> reported 35 weed species of crops which are locally used by the local inhabitants of District Abbotabad for common diseases such as cough, fever, diarrhea, pain, worms and skin diseases. Three plant species *Acyranthes aspera*, *Albizia lebek*, *Verbena officinalis* are used against snakebites. There is a definite treat that certain medicinal plants are endangered due to their small population, size, habitat specificity, habitat alteration, and present development activities. However study ascertains the value of great number of plants used in medicine, which could

be of considerable interest to the development of new drugs. Similarly conservation of medicinally valuable plant species has become imperative<sup>[3]</sup>

due to increasing interest in herbal medicines for health care all across the globe<sup>[4,12]</sup>.

**Table 2:** 50 Food values species of Bannu

<i>Abelmoschus esculentus</i> Moench	<i>Citrus reticulate</i> Blanco	<i>Helianthus annus</i> L.	<i>Psidium guajava</i> L.
<i>Allium cepa</i> L.,	<i>Cordia oblique</i> Willd	<i>Hordeum vulgare</i> L.	<i>Punica granatum</i> L.
<i>Allium sativum</i> L.	<i>Coriandrum sativum</i> L.	<i>Lepidium sativum</i> L.	<i>Pyrus malis</i> L.
<i>Amaranthus tricolor</i> L.	<i>Cucumis melo</i> Duthie	<i>Luffa cylindrica</i> Roem	<i>Raphanus sativus</i> L.
<i>Arachis hypogaea</i> L.	<i>Cucumis sativus</i> L.	<i>Lycopersicom esculentum</i> M	<i>Solanum melongena</i> L.
<i>Capsicum annuum</i> L.	<i>Cucurbita maxima</i> D.Lam	<i>Mangifera indica</i> L.	<i>Solanum nigrum</i> L.
<i>Carthamus oxycantha</i> M. B	<i>Cucurbita pepo</i> L.	<i>Medicago sativa</i> L.	<i>Triticum aestivum</i> L.
<i>Chenopodium album</i> L.	<i>Daucus carota</i> Linn.	<i>Momordica charantia</i> L	<i>Vigna marina</i> (Burm) Merr
<i>Chenopodium ambrosioides</i> L.	<i>Dodonaea viscosa</i> (L.)Jaeq	<i>Morus alba</i> L.	<i>Zea mays</i> L.
<i>Cicer arietinum</i> L.	<i>Eriobtry japonica</i> Lindley	<i>Morus nigra</i> L.	<i>Zizphus mauratiana</i> Lam
<i>Citrullus vulgaris</i> Schard	<i>Eugenia jambolana</i> Lam	<i>Oryza sativa</i> L.	<i>Zizphus spinosa</i> Hu.
<i>Citrus medica</i> L.	<i>Ficus carica</i> L.	<i>Pisum sativum</i> L	
<i>Citrus paradise</i> Macf.	<i>Foeniculum vulgare</i> Miller	<i>Portulaca oleracea</i> L.	

### 1. Systematic Position

Botanical Name: *Abelmoschus esculentus* L.

Synonym: *Hibiscus esculentus* Linn.

Family: Malvaceae

Local name: Bhindi

English Name: Lady's finger

Propagation: By seeds

Part used: Fruit, seeds and roots

Flowering period: Feb-Jun

**Medicinal uses:** Fruit is nutritious, demulcent, diuretic in case of dysentery and gonorrhoea. Seeds are stimulant and antispasmodic. It is very effective against urinary and skin diseases. It is also used as vegetable.

### 2. Systematic Position

Botanical Name *Allium cepa* L

Family Liliaceae

Local name Piyaz

English Name Onion

Propagation: By seeds.

Part used: Bulb and Leaves.

Flowering Period April-May

**Medicinal Uses:** The juice of this plant used for eye irritation, diarrhea, ear pain. The bulbs are sweet, aromatic, antibacterial, expectorant, stomachic, diuretic and tonic. They are useful in

dysentery asthma, bronchitis, vomiting, malarial fever, tumors, and wounds paralysis and skin diseases. Bulb are half cooked in fire and used as poultice & for removal of ear pain. In kitchen it is extensively used as spice, condiment vegetable & Salad.

### 3. Systematic Position

Botanical Name: *Allium sativum* L

Synonym: Nil

Family: Liliaceae

Local name: Yeeza

English Name: Garlic

Propagation: By cloves

Part used: Bulb and leaves.

