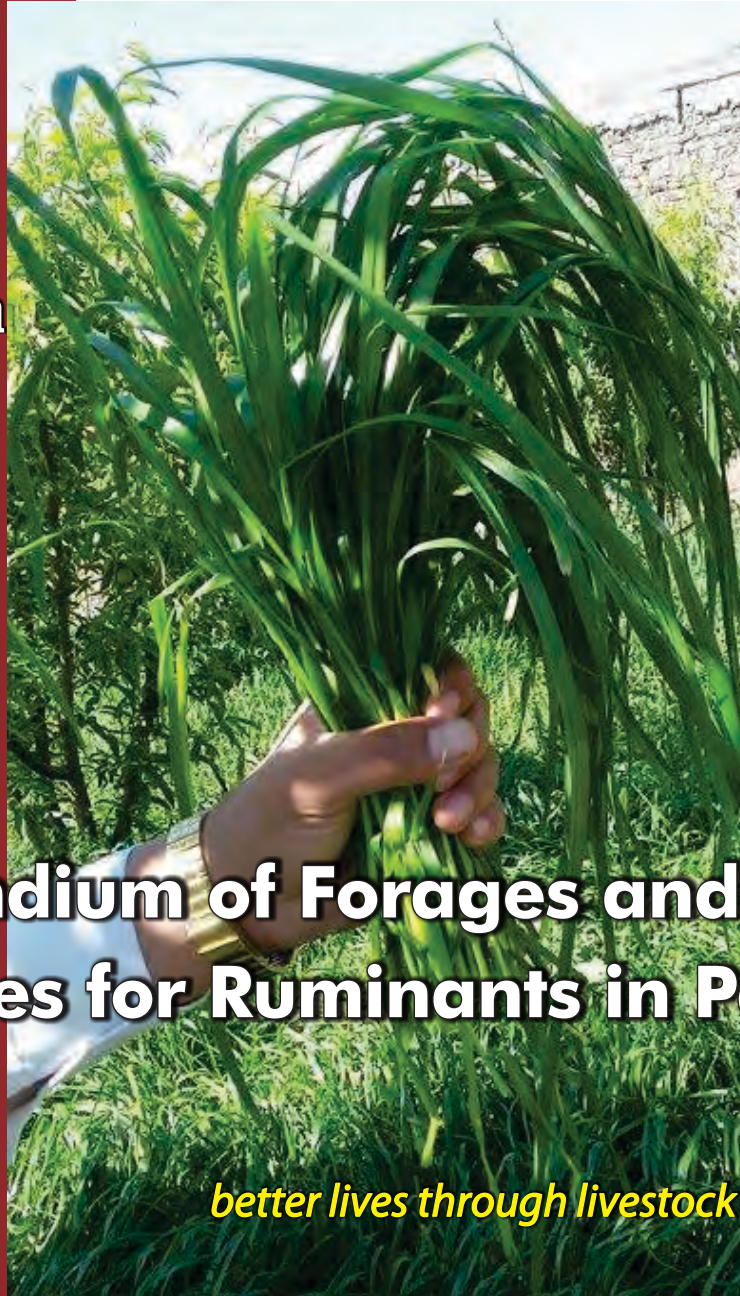


M.N.M. Ibrahim

# Compendium of Forages and Feed Resources for Ruminants in Pakistan

*better lives through livestock*



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### *Preface and Acknowledgements*

For the first time with my initiative in Pakistan, all feed information available in various institutions was gathered, nutritive value of the feeds calculated, and a book titled 'Feeding Tables for Ruminants in Pakistan' was published in 2019 under the auspices of the Pakistan Agricultural Research Council (PARC). For use of the feeding values expressed in the above book, identification of the feeds available at farm level or in fodder markets is of paramount importance to assess the nutrient composition.

In Pakistan, various local names are used to identify forages which makes it cumbersome not only to trace the scientific name of the feed resource but also its nutritive value. Hence the logical follow-up to the above Feeding Tables book, is for extension staff, farmers and nutritionists to be able to easily identify the feeds in the field. In order to fulfil this knowledge gap, a compendium titled 'Compendium of Forages and Feed Resources for Livestock Farmers in Pakistan' is published, which complements the Feeding Tables published in 2019. For convenience and easy reference, I have also included the Feed No. used in the Feeding Tables in this compendium.

The assistance provided by Mr. Jawad Anwar in gathering and arranging the information is gratefully acknowledged.

Finally, I would like to thank the Sindh Agricultural Growth Project – Livestock Component (SAGP-L) assisted by the World Bank for providing funds to publish this book.



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Glossary of Feeds available in Pakistan (Scientific, English & local names)

| Feed. No. <sup>1</sup> | Scientific name             | Common name in English                               | Local name in Pakistan                                   |
|------------------------|-----------------------------|--|--|
| 1                      | <i>Abutilon indicum</i>     | Country mallow                                       | Kanghi, mashtal ghol, peeli buti, kuho, pat-tir, schappa |
| 2                      | <i>Acacia arabica</i>       | Acacia, thorn tree, whistling thorn                  | Keeker   |
| 3                      | <i>Acacia modesta</i>       | Acacia, thorn tree, whistling thorn                  | Phala/Phulai   |
| 5                      | <i>Aerva persica</i>        |  | Bhoh   |
| 7                      | <i>Aesculus indica</i>      | Indian horse-chestnut or Himalayan horse chestnut    | Ban Khor   |
| 8                      | <i>Albizia lebbek</i>       | lebbek tree, flea tree, frywood, woman's tongue tree | Sirs, sirh, shareen                                      |
| 9                      | <i>Amaranthus blitum</i>    | Purple amaranth                                      | Chalai   |
| 10                     | <i>Amorpha fruticosa</i>    | Indigo bush  |  |
| 12                     | <i>Arachis hypogaea</i>     | Peanut or groundnut                                  | Moong phalli   |
| 13                     | <i>Aristida cyanantha</i>   |  | Chahanga   |
| 17                     | <i>Asbatuda vassica</i>     |  | Paikar   |
| 18                     | <i>Atriplex crarsifolia</i> | Saltbush   | Biobooti   |
| 19                     | <i>Atriplex lentiformis</i> | Saltbush   | Quail bush   |
| 20                     | <i>Avena sativa</i>         | Oat  | Jangli jai   |
| 21                     | <i>Azadirachta indica</i>   | Neem, nimtree, indian lilac                          | Neem   |
| 22                     | <i>Banhinia variegata</i>   | Phanera variegata, orchid tree, camel's foot tree    | Kachnar/Kachnal  |
| 23                     | <i>Beta vulgaris</i>        | Beet pulp  | Chukandar  |
| 25                     | <i>Bombax ceiba</i>         | Black Sumbal   |  |
| 27                     | <i>Bothriochloa pertusa</i> | Hurricane grass, Indian couch grass, pitted bluestem | Palwan   |
| 28                     | <i>Brachiaria mutica</i>    | Para grass   |  |
| 29                     | <i>Brachiaria ramosa</i>    | Browntop millet                                      | Shamak   |
| 30                     | <i>Brachiaria reptans</i>   | Sprawling signal grass                               | Kori   |
| 31                     | <i>Brassica campestris</i>  | Mustard  | Sarson   |

<sup>1</sup> Using the Feed No., the nutritive values can be found from the companion book titled 'Feeding Tables for Ruminants in Pakistan', Jan 2019.

## Compendium of Forages and Feed Resources for Ruminants in Pakistan

| Feed. No. | Scientific name                | Common name in English | Local name in Pakistan |
|-----------|--------------------------------|------------------------|------------------------|
| 32        | <i>Brassica napus</i>          | Rapeseed/ canola       | Thoria                 |
| 33        | <i>Broussonetia papyrifera</i> | Paper mulberry         | Jungli Thooth          |
| 35        | <i>Cactaceae</i>               | Micky mouse Cactus     |                        |
| 36        | <i>Calligonum polygonoides</i> |                        | Phog                   |
| 37        | <i>Cannabis indica/sativa</i>  |                        |                        |
| 38        | <i>Cardaria draba</i>          |                        | Baikri, Buskat         |
| 39        | <i>Cardia myxa</i>             |                        | Lasoor                 |
| 40        | <i>Carvia papaya</i>           | Papaya                 | Papeeta                |
| 41        | <i>Cassia fistula</i>          | Golden shower tree     | Amaltas                |
| 42        | <i>Ceiba pentandra</i>         |                        | (Sabre)                |
| 43        | <i>Cenchrus ciliaris</i>       | Cenchrus/ Buffelgrass  |                        |
| 44        | <i>Cenchrus setigerus</i>      |                        | Dhaman thal            |
| 45        | <i>Chenopodium album</i>       |                        | Bathu                  |
| 46        | <i>Chloris gayana</i>          | Rhode grass            |                        |
| 47        | <i>Chrysopogon gryllus</i>     |                        | Chit kharha            |
| 49        | <i>Cicer arietinum</i>         | Black gram             | Khale Chane            |
| 50        | <i>Cichorium intybus</i>       |                        | Kasni                  |
| 53        | <i>Colotropis procera</i>      | Rubber bush            |                        |
| 54        | <i>Commelina benghalensis</i>  | Benghal day flower     |                        |
| 55        | <i>Convolvulus pluricaulis</i> | Shankhini              | Keelanj                |
| 56        | <i>Convolvulus arvensis</i>    | Field bindweed/ Lili   | Waniwari               |
| 59        | <i>Cordia rothii</i>           | Citrus grandis         | Goondi                 |
| 60        | <i>Cressa cretica</i>          | Bimbo                  | Baans                  |
| 62        | <i>Cyamopsis tetragonoloba</i> | Guar                   | Gavar phali            |
| 63        | <i>Cymbopogon schoenanthus</i> | Camel grass            | Chitagha               |
| 65        | <i>Cynodon dactylon</i>        | Bermuda grass          | Khabble/ Dub           |
| 66        | <i>Cyperus rotundus</i>        | Nut grass              | Sad kufi               |
| 68        | <i>Dactyloctenium sp.</i>      | Crowfoot grass         | Madhana                |

## Compendium of Forages and Feed Resources for Ruminants in Pakistan

| Feed. No. | Scientific name               | Common name in English                           | Local name in Pakistan      |
|-----------|-------------------------------|--|-----------------------------|
| 69        | <i>Dalbergia sissoo</i>       | Indian rose wood                                 | Sheesham                    |
| 71        | <i>Demostechyua bipinnata</i> | Halfa grass, big cord grass                      | Dhub                        |
| 73        | <i>Dichanthium annulatum</i>  | Diaz bluestem, kleberg bluestem, hindi grass     | Palwan                      |
| 74        | <i>Digera arvensis</i>        | False amaranth                                   | Tandaln                     |
| 76        | <i>Digitaria sp.</i>          | Crab grass, finger grass, Buffalo grass          | Pangola                     |
| 79        | <i>Diplanche fusca</i>        | Beetle grass                                     |                             |
| 81        | <i>Echinochloa colonum</i>    | Swank  | Swanchian                   |
| 82        | <i>Eleusine compressa</i>     |  | Chimber                     |
| 83        | <i>Elionurus hirsutus</i>     |  | Vahl                        |
| 84        | <i>Enicostemma littorale</i>  | White head                                       | Mamajjakah, Chota chirayata |
| 85        | <i>Eragrostis superba</i>     | Saw tooth love grass, flat-seed love grass       |                             |
| 86        | <i>Eugenia jambolana</i>      | Java plum  | Jaman                       |
| 87        | <i>Eulaliopsis binata</i>     | Sabai grass                                      | Biber                       |
| 88        | <i>Euphorbia helioscopia</i>  | Sun spurge, Wart spurge, Umbrella milkweed       | Doodal Boti                 |
| 89        | <i>Euphorbia birta</i>        | Asthma-plant                                     | Khaerol                     |
| 90        | <i>Euphorbia microphylla</i>  | Hairy spurge, garden spurge                      | Dhodak                      |
| 91        | <i>Eurycles amboinensis</i>   | Cardwell lily, northern Christmas lily           | Tambal                      |
| 92        | <i>Withania somnifera</i>     | Indian ginseng, poison gooseberry, winter cherry | Ashwagandha                 |
| 95        | <i>Ficus bengalensis</i>      | Banyan tree                                      | Bur                         |
| 96        | <i>Ficus glomerata</i>        | Cluster fig tree                                 | Goolar                      |
| 98        | <i>Ficus religiosa</i>        | Pippala tree                                     | Pipal                       |
| 100       | <i>Fraxinus bookeri</i>       |  | Sum-Kasmir                  |
| 101       | <i>Glycine max</i>            | Soya bean  | Gwaar                       |
| 102       | <i>Gossypium sps.</i>         | Cotton   | Kapaas                      |
| 103       | <i>Helianthus sps.</i>        | Sunflower  | Sooraj mukhi                |
| 106       | <i>Holiotropium sps.</i>      | Indian heliotrope                                | Neelo                       |
| 108       | <i>Hordeum vulgare</i>        | Barley   | Jau                         |
| 109       | <i>Hyparrhenia birta</i>      | Thatching grass and coolatai grass               | Harnah                      |

## Compendium of Forages and Feed Resources for Ruminants in Pakistan

| Feed. No. | Scientific name                      | Common name in English    | Local name in Pakistan |
|-----------|--------------------------------------|---------------------------|------------------------|
| 110       | <i>Lespedeza sericea</i>             | Chinese lespedeza         | Morsi                  |
| 112       | <i>Leucaena leucocephala</i>         | Leucaena                  | Ipil Ipil              |
| 113       | <i>Linum usitatissimum</i>           | Linseed                   | Alsi                   |
| 115       | <i>Lolium multiflorum</i>            | Rye grass                 |                        |
| 116       | <i>Lomandra longifolia</i>           | Loonder grass             |                        |
| 117       | <i>Mangifera indica</i>              | Mango                     | Aam                    |
| 120       | <i>Medicago sativa</i>               | Alfalfa/Lucerne           | Vilaiti ghas           |
| 122       | <i>Megathyrsus maximus</i>           | Guinea grass              | Gini ghas              |
| 123       | <i>Melia azadirach</i>               | China berry tree          | Dharaik                |
| 126       | <i>Mnesithea laevis</i>              | Jointtail grass           | Beca                   |
| 128       | <i>Monordica balsamina</i>           | African cucumber          | Gorhawal               |
| 129       | <i>Moringa pterygosperma</i>         | Golden shower tree        | Sohanjna               |
| 132       | <i>Olea cuspidata</i>                | African olive             | Kao                    |
| 134       | <i>Opismenus compositus</i>          | Basketgrass               | Padkahi                |
| 135       | <i>Oryza sativa</i>                  | Rice                      | Chawal                 |
| 136       | <i>Panicum antidotale</i>            | Perennial Sudan grass     | Javar, Bansi           |
| 137       | <i>Panicum coloratum</i>             | Buffalo grass             |                        |
| 139       | <i>Paspalum distichum</i>            | Knot grass                | Naru                   |
| 142       | <i>Pennisetum glaucum/ typhoides</i> | Millet                    | Bajra                  |
| 143       | <i>Pennisetum orientale</i>          | Oriental fountain grass   |                        |
| 146       | <i>Phalaris tuberosa</i>             | Bulbous canary-grass      |                        |
| 147       | <i>Phaseolus aconitifolius</i>       | Moth bean                 | Moth                   |
| 151       | <i>Pongamia globra</i>               | Pongam oiltree            | Sukhchain              |
| 152       | <i>Populus spp.</i>                  | Poplar, aspen, cottonwood |                        |
| 153       | <i>Posidum guayava</i>               | Guava                     | Amrood                 |
| 155       | <i>Prosopis juliflora</i>            | Mexican thorn             | Jangli keeker          |
| 156       | <i>Prunus communis</i>               | Prunello                  | Alucha                 |
| 157       | <i>Prunus dulcis</i>                 | Almond                    | Badam                  |
| 159       | <i>Pyrus communis</i>                | European/Pear             | Nashpati               |



## Compendium of Forages and Feed Resources for Ruminants in Pakistan

| Feed. No. | Scientific name               | Common name in English                     | Local name in Pakistan  |
|-----------|-------------------------------|--|-------------------------|
| 160       | <i>Range grasses</i>          |  |                         |
| 162       | <i>Ricinus communis</i>       | Castor                                     | Aarand                  |
| 163       | <i>Rumex nepalensis</i>       | Nepal dock                                 | Jangali palak           |
| 165       | <i>Saccharum bengalense</i>   | Baruwa grass                               | Kaii                    |
| 166       | <i>Saccharum spp.</i>         | Sugarcane                                  | Ghana                   |
| 167       | <i>Salsola foetida</i>        | Saltwort                                   | Lana                    |
| 168       | <i>Sesamum indicum</i>        | Sesame                                     | Punjabi and bengali til |
| 169       | <i>Sesbania bispinosa</i>     | Jantar                                     | Dhancha                 |
| 171       | <i>Setaria glauca</i>         | Green bristle grass                        | Kangni                  |
| 176       | <i>Sorghum almum</i>          | Columbus grass                             |                         |
| 177       | <i>Sorghum halepense</i>      |  | Baroo                   |
| 178       | <i>Sorghum vulgare</i>        | Sorghum                                    | Javar                   |
| 179       | <i>Sporobolus helvolus</i>    | Khev grass in India                        | Shakkardub              |
| 180       | <i>Themeda triandra</i>       | Red oat grass                              | Roosa                   |
| 181       | <i>Trianthema monogyna</i>    | Desert horse purslane, black/giant pigweed | Itsit                   |
| 183       | <i>Tribulus aiatus</i>        | Bindii, bullhead, burra gokharu            | Bakhara                 |
| 185       | <i>Trifolium alexandrinum</i> | Berseem, egyptian clover                   | Berseem                 |
| 186       | <i>Trifolium resupinatum</i>  | Persian clover, shaftal,                   | Shaftal                 |
| 187       | <i>Triticum aestivum</i>      | Wheat                                      | Gandum                  |
| 188       | <i>Typha elephantina</i>      |  | Koondar                 |
| 192       | <i>Vetiveria zizanioides</i>  | Khus grass                                 |                         |
| 194       | <i>Vigna radiata</i>          | Green gram or golden gram, mung bean       | Mong                    |
| 195       | <i>Zea mays</i>               | Maize                                      | Makai                   |
| 197       | <i>Ziziphus nummularia</i>    | Kandaria                                   |                         |



Feed no. 1

*Abutilon indicum* (Indian Mallow; Pili Booti, Gidarh Warh)



Source: Wikipedia



Source: www.hear.org



Source: www.ecoport.org

**Scientific Name:** *Abutilon indicum*

**Synonyms:** Abutilon albidum, Abutilon asiaticum

**Common Name (Eng.):** Indian Abutilon, Indian Mallow

**Local Name:** Pili Booti, Gidarh Warh

**Family:** Malvaceae

### Morphological Description

Indian Mallow is an erect velvety-pubescent shrub with circular-ovate or heart-shaped leaves with coarsely crenate-serrate margins. The plant can reach up to 1-2 m. The leaves are alternately arranged, and have long stalks and have velvety, soft, pale hairs on them. Orange-yellow flowers, 2-3 cm across, occur solitary in axils, on long stalks, 4-7 cm. Orange-yellow petals are triangular-obovate, 1 cm long or slightly more, staminal-tube hairy with stellate hairs. Fruit is quite interesting - it is circular in shape, consisting of 11-20 radiating hairy carpels, brown when dry; each carpel flattened, somewhat boat shaped. Seeds are kidney-shaped. The plant is a weed commonly found on disturbed land. Flowering: September-April.

### Medicinal uses

Extract of water-soaked dried seeds is used as purgative. Leaves are used as tonic. Roots are taken as infusion in fever.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.hear.org](http://www.hear.org)
- [www.wikipedia.org](http://www.wikipedia.org)



Feed no. 2

*Acacia arabica* (Acacia; Kikar, Babool)



Source: gardening Pakistan



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [fwf.punjab.gov.pk](http://fwf.punjab.gov.pk)

**Scientific Name:** *Acacia arabica*

**Synonyms:** *Acacia nilotica*, *Mimosa arabica*, *Mimosa nilotica*

**Common Name (Eng.):** Acacia

**Local Name:** Kikar, Babool

**Family:** Mimosaceae

### Morphological Description

Perennial shrub or tree, 2.5–10 (–20) m tall, variable in many aspects. Branches spreading, forming a dense flat or rounded crown with dark to black coloured stems; branchlets purple-brown, shortly or densely pubescent, with lenticels. Bark thin, rough, fissured, deep red brown. Spines (thorns) thin, straight, light-grey in axillary pairs, usually in 3–12 pairs, 5–7.5 cm long in young trees, mature trees commonly without thorns. Leaves bipinnate 30–40 mm long, often with 1–2 petiolar glands and other glands between all or only the uppermost pinnae; pinnae 2–11 (–17) pairs, with 7–25 pairs of leaflets (1.5–7 mm long) per pinnae. Peduncles clustered at nodes of leafy and leafless branchlets. Flowers prolific, golden yellow, in globulus heads 1.2–1.5 cm in diameter. Pods straight or slightly curved, 5–15 cm long on a pedicel, 0.5–1.2 cm wide, with constrictions between the seeds giving the appearance of a string of pearls, fleshy when young, indehiscent, becoming black and hard at maturity. Seeds deep blackish-brown, smooth, sub-circular, compressed, areole 6–7 mm long, 4.5–5 mm wide. Seed weight ranges from 5,000–16,000 seed/kg. Tolerates a wide range of soil types, thriving in alluvial and heavy clay soils with pH 5.0–9.0.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [fwf.punjab.gov.pk](http://fwf.punjab.gov.pk)

Feed no. 3

*Acacia modesta* (Phulai)



Source: [pk-photography.blogspot.com](http://pk-photography.blogspot.com)

**Scientific Name:** *Acacia modesta*

**Synonyms:** *Mimosa dumosa*, *Senegalia modesta*

**Local Name:** Phulai

**Family:** Fabaceae

### Morphological Description

A small or medium sized deciduous tree, young shoot glabrous to subglabrous, bark brownish or greenish grey, rough, prickles in pairs, below the petiole, compressed, recurved, dark brown, shining, 4-5 mm long, sometimes prickles absent. Rachis 1.2-5 cm long, with a small gland near the base and sometimes one between the uppermost pair of pinnae. Pinnae generally 2-3 pairs rarely 1, 1.2-2.5 cm long, leaflets 3-5 pairs, petiolate, lamina 4-10 mm long, 3-7 mm broad, broadly ovate or obovate, oblique, obtuse, glaucous, veins prominent. Inflorescence a pedunculate spike, c. 3.7-7.5 cm long, peduncle 1.3-2.5 cm long. Pedicel 1 mm long. Calyx 1-1.5 mm long, broadly campanulate, glabrous. Corolla 2-2.5 mm long. Stamens indefinite, filaments 5 mm long. Pod stipitate, stipe 5-6 mm long, pod proper 5-7 cm long, 8-10 mm broad, thin, flat, straight, glabrous, apex deltoid, mucronate, late dehiscing. Seeds 3-5.