Flowering Period: April-July

**Medicinal Uses:** The aqueous solution of bulb juice in a nasal instillation and a gruel made with the bulbs are active in influenza. Its juice is mixed with milk to cure T.B. asthma and cough. It is effective in heart diseases and blood pressure. Its bulb used extensively in cooking as flavoring agent, spice, aromatic and condiment. It is also used in veterinary medicines. It is one of the main agricultural exports by Bannu.

#### 4. Systematic Position

Botanical Name: *Amaranthus tricolor* L.

Synonym: *Amaranthus polygamus* L.

Family: Amaranthaceae

Local name: Sobeh

English Name: Chinese spinach

Propagation: By seeds

Part used: Whole plant

Flowering Period: Throughout the year

**Medicinal Uses:** Decoction of plant is applicable in dysentery while the leaves act as an antidote to poison. Root-paste, mixed with worm water is taken internally, induces vomiting and thereby purges out toxic mater from the bowel. Leaves-paste, in combination with honey and rice water is useful in leucorrhoea.

#### 5. Systematic Position

Botanical Name: *Arachis hypogaea* L.

Synonym: Nil

Family: Fabaceae

Local name: Mampala

English Name: Groundnut

Propagation: By seeds

Part used: seeds, oil

Flowering Period: July-Aug

**Medicinal Uses:** The seeds are edible. They are sweet, aphrodisiac and tonic and are useful in diarrhea, and general debility. The oil is used in dislocated joints.

#### 6. Systematic Position

Botanical Name: *Capsicum annuum* L.

Synonym: Nil

Family: Solanaceae

Local name: Mrach

English Name: Chilli

Propagation: By seeds

Part used: Fruits

Flowering Period: Jan – May

**Medicinal Uses:** The green chillies are used fresh for garnishing, food flavoring, meat, and vegetable soups. Chillies in powder form is used for garnishing an flavoring meat and fish dishes, salad dressing, hot chili sauces, tomato ketchup and as ingredients of round spice powers (condiments). The fruit contains a strong stimulant which causes a sensation of warmth

when applied to skin. The stronger doses, it causes a burning sensation without blistering.

#### 7. Systematic Position

Botanical Name *Carthamus oxycantha* M. B

Synonym Nil

Family Asteraceae

Local name Kunzala

English Name Carthamus

Propagation: Seed

Part used: Seed

Flowering Period May-July

**Medicinal Uses:** It is used as a fodder for cattle. Oil is obtained from this plant which is used as a brain tonic. Commonly used as fuel, seeds are used by children as a food.

#### 8. Systematic Position

Botanical Name: *Chenopodium album* L.

Synonym: Nil

Family: Chenopodiaceae

Local name: Surma, Batho (Punjabi)

English Name: Wild spinach

Propagation: By seeds

Part used: Whole plant.

Flowering Period: February-march.

**Medicinal uses:** This plant is mostly used as vegetable. It is sweet, digestive, laxative antihelmintic and is used in peptic ulcer, cardiac disorder and spleen disorder. The roots are used in jaundice, urinary diseases and rheumatism. Fruit and root are known as antidote to snake poison.

#### 9. Systematic Position

Botanical Name: *Chenopodium ambrosioides* L.

Synonym: Nil

Family: Chenopodiaceae

Local name: Ranzekka

English Name: Wormseed

Propagation: By seeds

Part used: Whole plant.

Flowering Period: February-March.

**Medicinal uses:** The Wormseed is principally known for its ability to expel worms, especially roundworms and hookworms. However, it is also used as digestive remedy, being generally taken to settle colic and stomach pains. Wormseed

leaves have antispasmodic properties. A wormseed's muscle-relaxing action has led to its use in the treatment of spasmodic coughs and asthma. The plant also has external uses. Juice expressed from the whole herb is applied as a wash for haemorrhoids.

### 10. Systematic Position

Botanical Name: *Cicer arietinum* L.

Synonym: Nil

Family: Papilionaceae

Local name: Chanrha.

English Name: Bengal gram

Propagation: By seeds

Part used: Young shoot and seeds

Flowering Period: March-April

**Medicinal Uses:** Young shoots are cooked as pot herb. Leaves are purgative and are used in anorexia, dyspepsia and bronchitis. It is also used as fodder. Fruits are used as vegetable. The seeds are sweet, indigestible tonic, expectorant and cooling and are used as anti diuretic, in hyperdipsia, bronchitis and skin diseases.