### Sources

- pk-photography.blogspot.com
- fwf.punjab.gov.pk
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.eol.org](http://www.eol.org)



Feed no. 5

*Aerva persica/tomentosa/javanica* (Dessert cotton, kapok bush; Bhoh)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [Wikipedia](https://en.wikipedia.org/wiki/Aerva_persica)

**Scientific Name:** *Aerva javanica*

**Synonyms:** *Achyranthes javanica*, *Aerva persica*, *Aerva tomentosa*, *Aerva wallichii*, *Celosia lanata*, *Illecebrum javanicum*, *Iresine javanica*, *Iresine persica*

**Common Name (Eng.):** Dessert cotton, kapok bush

**Local Name:** Bhoh

**Family:** Amaranthaceae

### Morphological Description

Kapok Bush is a herbaceous, multi-stemmed and soft-wooded herb, and bears broad leaves; it often has an erect habit and grows to a height of about 1.6 m. Stem and branches are round, striped, densely whitish- or yellowish-woolly or pannose. Leaves are alternate, very variable in size and form, from narrowly linear to nearly round, densely whitish- or yellowish woolly but usually more thinly so and greener on the upper surface, margins plane or more or less involute (when strongly so the leaves frequently sickle shaped-recurved), stalk less or with a short and indistinct leaf-stalk or the latter rarely to about 2 cm in robust plants. Flowers are dioecious.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.hear.org](http://www.hear.org)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 7

*Aesculus indica* (Indian Horse Chestnut; Bankhor)



Source: [www.ucd.ie](http://www.ucd.ie)



Source: [www.henriettes-herb.com](http://www.henriettes-herb.com)



Photo copyright Henriette Kress  
<http://www.henriettesherbal.com>

**Scientific Name:** *Aesculus indica*

**Synonyms:** *Pavia indica*

**Common Name (Eng.):** Indian Horse Chestnut,

**Local Name:** Bankhor

**Family:** Sapindaceae

### Description

Native to the Himalayas, Indian Horse Chestnut is a tall, deciduous, spreading, shady tree, with a straight trunk, and branches in whorls. Its average height is 22 m; the girth of its trunk is about 1 m; its bark peels off upwards in narrow strips. The young shoots are minutely velvety, becoming hairless at maturity. The glossy leaves typically have seven leaflets arising from the same point on rather reddish stalks. The leaves are highly ornamental, and look like tiny umbrellas. The tree sheds its leaves during winter and the new growth starts in the last week of March. In April, the tree produces upright spikes of buds, and in May-June, the tree is decorated with upright panicles of white blooms. The panicles are about 40 cm long, containing over 300 flowers. These blooms are followed by the production of a spiny, green fruit which holds several brown seeds. Flowering: May-June.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.ucd.ie](http://www.ucd.ie),
- [www.henriettes-herb.com](http://www.henriettes-herb.com)



Feed no. 8

*Albizia lebbeck* (Albizia; Siris, Shirin)



Source: Wikipedia



Source: [www.pakflora.com](http://www.pakflora.com)

**Scientific Name:** *Albizia lebbek*

**Synonyms:** *Acacia lebbeck*, *Mimosa lebbeck*, *Mimosa sirissa*

**Common Name (Eng.):** Albizia

**Local Name:** Siris, Shirin

**Family:** Mimosaceae

### Description

Deciduous tree, growing to 30 m tall in native forests. In open situations, trees develop a spreading, sometimes multi-stemmed habit, to 25 m tall and 30 m across, with low branching. Can develop root suckers and produces dense coppicing from cut stumps. Bark rough, grey, somewhat flaky; inner bark reddish. Stems terete, punctate, green, puberulous or pubescent when young, rapidly becoming grey brown with time. Leaves bipinnate with (1 -) 2 - 4 (- 5) pairs of pinnae along a rachis 8 - 9 cm long. Pinnae comprise rachilla 5 - 10 cm long, bearing 3 - 11 pairs of asymmetric (midrib closer to the abaxial margin), oblong to elliptic-oblong leaflets 1.5 - 6.5 cm long and 0.5 - 3.5 cm wide, nyctinastic when young, fixed in older leaves. Inflorescence a terminal or axillary (often 2 or more per axil), 5 - 9 cm diameter semi-globular cluster of 15 - 40 flowers; peduncles 5 - 10 cm long. Flowers, fragrant, with pedicels 1.5 - 4.5 (- 7) mm long; calyx puberulous, 3.5 - 5 mm long; corolla 5 - 11 mm long, terminating in 5 triangular lobes pubescent at the apex; filaments numerous, 1.5 - 3 cm long, fused at the base, predominantly white to cream in colour, tipped with pale green, and becoming dark yellow with age

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)

Feed no. 9

*Amaranthus blitum* (Purple/Green Amaranth; Jangali Chulai)



Source: [www.cabi.org](http://www.cabi.org)



Source: [www.prota4u.org](http://www.prota4u.org)

**Scientific Name:** *Amaranthus blitum*

**Synonyms:** *Amaranthus gracilis*, *Amaranthus polystachyus*, *Euxolus viridis*

**Common Name (Eng.):** Purple amaranth, Green Amaranth

**Local Name:** Jangali Chulai

**Family:** Amaranthaceae

### Description

Green Amaranth is an annual herb with stems erect or occasionally ascending, 10-80 cm long. Stems are sparingly to densely branched, channeled. Leaves are triangular-ovate to narrowly rhombic, 2-7 cm long, 1.5-5.5 cm wide, hairless, tip usually narrow and with a small narrow notch, stalks 1-10 cm long. Flowers are green, in slender, panicle spikes, in leaf axils or at the end of branches. Both sexes are mixed throughout the spikes, but female flowers are more numerous, bracts and bracteoles whitish, triangular-ovate to broadly lance shaped, membranous, with a short, pale or reddish awn; sepals are 3, those of staminate flowers ovate-oblong, 1.5 mm long, tip pointed, mucronate, those of pistillate flowers narrowly spoon-shaped to oblong, 1.3-1.8 mm long, tip more or less mucronate; stigmas 2-3. Fruit is nearly round, 1.3-1.5 mm, not or only slightly exceeding the sepals.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.cabi.org](http://www.cabi.org)
- [www.prota4u.org](http://www.prota4u.org)



Feed no. 10

*Amorpha fruticosa* (Indigo Bush)



Source: [www.gardeningpakistan.com](http://www.gardeningpakistan.com)

**Scientific Name:** *Amorpha fruticosa*

**Synonyms:** *Amorpha angustifolia*, *Amorpha bushii*, *Amorpha pendula*

**Common Name (Eng.):** desert false indigo, false indigo-bush, and bastard indigobush

**Local Name:** Indigo Bush

**Family:** Fabaceae

### Description

*A. fruticosa* grows as a glandular, thorn less shrub which can reach 5 or 6 meters in height and spread to twice that in width. It is somewhat variable in morphology. The leaves are made up of many hairy, oval-shaped, spine-tipped leaflets. The inflorescence is a spike-shaped raceme of many flowers, each with a single purple petal and ten protruding stamens with yellow anthers. The fruit is a legume pod containing one or two seeds. It is found throughout eastern Canada, northern Mexico, and most of the continental United States, but it is probably naturalized in western areas. It is also present as an introduced species in Europe, Asia, and other continents. It is often cultivated as an ornamental plant and some wild populations may be descended from garden escapees.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.gardeningpakistan.com](http://www.gardeningpakistan.com)
- [www.tititudorancea.net](http://www.tititudorancea.net)

Feed no. 12

*Arachis hypogaea* (Groundnut; Mong phalli)



Source: [iprsindh.com.pk](http://iprsindh.com.pk)



Source: [Wikipedia](https://en.wikipedia.org/wiki/Arachis_hypogaea)



Source: [feedipedia](https://www.feedipedia.org/en/forage/arachis-hypogaea)

**Scientific Name:** *Arachis hypogaea*

**Synonyms:** *Lathyrus esquirolii*, *Arachis hypogaea* var. *hypogaea*

**Common Name (Eng.):** Groundnut

**Local Name:** Mong phalli

**Family:** Fabaceae

### Description

The groundnut plant is a low-growing, annual with a central upright stem. The numerous branches vary from low-flat to almost erect. It grows to 1 to 1 1/2 feet tall. The leaves are opposite, pinnate with four leaflets (two opposite pairs; no terminal leaflet), each leaflet 1 to 7 cm long and 1 to 3 cm broad. The flowers are a typical pea flower in shape, 2 to 4 cm across, yellow with reddish veining. After pollination, the fruit develops into a pod 3 to 7 cm long containing 1 to 3 (rarely 4) seeds, which forces its way underground to mature. That where the name groundnut comes from. Groundnuts are eaten in various forms. Roasted, salted groundnuts, boiled groundnuts, fried groundnuts, peanut butter are examples. Groundnut is native to South America, but now found widespread.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.feedipedia](http://www.feedipedia)
- [www.wikipedia](http://www.wikipedia)



Feed no. 13

*Aristida cyanantha* (Chahanga)



Source: Wikipedia



Source: www.wikiwand.com



Source: www.flickrriver.com

**Scientific Name:** *Aristida cyanantha*

**Synonyms:** *Chaetaria cyanantha*

**Common Name (Eng.):** None

**Local Name:** Chahanga

**Family:** Poaceae

### Description

Densely tufted, robust perennial; culms erect, up to 2 m high. Leaf-blades linear, up to 35 cm long and 5 mm wide when flat, flat at first, soon becoming in rolled except sometimes at the base. Panicle up to 40 cm long, very loose and open, the branches capillary, bare at the base. Spikelets purplish, becoming straw coloured; glumes unequal, narrowly lanceolate, the lower 8-12(-15) mm long, gradually passing into an awn, scaberulous on the keel, the upper 10-15 mm long, bifid at the apex with an awn up to 5 mm long in the sinus, smooth on the keel; lemma 8-10(-15) mm long, equaling or shorter than the upper glume, terete, convolute, smooth, slightly narrowed at the summit but passing into the awn without an articulation; callus narrowly oblong, 0.7-1 mm long, acute; central branch of the awn 3.5-5.5 cm long, the laterals 2.5-4.5 cm long.

### Sources

- [www.wikipedia](http://www.wikipedia)
- [www.wikiwand.com](http://www.wikiwand.com)
- [www.eol.org](http://www.eol.org)

Feed no. 17

*Adhatoda vasica* (Malabar Nut, White/Yellow vasa; Arusa, Paikar)



Source: [easyayurveda.com](http://easyayurveda.com)



Source: [easyayurveda.com](http://easyayurveda.com)



Source: [easyayurveda.com](http://easyayurveda.com)

**Scientific Name:** *Adhatoda vasica*

**Synonyms:** *Justicia adhatoda*, *Adhatoda zeylanica*

**Common Name (Eng.):** Malabar Nut, white vasa, yellow vasa

**Local Name:** Arusa, paikar

**Family:** Acanthaceae

### Description

Malabar nut is a small evergreen, sub-herbaceous bush which grows commonly in open plains, especially in the lower Himalayas. The Leaves are 10 to 16 cm in length, minutely hairy and broadly lanceolate. A herbal plant which requires very little watering and is an extremely hardy plant is Malabar nut. If there is one herbal plant that needs to be singled out for propagation and planting on a large scale, it would be this one. Adhatoda in Tamil, meaning a plant shunned by herbivorous animals. Propagated easily by cuttings, grows to a height of eight to 14 feet and has attractive white flowers.

### Medicinal uses

Adhatoda is useful for curing coughs, colds and asthma and is easy to administer. It has been used for centuries, and is mentioned in Sanskrit scriptures.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [easyayurveda.com](http://easyayurveda.com)

Feed no. 18

*Atriplex crassifolia* (Salt bush; Bio booti)



Source:plantillustrations.org



Source:plantillustrations.org

**Scientific Name:** *Artiplex crassifolia*

**Synonyms:** None

**Common Name (Eng.):** Saltbush

**Local Name:** Bio booti

**Family:** Chenopodioideae

### Description

Annual or perennial herbs, subshrubs or shrubs, monoecious or dioecious with some bisexual flowers. Flowers solitary or in clusters, these in spiciform or paniculate inflorescences; flowers 3-5-lobed; stamens 3-5; bracteoles often triangular, in fruit accrescent, connate, often indurated; stigmas 2(-3). Pericarp free or slightly adherent; seeds vertical, rarely horizontal; fruits heterocarpous; embryo annular; radicle ascending superior to superior

### Sources

- [www.eol.org](http://www.eol.org)
- [www.wikipedia](http://www.wikipedia)
- [www.wikiwand.com](http://www.wikiwand.com)



Feed no. 19

*Atriplex lentiformis* (Quail bush, Len-scale saltbush, White thistle)



Source: Wikipedia



Source: Wikimedia

**Scientific Name:** *Artiplex lentiformis*

**Synonyms:** *A. breweri*

**Common Name (Eng.):** Quail Saltbush, lenscale, len-scale saltbush and white thistle

**Local Name:** Quail bush

**Family:** Chenopodioideae

### Description

*Atriplex lentiformis* is a spreading, communal shrub reaching one to three meters in height and generally more in width. It is highly branched and bears scaly or scurfy gray-green leaves up to 5 centimeters long and often toothed or rippled along the edges. This species may be dioecious or monoecious, with individuals bearing either male or female flowers, or sometimes both. Male flowers are borne in narrow inflorescences up to 50 centimeters long, while inflorescences of female flowers are smaller and more compact. Plants can change from monoecious to dioecious and from male to female and vice versa. This species blooms in June and July

### Sources

- [www.eol.org](http://www.eol.org)
- [www.wikipedia](http://www.wikipedia)
- [www.wikiwand.com](http://www.wikiwand.com)



Feed no. 20

*Avena sativa* ( Oat; Jaii)



Source: Wekimedia



Source: Wekimedia



Source: feedipedia

**Scientific Name:** *Avena sativa*

**Synonyms:** *Avena algeriensis*, *Avena chinensis*, *Avena distans*

**Common Name (Eng.):** Oat

**Local Name:** jaii

**Family:** Poaceae

### Description

Common Oat is an erect tufted annual grass, up to 1.2 m tall. Culms are smooth or scabrous beneath the panicle. Leaves are 15-30 cm long, 0.6–1.2 cm wide, sheaths long and loose. Flowers are borne in panicle at the top, 15-30 cm long. Spikelets are usually 2-flowered, to 2.5 cm long, slender- pedicelled; glumes, several-nerved; lemma glabrous, teeth acute, dorsal awn absent or 1 to a floret, short; kernel 0.6–0.8 cm long, narrow, with nearly parallel sides, hairy, grooved lengthwise on the face, tightly enclosed.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.wikipedia](http://www.wikipedia)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.feedipedia](http://www.feedipedia)

Feed no. 21

*Azadirachta indica* (Neem, Indian Lilac)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.dreamstime.com](http://www.dreamstime.com)



Source: [herbycyclopedia](http://herbycyclopedia)

**Scientific Name:** *Azadirachta indica*

**Synonyms:** *Melia azadirachta*, *Antelaea azadirachta*

**Common Name (Eng.):** Indian Lilac

**Local Name:** neem

**Family:** Meliaceae

### Description

Neem is a fast-growing tree that can reach a height of 15-20 m, rarely to 35-40 m. It is evergreen but under severe drought it may shed most or nearly all of its leaves. The branches are widespread. The fairly dense crown is roundish or oval and may reach the diameter of 15-20 m in old, free-standing specimens. The trunk is relatively short, straight and may reach a diameter of 1.2 m. The bark is hard, fissured or scaly, and whitish grey to reddish-brown. The sapwood is greyish-white and the heartwood reddish when first exposed to the air becoming reddish-brown after exposure. The root system consists of a strong taproot and well-developed lateral roots. The alternate, pinnate leaves are 20-40 cm long, with 20-31 medium to dark green leaflets about 3-8 cm long.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.wikipedia](http://www.wikipedia)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)



Feed no. 22

***Bauhinia variegata*** (Orchid Tree, Camel's Foot Tree, Mountain-Ebony; Kachnar, Kachnal)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.dawn.com](http://www.dawn.com)

**Scientific Name:** *Bauhinia variegata*

**Synonyms:** *Bauhinia chinensis*, *Bauhinia decora*, *Phanera variegata*

**Common Name (Eng):** Orchid Tree, Camel's Foot Tree, Mountain-Ebony

**Local Name:** Kachnar, Kachnal

**Family:** Mimosaceae

### Description

Kachnar is closely related to peacock flower and to the tree many consider the world's most beautiful, the royal poinciana - and it shows! Orchid tree is staggeringly beautiful when in bloom - and it blooms for several months! Orchid tree grows 20-40 ft tall and 10-20 ft wide with a spreading crown of briefly deciduous leaves which are 4-6 in across and rounded with lobed ends and heart shaped bases. The leaves are shaped a little like a cow's hoof. The flowers are reminiscent of showy orchids, with five irregulars, usually slightly overlapping petals in shades of magenta, lavender, purplish blue or even white. The flowers often make their first appearance in late winter while the tree is bare of leaves. The blooming period then lasts until early summer. The flowers are 3-5 in across and carried in clusters at the branch tips.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.dawn.com](http://www.dawn.com)

Feed no. 23

*Beta vulgaris* (Sugar beet; Chukandar)



Source: Wikimedia



Source: [www.agribusiness.com.pk](http://www.agribusiness.com.pk)

**Scientific Name:** *Beta vulgaris* (subsp. *vulgaris* convar. *vulgaris* var. *altissima*)

**Synonyms:** *Beta maritima*, *Beta foliosa*

**Common Name (Eng.):** Sugar beet

**Local Name:** Chukandar

**Family:** Chenopodiaceae

### Description

Herbs annual or biennial. Root stout, tuber like, and napiform or fusiform, or branched and not tuber like. Stem erect,  $\pm$  branched, ribbed, striate. Basal leaves long petiolate; petiole stout, abaxially convex, adaxially flattened or slightly concave; leaf blade oblong, 20-30  $\times$  10-15 cm, adaxially crisped, sub lustrous, abaxially with strongly protruding veins, base cuneate, truncate, or slightly cordate, margin entire or undulate, apex obtuse. Cauline leaves alternate, smaller than basal ones; leaf blade ovate or lanceolate-oblong, base gradually narrowed into petiole, apex attenuate. Flowers 2- or 3-glomerulate. Perianth united at base; segments linear or narrowly oblong, becoming leathery and incurved in fruit. Utricle basally sunken into perianth, distally sub succulent. Seed red-brown, sub lustrous, lenticular, 2-3 mm in diam.; perisperm farinaceous. Fl. May-Sep, fr. Jul.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)





**Scientific Name:** *Bombax ceiba*

**Synonyms:** *Salmalia malabarica*, *Bombax malabaricum*

**Common Name (Eng.):** Red Silk Cotton Tree, Cotton Tree

**Local Name:** Sumbal

**Family:** Bombacaceae

### Description

Silk cotton tree is a type of native cotton tree with large red flowers. The genus name *Salmalia* is derived from the sanskrit name shaalmali. Silk cotton trees comprise eight species in the genus *Bombax*, native to India, tropical southern Asia, northern Australia and tropical Africa. Semul trees bear beautiful red-colored flowers during January to March. The phenomenon paints the whole landscape in an enchanting red hue. The fruit, the size of a ping-pong ball, on maturity appears during March and April. These are full of cotton-like fibrous stuff. It is for the fiber that villagers gather the semul fruit and extract the cotton substance called "kopak". This substance is used for filling economically priced pillows, quilts, sofas etc. The fruit is cooked and eaten and also pickled. Semul is quite a fast-growing tree and can attain a girth of 2 to 3 m, and height about 30 m, in nearly 50 years or so. Its wood, when sawn fresh, is white in color. However, with exposure and passage of time it grows darkish gray. It is as light as 10 to 12 kg, per cubic foot.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 27

*Bothriochloa pertusa* (Hurricane grass, Indian couch grass; Palwan)



Source: [www.tropicalforages.info](http://www.tropicalforages.info)



Source: [www.backyardnature.net](http://www.backyardnature.net)

**Scientific Name:** *Bothriochloa pertusa*

**Synonyms:** *Amphilophis pertusa*, *Andropogon pertusus*, *Dichanthium pertusum*, *Holcus pertusus*

**Common Name (Eng.):** Hurricane grass, Indian couch grass, Indian-bluegrass, Silver grass

**Local Name:** Palwan

**Family:** Poaceae

### Description

This is a perennial grass that spreads via stolon.]The stolons may be pink or red. They can be robust; stolons measuring 1.6 meters have been observed. The stems are upright to erect and reach 60 to 100 centimeters tall. At times they may extend along the ground for a distance, rooting where stem nodes contact the soil. The leaves are up to 30 centimeters long; the upper leaves longer than the lower. The leaves are green to grey-green. The inflorescence is a bunch of very hairy racemes each a few centimeters long. Parts of the inflorescence can be purplish in color. The spikelet has a twisted awn up to 2 centimeters long. The grass is aromatic, with a scent like ginger when it is crushed. The grass is well known as a fodder for livestock. It is planted as a pasture grass and used for hay and silage.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.wikimedia.com](http://www.wikimedia.com)



Feed no. 28

*Brachiaria mutica* (Para grass, Buffalo grass, Giant couch, Scotch grass)



Source: [keys.lucidcentral.org](http://keys.lucidcentral.org)



Source: [www.daf.qld.gov.au](http://www.daf.qld.gov.au)



Source: [www.fao.org](http://www.fao.org)

**Scientific Name:** *Brachiaria mutica*

**Synonyms:** *Panicum barbinode*, *Panicum muticum*, *Panicum purpurascens*

**Common Name (Eng.):** buffalo grass, Giant couch, Scotch grass

**Local Name:** Para grass

**Family:** Poaceae

### Description

A creeping perennial grass with long, coarse stolons up to 5.0 m, very hairy, decumbent stems and soft, moderately hairy leaves up to 20 mm wide and 30 cm long. Leaf sheath has a densely hairy collar. Inflorescence is a panicle 6–30 cm long, comprising 5–20 densely flowered racemes 2–15 cm long, with paired spikelets 2.5–5.0 mm long in several uneven rows. Stolons and branches root readily at the nodes.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.wikimedia.com](http://www.wikimedia.com)
- [www.fao.org](http://www.fao.org)



Feed no. 29

*Brachiaria ramosa* (Liverseed grass, brown top millet; Shamak)



Source: [greencoverseed.com](http://greencoverseed.com)



Source: [agronomy.com](http://agronomy.com)

**Scientific Name:** *Brachiaria ramosa*

**Synonyms:** *Panicum ramosum*, *Panicum pallidum*

**Common Name (Eng.):** Liverseed grass, brown top millet

**Local Name:** Shamak

**Family:** Poaceae

### Description

A summer annual with relatively wide leaves and open panicles. Brown top millet may grow erect or prostrate along the ground with tips ascending. This grass is primarily a weed of agronomic crops, hay fields, and abandoned fields. Flowers: Seed head an open panicle, 1 1/2 to 7 inches long, 3/4 to 2 1/2 inches wide. Individual grains are tan in color, ellipsoid, and approximately 2 mm long. Stems: Plants go erect or prostrate along the ground with tips ascending. Stems may reach 3 1/2 feet in height. Nodes along the stem are minutely to shortly hairy, and sheaths between the nodal sections are without hairs. Sheath margins may be hairy.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.greencoverseed.com](http://www.greencoverseed.com)

Feed no. 30

*Brachiaria reptans* (Running grass; Kori)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)

**Scientific Name:** *Brachiaria reptans*

**Synonyms:** *Urochloa reptans*

**Common Name (Eng.):** Running grass

**Local Name:** Kori

**Family:** Poaceae

### Description

Decumbent annual, 15-60 cm high rooting at nodes. Leaf-blades ovate-lanceolate, 2-8 cm long and 3-17 mm wide. Inflorescence of 5-16 cm racemes on an axis 1-8 cm long; racemes 1-4 cm in length with a triquetrous rhachis. Spikelets, glabrous, narrowly ovate, 1.5-2.2 mm long, borne in pairs and crowded on the rhachis.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.greencoverseed.com](http://www.greencoverseed.com)
- [www.fao.org](http://www.fao.org)

Feed no. 31

*Brassica campestris* (Mustard; Sarson)



**Scientific Name:** *Brassica campestris*

**Synonyms:** *Brassica rapa*

**Common Name (Eng.):** Mustard

**Local Name:** Sarson

**Family:** Brassicaceae

### Description

*B. rapa* formerly known as *B. campestris*, shows considerable variation in growth form and characteristics across the many cultivars, this species has, in general, a flat or globose root (in the case of turnips) without an elongated crown (as found in the rutabagas and kohlrabi, which are derived from *B. oleracea*), with stems that typically grow 30 to 120 cm (11.75 to 47.25 in), although in some cultivars up to 190 cm (75 in) tall. The leaves are large, soft, smooth or soft-hairy leaves, up to 50 cm (20 in) long, pinnatifid (deeply lobed) or lyrate (deeply lobed, but with an enlarged terminal lobe and smaller lateral lobes), which clasp the stem and may form a more or less dense head. The yellow, four-parted and cross-shaped flowers are small, usually less than 2 cm (0.75 in) long, and produce siliques—capsular fruit that dehisces (splits open) when mature—that may be up to 6 cm (2.5 in) long

### Sources

- [www.eol.org](http://www.eol.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikimedia.com](http://www.wikimedia.com)



Feed no. 32

*Brassica napus* (Rapeseed, Canola)



Source: [research.ncl.ac.uk](http://research.ncl.ac.uk)



Source: [www.floraofqatar.com](http://www.floraofqatar.com)

**Scientific Name:** *Brassica napus*

**Synonyms:**

**Common Name (Eng.):** rapeseed, canola

**Local Name:** Canola

**Family:** Brassicaceae

### Description

*Brassica napus* grows to 100 cm high with lower leaves pinnatifid and glaucous and the upper leaves clasping the stem. The flowers are yellow and about 17 mm across. *B. napus* differs from *B. nigra*, but can be distinguished by the upper leaves which do not clasp the stem, from *B. rapa* by its smaller petals which are less than 13 mm across.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikimedia.com](http://www.wikimedia.com)

Feed no. 33

*Broussonetia papyrifera* (Paper mulberry; Jangli toot)



Source: [plants.ifas.ufl.edu](http://plants.ifas.ufl.edu)



Source: [www.aliexpress.com](http://www.aliexpress.com)

**Scientific Name:** *Broussonetia papyrifera*

**Synonyms:** *Morus papyrifera*, *Papyrius papyriferus*

**Common Name (Eng.):** Paper mulberry

**Local Name:** Jangli toot

**Family:** Moraceae

### Description

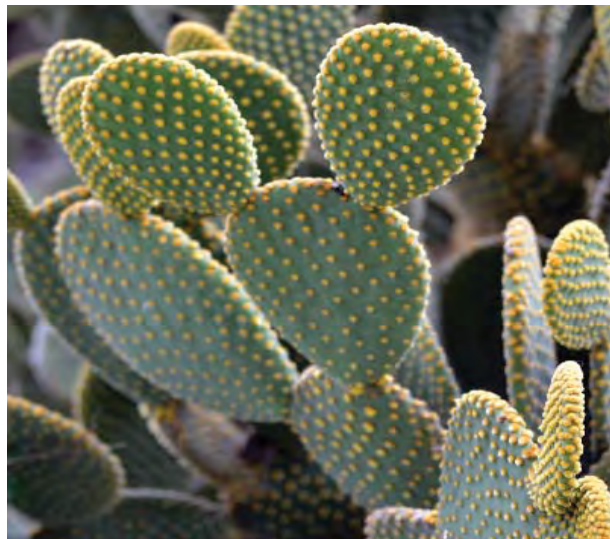
Paper Mulberry is a deciduous tree growing to 15 m tall, native to Japan and neighboring areas. The leaves are variable in shape, just like Mulberry leaves. They can be ovate heart-shaped to deeply lobed. They are 7–20 cm long, with a rough surface above, fuzzy-downy below and a finely toothed margin. The male flowers are produced in an oblong inflorescence, and the female flowers occur in a ball, with long hairs on the surface. In summer, the female flower matures into a red to orange, sweet, juicy fruit 3–4 cm diameter, which is an important food for wild animals. The fruit is edible and very sweet, but too fragile to be commercialized. The bark is composed of very strong fibers and can be used for making high-quality paper. The tender leaves and twigs can be used to feed deer, and the tree is sometimes nicknamed the "Deer's Tree".

### Sources

- [www.eol.org](http://www.eol.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 35

*Opuntia microdasys* (Micky mouse cactus)



Source: [www.flickr.com](http://www.flickr.com)



Source: [pinterest.com](http://pinterest.com)

**Scientific Name:** *Opuntia microdasys*

**Synonyms:**

**Common Name (Eng.):** Micky mouse cactus

**Local Name:** Micky mouse cactus

**Family:** Cactaceae

### **Description**

This cactus has no central stem or leaves. The individual segments which constitute the cactus body are oval shaped pads from which additional segments form. These new segments always grow in pairs, giving new growth areas the appearance of bunny ears. Newest segments grow in as a red color and mature to dark green as they grow. Flowers will always sprout from the terminal ends of segment pads.

### **Sources**

- [www.houseplantsexpert.com](http://www.houseplantsexpert.com)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.org](http://www.wikipedia.org)



Feed no. 36

*Calligonum polygonoides* (Phog)



Source: america.pink



Source: www.arnajharna.org

**Scientific Name:** *Calligonum polygonoides*

**Synonyms:** *Calligonum polygonoides* L.

**Common Name (Eng.):** Phog

**Local Name:** Phog

**Family:** Polygonaceae

### Description

Profusely branched, glabrous shrub with whitish to pale brownish bark, up to 1.5 m tall. Leaves very scanty, sessile, linear caduceus, 7-15 mm long; ochreae c. 1 mm long. Flowers pediculate, pedicel 3-8 mm long, slightly accrescent in fruit, articulate in the centre or near the base, Perianth segments 3-4 mm long, 2-3 mm broad, broadly oblong, white, reflexed in fruit. Stamens shorter than or equaling perianth. Fruit 12-17 mm long, 10-14 mm broad, densely setose, setae 2-3 times or more dichotomously branched, dilated at the base, arising on 4 pairs of longitudinal wings. Nut oblong, slightly coiled, winged, wings 1-2 mm broad.

### Sources

- [www.eol.org](http://www.eol.org)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 37

*Cannabis indica* (Marijuana, Hemp, Gallow grass; Bhang, ganja)



Source: [pinterest.com](#)



Source: [pinterest.com](#)

**Scientific Name:** *Cannabis indica*

**Synonyms:** *Cannabis sativa*, *Cannabis chinensis*, *Cannabis generalis*

**Common Name (Eng.):** Marijuana, Hemp, Gallow grass

**Local Name:** Bhang, ganja

**Family:** *Cannabaceae*

### Description

Marijuana, is a coarse, rangy annual that grows 6-12 ft in height. The leaves are palmately divided into 3-7 narrow, toothed segments, most about 3-6 in long. The stems are rough and scabrous and the inner bark is fibrous. Hemp is normally a dioecious species, with male and female flowers on separate plants, but sometimes bisexual plants occur. The female flowers are in greenish leafy spikes a little less than 1 in long, borne on stem tips, and the male flowers are yellowish, tiny, and borne in axillary clusters. The flowers are inconspicuous and without scent; they are pollinated not by insects, but by the wind. The fruit is an achene, which is a hard, one-seeded fruit that remains closed at maturity. There is only one species of *Cannabis*, but numerous forms have been selected for various purposes. Its seed, chiefly used as caged-bird feed, is a valuable source of protein & energy.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [pinterest.com](https://www.pinterest.com)
- [www.eol.org](http://www.eol.org)

Feed no. 38

*Cardaria draba* (Whitetop, Hoary Cress)



Source: [www.pfaf.org](http://www.pfaf.org)



Source: [www.pfaf.org](http://www.pfaf.org)



**Scientific Name:** *Lepidium draba*

**Synonyms:** *Cardaria draba*, *Cardaria brachypetala*, *Cardiolepis dentata*

**Common Name (Eng.):** Whitetop, Hoary Cress

**Local Name:** None

**Family:** Brassicaceae

### Description

Whitetop is a perennial herb that reproduces by seeds and by horizontal creeping roots. The stem is stoutish, erect or spreading, 10 to 80 cm tall, branched, covered sparsely with ash-colored soft hairs to heavily covered. The leaves are alternating, simple, and mostly toothed. The basal leaves are 4 to 10 cm, have a slight stem (petiole), and are long and flat, lance-shaped to egg-shaped, with the narrow end attached to the stalk. On the upper part of the stem the leaves are attached directly to the stalk (sessile), are 2 to 6.5 cm long, and are oblong or tapering the point, with broad bases that clasp the stalk. Whitetop has slightly domed flower clusters in which the individual flower stalks grow upward from various points off the branch to approximately the same height (corymb-like). The petals are white, clawed, and 3 to 5 mm long, about twice the length of the sepals.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)



Feed no. 39

*Cordia myxa* (Assyrian Plum; Lasura)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.pakflora.com](http://www.pakflora.com)

**Scientific Name:** *Cordia myxa*

**Synonyms:** Bourreria glabra, Cordia ixiocarpa

**Common Name (Eng.):** Assyrian Plum

**Local Name:** Lasura

**Family:** Boraginaceae

### Description

Lasura is a fairly fast growing species. It matures in about 50 to 60 years by when its girth at the breast height is about 1 to 1.5 m. The bark of lasura is grayish brown in color with longitudinal and vertical fissures. The tree can be easily identified from a distance by observing the fissures which are so prominent in the bark of the main bole of a tree approaching maturity. The leaves of lasura are broad, ovate, alternate and stalked with the spread being 7 to 15 cm x 5 to 10 cm. In matter of external appearance these are glabrous above and pubescent below. The young leaves tend to be hairy. The fresh foliage is quite useful as fodder for cattle — more so during grass famines. These are also used for wrapping biddies and cheroots. Lasura tree flowers during March-April. The inflorescence, mostly terminal, is, white in color. Individual florets are nearly 5 mm in diameter. The fruit of lasura start appearing during July-August. It is a kind of a drupe, light pale to brown or even pink in color. The appearance tends to darken when ripening sets in.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)

Feed no. 40

*Carwia papaya* (Papaya; Papeeta)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [wildlifeofhawaii](http://wildlifeofhawaii)



Source: [Wikipedia](http://Wikipedia)

**Scientific Name:** *Carica papaya*

**Synonyms:** *Carica bourgeau*, *Carica citrifolia*, *Carica citrifolia*

**Common Name (Eng.):** Papaya

**Local Name:** Papeeta

**Family:** Caricaceae

### Description

The papaya plant has an erect branchless trunk 6-20 ft. tall, and a palm like head of foliage at the top. The trunk remains somewhat succulent and soft wooded, and never develops true bark. It is ringed with prominent scars from previous leaf stems and contains an acrid milky latex sap. The leaves are deeply incised and lobed, up to 24 in across and borne on 24 in petioles. The five-petal flowers are fleshy, waxy and fragrant. Some papaya bears only short stalked female flower or bisexual flowers, while others may bear only male flowers, clustered on panicles 5-6 feet long. Some papaya may have both male and female flowers. The flower of papaya is usually white and small. Pollination of papaya are done by wind and sometimes by hand when necessary to get a proper fruit. The smooth-skinned fruits are green, yellow, orange or rose colored, and typically weigh about 0.5 kg. They hang on short stalks in clusters directly from the trunk beneath the umbrella of giant leaves. Papayas flower and fruit simultaneously throughout the year.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)



Feed no. 41

*Cassia fistula* (Golden Shower Tree; Amaltaas, Garhdanali)



Source: [www.pakflora.com](http://www.pakflora.com)

**Scientific Name:** *Cassia fistula*

**Synonyms:** *Cassia excels*, *Cassia rhombifolia*, *Bactyrilobium fistula*

**Common Name (Eng.):** Indian laburnum, Golden Shower Tree

**Local Name:** Amaltaas, Garhdanali

**Family:** Caesalpiniaceae

### Description

This native of India, commonly known as Amaltaas, is one of the most beautiful of all tropical trees when it sheds its leaves and bursts into a mass of long, grape-bunches like yellow gold flowers. A tropical ornamental tree with a trunk consisting of hard reddish wood, growing up to 40 feet tall. The wood is hard and heavy; it is used for cabinet, inlay work, etc. It has showy racemes, up to 2' long, with bright, yellow, fragrant flowers. These flowers are attractive to bees and butterflies. The fruits are dark-brown cylindrical pods, also 2' long, which also hold the flattish, brown seeds (up to 100 in one pod) These seeds are in cells, each containing a single seed.

### Medicinal uses

The sweet blackish pulp of the seedpod is used as a mild laxative

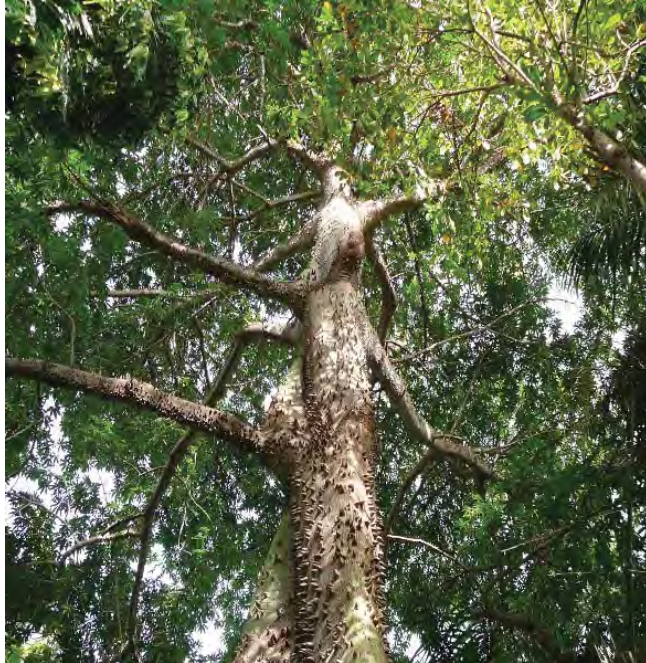
### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)



Feed no. 42

*Ceiba pentandra* (Kapok, White Silk-Cotton Tree; Sabre, Safed semal)



Source: Wikipedia



Source: www.prota4u.org

**Scientific Name:** *Ceiba pentandra*

**Synonyms:** *Ceiba casearia*, *Bombax guineense*, *Ceiba guineensis*

**Common Name (Eng.):** Kapok, Ceiba, White Silk-Cotton Tree

**Local Name:** Sabre, Safed semal

**Family:** Bombacaceae

### Description

Kapok tree is an emergent tree of the tropical rainforests and is often described as majestic. It can grow to a height of 150 feet or more, towering over other trees in the rainforest. Originally a native to South America it now has spread to the primary rainforests of West Africa, and the Southeast Asia. The straight trunks are cylindrical, smooth and gray in color, and can reach a diameter of 9 feet. The wood is a pinkish white to ashy brown in color, with a straight grain. The branches grow in horizontal tiers and spread widely. The crown has an open umbrella shape. Many plants and animals grow and live in the branches of the kapok tree. Birds nest in it, and mammals use the huge branches as highways. Frogs breed in the pools of water that collect in the bromeliads. The leaves are palmate and compound. The 5-9 leaflets are 7-8 cm long and 1-3.5 cm wide. Flowers usually open before the leaves appear, and are clustered on small, new branches. The 5 petals of a flower are about 2.5 cm long and are a creamy white or pale pink in color. Their odor is unpleasant but is probably meant to attract the bats that pollinate them. The brown seeds are round like peas and are found in pods.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 43

*Cenchrus ciliaris* (buffel/foxtail buffalo grass; Dhaman)



Source: [www.pcrwr.gov.pk](http://www.pcrwr.gov.pk)



Source: [www.gardeningpakistan.com](http://www.gardeningpakistan.com)

**Scientific Name:** *Cenchrus ciliaris*

**Synonyms:** *Cenchrus glaucus*, *Pennisetum cenchroides*, *Pennisetum ciliare*

**Common Name (Eng.):** buffel grass, foxtail buffalo grass, blue buffalo grass

**Local Name:** Dhaman

**Family:** Poaceae

### Description

Extremely variable species, tufted (sometimes shortly rhizomatous) perennial, with types ranging in habit from ascendant to erect, and branching culms from about 0.3-2.0 m at maturity. Leaf blades linear, 2-13 mm wide and 3-30 cm long; green, blue green to grey green in colour, scabrous, mostly glabrous, sometimes hairy at the base. Panicle an erect or nodding, straw, grey or purple coloured, bristly, false spike, 2-15 cm long and 1-2.5 cm wide, with seed units or fascicles inserted along a zig-zag axis. Each bur-like fascicle comprises a single spikelet or cluster of 2-4 spikelets, 3.5-5 mm long surrounded by an involucre of bristles of various length up to 16 mm long; bristles barbed and ( hairy, giving the fascicle an adhesive quality. 330,000-550,000 seed units/kg, or 900,000-2,000,000 caryopses/kg. Deep, strong, fibrous root system to >2 m.

### Sources

- [www.pcrwr.gov.pk](http://www.pcrwr.gov.pk)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.wikipedia](http://www.wikipedia)



Feed no. 44

*Cenchrus setigerus* (Birdwood grass, cow sandbur; Motha Dhaman, Dhaman thal)



Source: [www.floraofqatar.com](http://www.floraofqatar.com)



Source: [feedipedia](http://feedipedia)

**Scientific Name:** *Cenchrus setigerus*

**Synonyms:** *Cenchrus setigerus*, *Cenchrus barbatus*, *Cenchrus montanus*

**Common Name (Eng.):** Birdwood grass, cow sandbur

**Local Name:** Motha Dhaman, Dhaman thal

**Family:** Poaceae

### Description

Tufted, non-rhizomatous (or shortly rhizomatous), erect or ascending perennial to 60 cm (rarely to >1 m) tall, similar to smaller types of *C. ciliaris*. Leaf blades linear, 15-30 cm long, and 4-6 mm wide. Panicle a green, maturing to light straw-colored (mostly African origin) or dark purple (mostly Indian origin), false spike, 1.5-9 cm long and ca. 1 cm wide. Seed units or fascicles are inserted along a zig-zag axis, each bur-like fascicle comprising a single spikelet or cluster of 2 or 3 spikelets, 3-4.5 mm long, surrounded by an involucre of short, stiff teeth 3.5-5 mm long. 180,000-350,000 seed units/kg.