### 11. Systematic Position

Botanical Name: *Citrullus vulgaris* Schard

Synonym: Nil

Family: Cucurbitaceae

Local name: Khandwana

English Name: Watermelon

Propagation: By seeds

Part used: Fruits and seeds

Flowering Period: July-Aug

**Medicinal Uses:** Used characterized by excessive sweating, thirst, raised temperature, scanty urine, diarrhea and irritability. Watermelon fruit and juice soothe these symptoms, increasing urine flow and clean the kidney. The fruit's refreshing properties extend to the digestive system, where it clears wind. Watermelon may also be used in treatment of hepatitis. In hot stifling weather it is helpful for those suffering from bronchitis or asthma. The cooling fruit pulp may be applied to hot and inflamed skin and to soothe sunburn. The seeds can be mashed and used to expel worms.

### 12. Systematic Position

Botanical Name: *Citrus medica* L.

Synonym: Nil

Family: Rutaceae

Local name: Nemboo.

English Name: Citron

Propagation: By seeds

Part used: Fruit & roots.

Flowering Period May-June

**Medicinal Uses:** The roots are laxative, anthelmintic and diuretic and are used in constipation, colic, stranguary, renal tumors, vomiting and dental caries. The buds and flowers are useful in anorexia, vomiting, tumors, abdominal disorders, asthma, cough, digestive and cardiac stimulant. The seeds are used in inflammation, skin diseases and hemorrhoids. The cover of fruit is grind and mixed with salt and is used for diarrhea and regulation of digestion. Juice is used as restorative, digestive, antipyretic, anathematic, in scurvy (for its abundant Vitamin C). Its juice is mixed with ark-e-gulab and used on face to cure freckles. Sometime used for mosquito bites, hedging and fencing. It is a good honey bee species.

### 13. Systematic Position

Botanical Name: *Citrus paradise* Macf.

Synonym: Nil

Family: Rutaceae

Local name: Chakotra

English Name: Grapefruit

Propagation: By seeds & vegetative methods.

Part used: fruit peel

Flowering Period May-June

**Medicinal Uses:** Grapefruit oil has a sweet, pleasant odour intermediate between orange and lemon. It is largely employed in flavors for soft drinks, ice-cream, candy, baked goods and chewing gum

### 14. Systematic Position

Botanical Name: *Citrus reticulata* Blanco

Synonym: *Citrus nobilis* Watt.

Family: Rutaceae

Local name: Malta

English Name: Orange  
Propagation: By seeds & vegetative methods.  
Part used: fruits (green and rip) and seeds.  
Flowering Period: May-June

**Medicinal Uses:** The dried rind of the fruit is effective in treating cough, chest pain, excessive expectoration, colic, diarrhea and vomiting. It is also used as an ant-rheumatic and diuretic drug. External application of a poultice made of heated fresh leaves and a decoction of dried leaves taken by mouth are prescribed for the treatment of colic and mastitis.

### 15. Systematic Position

Botanical Name: *Cordia obliqua* Willd  
Synonym: *Cordia dichotoma* Forst.  
Family: Boraginaceae  
Local name: Laserha.

English Name: Sebesten plum  
Propagation: By seeds  
Part used: Fruit, bark and leaves  
Flowering Period: April-May

**Medicinal Uses:** The bark is astringent, bitter and cooling and is used in fever, diarrhea, burning sensation, and skin diseases. The leaves are aphrodisiac and are used in gonorrhoea. The fruit are sweet, edible, laxative and are used in ulcers, skin disease and dry cough, pectoral diseases. Fruit are used in prickle, asthma and cough. It is also used for spinal cord's pain. It is believed by the local peoples that it increases the sex power especially the sperm content of the male.

### 16. Systematic Position

Botanical Name: *Coriandrum sativum* L.  
Synonym: Nil  
Family: Apiaceae  
Local name: Diarrhea.  
English Name: Coriander  
Propagation: By seeds and vegetative methods  
Part used: Leaves and fruits.  
Flowering Period: March-April.

**Medicinal Uses:** Leaves are used as a vegetable, salad, and fruit in condiment as spice and flowering agent. These are aromatic, bitter, sweet, astringent, stimulant, carminative and are used in vitiated condition of *pitta*, burning

sensation, vomiting, colic and giddiness, it also increases the secretion of gastric juice. Decoction is used for meningitis in pigeons. It is also useful for higher B.P. patient & throat infection.