### Sources

- [www.pcrwr.gov.pk](http://www.pcrwr.gov.pk)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.wikipedia](http://www.wikipedia)



Feed no. 45

*Chenopodium album* (white goosefoot; Bathu)



Source: [www.gardeningpakistan.com](http://www.gardeningpakistan.com)



Source: [swbiodiversity.org](http://swbiodiversity.org)

**Scientific Name:** *Chenopodium album*

**Synonyms:** *Anserina candidans*, *Atriplex viridis*, *Chenopodium album*

**Common Name (Eng.):** fat hen, lamb's quarters, white goosefoot

**Local Name:** Bathu

**Family:** Amaranthaceae

### Description

Bathua is a fast-growing, upright, weedy annual species of goosefoot, very common in temperate regions, growing almost everywhere in soils rich in nitrogen, especially on wasteland. Its pollen can contribute to hay fever-like allergies. It tends to grow upright at first, reaching heights of 30-80 cm, but typically becomes recumbent after flowering (due to the weight of the foliage and seeds) unless supported by other plants. The opposite leaves can be very varied in appearance. The first leaves, near the base of the plant, are toothed and roughly diamond-shaped, 3-7 cm long and 3-6 cm broad. The leaves on the upper part of the flowering stems are entire and lanceolate-rhomboid, 1-5 cm long and 0.4-2 cm broad. The leaves are waxy-coated, unwettable and mealy in appearance, with a whitish coat on the underside. The tiny flowers are radially symmetrical and grow in small cymes on a dense branched inflorescence 10-40 cm long. Bathua can be eaten as a vegetable, either steamed in entirety, or the leaves cooked like spinach as a leaf vegetable.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 46

*Chloris gayana* (Rhodes grass)



Source: [tropicalforages.info](http://tropicalforages.info)



Source: [feedipedia.org](http://feedipedia.org)



Source: [tropicalforages.info](http://tropicalforages.info)

**Scientific Name:** *Chloris gayana*

**Synonyms:** *Chloris abyssinica*

**Common Name (Eng.):** Rhodes grass

**Local Name:** Rhodes grass

**Family:** Poaceae

### Description

Tufted perennial, usually stoloniferous (varies with genotype), with foliage from 0.5-1.2 m, and fertile tillers from 0.9-2 m tall. Can act as an annual in regions with extremely cold winters or long dry seasons. Stolon stems 4-5 mm diameter, fertile stems 2-4 mm diameter. Leaves glabrous, with 2-3 mm long hairs near the collar; blades (12.5-) 25-50 cm long, and (1.5-) 3 to >9 mm wide, tapering to a fine, pointed apex. Inflorescence a digitate (single whorl) or subdigitate (double whorl), comprising (3-) 6-15 (-20) ascending or spreading, spike-like racemes 4-15 cm long, usually light, greenish brown (rarely yellow) in colour, ripening to darker brown. Spikelets about 3.5 mm long, comprising 3-4 florets, usually one perfect with 1-10 mm long awn, and another, male, with 1.5-5.5 mm long awn (awn length can be useful in cultivar differentiation), sometimes all florets hermaphrodite and fertile. 4 million seeds (spikelets)/kg for 'Katambora', and 7-10 million for most other varieties. Caryopsis brown, c. 2 mm long, 0.5 mm wide, separating readily from the spikelet in some varieties, about 2 million/kg. Roots to 4.7 m deep, but sparse beyond 2.4 m.

### Sources

- [www.pcrwr.gov.pk](http://www.pcrwr.gov.pk)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.wikipedia](http://www.wikipedia)

Feed no. 47

*Chrysopogon gryllus* (Chir Kharha)



Source: Wikipedia



Source: [www.plantillustrations.org](http://www.plantillustrations.org)

**Scientific Name:** *Chrysopogon gryllus*

**Synonyms:** *Pollinia gryllus*, *Chrysopogon verticillatus*

**Common Name (Eng.):**

**Local Name:** Chir Kharha

**Family:** Poaceae

### Description

Perennial forming tough tussocks. Culms robust, up to 1.5 m tall, scabrid below panicle. Leaf sheaths strongly keeled at base; leaf blades linear, glaucous, up to 30 × 0.2–0.4 cm, sparsely to densely hispid with tubercle-based hairs or glabrous, apex subacute to acuminate; ligule ca. 0.5 mm, a ciliate rim. Panicle open to contracted, 6–25 cm, purplish; branches stiffly ascending to loosely spreading, 3–15 cm, tipped by a single triad or also with 1–4 spikelet pairs below the triad. Sessile spikelet ca. 7 mm; callus subacute, 1.3–1.7 mm, bearded with golden hairs, obliquely attached to branch apex; lower glume narrowly oblong, tuberculate-spinose along in turned flanks, sometimes hispidulous at apex, apex truncate or 2-toothed; upper glume hispid on keel toward apex, awnless, mucronate or with an awn up to 10 mm; upper lemma minutely 2-toothed, awned; awn geniculate, 1.2–3.5 cm, column puberulous. Pedicelled spikelet staminate, 7–11 mm; lower glume with 3.5–7 mm awn. Pedicel 2/3–3/4 length of sessile spikelet, glabrous. Fl. and fr. autumn.

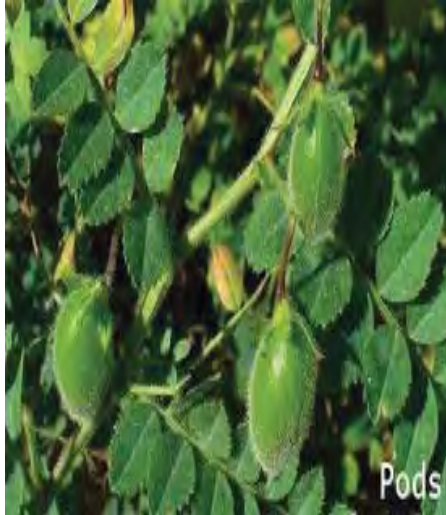
### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)



Feed no. 49

*Cicer arietinum* (Chickpea; Chana)



Source: [iprsindh.com.pk](http://iprsindh.com.pk)



Source: [iprsindh.com.pk](http://iprsindh.com.pk)



Source: [feedipedia.org](http://feedipedia.org)

**Scientific Name:** *Cicer arietinum*

**Synonyms:** *Cicer grossum*, *Cicer album*, *Cicer nigrum*

**Common Name (Eng.):** Chickpea

**Local Name:** Chana

**Family:** Fabaceae

### **Description**

Chickpea is an edible legume, and an annual herb. The plant grows to between 20 and 50 cm high and has small feathery leaves on either side of the stem. One seedpod contains two or three peas. The flowers are white or sometimes reddish-blue. The seed is eaten in various forms in Pakistan and is extremely popular in Punjab. Chickpeas are a type of pulse, with one seedpod containing two or three peas. It has white flowers with blue, violet, or pink veins.

### **Sources**

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 50

*Cichorium intybus* (Chicory, Blue Daisy; Kasni)



Source: pakflora.com



Source: feedipedia.org



source: feedipedia.org

**Scientific Name:** *Cichorium intybus*

**Synonyms:** *Cichorium balearicum*, *Cichorium byzantinum*

**Common Name (Eng.):** Common chicory, Chicory, Blue Daisy

**Local Name:** Kasni

**Family:** Asteraceae

### Description

Chicory is a bushy perennial herb with blue or lavender flowers. It is a bushy perennial plant that attains a height of 1 to 4 feet. The stem has edges having hard branches. Flowers occur either solitary on nearly leafless branches, or in clusters in leaf axils. Flower-heads are 2.5-4 cm across, with spreading ray-florets. The green bracts below the flowers are prominent. The outer lacelike bracts are spreading outwards, while the longer inner ones are upright. Leaves are oblong-lacelike, and lower leaves are pinnately lobed. The upper leaves are entire, bract-like, stem-clasping. Root is like a tail of a cow and is fleshy having brownish color from outside and white color from inside. It has a length of 2½ feet and has a bitter taste. Chicory is grown for its leaves, or for the roots, which are baked, ground, and used as a coffee substitute in instant coffee.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 53

*Calotropis procera* (kapok tree, king's crown; Rubber bush)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [agriculture.vic.gov.au](http://agriculture.vic.gov.au)



Source: [www.flicker.com](http://www.flicker.com)



**Scientific Name:** Calotropis procera

**Synonyms:** *Asclepias procera*

**Common Name (Eng.):** Apple of Sodom, kapok tree, king's crown

**Local Name:** Rubber bush

**Family:** Apocynaceae

### Description

Calotropis is a spreading shrub or medium-sized tree reaching 2.5 to 6 m in height. It has a deep taproot, 3-4 m deep, and a secondary root system with woody lateral roots that may rapidly regenerate adventitious shoots when the plant is injured. The stems are crooked and covered with a fissured corky bark. The grey-green leaves are 15-30 cm long and 2.5-10 cm broad and have a succulent and waxy appearance, hence the name procera, which means wax in latin. The flowers are pentamerous, small, cream or greenish white at the base and purple violet at the extremity of the lobes. The fruit is a fleshy and inflated, up to 10 cm or more in diameter. Calotropis is also used as fodder. Young pods, senescing leaves and flowers can be fed to goats, camels, and sheep (more rarely to cattle) in times of scarcity.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.feedipedia.org](http://www.feedipedia.org)



Feed no. 54

*Commelina benghalensis* (Bengal Dayflower)



Source: Wikipedia



Source: Wikimedia



Source: Wikimedia

**Scientific Name:** *Commelina benghalensis*

**Synonyms:** *Commelina canescens*, *Commelina cucullata*, *Commelina hirsuta*

**Common Name (Eng.):** Bengal Dayflower

**Local Name:** Bengal Dayflower

**Family:** Commelinaceae

### Description

Bengal Dayflower is a diffuse herb, rooting at lower nodes, rootstock with self-pollinating flowers. Leaves are 3-5 x 2-3.5 cm, ovate or elliptic-ovate, base rounded or almost flat, tip blunt or pointed, velvet-hairy, margin frilly, stalk up to 8 mm long, sheath up to 1.5 cm long, tip with rusty hairs. Spathe is about 1.5 cm across, funnel-shaped, flat at apex, velvet-hairy. Sepals are nearly equal, about 2.5 mm long, outer ones linear, inner ones orbicular. Petals are blue, larger ones about 4 x 4.5 mm, broadly ovate. Stamens are 3, staminodes 2, ovary up to 1mm long. Capsule is up to 5 mm long, ellipsoid, 3-celled. Seeds are 5, pitted. Bengal Dayflower is a wide-ranging plant, being native to tropical and subtropical Asia and Africa, an area otherwise known as the paleo tropics.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.feedipedia.org](http://www.feedipedia.org)

Feed no. 55

*Convolvulus pluricaulis* (Prostrate Bindweed; Sireen, Dodak)



Source: [www.101herbs.com](http://www.101herbs.com)



Source: [www.floraofqatar.com](http://www.floraofqatar.com)



Source: [www.floraofqatar.com](http://www.floraofqatar.com)

**Scientific Name:** *Convolvulus pluricaulis*

**Synonyms:** *Convolvulus microphyllous*, *Convolvulus parviflorus*, *Convolvulus prostratus*

**Common Name (Eng):** Prostrate Bindweed

**Local Name:** Sireen, Dodak

**Family:** Convolvulaceae

### Description

Dodak is an indigenous plant commonly mentioned in Ayurveda, as a rasayana which is mainly advocated for use in mental stimulation and rejuvenation therapy. Dodak is a prostrate, spreading, perennial, wild herb commonly found on sandy or rocky ground under xerophytic conditions in northern India. The species is marked by great morphological variability especially in size of the flower. Stems are ascending or prostrate, 10-40 cm long, densely velvety with appressed to spreading hairs. Leaves are nearly stalkless, linear to oblong, lance shaped or inverted-lance shaped, 0.8-3 cm long, 1.5-6 mm broad, wedge-shaped at the base, pointed to blunt at the tip, velvety to hairy. Flowers are borne in 1-3-flowered cymes which are carried on stalks up to 2-3 cm long but often much shorter or absent. Bracts are linear to lance shaped, about 3-7 mm long. Flower-stalks are up to 3 mm long. Sepals are lance shaped, long-pointed, 4-8 mm long, the 2 outer longer, hairy. Flowers are white or pale pink, 1-1.3 cm long, mid-petaline areas velvety. Style is about 2-4 mm long, stigma-lobes 3-5 mm long. Capsule is round, 3-4 mm in diameter. Seeds are 2-4, about 2-2.5 mm long, dark brown.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 56

*Convolvulus arvensis* (Field Bindweed; Wonwerhi)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [pakflora.com](http://pakflora.com)



**Scientific Name:** *Convolvulus arvensis*

**Synonyms:** *Convolvulus chinensis*

**Common Name (Eng.):** Bindweed, Field Bindweed

**Local Name:** Wonwerhi

**Family:** Convolvulaceae

### Description

This prolific, persistent and universal plant is considered a weed and is despised by human beings, who spend long, fruitless hours attempting to exterminate it. Its success can be partly attributed to its root system, with its extensive and deeply descending network of rhizomes, that can penetrate the earth up to a depth of 6 m, and its seeds, which can live in the soil for up to 50 years before germinating. Petals fused together to form a flower having the shape of a trumpet, hence that starts as a narrow tube, but widens into a flared mouth, where the petals often turn slightly back.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.feedipedia.org](http://www.feedipedia.org)



Feed no. 59

*Cordia rothii* (Grey-leaved saucer berry; Goondi)



Source: [www.prota4u.org](http://www.prota4u.org)



Source: [tropical.theferns.info](http://tropical.theferns.info)

**Scientific Name:** *Cordia rothii*

**Synonyms:** *Cordia sinensis*

**Common Name (Eng.):** Grey-leaved saucer berry, Grey-leaved cordia, Marer, Mnya mate, Mkamasi

**Local Name:** Goondi

**Family:** Convolvulaceae

### Description

*C. sinensis* exhibits a range of growth forms, from low shrub to a multi-stemmed tree up to 12m in height. The stem bark is brown, to cream brown. Flowers are white or cream in colour. The fruit is conical, orange or red with a fleshy, viscid pulp overlying a 1-4 large seeds. Shrub or small tree. Leaves opposite, sub opposite or alternate, oblong to obovate, greyish-green with pale hairs on both surfaces; margins entire or with widely spaced teeth on the apical half. Flowers in terminal clusters, white, the calyx lobes covered in soft rusty hairs. Fruit ovoid with a long tip, embedded in the persistent calyx, orange-red when mature.

### Sources

#### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)

Feed no. 60

*Cressa cretica* (Rudravanti, Littoral bind weed; Bimbo)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)

**Scientific Name:** *Cressa cretica*

**Synonyms:** None

**Common Name (Eng.):** Rudravanti, Littoral bind weed

**Local Name:** Bimbo

**Family:** Convolvulaceae

### **Description**

Rudravanti is a shrubby, diffuse herb, a few cm to 30 cm high, arising from a woody perennial root-stock. Numerous stalk less leaves are very small, ovate, acute tipped, hairy or ashy-velvety. Flowers are small, white or pink, nearly stalk less in upper leaf axils, forming a many-flowered head. Sepals are 5, flower is funnel-shaped, and stamens protrude out of the flower. Flowering: December-February.

### **Medicinal Uses**

According to Ayurveda, it is bitter, pungent, rough and hot in properties. The whole plant is used for medicinal purposes. It is useful herb for asthma, bronchitis, dyspepsia, flatulence, colic, anorexia, anemia, diabetes and skin disease.

### **Sources**

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 62

*Cyamopsis tetragonoloba* (Cluster Bean; Guar)



Source: Wikipedia



Source: www.ipmimages.org



Source: www.alamy.com



**Scientific Name:** *Cyamopsis tetragonoloba*

**Synonyms:** *Cyamopsis psoraloides*, *Dolichos fabæformis*, *Dolichos psoraloides*, *Psoralea tetragonoloba*

**Common Name (Eng.):** Cluster Bean, Guar bean

**Local Name:** Guar

**Family:** Fabaceae

### Description

The guar bean or cluster bean is an annual legume and the source of guar gum. A bushy, upright herb reaching up to 3 m in height. It has a vigorous root system. The stiff branches have white hairs and trifoliate leaves. The flowers are white or pink and the pods are straight, hairy, pale green and up to 10 cm long. It is grown for gum production. The young tender pods can be eaten as vegetables and the seeds are used as livestock feed. The plant is also grown as a green manure or used as fodder. Seed flour is used to improve the strength of paper and stamps or in textile sizing and as a thickener in ice creams and salad dressings. A water-soluble natural resin is also obtained from the seeds and is used in the food, paper, mining and petroleum industries.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)



Feed no. 63

*Cymbopogon schoenanthus* (Camel grass; Chitagha)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)

**Scientific Name:** *Cymbopogon schoenanthus*

**Synonyms:** *Andropogon schoenanthus*, *Andropogon ivarancusa*

**Common Name (Eng.):** Camel grass, Fever grass, West Indian lemon grass, Camel's hay

**Local Name:** Chitagha

**Family:** Poaceae

### Description

A compact tufted perennial grass with culms 60–90 cm high; on dry stony ground of sub-desert bushland: represented by two subspecies: *ssp. proximus* (Hochst.) Maire & Weiler common throughout the whole Region, and *ssp. schoenanthus*, of N Africa, the Orient and India and occasionally recorded in Mali, Niger and Ghana. Subspecies *schoenanthus* is one of the traditional drug plants of the ancient Mediterranean philosophers.

### Sources

- [www.wikipedia.org](http://www.wikipedia.org)
- [www.arkive.org](http://www.arkive.org)
- [www.plants.jstor.org](http://www.plants.jstor.org)

Feed no. 65

*Cynodon dactylon* (Couch grass; Khabble/Dub)



Source: pakflora.com



Source: pakflora.com

**Scientific Name:** *Cynodon dactylon*

**Synonyms:** *Chloris cynodon*, *Cynodon aristulatus*, *Cynodon decipiens*

**Common Name (Eng.):** Dhoob, Bermuda grass, Bahama grass, Devil's grass, Couch grass

**Local Name:** Khabble/Dub

**Family:** Poaceae

### Description

A fine to robust stoloniferous perennial, mostly with rhizomes. Rhizomes can penetrate 40-50 cm in clay soil and 70-80 cm in sand. Foliage dense, 10-40 cm tall (rarely to 90 cm); leaf blades glabrous or sparsely pubescent, often glaucous, with minutely scabrous margins, 3-15 cm long and 2-4 mm wide; ligule a dense row of short hairs on a membranous rim, 0.2 mm long with tuft of longer hairs either end (cf. membranous ligule in *Digitaria*). Inflorescence a digitate panicle, comprising (2-) 4-5 (-7) racemes (in robust forms up to 10 racemes, sometimes in 2 whorls), 1.5-8 cm long. Spikelets 2-3 mm long; caryopses ovoid, about 1.5 mm long, yellow to reddish; 3-4.5 million seeds/kg.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.wikipedia.com](http://www.wikipedia.com)



Feed no. 66

*Cyperus rotundus* (Java grass, nut grass)



Source: Wikipedia



Source: Wikipedia

**Scientific Name:** *Cyperus rotundus*

**Synonyms:** *Cyperus olivaris*, *Pycnus rotundus*

**Common Name (Eng.):** Java grass, nut grass, purple nut sedge or purple nut sedge,

**Local Name:** Nut grass

**Family:** Cyperaceae

### Description

The nut-grass (*Cyperus rotundus*) is a slender, erect, perennial sedge which spreads by means of a fibrous root system. Its slender, underground stems, known as rhizomes, are initially white, fleshy and covered with scaly, modified leaves, but become brown and woody with age. The stems of the nut-grass are smooth and erect, usually reaching around 30 to 40 centimeters in height, and are triangular in cross-section. The leaves originate from the base of the plant and are arranged on the stem in groups of three. They are smooth, shiny and dark green, with a grooved upper surface and a sharp tip, and are long and narrow, generally measuring up to 20 to 30 centimeters in length and 0.2 to 1 centimeters in width

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.arkive.org](http://www.arkive.org)



Feed no. 68

*Dactyloctenium aegyptium* (Egyptian crowfoot grass; Madhana)



Source: [www.jircas.com](http://www.jircas.com)



Source: [www.oisat.org](http://www.oisat.org)

**Scientific Name:** *Dactyloctenium aegyptium*

**Synonyms:** *Eleusine aegyptia*, *Cynosurus aegyptius*

**Common Name (Eng.):** Egyptian crowfoot grass

**Local Name:** Madhana

**Family:** Poaceae

### Description

Annual; culms up to 70(100) cm high, usually geniculately ascending and rooting at the lower nodes, frequently shortly stoloniferous and mat-forming, less often erect. Leaf-blades flat, 3-25 cm long, 2.5-7.5 mm wide, papillose-hispid especially along the margins. Inflorescence composed of (1)3-9 linear to narrowly oblong spikes 1.2-6.5 cm long. Spikelets 3-4-flowered, broadly ovate, 3.5-4.5 mm long; glumes subequal, 1.5-2.2 mm long, the lower lanceolate in profile with a thick scabrid keel, the upper elliptic to narrowly obovate in profile, the smooth keel extended into a stout divergent scabrid awn half to twice as long as the glume; lemmas narrowly ovate to ovate in profile, 2.6-4 mm long, the keel gibbous, concave and scabrid above the middle and often extended into a stout cusp or mucro up to 1 mm long; palea-keels winged or wingless; anthers 0.25-0.8 mm long. Grain about 1 mm long, broadly obovate to obtriangular in profile, transversely rugose.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.arkive.org](http://www.arkive.org)

Feed no. 69

*Dalbergia sissoo* (Indian Rosewood; Sheesham, Tali, Shawa)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [fwf.punjab.gov.pk](http://fwf.punjab.gov.pk)



Source: [www.mswn.com](http://www.mswn.com)

**Scientific Name:** *Dalbergia sissoo*

**Synonyms:** *Amerimnon sissoo*

**Common Name (Eng.):** Indian Rosewood

**Local Name:** Sheesham, Tali, Shawa

**Family:** Papilionaceae

### Description

Shisham is a medium to large deciduous tree, native to India, with a light crown which reproduces by seeds and suckers. It can grow up to a maximum of 25 m in height and 2 to 3 m in diameter but is usually smaller. Trunks are often crooked when grown in the open. Leaves are leathery, alternate, pinnately compound and about 15 cm long. Flowers are whitish to pink, fragrant, nearly sessile, up to 1.5 cm long and in dense clusters 5-10 cm in length. Pods are oblong, flat, thin, strap-like 4-8 cm long, 1 cm wide, and light brown. They contain 1-5 flat bean-shaped seeds 8-10 mm long. They have a long taproot and numerous surface roots which produce suckers. It is primarily found growing along riverbanks below 900 m elevation, but can range naturally up to 1300 m. Shisham is best known internationally as a premier timber species of the rosewood genus. However, Shisham is also an important fuel wood, shade, and shelter. With its multiple products, tolerance of light frosts and long dry seasons, this species deserves greater consideration for tree farming, reforestation and agro-forestry applications. After teak, it is the most important cultivated timber tree in India, planted on roadsides, and as a shade tree for tea plantations.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)



Feed no. 71

*Demostechyua bipinnata* (Salt reed-grass; Dhub)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)

**Scientific Name:** *Demostechyua bipinnata*

**Synonyms:** *Briza bipinnata*, *Eragrostis bipinnata*

**Common Name (Eng.):** Halfa grass, big cordgrass, salt reed-grass

**Local Name:** Dhub

**Family:** Papilionaceae

### Description

Harsh tussocky rhizomatous perennial; culms stout, up to 1.2 m high. Leaf-blades up to 65 cm long, 3.8-10.5 mm wide when unrolled; lower leaf-sheaths leathery, often densely flabellate towards the base of the culm. Inflorescence up to 60 cm long; spikes clustered or spaced, 14 cm long. Spikelets 3-17-flowered, narrowly ovate to linear-oblong, 3-10 mm long; lower glume 0.7-1.5 mm long, upper glume 1.1-2.0 mm long; lemmas straw-coloured or suffused with purple, 1.8-2.7 mm long.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.arkive.org](http://www.arkive.org)



Feed no. 73

*Dichanthium annulatum* (Bluestem, Hindi grass, Shed grass, Marvel grass; Palwan)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)



Source: [www.arkive.org](http://www.arkive.org)

**Scientific Name:** *Dichanthium annulatum*

**Synonyms:** *Andropogon annulatus*, *Dichanthium nodosum*

**Common Name (Eng.):** Bluestem, Diaz bluestem, Hindi grass, Shed grass, Marvel grass

**Local Name:** Palwan

**Family:** Poaceae

### Description

Perennial tussock, sometimes stoloniferous, with culms geniculately ascending, foliage to 80 cm and fertile tillers to about 1 m (rarely 1.8 m); pronounced annulus of radiating, 3-5 mm long white hairs on the nodes; leaf blade linear, to about 30 cm long and 2-7 mm wide, margins sparsely pubescent and scaberulous. Inflorescence a sub-digitate panicle, comprising 2-9 (-15) pale green or purplish racemes, each 3-7 cm long; geniculate, twisted awn 8-25 mm long arising from the upper lemma of the sessile spikelet. Caryopsis oblong to obovate, dorsally compressed, ca. 2 mm long (1.9 million/kg), although seed weight (sessile + pedicellate spikelet ) about 500,000/kg. Surface rooted, >90% of roots in topsoil. Distinguished from *D. caricosum* in having nodal annulus , and from *D. aristatum* in lacking the short, dense pubescence on the peduncle immediately below the lowest raceme .

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.arkive.org](http://www.arkive.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)

Feed no. 74

*Digera arvensis* (False Amaranth; Tandala)



Source: gardeningpakistan.com



Source: gardeningpakistan.com

**Scientific Name:** *Digera arvensis*

**Synonyms:** *Achyranthes alternifolia*, *Chamissoa muricata*, *Digera muricata*

**Common Name (Eng.):** False Amaranth

**Local Name:** Tandala

**Family:** Amaranthaceae

### Description

False Amaranth is an annual herb, growing to 20-70 cm tall. It can be seen growing wild in waste areas. Stems are simple or branched from the base, nearly hairless. Alternately arranged leaves, 1-9 cm long and 0.2-5 cm broad, are narrowly linear to broadly ovate. Leaf stalks are long, up to 5 cm, base is narrowed, and the tip pointed. Flowers are borne on slender spike-like racemes, which can be as large as 30 cm long. The racemes are on a stalk that can be up to 14 cm long. Flowers are hairless, white mixed with pink to carmine or red, usually becoming greenish-white in fruit. Fruit sub globose, slightly compressed, 2-2.5 mm, bluntly ribbed along each side, surmounted by a thick rim. In India, the young leaves and shoots of False Amaranth are made into curries, or the entire plant is boiled and seasoned. Flowering: August-September.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 76

*Digitaria sp.* (crab grass, finger-grass)



Source: Wikipedia



Source: [luirig.altervista.org](http://luirig.altervista.org)



Source: [www.nature-museum.net](http://www.nature-museum.net)



**Scientific Name:** *Digitaria sp.*

**Synonyms:** *Sanguinella, Acicarpa, Sanguinaria*

**Common Name (Eng.):** crab grass, finger-grass

**Local Name:** crab grass

**Family:** Poaceae

### **Description**

This grass is a summer annual about 1-3' long. It develops several branching culms at the base; the lower branches of the culms tend to sprawl across the ground, while their upper branches are more erect. The culms are light green, terete, and glabrous, although they are mostly covered by the sheaths. The blades of the alternate leaves are up to 6" long and nearly ½" across; they are dull light green, entire or slightly curly along the margins, and often hairy toward the base. The sheaths are light green, finely ribbed, shiny or dull, and hairy. Each upper culm terminates in 2-10 finger-like racemes up to 8" long; these racemes spread outward from a short stalk and they are narrow and straight. The central stalk (rachis) of each raceme is light green, flattened, and about 1 mm. across. There are many pairs of one-flowered spikelets along the length of each raceme; they occur along only one side of the flattened stalk. Each ovoid spikelet is light green to brownish green, flattened, and about 3 mm. long. It consists of 2 lemmas about 3 mm. long and 2 glumes; one glume is about 1/3 to 1/2 as long as the lemmas, while the other glume is tiny and insignificant. The lemmas enclose a single developing grain. The blooming period occurs from mid-summer to early fall. Each grain is ovoid and flattened like the lemmas. The root system is fibrous; sometimes the nodes of the lower culms will form new fibrous roots. Common Crabgrass often forms colonies.



Feed no. 79

*Diplanche fusca* (Brown beetle Grass)



Source: Wikimedia



Source: Wikimedia



Source: Wikimedia

**Scientific Name:** *Diplanche fusca*

**Synonyms:** *None*

**Common Name (Eng.):** Brown beetle Grass

**Local Name:** Brown beetle Grass

**Family:** Poaceae

### Description

Aquatic or semi-aquatic rhizomatous perennial; culms 60-150 cm high, rooting and branching from the lower nodes. Leaf-blades tough, linear with filiform tips, 25-55 cm long, up to 5 mm wide, inrolled or rarely flat, scabrid, grey-green with a broad white central nerve. Inflorescence 20-35 cm long; racemes 10-30, slender, 7-15 cm long, more or less straight. Spikelets 6-11-flowered; narrowly elliptic to elliptic, 8-15 mm long, slightly overlapping, grey-green or olive-green; glumes keeled, scabrid on the keels, the lower lanceolate to narrowly lanceolate, 2.1-4.6 mm long, acute or acuminate, the upper narrowly oblong, 3.3-7.4 mm long, acute or obtuse and minutely mucronate; lemmas narrowly oblong, 3.2-5.9 mm long, pilose on the lower part of the nerves, 2- or more toothed and mucronate or shortly awned from the sinus (the awn 0.3-1.6 mm long). Caryopsis dorso-ventrally flattened.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.arkive.org](http://www.arkive.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)

Feed no. 81

*Echinochloa colonum* (Jungle rice grass; Swank)



Source: Wikipedia



Source: gardeningpakistan.com



Source: Wikipedia

**Scientific Name:** *Echinochloa colonum*

**Synonyms:** *Panicum colonum*

**Common Name (Eng.):** Jungle rice, awnless barnyard grass, corn panic grass, deccan grass, jungle rice grass

**Local Name:** Swank

**Family:** Poaceae

### Description

Jungle rice (*Echinochloa colona* (L.) is an annual (rarely perennial) grass, 30-100 cm high. It is green to purple, tufted and shortly stoloniferous. Its culms are glabrous, cylindrical, erect and decumbent. They are red purple at their base and can root at the lower nodes. The leaves are flat, 10 to 25 cm long, 3-7 mm wide, sometimes tinged with red at their base. The inflorescence is green to purple, 6-12 cm long and bears 4-8 short racemes on the main axis. The sessile awn less spikelets are arranged in 4 rows on one side of the racemes. It has also been cultivated as a cereal in Egypt and the seeds can be cooked or ground to make flour and used as a mush or porridge.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.arkive.org](http://www.arkive.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.feedipedia.org](http://www.feedipedia.org)



Feed no. 82

*Elensuine compressa* (Phalwan, Chimbar)



Source: [plants.usda.gov](http://plants.usda.gov)

**Scientific Name:** *Elensuine compressa*

**Synonyms:** *Panicum compressum*

**Common Name (Eng.):** Phalwan, Chimbar

**Local Name:** Phalwan, Chimbar

**Family:** Poaceae

### Description

Sprawling stoloniferous perennial; culms prostrate or geniculately ascending, up to 30 cm high, rarely forming clumps up to 90 cm high. Leaf-blades (1)2.5-15 cm long, 2-3 mm wide, glaucous. Spikes 1.5-4.5 cm long, clustered at the top of the culm. Spikelets 4-8-flowered, 4.5-8 mm long; lower glume 2.2-23 mm long; upper glume 3.5-4.7 mm long; lemmas 3.8-5.4 mm long.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.arkive.org](http://www.arkive.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.feedipedia.org](http://www.feedipedia.org)



Feed no. 83

*Elionurus hirsutus* (Sour grass; Gorkah, Sevan)



Source: [ausgrass2.myspecies.info](http://ausgrass2.myspecies.info)

**Scientific Name:** *Elionurus hirsutus*

**Synonyms:** *Lasiurus ecaudatus*, *Saccharum hirsutum*

**Common Name (Eng.):** Sour grass

**Local Name:** Gorkah, sevan

**Family:** Poaceae

### Description

Perennial; culms often woody below, up to 90 cm high, simple or suffruticose, erect from a thick woody rhizome covered with firm, imbricate, often silky cataphylls, these often decaying into stiff parallel fibres. Leaf-blades firm, flat or convolute, up to 30 cm long and 6 mm wide, glaucous. Racemes up to 10 cm long, silky vinous from internodes, pedicels and glumes. Sessile spikelet 6-13 mm long; lower glume lanceolate, often caudate, bidentate at the tip with divergent teeth, often spreading horizontally at maturity. Pedicelled spikelet usually 5-7 mm long, the pedicel free.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.efloras.org](http://www.efloras.org)
- [www.tropicalforages.info](http://www.tropicalforages.info)

Feed no. 84

*Enicostemma littorale* (Quin)



Source: [www.matxin.co.in](http://www.matxin.co.in)



Source: [www.slideshare.net](http://www.slideshare.net)



Source: [www.slideshare.net](http://www.slideshare.net)

**Scientific Name:** *Enicostemma littorale*

**Synonyms:**

**Common Name (Eng.):** Quin

**Local Name:** Quin

**Family:** Gentianaceae

### Description

They are perennial herbs, erect to creeping, glabrous, often succulent; Stems terete to angled, often winged. Leaves all cauline, sessile, ovate to lanceolate or linear. Inflorescences axillary, densely clustered. Small, sessile or almost sessile flowers, with an underlying linear bract; perianth and androecium five-match; calyx tube campanulate or urceolado summarily; Wolves lanceolate corolla; stamens inserted near the middle of corolla tube with a small flake 2 caps at the base of each threadlike filament, the introrsas anthers oblong, erect, apiculate and pollen in monads; ovary 1-locular with a placenta slightly projected inward, short style, capitate stigma. Capsules 2-septidicamente you valvadas and wrapped by Marcescent perianth; numerous seeds, small, foveoladas.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.efloras.org](http://www.efloras.org)

Feed no. 85

*Eragrostis superba* (Sawtooth grass)



*Source: zambiaflora.com*



*Source: zambiaflora.com*



*Source: zambiaflora.com*



**Scientific Name:** *Eragrostis superba*

**Synonyms:** *Eragrostis platystachys*, *Eragrostis elata*

**Common Name (Eng.):** Sawtooth grass

**Local Name:** Sawtooth grass

**Family:** Poaceae

### Description

Caespitose perennial; culms 20-120 cm high, erect. Leaf-blades flat, up to 40 cm long and 10 mm wide, firm, glaucous. Panicle lanceolate to broadly ovate, 10-30 cm long; primary branches stout, usually with secondary branchlets but sometimes almost raceme-like, the spikelets on short pedicles 1-5 mm long. Spikelets 6-28 (-47)-flowered, narrowly ovate to suborbicular, 6-16(23) mm long, 3-10 mm wide, strongly flattened, green tinged with brownish purple, disarticulating below the glumes at maturity and falling entire; glumes lanceolate in side-view, subequal, 24 mm long; lemma narrowly ovate in side-view, 3-4.5 mm long, strongly keeled, the keel scaberulous, narrowly obtuse; palea 2-nerved, the nerves thickened, cartilaginous and bearing a hyaline minutely ciliate wing; anthers 3, 2 mm long. Caryopsis ellipsoid, 1-1.5 mm long.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.efloras.org](http://www.efloras.org)

Feed no. 86

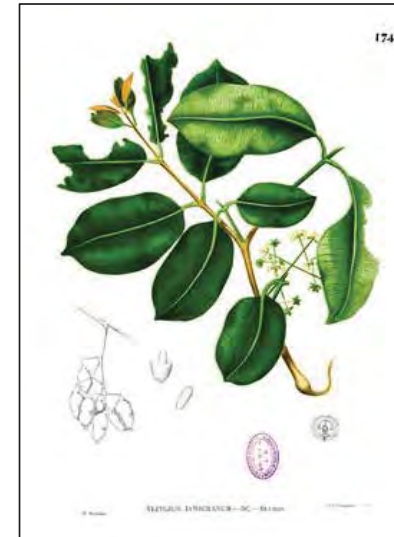
*Eugenia jambolana* (Black Berry; Jaman, Jamoon)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.telegraphindia.com](http://www.telegraphindia.com)



**Scientific Name:** *Syzygium cumini*

**Synonyms:** *Eugenia jambolana*

**Common Name (Eng.):** Black Berry

**Local Name:** Jaman, Jamoon

**Family:** Myrtaceae

### Description

The evergreen jamun plant is originally from Indonesia and India. Indian mythology describes the Indian subcontinent as an island, 'situated in the centre of the world', called Jambudweep. Because of a majority of Jamun (black berry) trees, this island was named as Jambudweep. An evergreen tropical tree, 50 to 100 ft. tall, with oblong opposite leaves that are smooth, glossy and having a turpentine smell. Jamun has fragrant white flowers in branched clusters at stem tips and purplish-black oval edible berries. The leaves are antibacterial, and are used for strengthening the teeth and gums. The fruit and seeds are sweet, acrid, sour, tonic, and cooling, and are used in diabetes, diarrhoea and ringworm. The bark is astringent, sweet sour, diuretic, digestive and anthelmintic.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 87

*Eulaliopsis binate* (Babui; Bhabbar, Sabai, Gor-kah)



Source: Wikimedia

**Scientific Name:** *Eulaliopsis binata*

**Synonyms:** *Andropogon binatus*, *Andropogon notopogon*

**Common Name (Eng.):** Babui

**Local Name:** Bhabbar, Sabai, Gor-kah

**Family:** Poaceae

### Description

Tufted perennial; basal sheaths woolly tomentose with whitish hairs; culms 45-90 cm high. Leaf-blades mostly basal, up to 60 cm long, 2-3 mm wide, glabrous, sometimes villous towards the base, hairy at the mouth of the sheath, rigid, suberect, folded or convolute. Racemes 2-4 cm long, rufously hairy. Spikelets narrowly elliptic-oblong, 3.5-4.5 mm long; lower glume rufously hairy on the margins and with tufts of hair in the middle across the back; upper glume similarly hairy on the margins and with a single tuft in the middle on the back; lower floret male with well-developed lemma and palea; upper lemma with an awn 6-9 mm long.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.eol.org](http://www.eol.org)
- [www.efloras.org](http://www.efloras.org)



Feed no. 88

*Euphorbia helioscopia* (Sun Spurge; Gandi Booti, Dodal booti)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [jkmpic.blogspot.com](http://jkmpic.blogspot.com)

**Scientific Name:** *Euphorbia helioscopia*

**Synonyms:**

**Common Name (Eng.):** Sun Spurge

**Local Name:** Gandi Booti, Dodal booti

**Family:** Euphorbiaceae

### Description

Sun Spurge is an annual plant growing in ploughed land and disturbed ground. It grows to 10-50 cm tall, with a single, erect, hairless stem, branching toward the top. Leaves are obovate, broadest near the tip, 1.5-3 cm long, with a finely toothed margin. The flowers are small, yellow- green, with 2-5 basal bracts similar to the leaves but yellower. It is highly poisonous. Active ingredients are extracted from it for use in pharmaceutical industry. Sun Spurge is found in the Himalayas, from Afghanistan to Himachal Pradesh, at altitudes of 300-1800 m. Flowering: April-June.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 89

*Euphorbia hirta* (Asthma weed, Common spurge, Cats hair; Khaerol)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.prota4u.org](http://www.prota4u.org)

**Scientific Name:** *Euphorbia hirta*

**Synonyms:** none

**Common Name (Eng.):** Asthma weed, Common spurge, Cats hair

**Local Name:** Khaerol

**Family:** Euphorbiaceae

### Description

Asthma Weed is a slender-stemmed, annual hairy plant with many branches, growing up to 40 cm. tall, reddish or purplish in color. Leaves are opposite, elliptic-oblong to oblong-lacelike, 1-2.5 cm long, blotched with purple in the middle, toothed at the edge. Flowers, purplish to greenish in color, dense, axillary, short-stalked clusters or crowded cymes, about 1 mm in length. Capsules are broadly ovoid, hairy, three-angled, about 1.5 cm.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 90

*Euphorbia microphylla* (Prostrate Sandmat, Red euphorbia, Prostrate Spurge; Dodhak)



Source: [www.eflorakkl.in](http://www.eflorakkl.in)



Source: [www.eflorakkl.in](http://www.eflorakkl.in)



**Scientific Name:** *Euphorbia microphylla*

**Synonyms:** *Euphorbia prostrata*

**Common Name (Eng.):** Prostrate Sandmat, Red euphorbia, Prostrate Spurge

**Local Name:** Dodhak

**Family:** Euphorbiaceae

### Description

Prostrate Spurge is a species of euphorbia, native to the West Indies and certain parts of South America, but it is widely naturalized in many other parts of the world, where it can be found in varied habitat types and in many areas grows as a roadside weed. It is an annual herb producing slender prostrate stems up to about 20 cm long, sometimes purple-tinted in color. The oval-shaped leaves are up to 1 cm long with finely toothed edges. The inflorescence is a cyathium less than 2 mm wide, with white petal-like appendages surrounding the actual flowers. There are four male flowers and a single female flower, the latter developing into a lobed, hairy fruit 1-2 mm wide.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 91

*Eurycles amboinensis* (Cardwell lily; Tambal)



Source: Wikipedia



Source: Wikipedia

**Scientific Name:** *Eurycles amboinensis*

**Synonyms:** *Proiphys amboinensis*, *Eurycles amboinensis*, *Eurycles sylvestris*

**Common Name (Eng.):** Cardwell lily

**Local Name:** Tambal

**Family:** Amaryllidaceae

### Description

Cardwell Lily is an attractive perennial bulb plant which occurs naturally in the rainforest and coastal areas of Western Australia and South-East Asia. The large kidney-shaped leaves are glossy with symmetrically curved venation. They are 20-30 cm long and 15-35 cm wide and carried on long stems 15-60 cm long. The white flowers which occur in summer have a yellow throat and are produced on stalks which can vary from 15-90 cm long. Cardwell Lily is surprising not well known, despite it being an attractive and not difficult to grow plant.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 92

*Withania somnifera* (Indian Ginseng, Poison Gooseberry, Winter Cherry; Ashwagandha)



Source: [mlb-community.org](http://mlb-community.org)



Source: [mlb-community.org](http://mlb-community.org)



Source: [mlb-community.org](http://mlb-community.org)

**Scientific Name:** *Withania somnifera*

**Synonyms:** *Physalis somnifera*, *Withania kansuensis*, *Withania microphysalis*

**Common Name (Eng.):** Indian Ginseng, Poison Gooseberry, Winter Cherry

**Local Name:** Ashwagandha

**Family:** Solanaceae

### Description

Ashwagandha, is native to drier parts of India. It is a perennial herb that reaches about 6 feet in nature. In the greenhouse they flower in the late fall and winter. Orange fruits in persistent papery calyxes follow the small greenish flowers. Ashwagandha is propagated by division, cuttings or seed. Seed is the best way to propagate them. Seed sown on moist sand will germinate in 14-21 days at 20° C.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)



Feed no. 95

*Ficus benghalensis* (Banyan tree; Borh)



*Source: treesplanet.blogspot.com*

**Scientific Name:** *Ficus benghalensis*

**Synonyms:** None

**Common Name (Eng.):** Banyan tree

**Local Name:** Borh

**Family:** Moraceae

### Description

Borh or Banyan, a remarkable tree of Pakistan and tropical Africa sends down from its branches great numbers of shoots, which take root and become new trunks. A single tree thus may spread over a large area and look like a small forest. This tree is considered to be sacred in some places in India. The banyan often grows to a height of over 21 meters and lives through many ages. Perhaps the most amazing part of this extraordinary tree is its flower. What we think of as the fruit is really a hollow, flower-bearing structure called a cyconia. The inside it is lined with hundreds of male and female flowers. The males carry pollen and the females bear seeds. Various parts of this plant are considered medicinal. The bark of this therapeutically valuable tree is attributed with tonic, astringent, cooling and diuretic properties in Ayurveda.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 96

*Ficus glomerata* (Cluster fig; Goolar)



Source: Wikipedia



Source: Wikipedia

**Scientific Name:** *Ficus glomerata*

**Synonyms:** *Ficus lucescens*, *Ficus racemosa*

**Common Name (Eng.):** Cluster fig

**Local Name:** Goolar

**Family:** Moraceae

### Description

Goolar is an attractive fig tree with a crooked trunk and a spreading crown. Unlike the banyan, it has no aerial roots. The most distinctive aspect of this tree is the red, furry figs in short clusters, which grow directly out of the trunk of the tree. Goolar is a tree commonly found in cities and towns. It has evergreen leaves, if it is close to a water source. Otherwise it sheds its leaves in January. Figs have been traditionally used by children to play. Thin sticks can be joined by inserting them in goolar figs to make interesting shapes.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)



Feed no. 98

*Ficus religiosa* (Sacred Fig; Peepal, Pippal)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [toptropicals.com](http://toptropicals.com)



Source: [www.pakflora.com](http://www.pakflora.com)



**Scientific Name:** *Ficus religiosa*

**Synonyms:** *Ficus caudata*, *Ficus peepul*, *Urostigma religiosum*

**Common Name (Eng.):** Sacred Fig

**Local Name:** Peepal, Pippal

**Family:** Moraceae

### Description

Peepal is unrivalled for its antiquity and religious significance. No other tree is claimed to have such long life - one in Sri Lanka, said to have been planted in the year 288 B.C. A grand peepal tree is a perfect shade tree, and village meetings are often conducted under a peepal tree. It is a large deciduous tree with a pale stem often appearing fluted on account of the numerous roots which have fused with the stem. Leaves leathery 4-8 inches long by 3-5 inches wide, somewhat egg-shaped or rounded, tailed at the tip and heart-shaped at the base, or sometimes rounded. The young leaves are frequently pink, change to copper and finally to green. Flowers minute within the receptacle. Fruit is a fig.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 100

*Fraxinus hookeri* (Ash; Sum Ash)



Source: [www.botanicayjardines.com](http://www.botanicayjardines.com)

**Scientific Name:** *Fraxinus hookeri*

**Synonyms:** *Fraxinus excelsior*

**Common Name (Eng.):** Ash

**Local Name:** Sum Ash

**Family:** Oleaceae

### Description

Trees large. Leaves opposite or in whorls of three, 20-35 cm long; leaflets 5-9, 10-15 cm long, 3-6 cm broad, elliptic to obovate, acuminate, entire to slightly crenate or serrulate especially the upper portion, dark green above, paler beneath, slightly pubescent along midrib and prominent nerves, subsessile. Inflorescence decussate on branchlets of the previous year. Calyx and corolla lacking. Anthers sessile, greatly exceeded by pistil. Stigma divided into 2 lobes of c. 0.5 mm length. Samarae lanceolate, 3-4 cm long, 6-8 mm broad, in pendulous decussate panicles, rachis 4-8 cm long. This species has been collected from Kashmir and Swat valley above Bahrein and is to be expected in the other parts of the Himalayas in Pakistan. In a number of places the tree has probably been exterminated. The wood is highly valued for tools, rifle butts, etc. Young branches are often cut and used as fodder.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 101

*Glycine max* (Soybean; Soya bean)



Source: [knowpulse](#)



Source: [Wikipedia](#)



Source: [www.dreamstime.com](http://www.dreamstime.com)

**Scientific Name:** *Glycine max*

**Synonyms:** *Dolichos sofa*, *Phaseolus max*, *Soja soja*

**Common Name (Eng.):** Soya Bean, Soybean

**Local Name:** Soybean

**Family:** Fabaceae

### Description

Soya bean is a legume native to East Asia, widely grown for its edible bean which has numerous uses. Soy varies in growth and habit. The height of the plant varies from less than 0.2 to 2.0 m. The pods, stems, and leaves are covered with fine brown or gray hairs. The leaves are trifoliolate, having three to four leaflets per leaf, and the leaflets are 6-15 cm long and 2-7 cm broad. The leaves fall before the seeds are mature. The inconspicuous, self-fertile flowers are borne in the axil of the leaf and are white, pink or purple. The fruit is a hairy pod that grows in clusters of three to five, each pod is 3-8 cm long and usually contains two to four (rarely more) seeds 5-11 mm in diameter. For human consumption, soybeans must be cooked with "wet" heat to destroy the trypsin inhibitors (serine protease inhibitors). Raw soybeans, including the immature green form, are toxic to all monogastric animals. Soy protein products can be good substitutes for animal products because, unlike some other beans, soy offers a 'complete' protein profile. Soya Bean is native to E Asia, widely naturalized.