### 17. Systematic Position

Botanical Name: *Cucumis melo* Duthie & Fuller.  
Synonym: Nil

Family: Cucurbitaceae  
Local name: Kharbiza  
English Name: Musk Melon  
Propagation: By seeds and vegetative methods  
Part used: Fruits and seeds  
Flowering Period: July-Aug

**Medicinal Uses:** The fruit are sweet, cooling, laxative, diuretic and aphrodisiac and are useful in insanity and general weakness.

### 18. Systematic Position

Botanical Name: *Cucumis sativus* L.  
Synonym: Nil

Family: Cucurbitaceae  
Local name: Badrangh / kachar  
English Name: Cucumber  
Propagation: By seeds and vegetative methods  
Part used: Fruits and seeds  
Flowering Period: July-Aug

**Medicinal Uses:** The fruit and seeds are sweet, refrigerant and are useful in burning sensation, fever, constipation, renal calculus and bronchitis

### 19. Systematic Position

Botanical Name: *Cucurbita maxima* Duchesne ex Lam.

Synonym: Nil  
Family: Cucurbitaceae  
Local name: Ghreie kadi  
English Name: Squash, Red gourd, pumpkin  
Propagation: By seeds and vegetative methods.  
Part used: Fruits and seeds  
Flowering Period: July-Aug

**Medicinal Uses:** The fruits are sweet, refrigerant, emollient, diuretic and tonic, and are used in burns, scalds, inflammation and neuralgia, the seeds are anthelmintic, and nervine tonic, and are useful in nervous debility

## 20. Systematic Position

Botanical Name: *Cucurbita pepo* L.

Synonym: Nil

Family: Cucurbitaceae

Local name: Kadai

English Name: Pumpkin

Propagation: By seeds and vegetative methods.

Part used: Seeds and pulp.

Flowering Period: July-Aug

**Medicinal Uses:** Pumpkin are particularly used against tapeworms in pregnant woman and in children, for whom stronger-acting and toxic are unsuitable. The seeds are mildly diuretic, and are locally used as a treatment for nephritis other urinary system problems. Pumpkin has been recommended in the early stage of prostate problems.

## 21. Systematic Position

Botanical Name: *Daucus carota* Linn. Synonym: Nil

Family: Apiaceae

Local name: Gajar

English Name: Carrot

Propagation: By seeds and vegetative method.

Part used: seeds and roots.

Flowering Period: Jan-Feb

**Medicinal Uses:** Carrot seed oil with its warm spicy flavor is used in spice blender, formulation of compound oil for sauces and for flavoring alcoholic beverages. Carrot root is edible and is used in salad preparation. Gajar's halwa is the most common dish of the area.

## 22. Systematic Position

Botanical Name: *Dodonaea viscosa* (L.) Jacq

Synonym: Nil

Family: Sapindaceae

Local name: Sanatha.

English Name

Propagation:

By seeds

Part used:

Leaves, bark & oil

Flowering Period: April-June

**Medicinal uses:** It is grow as a hedging plant and also for ornamental purposes. It is used as fuel. Leaves are bitter and astringent, used in swelling and burns. Bark is employed in astringent and fermentation. The leaves of *Dodonaea* are burnt and then it's mixed with *Brassica* oil and is used for external wound and also for animal's mouth infection. The *Dodonaea viscosa* oil are used for snake bite.

## 23. Systematic Position

Botanical Name: *Eriobotrya japonica* (Thunb.) Lindley

Synonym: Nil

Family: Rosaceae

Local name: Alukat.

English Name: Japanese meddler, Japanese plum.

Propagation: By seeds and vegetative method.

Part used: Fruits, leaves, branches and wood,

Flowering Period: March-April

**Medicinal uses:** The leaves are use in the treatment of cough, chronic bronchitis and especially vomiting of pregnancy. The decoction is used to wash wounds. Wood is used as a fuel, and timber. Honey bees are attracted due to sugar content in it. Fruit are extensively used, which are laxative, digestive and blood purifier. Agricultural tools are made from its wood.

## 24. Systematic Position

Botanical Name: *Eugenia jambolana* Lam

Synonym: Nil

Family: Myrtaceae

Local name: Jamoow

English Name:

Propagation: By seeds

Part used: A fruits, leaves and wood.