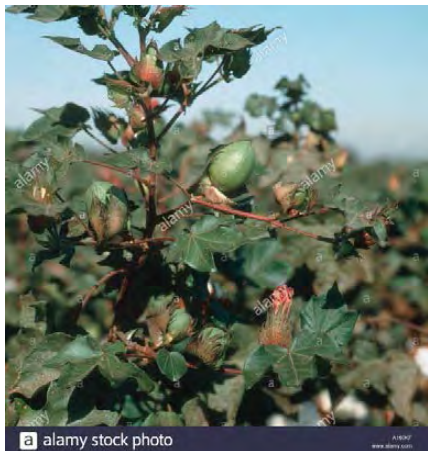
### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)



Feed no. 102

*Gossypium spp* (Upland Cotton, Mexican Cotton; Kapas, Kapah)



Source: [www.alamy.com](http://www.alamy.com)



Source: [www.photoree.com](http://www.photoree.com)



Source: [www.aliexpress.com](http://www.aliexpress.com)

**Scientific Name:** *Gossypium hirsutum*

**Synonyms:** *Gossypium mexicanum*, *Gossypium religiosum*

**Common Name (Eng.):** Upland Cotton, Mexican Cotton

**Local Name:** Kapas, Kapah

**Family:** Malvaceae

### Description

Mexican Cotton is a coarse subshrub native to Central America. In Indian climates, it is biennial or perennial and will grow to 5 feet tall. It has heart-shaped leaves that are 3-5 lobed reaching up to 6 inches across. Mexican Cotton blooms in summer when grown outside, but when grown in the greenhouse plants can bloom at any time of the year. The white to yellowish flowers are up to 3.5 inches across. They are followed by 1.5-inch-long fruits. Fruits are 3-5 celled with 5-11 seeds per cell producing copious lint and fuzz. The splitting capsules are well armed making it an uncomfortable plant to harvest by hand. Cotton plants have been grown the world over for centuries as the source of cotton fibers.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 103

*Helianthus spp* (Sunflower; Suraj Mukhi)



Source: [tribune.com.pk](http://tribune.com.pk)



Source: [feedipedia](http://feedipedia)

**Scientific Name:** *Helianthus annus*

**Synonyms:** *Helianthus aridus*, *Helianthus indicus*

**Common Name (Eng.):** Sunflower

**Local Name:** Suraj Mukhi

**Family:** Asteraceae

### Description

In Greek "helios" means sun and "anthos" means flower, thus Sunflower. The name is just apt for a plant that turns its flower to face directly into the sun as it passes and also looks like the sun in its yellow rays. *Helianthus annuus* is a highly variable species that is indigenous to North America. There are so many different-looking cultivars of sunflower that it's hard to make generalizations about the whole species. Most sunflowers are tall 8-15 ft (2.4-4.6 m); most have rough-hairy oval to heart shaped leaves; most have large flowerheads 8-12 in (20-30.5 cm) across; and most have yellow ray florets and purplish brown disk florets. The ray florets of sunflowers are sterile, and only the disk florets produce seeds. All the sunflower cultivars are fast-growing annuals, and many are rather rank coarse-textured plants. Sunflowers are easy to grow in any well-drained, neutral to slightly alkaline soil. Add lime if your soil is acidic.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 106

*Holiotropium* spp. (Common heliotrope; Neelni, Neelo)



Source: plants.ces



Source: www.wikiwand.com



Source: maltawildplants



**Scientific Name:** *Heliotropium spp*

**Synonyms:**

**Common Name (Eng.):** Common heliotrope

**Local Name:** Neelni, Neelo

**Family:** Boraginaceae

### Description

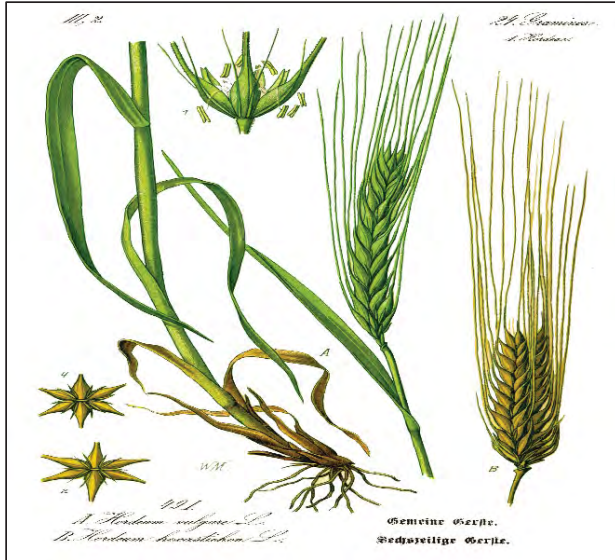
Heliotropium from Greek words Helios meaning sun and tropaios meaning turning back: turning towards the sun. For plants that have flowers that turn towards the sun, a characteristic of many species known as heliotropism. Flowers are small, blue or white, with 5 petals fused to form a tubular corolla with free lobes at the apex. Flowers arranged in strongly curled sprays which look like caterpillars! Stem and leaves covered with downy hairs. Leaves ovate, tapering at either end, and with smooth outer margins. Plant 6 to 30 inches in height. Plants establish quickly in fallows, stubbles and lightly grassed pastures, and is treated as a weed.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 108

*Hordeum vulgare* (Barley; Jao, Jav)



Source: Wikipedia



Source: www.prota4u.org

**Scientific Name:** *Hordeum vulgare*

**Synonyms:** *Hordeum aestivum*, *Hordeum bifarium*, *Hordeum caspicum*

**Common Name (Eng.):** Barley

**Local Name:** Jao, Jav

**Family:** Poaceae

### Description

Barley, *Hordeum vulgare*, is an edible annual grass in the family Poaceae grown as a cereal grain crop. It is a tall grass with a hairy stem which stands erect and produces spikelets at the head. The stem is made up of nodes and internodes. The internodes are solid, whereas the internodes are hollow. The stem supports the inflorescence, or spike, where the grain is produced. Barley seeds heads are cylindrical spikes composed of rachis each with 3 spikelets. Each spike produces 20–60 grains. Barley plants are freely tillering and typically possesses 1–6 stems. The tillers do not produce seed heads. Barley is an annual plant which is harvested each year and it can range in height from 80 to 100 cm (31.5–39.4 in). Barley may be referred to as spring barley or winter barley and it was first domesticated in the Fertile Crescent of the Middle East.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 109

*Hyperthenea hirta* (Thatching Grass; Harnah)



Source: [www.prota4u.org](http://www.prota4u.org)



Source: [www.prota4u.org](http://www.prota4u.org)

**Scientific Name:** *Hyparrhenia hirta*

**Synonyms:** *Andropogon hirtus*, *Andropogon collinus*

**Common Name (Eng.):** Thatching Grass

**Local Name:** Harnah

**Family:** Poaceae

### Description

This is a perennial grass forming clumps 30 centimeters to one-meter-tall with tough, dense bases sprouting from rhizomes. The inflorescence atop the wiry stem is a panicle of hairy spikelets with bent awns up to 3.5 cm long. The grass can grow in a variety of habitat types, in dry conditions, heavy, rocky, eroded soils, and disturbed areas.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)



Feed no. 110

*Lespedeza sericea* (Chinese bush-clover, Silky Bush-Clover; Morsi)



Source: Wikipedia



Source: Wikipedia

**Scientific Name:** *Lespedeza sericea*

**Synonyms:** *Lespedeza cuneata*, *Aspalathus cuneata*

**Common Name (Eng.):** Chinese bush-clover, Silky Bush-Clover

**Local Name:** Morsi

**Family:** Fabaceae

### Description

*Lespedeza cuneata* is a deciduous Shrub growing to 1 m (3ft 3in). It is frost tender. It is in flower from Aug to September, and the seeds ripen from Oct to November. The flowers are hermaphrodite (have both male and female organs) and are pollinated by Insects. It can fix Nitrogen. Suitable for: light (sandy) and medium (loamy) soils and prefers well-drained soil. Suitable pH: acid, neutral and basic (alkaline) soils. It cannot grow in the shade. It prefers moist soil.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)

Feed no. 112

*Leucaena leucocephala* (White Babool, Leucaena, Lead tree; Ipil Ipil)



Source: [fairdinkumseeds.com](http://fairdinkumseeds.com)

**Scientific Name:** *Leucaena leucocephala*

**Synonyms:** *Leucaena glauca*

**Common Name (Eng.):** Wild tamarind, White Babool, Leucaena, Lead tree

**Local Name:** Ipil Ipil

**Family:** Fabaceae

### Description

Leucaena is a fast growing, evergreen, thorn less shrub, reaching a height of 5 m (Hawaiian type) to 20 m (Hawaiian giant type). Leucaena is a long-lived perennial legume (around 23-year half-life in difficult conditions in Australia). It has a deep taproot and is highly branched. Leaves are bipinnate, bearing numerous leaflets 8 mm to 16 mm long. The inflorescence is a cream coloured globular shape producing clusters of flat brown pods, 13 to 18 mm long containing 15-30 seeds. Flowering and fruiting occur throughout the year. Leucaena is valuable for its wood, which is used to make good quality charcoal, small furniture and paper pulp. Its young shoots, young leaves and seeds may be used as a vegetable in human nutrition. Seeds can also be used as a substitute of coffee or as pieces of jewelry. Leucaena is one of the highest quality and most palatable fodder trees of the tropics.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.feedipedia.org](http://www.feedipedia.org)



Feed no. 113

*Linum usitatissimum* (Flax, Common flax, Flaxseed, Linseed; Alsi)



Source: agroAtlas



Source: agroAtlas



Source: agroAtlas



**Scientific Name:** *Linum usitatissimum*

**Synonyms:** *Linum crepitans*, *Linum humile*

**Common Name (Eng.):** Flax, Common flax, Flaxseed, Linseed

**Local Name:** Alsi

**Family:** Fabaceae

### Description

Several other species in the genus *Linum* are similar in appearance to *L. usitatissimum*, cultivated flax, including some that have similar blue flowers, and others with white, yellow, or red flowers.[4] Some of these are perennial plants, unlike *L. usitatissimum*, which is a plant. Cultivated flax plants grow to 1.2 m (3 ft. 11 in) tall, with slender stems. The leaves are glaucous green, slender lanceolate, 20–40 mm long, and 3 mm broad. The flowers are pure pale blue, 15–25 mm in diameter, with five petals. The fruit is a round, dry capsule 5–9 mm in diameter, containing several glossy brown seeds shaped like an apple pip, 4–7 mm long.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.feedipedia.org](http://www.feedipedia.org)

Feed no. 115

*Lolium multiflorum* (Perennial Ryegrass, English ryegrass; Rye Grass)



Source: [stephenville.tamu.edu](http://stephenville.tamu.edu)



Source: [landscaping.about.com](http://landscaping.about.com)



Source: [Wikipedia](https://en.wikipedia.org/wiki/Lolium_multiflorum)

**Scientific Name:** *Lolium multiflorum*

**Synonyms:** *None*

**Common Name (Eng.):** Perennial Ryegrass, English ryegrass

**Local Name:** Rye Grass

**Family:** Poaceae

### Description

Perennial Ryegrass plant is a low-growing, tufted, hairless grass, lacking stolons or rhizomes. The leaves are dark green, smooth and glossy on the lower surface, linear, with prominent parallel veins on the upper surface. The leaves are folded lengthwise in bud with a strong central keel, giving a flattened appearance. The ligule is very short and truncate, often difficult to see, and small white auricles grip the stem at the base of the leaf blade. Leaf sheaths at the base are usually tinged pink and hairless. Stems grow up to 90 cm. The inflorescence is unbranched, with spikelets on alternating sides edgewise-on to the stem. Each spikelet has only a single glume, on the side away from the stem, and multiple fertile Florets without awns. The Anthers are pale yellow. Flowering: May-July.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.feedipedia.org](http://www.feedipedia.org)

Feed no. 116

*Lomandra longifolia* (Basket grass, spiny-head mat-rush; Loonder grass)



Source: antzplants.com.au



Source: antzplants.com.au

**Scientific Name:** *Lomandra longifolia*

**Synonyms:** *Xerotes longifolia*

**Common Name (Eng.):** Basket grass, spiny-head mat-rush

**Local Name:** Loonder grass

**Family:** Asparagaceae

### Description

*Lomandra longifolia* is a perennial growing to 1 m (3ft 3in). The flowers are dioecious (individual flowers are either male or female, but only one sex is to be found on any one plant so both male and female plants must be grown if seed is required) and are pollinated by Beetles. Suitable for: light (sandy), medium (loamy) and heavy (clay) soils. Suitable pH: acid, neutral and basic (alkaline) soils. It can grow in semi-shade (light woodland) or no shade. It prefers moist soil.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.pfaf.org](http://www.pfaf.org)



Feed no. 117

*Mangifera indica* (Mango; Aam, Amm, Amb)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [dawn.com](http://dawn.com)



Source: [www.dostpakistan.pk](http://www.dostpakistan.pk)

**Scientific Name:** *Mangifera indica*

**Synonyms:** *Mangifera austro-yunnanensis*

**Common Name (Eng.):** Mango

**Local Name:** Aam, Amm, Amb

**Family:** Anacardiaceae

### Description

It is a matter of astonishment to many that the delicious mango, one of the most celebrated of Pakistan fruits, is a member of the family Anacardiaceae—notorious for embracing a number of highly poisonous plants. The mango tree is erect, 30 to 100 ft. high, with a broad, rounded canopy which may, with age, attain 100 to 125 ft. in width, or a more upright, oval, relatively slender crown. In deep soil, the taproot descends to a depth of 20 ft., the profuse, wide-spreading, feeder root system also sends down many anchor roots which penetrate for several feet. The tree is long-lived, some specimens being known to be 300 years old and still fruiting. Nearly evergreen, alternate leaves are borne mainly in rosettes at the tips of the branches and numerous twigs from which they droop like ribbons on slender petioles 1 to 4 in long. Hundreds and even as many as 3,000 to 4,000 small, yellowish or reddish flowers, 25% to 98% male, the rest hermaphroditic, are borne in profuse, showy, erect, pyramidal, branched clusters 2 1/2 to 15 1/2 in high. There is great variation in the form, size, color and quality of the fruits. They may be nearly round, oval, ovoid-oblong, or somewhat kidney-shaped, often with a break at the apex, and are usually more or less lop-sided.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 120

*Medicago sativa* (Alfalfa, Lucerne, purple medic, sand Lucerne; Lucerne)



Source: Wikipedia



Source: [www.swcoloradowildflowers.com](http://www.swcoloradowildflowers.com)

**Scientific Name:** *Medicago sativa*

**Synonyms:** *None*

**Common Name (Eng.):** Alfalfa, bastard medic, buffal herb, Lucerne, purple medic, sand Lucerne

**Local Name:** Lucerne

**Family:** Fabaceae

### Description

Alfalfa is a perennial herb with stems erect or sometimes prostrate, 0.3–1 m long, 5-25 or more per crown, much-branched, 4-angled. Rhizome is stout, penetrating the soil as much as 7-9 m. Stipules are united up to 1/3-1/2 of the length - free portion is triangular-lance shaped, tapering, basally entire or with 1–2 teeth. Leaves are trifoliolate - leaflets are obovate- oblong, ovate or linear, tapering to base, toothed above middle, 1-4.5 cm long, 3–10 mm broad, smooth or appressed hairy, paler green beneath. Flower racemes are oval or rounded, 1-2.5 cm long, 1-2 cm broad, arising in leaf axils, 5-40-flowered. Stalk carrying the cluster is slender, firm, always exceeding the subtending leaf. Sepal cup is tubular, with linear- subulate teeth longer than tube. Flowers are yellow or blue to purple or violet, 6-15 mm long. Bracteoles are whitish, linear-subulate, mostly equaling the flower-stalk. Pod is 3-9 mm in diameter, with 2-3 spirals, prominently net-veined. Seeds are 6 or 8 per pod. Alfalfa is widely grown throughout the world as forage for cattle, and is most often harvested as hay. Alfalfa has the highest feeding value of all common hay crops, being used less frequently as pasture. Flowering: May-July.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)



Feed no. 122

*Megathyrsus maximus* (Guinea grass; Green panic grass)



Source: feedipedia



Source: www.actaplantarum.org



**Scientific Name:** *Panicum maximum*

**Synonyms:** *Megathyrsus maximus*, *Panicum hirsutissimum*, *Urochloa maxima*

**Common Name (Eng.):** Guinea grass, Green panic grass

**Local Name:** Guinea grass

**Family:** Poaceae

### Description

An extremely variable species, loosely to densely tufted, shortly rhizomatous, erect or geniculately ascending, rooting at the lower nodes. Leaf blades linear to narrowly lanceolate. Panicle open, oblong or pyramidal, with secondary branches well developed and flexuous. Spikelets oblong, blunt or acute, rounded on the back. Because of the morphological and agronomic variability, the species will be treated here as 2 broad types: Tall/medium (TM) type - tussock, mostly >1.5 m in flower.

### Sources

- [www.tropicalforages.info](http://www.tropicalforages.info)
- [www.feediprdia.com](http://www.feediprdia.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 123

*Melia azendarch* (White Cedar, Bead-tree, Cape lilac; Daraig, Darek)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [thelovelyplants.com](http://thelovelyplants.com)



Source: [molbiol.ru](http://molbiol.ru)

**Scientific Name:** *Melia azedarach*

**Synonyms:** *Azedara speciosa*, *Azedarach commelinii*, *Melia toosendan*

**Common Name (Eng.):** White Cedar, Chinaberry tree, Bead-tree, Cape lilac

**Local Name:** Daraig, Darek

**Family:** Meliaceae

### Description

The Persian lilac tree is frequently confused with Neem. However, the structure of the leaves and the color of the flowers, white in Neem and lilac in Persian lilac, are sufficient to distinguish between the two. A large evergreen tree native to India, growing wild in the sub-Himalayan region. In India, Muslims are credited with the spread of the tree. The bark is reddish brown, becoming fissured on mature trees. The deciduous leaves are bipinnate (twice feather-like) and 1-2 ft long. The individual leaflets, each about 2 in long and less than half as wide, are pointed at the tips and have toothed edges. In spring and early summer, Persian lilac produces masses of purplish, fragrant, star shaped flowers, each about 3/4 in in diameter, that arch or droop in 8 in panicles. They are followed by clusters of spherical, yellow fruits about 3/4 in in diameter that persist on the trees even after the leaves have fallen. All parts of Persian lilac tree are poisonous. Eating as few as 6 berries can result in death. Birds that eat too many seeds have been known to become paralyzed.

### Sources

- [www.pakflora.com](http://www.pakflora.com)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 126

*Mnesithea laevis* (Joint tail Grass; Beca)



*Source:phytoimages.siu.edu*



*Source:phytoimages.siu.edu*



*Source:phytoimages.siu.edu*

**Scientific Name:** *Mnesithea laevis*

**Synonyms:** *Diperium cylindricum* , *Rottboellia laevis*

**Common Name (Eng.):** Joint tail Grass

**Local Name:** Beca

**Family:** Poaceae

### Description

Shortly rhizomatous perennial; culms 20-100 cm high. Leaf-blades flat, 3-25 cm long, 2-5 mm wide, abruptly acute. Racemes terminal and axillary, 5-15 cm long. Sessile spikelet 3-4 mm long; lower glume narrowly oblong-elliptic, smooth, wingless. Pedicelled spikelet absent, the pedicel fused to the internode at its upper end.

### Distribution

Pakistan (Punjab & N.W.F.P.); Afghanistan through India to Sri Lanka, Burma, Thailand and Indonesia.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.feedipedia.org](http://www.feedipedia.org)

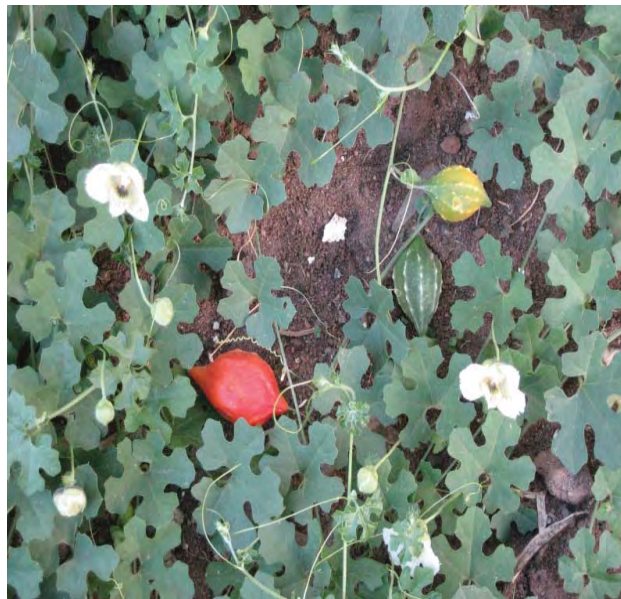


Feed no. 128

*Momordica balsamina* (Balsam apple, African cucumber; Jangali Karela)



Source: Wikimedia



Source: Wikimedia

**Scientific Name:** *Momordica balsamina*

**Synonyms:** *None*

**Common Name (Eng.):** Balsam apple, African cucumber

**Local Name:** Jangali Karela

**Family:** Cucurbitaceae

### Description

Annual climber with unbranched glabrous tendrils, monoecious. Stem pubescent to glabrescent. Leaves orbicular, 1.5-5.0 (-12.0) cm long and as broad, cordate, glabrous or sparsely hairy, 3-5-lobed, middle lobes broadly ovate or rhombic-ovate, sinuate-dentate or acutely lobulate. Petiole 1-3(-4) cm long, pubescent. Flowers yellow, 2.5-3.0 cm across, pedicellate. Male flowers solitary, on 1.5(-7) cm long peduncle, bearing near the apex a sessile, broadly ovate-cordate, subglabrous, dentate bract; female flowers on 5-15 mm long basally bracteate or ebracteate peduncles. Calyx tube 5-6 mm long, pubescent, lobes ovate, acuminate, 3-3.5 mm broad. Corolla slightly zygomorphic, brown at base, lobes yellow, obovate, 10-15 mm long, 8-10(-12) mm broad. Ovary fusiform, beaked, puberulous, longitudinally tuberculate. Fruit broadly ovoid, narrowed at ends, 2-7 cm long, 1-2.5 cm broad, orange-red, tuberculate. Seeds elliptic-ovate, 1-1.2 cm long, 6-7 mm broad.

### Sources

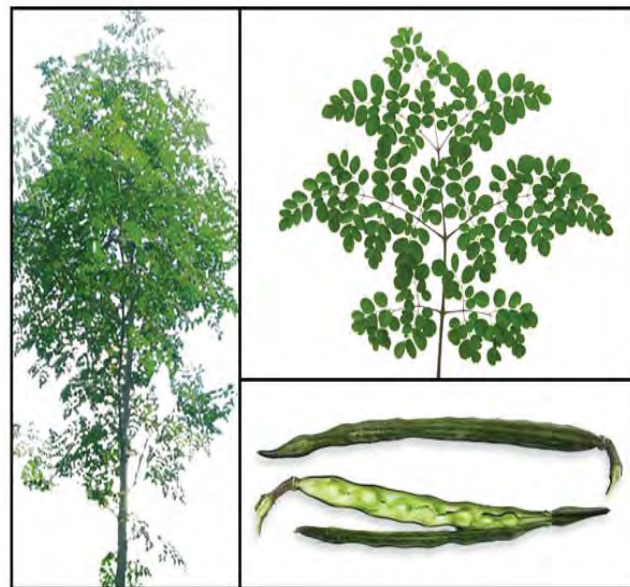
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)

Feed no. 129

*Moringa pterygosperma* (Drumstick Tree, Horse radish tree; Sohanjna)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.pakflora.com](http://www.pakflora.com)

**Scientific Name:** *Moringa oleifera*

**Synonyms:** *Guilandina moringa*, *Moringa moringa*

**Common Name (Eng.):** Drumstick Tree, Horse radish tree

**Local Name:** Sohanjna

**Family:** Moringaceae

### Description

Drumstick tree is a small, deciduous tree, of the family Moringaceae, native to tropical Asia but also naturalized in Africa and tropical America. Drumstick trees can reach a height of about 9 m (30 feet); they have corky gray bark, branching and fernlike leaves. Highly scented white flowers and long bean like seed pods. Seed pods are used as a vegetable, especially in south Indian cuisine, e.g. drumstick sambar. An excellent oil is derived from the seeds, which is used for cooking and lubrication of delicate mechanisms. The leaves are extensively used as a vegetable in many parts of the world, and the root can be made into a condiment similar to horseradish.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.com](http://www.flowersofindia.com)



Feed no. 132

*Olea cuspidata* (Wild olive, African olive; Zeton)



Source: [www.gbif.org](http://www.gbif.org)



Source: [www.gbif.org](http://www.gbif.org)



**Scientific Name:** *Olea cuspidata*

**Synonyms:** *Olea africana*, *Olea europaea*

**Common Name (Eng.):** Wild olive, African olive

**Local Name:** Zeton

**Family:** Oleaceae

### Description

Trees up to 7 m high, greyish-green; bark grey, on branchlets whitish. Leaves lanceolate, sometimes ovate, c. 4 cm long, 1 cm broad, coriaceous; upper surface dark green, with few scales, ventral silvery-whitish due to scaly hairs; petiole 5 mm. Flowers whitish, in terminal or lateral cymes. Calyx truncate or with 4 little teeth. Corolla tube short; lobes 4, 1-2 mm long. Drupe blackish-violet when ripe, ovoid, 1-2 cm in diam.; pulp oily.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.com](http://www.flowersofindia.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 134

*Oplismenus compositus* (Running mountain grass; Padkahi)



Source: plantjdx.com



Source: herbarium.gov.hk

**Scientific Name:** *Oplismenus compositus*

**Synonyms:** *Echinochloa lanceolata*

**Common Name (Eng.):** Running mountain grass

**Local Name:** Padkahi

**Family:** Poaceae

### Description

Perennial with rambling culms 15-150 cm long. Leaf-blades narrowly lanceolate to narrowly ovate, 2-15 cm long, 8-25 mm wide. Inflorescence 5-25 cm long, the lowest raceme 2.5-10 cm long, its rachis glabrous to loosely pilose, the spikelet pairs  $\pm$  distant. Spikelets lanceolate, 2.5-4 mm long, glabrous to pubescent; glumes with smooth viscid awns, the longest in each pair of spikelets 3-10 mm.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.com](http://www.flowersofindia.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 135

*Oryza sativa* (Rice; Chawal, Dhan)



Source: [pakagrifarming.blogspot.com](http://pakagrifarming.blogspot.com)

**Scientific Name:** *Oryza sativa*

**Synonyms:** *Oryza communissima*, *Oryza formosana*, *Oryza glutinosa*, *Oryza sorghoides*

**Common Name (Eng.):** Asian Rice, Rice

**Local Name:** Chawal, Dhan

**Family:** Poaceae

### Description

Rice is normally grown as an annual plant, although in tropical areas it can survive as a perennial and can produce a ratoon crop for up to 30 years. The rice plant can grow up to 3.3–5.9 ft tall, occasionally more depending on the variety and soil fertility. It has long, slender leaves 50-100 cm long and 2-2.5 cm broad. The small wind-pollinated flowers are produced in a branched arching to pendulous inflorescence 30-50 cm long. The edible seed is a grain 0.5-1.2 cm long and 2-3 mm thick. Rice cultivation is well-suited to countries and regions with low labor costs and high rainfall, as it is labor-intensive to cultivate and requires ample water. Rice can be grown practically anywhere, even on a steep hill or mountain. Although its parent species are native to South Asia and certain parts of Africa, centuries of trade and exportation have made it commonplace in many cultures worldwide.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.com](http://www.flowersofindia.com)
- [www.wikipedia.com](http://www.wikipedia.com)



Feed no. 136

*Panicum antidotale* (Blue panic grass; Bansi Ghass)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [graniteseed.com](http://graniteseed.com)



Source: [graniteseed.com](http://graniteseed.com)

**Scientific Name:** *Panicum antidotale*

**Synonyms:** *Panicum kermesinum*, *Panicum longijubatum*, *Panicum miliare*, *Panicum proliferum*, *Panicum subalbidum*

**Common Name (Eng.):** Blue panic grass

**Local Name:** Bansi Ghass

**Family:** Poaceae

### Description

*Panicum antidotale* is a perennial growing to 3 m (9ft 10in). The flowers are hermaphrodite (have both male and female organs) and are pollinated by Wind. Suitable for: light (sandy), medium (loamy) and heavy (clay) soils and prefers well-drained soil. Suitable pH: acid, neutral and basic (alkaline) soils. It cannot grow in the shade. It prefers moist soil. The stems are thin and wiry; the plant is bulbous at the base and grows 150 - 270cm tall.

### Sources

- [www.wikipedia.com](http://www.wikipedia.com)
- [www.efloras.org](http://www.efloras.org)
- [www.flowersofindia.com](http://www.flowersofindia.com)

Feed no. 137

*Panicum coloratum* (Klein grass, white buffalo grass; Bansi Ghass)



Source: [tropicalforages.info](http://tropicalforages.info)



Source: [soilcropandmore.info](http://soilcropandmore.info)



Source: [soilcropandmore.info](http://soilcropandmore.info)

**Scientific Name:** *Panicum coloratum*

**Synonyms:** *Panicum makarikariense*, *Panicum crassipes*

**Common Name (Eng.):** klein grass, white buffalo grass

**Local Name:** Bansi Ghass

**Family:** Poaceae

### Description

A highly variable species, in the *P. coloratum* - *P. stapfianum* complex, with types varying in appearance from small and fine to large and robust. A shortly rhizomatous, tufted (erect, geniculate or decumbent) perennial, sometimes with long spreading stolons. Stems 2-4 mm in diameter, and culms 0.3-1.5 m tall at maturity. Foliage mostly 20-70 cm tall, with leaves glabrous to hairy, 5-40 cm long and 4-14 mm wide, varying in colour from green to glaucous blue green. Panicle open, erect or nodding, 6-30 cm long, the lower branches mostly single, occasionally paired, rarely whorled; spikelets green and purple, 2-3 mm long, obtuse or subacute, 0.8-1.4 million seeds/kg. Var. *coloratum*, which seldom exceeds 120 cm tall, is the most widely distributed variety, and differs from var. *makarikariense* in having green leaves, whereas the latter has bluish, glaucous, usually fleshy leaves with strong white midribs. The Kabulabula type, a robust variety from Botswana and Namibia, often forming a whorl of 2-3 lowermost branches in the inflorescence, is somewhat intermediate between the two varieties, but is usually included in var. *coloratum*.

### Sources

- [www.efloras.org](http://www.efloras.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)



Feed no. 139

*Paspalum distichum* (Water-finger grass; Naru grass)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [wikiwand.com](http://wikiwand.com)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



**Scientific Name:** *Paspalum distichum*

**Synonyms:** *Digitaria paspaloides*, *Paspalum paspaloides*

**Common Name (Eng.):** Water-finger grass

**Local Name:** Naru grass

**Family:** Poaceae

### Description

Perennials; stolon creeping, stout, flowering culm very short, 20-50 cm tall, nodes thickened and pubescent. Blade 5-10 cm long, 3-7 mm wide, glabrous; sheath glabrous, margins ciliate; ligule membranaceous, truncate and fringed, 2-3 mm long, glabrous abaxially; Racemes 2, 2-6 cm long; rachis 1.5- 2 mm wide, flat. Spikelets solitary, obovate-oblong, acute, loosely pubescent, approx. 3 mm long; lower glume usually absent, developed in a few spikelets, triangular in shape, approx. 0.3 mm long; upper glume appressed pubescent; lower lemma 3-5-veined, usually glabrous, acute; upper lemma nearly as long as spikelet, coriaceous, pale green, acute, hairy at apex.

### Sources

- [www.efloras.org](http://www.efloras.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)

Feed no. 142

*Pennisetum glaucum/ Pennisetum typhoides* (Pearl millet; Bajra)



Source: [www.kew.org](http://www.kew.org)



Source: [agrihunt.com](http://agrihunt.com)



Source: [www.team-bhp.com](http://www.team-bhp.com)

**Scientific Name:** *Pennisetum glaucum*/ *Pennisetum typhoides*

**Synonyms:** *Panicum glaucum*, *Panicum spicatum*, *Pennisetum americanum*

**Common Name (Eng.):** Bulrush millet, cat tail millet, pearl millet

**Local Name:** Bajra

**Family:** Poaceae

### Description

Erect, robust, annual grass with tillers 1.5 - 3 (- 4) m tall; tillering from the base, and sometimes branching from the lower nodes; extensive root system, thick prop roots from lower nodes. Stems 1 - 3 cm diameter, nodes glabrous to bearded. Leaf-blades 20 - 100 cm long, 8 - 80 mm wide, ciliate, glabrous or hairy, linear to linear-lanceolate, flat, apexattenuate, base rounded or sub-cordate; ligule a fringe of hairs 2 - 3 mm long. Sheath glabrous or with sparse to dense tubercular-based hairs, usually densely bearded near the collar. Panicle spiciform, linear, elliptic, or ovate; dense, 10 - 50 cm long, 1.5 - 5.0 cm diameter; peduncle densely pubescent. Spikelets in clusters of 1 - 9 subtended by a persistent involucre of many bristles, mostly 4 - 7 mm long; stipe pubescent, 1 - 5 mm long; spikelets obovate 3 - 6 mm long, pedicellate. Caryopsis globose to cylindrical or conical, 2.5 - 6.5 mm long, white, pearl-coloured or yellow to blue-grey or brown, occasionally purple. 95,000 - 140,000 (- 180,000) seeds/kg.

### Sources

- [www.efloras.org](http://www.efloras.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)

Feed no. 143

*Pennisetum spp.* (Elephant grass, Merker grass, Napier grass; Mott grass)



Source: feedipedia



Source: feedipedia

**Scientific Name:** *Pennisetum spp.*

**Synonyms:** *Pennisetum benthamii*

**Common Name (Eng.):** Elephant grass, Merker grass, Napier grass, Mott grass

**Local Name:** Mott grass

**Family:** Poaceae

### Description

Robust perennial forming large, bamboo-like clumps, with culms usually 2-3.5 m high (up to 7.5 m) and branched towards the top; stems to 3 cm diameter near the base. Leaf blades glabrous or hairy, 30-120 cm long and 1-5 cm wide; leaf-sheaths glabrous or with stiff hairs. Spreads by short rhizomes, rooting from lower nodes or falling stems rooting at nodes creating a stolon. Inflorescence a bristly false spike 10-30 cm long, 1.5-3 cm wide (excluding bristles) dense, usually yellow-brown in colour, more rarely greenish or purplish. Extensive root system penetrating to 4.5 m. About 3 million fertile spikelets or 'seeds'/kg.

### Sources

- [www.efloras.org](http://www.efloras.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)



Feed no. 146

*Phalaris tuberosa* (Harding grass)



Source: Wikipedia



Source: Wikipedia



Source: Wikipedia

**Scientific Name:** *Phalaris tuberosa*

**Synonyms:** *Phalaris aquatica*

**Common Name (Eng.):** Harding grass

**Local Name:** Harding grass

**Family:** Poaceae

### Description

It is an erect, waist-high, stout perennial bunch grass with grayish to bluish green leaves. Flowering heads are dense, spike-like, and usually two to five inches long. It is slow to develop from seed but can form large bunches after several years. (reed canary grass) differs from Harding grass in having more distinct rhizomes and an inflorescence that is compact at first but later becomes more open as the branches spread. Hybrids of Harding grass and reed canary grass have been produced. Varieties include 'AQ1', 'Uneta', and 'Australis'.

### Sources

- [www.efloras.org](http://www.efloras.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.tropicalforages.info](http://www.tropicalforages.info)

Feed no. 147

*Phaseolus aconitifolius* (Moth Bean, Mat Bean, Turkish Gram)



Source: [www.ebay.ca](http://www.ebay.ca)



Source: [www.iiim.res.in](http://www.iiim.res.in)



Source: [Wikipedia](https://en.wikipedia.org/wiki/Phaseolus_aconitifolius)

**Scientific Name:** *Phaseolus aconitifolius*

**Synonyms:** *Vigna aconitifolia*, *Phaseolus palmatus*, *Phaseolus aconitifolius*, *Dolichos dissectus*

**Common Name (Eng.):** Moth Bean, Mat Bean, Turkish Gram

**Local Name:** Moth Bean

**Family:** Fabaceae

### Description

Moth Bean is a herbaceous creeping annual plant that creates a low-lying soil cover when fully grown. Its stem can grow up to 40 cm in height, with its hairy and dense-packed branches reaching a span of up to 150 cm. Yellow flowers are like pea flowers. develop into a brown pod 2.5 to 5 cm in length, which holds 4 to 9 seeds inside. The rectangular seeds exist in a variety of colours including, yellow-brown, whitish green and mottled with black. Moth Bean is native to India, Pakistan, Sri Lanka, Myanmar.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 151

*Pongamia glabra* (Indian Beach Tree; Sukh Chain)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.pakflora.com](http://www.pakflora.com)



**Scientific Name:** *Pongamia pinnata*

**Synonyms:** *Millettia pinnata*, *Pongamia glabra*, *Derris indica*, *Cytisus pinnatus*

**Common Name (Eng.):** Indian Beach Tree

**Local Name:** Sukh Chain

**Family:** Papilionaceae

### Description

A fast-growing deciduous tree up to 20 meters tall that is thought to have originated in India and is found throughout Asia. It is a deciduous tree that grows to about 15-25 meters in height with a large canopy that spreads equally wide. The leaves are a soft, shiny burgundy in early summer and mature to a glossy, deep green as the season progresses. Small clusters of white, purple, and pink flowers blossom on their branches throughout the year, maturing into brown seed pods. The tree is well suited to intense heat and sunlight and its dense network of lateral roots and its thick, long taproot make it drought tolerant. Flowering: March-April.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 152

*Populus spp.* (Black poplar, Lombardy poplar; Poplar)



Source: pnwhandbooks.org



Source: pnwhandbooks.org



Source: Wikipedia

**Scientific Name:** *Populus spp*

**Synonyms:** *Populus sosnowskyi*

**Common Name (Eng.):** Black Poplar, Lombardy poplar

**Local Name:** Poplar

**Family:** *Salicaceae*

### Description

Black Poplar is a medium-sized to large deciduous tree, reaching 20-30 m, rarely 40 m tall, with a trunk up to 1.5 m diameter. The leaves are diamond-shaped to triangular, 5-8 cm long and 6-8 cm broad, green on both surfaces. The species is dioecious (male and female flowers on different plants), with flowers in catkins and pollination by wind. The flowers are catkins, borne on the tree in mid spring. Male catkins are red, the females green, the females ripening to fluffy seed-heads in summer. Black Poplar is a native of W & C Asia and Europe. It is widely cultivated in Ladakh.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 153

*Psidium guajava* (Guava; Amrood, Amrut)



Source: Wikipedia



Source: www.ebay.com



Source: pak101.com

**Scientific Name:** *Psidium guajava*

**Synonyms:** *Myrtus guajava*, *Guaiaava pyrigormis*

**Common Name (Eng.):** Guava

**Local Name:** Amrood, Amrut

**Family:** Myrtaceae

### Description

One of the most gregarious of fruit trees, the guava of the Bottlebrush family, is almost universally known by its common English name or its equivalent in other languages. A small tree to 33 ft (10 in) high, with spreading branches, the guava is easy to recognize because of its smooth, thin, copper-colored bark that flakes off, showing the greenish layer beneath; and also because of the attractive, "bony" aspect of its trunk which may in time attain a diameter of 10 in (25 cm) Faintly fragrant, the white flowers, borne singly or in small clusters in the leaf axils, are 1 in (2.5 cm) wide, with 4 or 5 white petals which are quickly shed, and a prominent tuft of perhaps 250 white stamens tipped with pale-yellow anthers. The fruit, exuding a strong, sweet, musky odor when ripe, may be round, ovoid, or pear-shaped, 2 to 4 in (5-10 cm) long, with 4 or 5 protruding floral remnants (sepals) at the apex; and thin, light-yellow skin, frequently blushed with pink.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

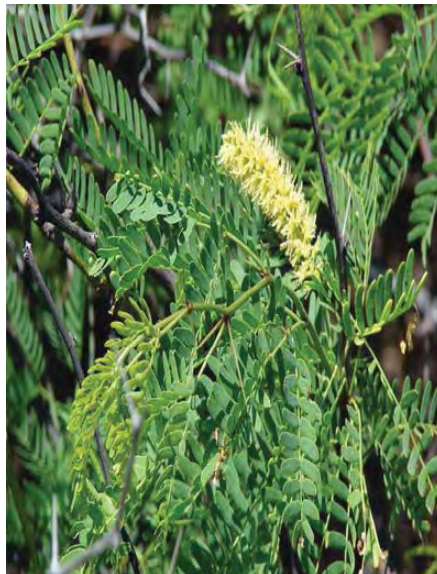


Feed no. 155

*Prosopis juliflora* (Algaroba, Mesquite; Jungli keekar)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [Wikimedia](https://commons.wikimedia.org/wiki/File:Prosopis_juliflora.jpg)



Source: [www.jircas](http://www.jircas.jp)