Flowering Period: April-May

**Medicinal uses:** Fruit is edible and used for purification of blood. Fruits are also used in toothache & to increase appetite. Its seeds are usually given to diabetes patient. The plant is also used in naming like Jaman road, It is also used for diarrhea. It is a valuable timber, fuel, shade tree. Agricultural tools are made from its wood.

## 25. Systematic Position

Botanical Name: *Ficus carica* L.

Synonym: Nil

Family: Moraceae

Local name: Tooghoo

English Name: Fig.

Propagation: By vegetative method.

Part used: January-April

Flowering Period: Fruit and latex

**Medicinal uses:** The fruit sugar found in side the fig has laxative effect. The fruit's pulp helps in relieve pain and anti-inflammation, and it has been used to treat tumors and swelling. The latex from leaves and stems is reported to be analgesic and has long been used to treat wart, insect bites and hurt. The fruit is edibles & also used as a vegetable. It is a fuel wood, hot tree, fruits are laxative and demulcent. It is used in urinary tract diseases.

## 26. Systematic Position

Botanical Name: *Foeniculum vulgare* Miller

Synonym: *Forniculum officinale* All.

Family: Apiaceae (umbelliferae)

Local name: Soup

English Name: Fennel

Propagation: By seeds and vegetative method.

Part used: Fruit, Shoot.

Flowering period: March-April

**Medicinal uses:** Fennel is used to confer flavor and aroma to soups, meat dishes, sauces, bakery and confectionery products, condiments and pickles. It is used after feeling cold and pains in stomach and lower abdomen also used for removal of gases during gas trouble. These are expectorant and clear the throat. Fruits are good for lactating mothers and also used in colic and to improve eye sight.

## 27. Systematic Position

Botanical Name: *Helianthus annus* L.

Synonym: Nil

Family: Asteraceae

Local name: Maera stargay gul.

English Name: Sun flower

Propagation: By seeds and vegetative method.

Part used: Whole plant.

Flowering period: May-July

**Medicinal uses:** The roots are used for strengthening the teeth. The leaves are e are used in malarial fever, ulcer, wounds and brining sensation. The flowers are used in inflammation, skin diseases, ulcer & anemia. The seeds are expectorant and diuretic, and are useful in cough. Seed yield edible oil which is used for cooking and in "ghee" industry. Roasted seeds are eaten to improve memory. It is also cultivated as an ornamental plant.

## 28. Systematic Position

Botanical Name: *Hordeum vulgare* L.

Synonym: Nil

Family: Poaceae

Local name: Arboshy

English Name: Barley

Propagation: By seeds and vegetative method

Part used: Whole plant

Flowering period: April-May

**Medicinal Uses:** The grains are astringent, refrigerant, emollient, mucilaginous, and are used in cough, asthma, amentia, fever, and anemia. Roasted seeds are grinded and mixed with lemon juice and used as restorative and digestive agent Straw are used as common fodder by the local peoples. Barley is also used in wine preparation.

## 29. Systematic Position

Botanical Name: *Lepidium sativum* L.

Synonym: Nil

Family: Brassicaceae or Cruciferae

Local name: Bushta

English Name: Garden cress, water cress

Propagation: By seeds and vegetative method.

Part used: Leaves, roots and seeds.

Flowering period: March-April

**Medicinal uses:** The leaves are stimulant, diuretic and antibacterial and are useful in skin diseases, dysentery, diarrhoea, seminal weakness, asthma and cough. It is also used as a saag and is useful for cholera curing and abdominal pain. It can be administered to cause abortion.

## 30. Systematic Position

Botanical Name: *Luffa cylindrica* (L.) M. Roem.

Synonym: *Luffa aegyptiaca* Mill.

Family: Cucurbitaceae

Local name: Teriyai

English Name: vegetable sponge, Wash sponge

Propagation: By seeds and vegetative method.

Part used: Fruits and seeds.

Flowering period: July-Aug

**Medicinal Uses:** The fruits are diuretic, emollient, laxative, tonic, carminative and anthelmintic. They are used in hemorrhoids, fever, bronchitis and tumor. The seeds are bitter, emetic and are used in skin diseases.

### 31. Systematic Position

Botanical Name: *Lycopersicon esculentum* Mill.

Synonym: Nil

Family: Solanaceae

Local name: Tamatar.

English Name: Tomato

Propagation: By seeds and vegetative method.

Part used: Berries

Flowering period: June-July

**Medicinal uses:** Fruits are used as vegetable, flavoring agent and salad. Tomato ketchup is prepared from its fruits. Pieces of fruit are used externally for skin cleansing. Fruits are laxative and digestive. It is given on fasting to the patients of jaundice and diabetes. It produced blood but according to some local people "the skin of tomato fruit cause liver stone".

### 32. Systematic Position

Botanical Name: *Mangifera indica* L

Synonym: Nil

Family: Anacardiaceae

Local name: Aamb / Am.

English Name: Mango

Propagation: By seeds and vegetative method.

Part used: Whole Plant

Flowering period: March-May

**Medicinal uses:** The roots, bark, leaves and flowers are astringent, refrigerant, vulnerary and anti-inflammatory. The ash of burnt leaves is useful in burns. It is a shade and honey bee species. Wood is used as Timber and fuel. Fruit is edible and used extensively in jams, jellies and

pickles. Fruits are digestive and restorative. Commonly, it is considered that if some one rubbed its flower with his body daily, He will be never harmed by scorpion or bees sting.

### 33. Systematic Position

Botanical Name: *Medicago sativa* L.

Synonym: Nil

Family: Papilionaceae

Local name: Malkindye

English Name: Alfalfa, Lugerne

Propagation: By seeds and vegetative method

Part used: Leaves and young stem.

Flowering period: April-May

**Medicinal uses:** Alfalfa is perhaps more useful as a food than as a medicine. It is mostly used as a saag. A common pot herb used as a fresh fodder, laxative, digestive and tonic. It has estrogenic activity and could prove useful in treating problems relating to menstruation.

### 34. Systematic Position

Botanical Name: *Momordica charantia* L.

Synonym: Nil

Family: Cucurbitaceae

Local name: Karela

English Name: Bitter gourd, balsam apple.

Propagation: By seeds and vegetative method.

Part used: Fruits

Flowering period: July-Aug

**Medicinal Uses:** Fruit is used to treat malignant ulcers, stomach worms, fever, hypertension, dysentery and diabetes.

### 35. Systematic Position

Botanical Name: *Morus alba* L.

Synonym: Nil

Family: Moraceae

Local name: Spin thith.. Tut (urdu).

English Name: White fruited mulberry.

Propagation: By seeds and vegetative method.

Part used: All parts

Flowering period: March-April

**Medicinal uses:** Leaves are used in silkworm diseases, as diaphoretic and emollient. A decoction of leaves is used as gargle in

inflammation of throat. Fruit is edible and is used as cooling and laxative. It is used for sore throat, dyspepsia and melancholia. Root is known as anthelmintic and astringent. Wood is used in making furniture and sports goods. Fruits are also used in kidney failure and B.P patient because it lowers the B.P. Root bark is used for cough, oedema and injury.

### 36. Systematic Position

Botanical Name: *Morus nigra* L.

Synonym: Nil

Family: Moraceae

Local name: Taer Tut.

English Name: Black fruited mulberry.

Propagation: By seeds and vegetative method.

Part used: Leaves, fruit, branches, wood

Flowering period: March-April.

**Medicinal uses:** Fruits is edible, emollient and laxative. Leaves are used for cleaning throat, and as cooling agent, anthelmintic and astringent. Flexible branches are used making baskets. Wood is used in making furniture and sports goods. It is shade tree, fuel wood tree; honey bee species and leaves are used as fodder. Leaves are also used in folklore, in thatching and hedging.

### 37. Systematic Position

Botanical Name: *Oryza sativa* L.

Synonym: *Oryza plena* L.

Family: Poaceae

Local name: Shelley

English Name: Rice, paddy.

Propagation: Seeds & vegetative method.

Part used: Roots, Grain & Straw

Flowering period: September-October

**Medicinal uses:** The roots are cooling, diuretic and febrifuge, and are useful in burning sensation, dyspsia, and diabetes. The grains are useful in diarrhea. It is an important cereal crop. Its decoction is given to children in dysentery. Hay is used as fodder and insulating agent in mosques. The outer cover of the seeds (Paagh), after polishing, is given to horses.

### 38. Systematic Position

Botanical Name: *Pisum sativum* L.

Synonym: Nil

Family: Papilionaceae

Local name: Matter

English Name: Pea

Propagation: By seeds and vegetative method.

Part used: Seeds. Leaves,

Flowering period: March-April

**Medicinal Uses:** It is used as a vegetable; fruits are also edible without cooking.

### 39. Systematic Position

Botanical Name: *Portulaca oleracea* L.

Synonym: Nil

Family: Portulacaceae

Local name: Woorkhora.

English Name: Garden purslane.

Propagation: By seeds and vegetative method.

Part used: Whole plant

Flowering period: May-June.

**Medicinal uses:** The whole plant, except the root, is used as antibacterial, anti-inflammatory and anthelmintic. The juice extracted from 100g of fresh plant are diluted with water and serves as an anthelmintic and ascariasis. It is refrigerant, laxative and alterative, also used in lower abdomen and urinary tract problems.

### 40. Systematic Position

Botanical Name: *Psidium guajava* L.

Synonym: Nil

Family: Myrtaceae

Local name: Amrooth

English Name: Guava

Propagation: By seeds and vegetative method.

Part used: Leaves fruit and root.

Flowering period: March-April

**Medicinal Uses:** Juice from the leaves is used to treat diarrhea, cough, stomachache and dysentery. The leaves are crushed, boiled in salt water and the solution is used to treat toothaches. An infusion of leaves and roots is used to treat indigestion. The fruit is eaten to cure constipation.

### 41. Systematic Position

Botanical Name: *Punica granatum* L.

Synonym: Nil

Family: Punicaceae

Local name: Anar/wolang.

English Name: Pomegranate  
Propagation: By seeds and vegetative method.  
Part used: Fruit, bark, seeds and flowers  
Flowering period: April-May

**Medicinal uses:** The juice of fruit is used to treat jaundice and diarrheas. The rind of the fruit is ground in water and drunk every morning by diabetics. The fruit together with juice of *cynodon dactylon* leaves is used for running noses. The juice of flowers is used to treat nose bleeds. The bark of the fruit is dried and grind then used it successfully remedy for diarrhea, abdominal pain, burning of urine and other urinary tract infection and for body cooling . Unripe seeds are dried and used in spices and condiments. Fruits are used to produce blood and regulate hepatic activity. Pericarp of fruit is used in dysentery, bilious, disorders and skin diseases, also given to children in urinary diseases. Fruits are used as a tonic, root are used anthelmintic. Bark is used as mouth wash, antipyretic and expectorant.

#### 42. Systematic Position

Botanical Name: *Pyrus malus* L.  
Synonym: *Malus pumila* L  
Family: Rosaceae  
Local name: Manraha  
English Name: Apple  
Propagation: By seeds and vegetative method.  
Part used: Fruits, wood.  
Flowering period: February-March

**Medicinal uses:** Fruits are edible having commercial value. Wood is used as fuel. It is honey bee species, also used for diarrhea.

#### 43. Systematic Position

Botanical Name: *Raphanus sativus* L  
Synonym: Nil  
Family: Cruciferae  
Local name: Mileiyai  
English Name:  
Propagation: By seeds and veg. method.  
Part used: Leaves, roots and seeds.  
Flowering period: Sept- October

**Medicinal Uses:** Indigestion and skin infections. The juice of fresh leaves is also used as a diuretic, a laxative and in flatulence. Root is used as salad.

#### 44. Systematic Position

Botanical Name: *Solanum melongena* L.  
Synonym: Nil  
Family: Solanaceae  
Local name: Bengarh  
English Name: Brinjal, Egg plant.  
Propagation: By seeds  
Part used: Leaves, roots and unripe fruits.  
Flowering period: Jan-March

**Medicinal Uses:** The root is laxative, analgesic and cardio tonic and is useful in inflammations, neuralgia, cardiac debility and ulcer in the nose. The leaves are narcotic and are used in cholera, bronchitis asthma, and fever. The unripe fruits are bitter, acrid, sweet, and aphrodisiac. Mostly used as vegetable by local people.

#### 45. Systematic Position

Botanical Name: *Solanum nigrum* L.  
Synonym: *Solanum rubrum* Mill.  
Family: Solanaceae  
Local name: Khun-se-bai.  
English Name: Black night-shade.  
Propagation: By seeds and vegetative method.  
Part used: Fruit, Leaves and young stem.  
Flowering period: Throughout the year.

**Medicinal uses:** Successfully used in hair diseases. It is used as vegetable and fresh fodder. The leaves are used externally in joints pain and skin disorder. The decoction of the berries and flowers is useful in cough, rat bit, bronchitis, pulmonary tuberculosis, fever, diarrhea and hydrophobia. Fruit are carminative tonic and diuretic. The juice of plant is also used for liver diseases especially for jaundice, hepatitis.

#### 46. Systematic Position

Botanical Name: *Triticum aestivum* L  
Synonym: Nil  
Family: Poaceae  
Local name: Ghanam.  
English Name: Wheat

Propagation: By seeds

Part used: Whole plant

Flowering period: April-May

**Medicinal uses:** The grains are sweet, refrigerant, emollient, laxative, rejuvenating, demulcent, aphrodisiac and tonic. They are used in anorexia, boils, skin disease, ulcers, constipation, and general debility. It is used as dry fodder and anti-cracking agent. It is also used in making handicrafts.

#### 47. Systematic Position

Botanical Name: *Vigna marina* (Burm) Merr

Synonym: *Vigna retusa* Walp.

Family: Fabaceae

Local name: Meat / Taj

English Name: Beach bean.

Propagation: By seeds

Part used: Leaves

Flowering period: May-Jun

**Medicinal Use:** Mostly used in healing of fracture bones; remedy for food poisoning; to treat weakness after childbirth and to treat headache; to cure stomachache. Infusion of leaves is used as a liquid remedy and is applied in drops to the eyes, nose and mouth and also rubbed onto the body to treat disease caused by spirits. Mouth infection is also treated with this plant. It is also used to clean out the female reproductive system.

#### 48. Systematic Position

Botanical Name: *Zea mays* L.

Synonym: Nil

Family: Poaceae

Local name: Jewwor

English Name: Maize

Propagation: By seeds

Part used: Whole plant body including styles and stigmas.

Flowering period: October-November

**Medicinal uses:** Maize silk (style and stigmas), is used as diuretic in treatment of heart disease, hypertension, urinary diseases, hepatitis and diabetes mellitus. It is also used in combination with vitamin k as a haemostatic. Stem and leaves are used as fresh and dry fodder; it is also used as fuel. Edible oil is extracted, used in ghee

industry. The cobs are cooked directly in fire and are eaten which are extremely delicious.

#### 49. Systematic Position

Botanical Name: *Zizphus mauratiana* Lam.

Synonym: *Zizphus jujuba* (Linn.) Gaertn.

Family: Rhamnaceae

Local name: Karkanrh Bera

English Name: Common jujube, Chinese date.

Propagation: Seeds

Part used: Fruits, wood, branches, leaves.

Flowering period: April-May

**Medicinal uses:** The root is used in fever, wounds and ulcers. The bark is astringent and is used in dysentery, diarrhea, gingivitis and boils. The seeds are useful in cough, asthma, wounds, burning sensation, diarrhea and vomiting. It is timber wood, hedge plant and shade tree and honey bee species. It is considered that the best honey is that of *zizphus* species. Timber used in making 'charpais', for its stiffness. The plant is used as folk lore especially for goat. Branches are used in fencing. Leaves of this plant especially young leaves are used by the diabetes patient. The leaves of this plant are grinded and the juice is used as shampoo for lengthening hairs.

#### 50. Systematic Position

Botanical Name: *Zizphus spinosa* Hu.

Synonym: Nil

Family: Rhamnaceae

Local name: Mada Bera/ Kobli bera

English Name: Spiny Chinese date.

Propagation: By seeds and veg: method.

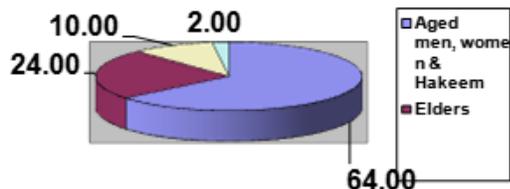
Part used: Seeds & Fruit

Flowering period: April-May

**Medicinal Use:** It is considered that the best honey is that of this *zizphus* species. The plant is used as fodder especially for goat. Leaves of this plant especially young leaves are used by the diabetes patient. The leaves of this plant are grinded and the juice is used as shampoo for lengthening hairs.

**Table 3:** Age groups of the interviewees

Age group	Percentage
10-20	02
30-45	10
45-60	24
60+	64
<b>Total</b>	<b>100</b>



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