**Scientific Name:** *Prosopis juliflora*

**Synonyms:** None

**Common Name (Eng.):** Algaroba, Mesquite

**Local Name:** Jungli keekar

**Family:** Fabaceae

### Description

The Mesquite has been introduced in Asia and Africa and is now widespread in the semi-arid areas of the world. In many areas, it is considered a weed. It is a drought resistant small tree and has been planted in dry areas of Delhi. It is a deciduous thorny shrub or small tree, to 12 m tall; trunk to 1.2 m in diameter, bark thick, brown or blackish, shallowly fissured; leaves compound, commonly many more than 9 pairs, the leaflets are mostly 5–10 mm long, linear-oblong, glabrous, often hairy, commonly rounded at the apex; stipular spines, if any, yellowish, often stout; flowers perfect, greenish-yellow, sweet-scented, spikelike; corolla deeply lobate. Pods several-seeded, strongly compressed when young, thick at maturity, more or less constricted between the seeds, 10–25 cm long, brown or yellowish, 10–30-seeded. Mesquite pods are among the earliest known foods of prehistoric man in the new world. Today flour products made from the pods are still popular, although only sporadically prepared, mostly by Amerindians. Pods are made into gruels, sometimes fermented to make a mesquite wine.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 156

*Prunus communis* (Plum; Aalo Bukhara, Alocha)



Source: [www.pinterest.com](http://www.pinterest.com)



Source: [Wikipedia](http://Wikipedia)



Source: [Wikipedia](http://Wikipedia)

**Scientific Name:** *Prunus communis*

**Synonyms:** *Prunus domestica*

**Common Name (Eng.):** Plum

**Local Name:** Aalo Bukhara, Alocha

**Family:** Rosaceae

### Description

A deciduous Tree growing to 12m by 10m at a medium rate. It is in flower in April, and the seeds ripen from July to November. The flowers are hermaphrodite (has both male and female organs) and are pollinated by Insects. The plant is self-fertile. The fruit varies considerably from cultivar to cultivar, but it is generally somewhat mealy, soft and juicy with a delicious flavor ranging from very sweet to acid. The more acid fruits are usually only used for cooking purposes. White flowers grow in clusters, and are beautiful to look at.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)



Feed no. 157

*Prunus dulcis* (Almond; Badaam)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [pakbonsai.forumotion.com](http://pakbonsai.forumotion.com)



**Scientific Name:** *Prunus dulcis*

**Synonyms:** *Prunus amygdalus*, *Amygdalus communis*

**Common Name (Eng.):** Almond

**Local Name:** Badaam

**Family:** Rosaceae

### Description

The almond is a deciduous tree, growing 4–10 m (13–33 ft.) in height, with a trunk of up to 30 cm (12 in) in diameter. The young twigs are green at first, becoming purplish where exposed to sunlight, then grey in their second year. The leaves are 3–5 inches long, with a serrated margin and a 2.5 cm (1 in) petiole. The flowers are white to pale pink, 3–5 cm (1–2 in) diameter with five petals, produced singly or in pairs and appearing before the leaves in early spring. Almond grows best in Mediterranean climates with warm, dry summers and mild, wet winters. The optimal temperature for their growth is between 15 and 30 °C (59 and 86 °F) and the tree buds have a chilling requirement of 300 to 600 hours below 7.2 °C (45.0 °F) to break dormancy.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 159

*Pyrus communis* (Pear; Nashpati)



Source: Wikipedia



Source: pk. geoview.info

**Scientific Name:** *Pyrus communis*

**Synonyms:** *Pyrus domestica*

**Common Name (Eng.):** Pear, Common Pear, European Pear, Bhutan Pear

**Local Name:** Nashpati

**Family:** Rosaceae

### Description

Pear is an edible fruit native to central and eastern Europe and southwest Asia. Often planted in orchards, the familiar pear tree is a small-medium sized tree. The alternate leaves are shiny and usually oval but pointed, and finely toothed. The highly distinctive bark is grey and square-cracked. Buds are brown and pointed. Clusters of showy white flowers, 1.5-2 cm across, appear before or with the leaves.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 162

*Ricinus communis* (Castor oil Plant; Hanoli, Arand, Aranda)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [www.sm.com.pk](http://www.sm.com.pk)

**Scientific Name:** *Ricinus communis*

**Synonyms:** *Cataputia major*

**Common Name (Eng.):** Castor oil Plant

**Local Name:** Hanoli, Arand, Aranda

**Family:** Euphorbiaceae

### Description

The castor bean plant, an erect, tropical shrub or small tree, grows up to 30 feet tall. As an annual in the cooler zones, it grows up to 15' tall. It is a very fast-growing plant. The joints of the hollow stem, stalks and leaves are reddish to purple. The 6 - 11 lobed, palmate leaves with uneven serrated edge, are also red or colored and often have a blue-gray bloom. There is also a green variety. The flat seeds are in a seedpod that explodes when ripen. All the top of the stem and stalks are the inflorescence with the male - and female flowers. The female flowers are the fuzzy red structures at the top of the flower spike with the male flowers positioned on the lower half and have conspicuous yellow anthers. The oblong fruit turns brown when ripe. In each seed pod (a capsule) there are three seeds. The seeds of castor bean or castor oil plant are very poisonous to people, animals and insects; just one milligram of ricin (one of the main toxic proteins in the plant) can kill an adult. The castor oil is extracted from the beans, which is used for medicinal purposes. Commercially prepared castor oil contains none of the toxin.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)



Feed no. 163

*Rumex nepalensis* (Toothed dock; Jangali palak)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)

**Scientific Name:** *Rumex dentatus*

**Synonyms:** *Rumex klotzschianus*, *Rumex limosus*, *Rumex nepalensis*

**Common Name (Eng.):** Toothed dock

**Local Name:** Jangali palak

**Family:** Polygonaceae

### Description

This plant grows abundantly in many parts of Pakistan and is used by the natives for its astringent qualities, and for dyeing purposes. These are erect plants with long tap roots. The fleshy to leathery leaves form a basal rosette at the root. The basal leaves may be different from those near the inflorescence. The inconspicuous flowers are carried above the leaves in whorl-like clusters. The fertile flowers are mostly hermaphrodite, or they can be functionally male or female. The flowers and seeds grow on long clusters at the top of a stalk emerging from the basal rosette. Each seed is a 3-sided achene. Plants can contain quite high levels of oxalic acid, which is what gives the leaves of many members of this genus an acid-lemon flavor.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 165

*Saccharum bengalense* (Munj Sweet cane; Sarkanda, Kaana)



Source: sm.com.pk



Source: Wikipedia

**Scientific Name:** *Saccharum bengalense*

**Synonyms:** *Erianthus munja*, *Saccharum munja*, *Saccharum sara*

**Common Name (Eng.):** Munj Sweet cane

**Local Name:** Sarkanda, Kaana

**Family:** Poaceae

### Description

Munj Sweet cane Tall is a perennial herb with stems up to 4 m tall. Leaves are up to 3 ft long, 3-10 mm wide, flat or markedly channeled, the midrib occupying the greater part of the width, glaucous. Flower panicles are 20-75 cm long. Racemes are 2-4 cm long, considerably shorter than the supporting branches, the internodes and flower-stalks are hirsute with hairs up to 7 mm long. Spikelets are slightly heteromorphous, 3.8-5.5 mm long, the callus bearded with whitish or greyish hairs up to 2.5 mm long; glumes equal, membranous, lower glume of sessile spikelet hairy on the back, the upper glume glabrous, both glumes of pedicelled spikelet hairy, the hairs at least 4 mm long, often up to 9 mm; lower lemma oblong- elliptic, hairy on the back; upper lemma ovate-lanceolate, ciliate on the margins, acute or very shortly awned, the awn not visible beyond the glumes. Flowering: October-January.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 166

*Saccharum spp.* (Sugarcane; Ganna)



Source: [agricorner.com](http://agricorner.com)



Source: [agricorner.com](http://agricorner.com)



**Scientific Name:** *Saccharum spp.*

**Synonyms:** None

**Common Name (Eng.):** Sugarcane

**Local Name:** Sugarcane, Ganna

**Family:** Poaceae

### Description

Sugarcane is a plant which is actually a giant grass. The stem is jointed, 3–5 m tall, 2–3 cm thick, solid juicy, the lower internodes short, swollen; sheaths greatly overlapping, the lower usually falling from the culms. Leaf blades elongate, mostly 4–6 cm wide, with a very thick midrib. The white flowers appear in plume like panicles, 20–60 cm long, the slender racemes drooping. spikelets about 3 mm long, are obscured in a basal tuft of silky hairs 2–3 times as long as the spikelet. Cane sugar, cane syrup, molasses, wax, and rum are products of sugarcane. Fresh cane stems are often chewed, especially by poorer people. The young unexpanded inflorescence is eaten raw, steamed or toasted, and prepared in various ways.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 167

*Salsola foetida* (Glasswort; Lana)



Source: [www.floraofqatar.com](http://www.floraofqatar.com)



Source: [www.floraofqatar.com](http://www.floraofqatar.com)

**Scientific Name:** *Salsola foetida*

**Synonyms:** *Salsola imbricata*

**Common Name (Eng.):** Glasswort

**Local Name:** Lana

**Family:** Poaceae

### Description

Height: 0.3-1.5 m high. The species of *Salsola* are mostly subshrubs, shrubs, small trees, and rarely annuals. The leaves are mostly alternate, rarely opposite, simple and entire. The bisexual flowers have 5 tepals and 5 stamens. The pistil ends in two stigmas. The fruit is spherical with a spiral embryo and no perisperm.

### Sources

- [www.floraofqatar.com](http://www.floraofqatar.com)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 168

*Sesamum indicum* (Sesame; Safed til)



Source: Wikipedia



Source: [www.oisat.org](http://www.oisat.org)

**Scientific Name:** *Sesamum indicum*

**Synonyms:** *Sesamum orientale*, *Sesamum mulayanum*

**Common Name (Eng.):** Sesame

**Local Name:** Safed til

**Family:** Pedaliaceae

### Description

This is a small bush found in Pakistan & India. There are three varieties; black, white, red (or brown) White has most oil, black is best for healing. There are several variants and the flower differ in color from one variety to the other. The herb is cultivated extensively in many regions of the world, including the People's Republic of China, India, Ethiopia, El Salvador, Nicaragua, Sudan, Mexico, Guatemala, and the United States. The plant grows erect and reaches a height of 1 to 2 meters, with fine pubescent leaves, pink or white flowers, and a capsule-type fruit from which seeds are obtained. From their seeds an oil is expressed, called benne oil, used mostly for making soap. In the southern United States, the seeds are used in candy.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.com](http://www.wikipedia.com)



Feed no. 169

*Sesbania bispinosa/sesban* (Egyptian pea; Jantar, Jinjenrh)



Source: [www.pakflora.com](http://www.pakflora.com)



Source: [agrihunt.com](http://agrihunt.com)

**Scientific Name:** *Sesbania sesban*

**Synonyms:** *Aeschynomene sesban*, *Coronilla sesban*, *Sesban aegyptiaca*

**Common Name (Eng.):** Egyptian pea

**Local Name:** Jantar, Jinjenrh

**Family:** Papilionaceae

### Description

Common sesban is a small, often multi-stemmed tree, growing to 4-8 m high. Its leaves are pinnately compound, 2-18 cm long with 6-27 pairs of linear oblong leaflets (26 x 5 mm). The raceme has 2-20 pea-shaped flowers which are yellow with purple or brown streaks on the corolla. Pods are subcylindrical, straight or slightly curved up to 30 cm long and 5 mm wide containing 10-50 seeds. Common sesban has a long history of use in India, primarily as a green manure and a source of cut and carry forage. Planted, or assisted to establish as a volunteer, as an improved fallow in maize fields in southern and east Africa because it improves crop yields and provides fuelwood. Can be intercropped with corn, beans, cotton and many other field crops. Harvested leaves make a rich compost. Its leaves are a good source of protein for cattle and sheep.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.com](http://www.wikipedia.com)

Feed no. 171

*Setaria glauca* (Yellow fox tail; Loomar grass)



Source: [www.fao.org](http://www.fao.org)



Source: [ast.wikipedia.org](http://ast.wikipedia.org)

**Scientific Name:** *Setaria glauca*

**Synonyms:** *Panicum pumilum*, *Setaria glauca*, *Chaetochloa lutescens*

**Common Name (Eng.):** Yellow fox tail

**Local Name:** Loomar grass

**Family:** Poaceae

### Description

Yellow Foxtail is a clump-forming summer annual with a seed head that resembles a fox's tail. A weed of many agronomic crops, turf, landscapes, and nurseries. Leaf blades may reach 12 inches in length and 7-12 mm in width and have long silky hairs at the leaf bases. Auricles are absent and the ligule is a fringe of hairs reaching 2 mm in length. The seed head is a cylindrical bristly panicle, reaching 6 inches in length and 1/3-2/3 inch in width. Spikelets are approximately 3 mm long, green, and each spikelet has 1-3 bristles that are 5-10 mm long. The bristles turn yellow at maturity, giving the plant its name.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.com](http://www.wikipedia.com)



Feed no. 176

*Sorghum alnum* (Almum grass, Almum sorghum; Columbus grass)



Source: [www.southeastweeds.org.au](http://www.southeastweeds.org.au)



Source: [feedipedia](http://feedipedia)



**Scientific Name:** *Sorghum alnum*

**Synonyms:** *Sorghum alnum*

**Common Name (Eng.):** Alnum grass, Alnum sorghum, Columbus grass, Five-year sorghum

**Local Name:** Columbus grass

**Family:** Poaceae

### Description

An erect, robust, tussocky perennial with numerous tillers and thick short rhizomes which curve upwards to produce new shoots near the parental stool. Culms solid and pithy, about 1 cm thick, sometimes reaching a height of 3–3.6 m. Internodes of culm may have a thickened ring. Leaves 2.5–4.0 cm wide, generally glabrous except for hairs near the ligule. Inflorescence is a large pyramidal panicle with secondary and tertiary branches, generally drooping as seed ripens.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.feedipedia.org](http://www.feedipedia.org)

Feed no. 177

*Sorghum halepense* (Johnson Grass, Aleppo millet grass; Baru grass)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [Wikipedia](https://en.wikipedia.org/wiki/Sorghum_halepense)

**Scientific Name:** *Sorghum halepense*

**Synonyms:** *Andropogon halepensis*

**Common Name (Eng.):** Johnson Grass, Aleppo grass, Aleppo millet grass

**Local Name:** Baru grass

**Family:** Poaceae

### Description

Johnson Grass is an erect, perennial, rhizomatous grass, to 3.5 m tall. It is a principal weed of corn, cotton, and sugarcane, and a weed of many crops throughout the world. Leaf-blades 20-90 cm long; 5-40 mm wide. Leaf-blade margins scaberulous. Inflorescence is a panicle with branches tipped by a raceme. Panicle are open lance-shaped or pyramidal, 10-55 cm long, 3-25 cm wide. Primary panicle branches are whorled at most nodes, moderately divided. Racemes are 1.2-2.5 cm long, bearing few fertile spikelets, bearing 1-5 fertile spikelets on each. Rachis is fragile at the nodes, ciliate on margins. Rachis internodes filiform. Rachis internode tip transverse, cupuliform. Spikelets occur in pairs. Fertile spikelets are stalkless, 1 in the cluster. Companion sterile spikelets pedicelled; 1 in the cluster. Pedicels filiform; ciliate. Johnson Grass is native to eastern Europe, but now naturalized throughout the world.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.feedipedia.org](http://www.feedipedia.org)

Feed no. 178

*Sorghum vulgare* (Sudan grass; Jowar)



Source: topsy.fr



Source: www.slideshare.ne

**Scientific Name:** *Sorghum vulgare*

**Synonyms:** *Sorghum bicolor*

**Common Name (Eng.):** Jowar, sudan grass

**Local Name:** Jowar

**Family:** Poaceae

### Description

Jowar is a plant cultivated for grain for human consumption and for animal feed. The species originated in northern Africa and can grow in arid soils and withstand prolonged droughts. Jowar is usually an annual, but some cultivars are perennial. It grows in clumps which may reach over 4 meters high. The leaves look much like those of maize, they sometimes roll over. The flower head carries two types of flowers, one type has no stalk and has both male and female parts, and the other flower is stalked and is usually male. The grain is small reaching about 3 to 4 mm in diameter. Sweet sorghums are sorghum cultivars that are primarily grown for foliage; they are shorter than those grown for grain.

### Sources

- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.eol.org](http://www.eol.org)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.feedipedia.org](http://www.feedipedia.org)



Feed no. 179

*Sporobolus helvolus* (Shakkardub)



Source: [tsammalex.clld.org](http://tsammalex.clld.org)



Source: [species.wikimedia.org](http://species.wikimedia.org)

**Scientific Name:** *Sporobolus helvolus*

**Synonyms:** *Sporobolus robustus*, *Agrostis aequalis*

**Common Name (Eng.):**

**Local Name:** Shakkardub

**Family:** Poaceae

### Description

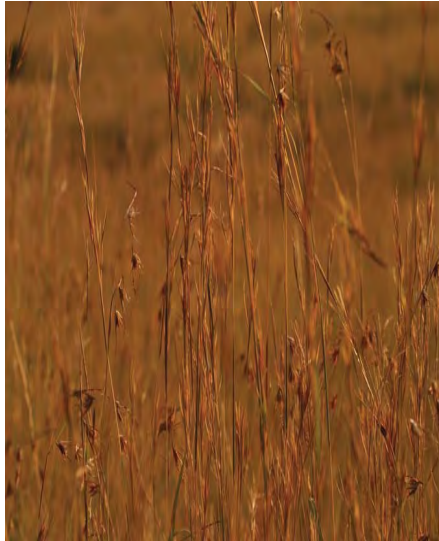
Tufted perennial with long slender stolons; culms wiry, 15-60 cm high,  $\pm$  1 mm in diameter at the base. Leaf-blades flat, 2-15 cm long, 2-4 mm wide, glaucous, tapering to a filiform tip. Panicle linear to narrowly lanceolate, 4-12 cm long, 5-20 mm wide, usually distinctly branched with the primary branches 0.5-2 cm long and bearing dense clusters of spikelets from the base, sometimes contracted and subspiciform. Spikelets 1.4-2 mm long, greenish brown; glumes narrowly lanceolate to lanceolate, as long as the spikelet or the lower a little shorter, smooth or scaberulous, acuminate; lemma narrowly ovate, as long as the glumes, acute; anthers 3, 0.6-0.8 mm long. Grain ellipsoid, 0.5 mm long.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.efloras.org](http://www.efloras.org)
- [www.wikipedia.org](http://www.wikipedia.org)

Feed no. 180

*Themeda triandra* (Red oat grass; Roosa)



Source: rawnaturephoto.com



Source: rawnaturephoto.com



Source: feedipedia

**Scientific Name:** *Themeda triandra*

**Synonyms:** *Triandra australis*

**Common Name (Eng.):** Red oat grass

**Local Name:** Roosa

**Family:** Poaceae

### Description

Perennial from a knotty rootstock. Culms tussocky, yellowish, usually farinose near nodes, 0.5–1.5 m tall. Leaf sheaths usually hispid with tubercle-based hairs; leaf blades 10–50 × 0.4–0.8 cm, glabrous or pilose, finely acuminate; ligule 1–2 mm, truncate, ciliate. Compound panicle lax, open, with spaced, often nodding spathate fascicles; spathes and spatheoles narrowly lanceolate, glabrous or thinly to densely tuberculate-hispid, innermost 2–3.5 cm. Raceme composed of a triad of 1 sessile and 2 pedicelled spikelets above the involucre of 2 homogamous pairs. Homogamous spikelets all sessile, arising at same level, staminate, both glumes present, 7–14 mm, oblong-lanceolate with lateral scarious wings, glabrous or hispid with tubercle-based hairs. Sessile spikelet 5–7 mm; callus 1.5–3 mm, pungent, brown bearded; lower glume dorsally rounded, dark brown, glossy, hispidulous in upper 1/3, smooth below; awn 3.7–7 cm. Pedicelled spikelet 7–12 mm, male or barren.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)



Feed no. 181

*Trianthema monogyna* (Desert horse purslane; Itsit)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [www.mozambiqueflora.com](http://www.mozambiqueflora.com)



**Scientific Name:** *Trianthema portulacastrum*

**Synonyms:** *Portulacastrum monogynum*, *Trianthema monogyna*

**Common Name (Eng.):** *Desert horse purslane*

**Local Name:** Itsit

**Family:** Aizoaceae

### Description

Desert Horse Purslane is a weed found throughout the tropical and subtropical countries. It occurs in wastelands, roadsides, lawns, gardens, cultivated crops, and in paddy fields if the water supply is low. Stems are prostrate or rising, somewhat succulent, up to 50 cm long or more, smooth or sparsely velvety. Leaves are flat, elliptic to obovate or spade-shaped, 1-2 cm long, 0.4-2 cm wide, margins entire, tip blunt, base rounded to wedge-shaped. Leaf stalks are 0.5-2.5 cm long, expanded into a sheath joined with opposing leaf base to form a cup. Pink flowers are borne solitary, stalk less, largely hidden in leaf axils. Petals (perianth lobes) are linear to narrowly deltate, 4-5 mm long, inner surface pink or white, sparsely velvety externally; ovary cylindrical; style about 2 mm long.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 183

*Tribulus alatus* (Puncture Vine, Yellow Vine, Goat head; Bhakra)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)



Source: [gardeningpakistan.com](http://gardeningpakistan.com)

**Scientific Name:** *Tribulus longipetalus*

**Synonyms:** *Tribulus alatus*

**Common Name (Eng.):** Puncture Vine, Caltrop, Yellow Vine, Goat head

**Local Name:** Bhakra

**Family:** Zygophyllaceae

### Description

Puncture Vine is an obnoxious weed whose seeds are incredibly painful to step on, they can easily puncture your bicycle tyre, and sometimes have to be pulled out of your pets' paws. It is a tap rooted herbaceous perennial plant that grows as a summer annual in colder climates. The stems radiate from the crown to a diameter of about 10 cm to over 1 m, often branching. They are usually prostrate, forming flat patches, though they may grow more upwards in shade or among taller plants. The leaves are pinnately compound with leaflets less than a quarter inch long. The flowers are 4-10 mm wide, with five lemon-yellow petals. A week after each flower blooms, it is followed by a fruit that easily falls apart into four or five single-seeded nutlets. The nutlets or "seeds" are hard and bear two sharp spines, 10 mm long and 4-6 mm broad point-to-point. These nutlets strikingly resemble goats' or bulls' heads; the "horns" are sharp enough to puncture bicycle tyre and to cause considerable pain to unshod feet.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)

Feed no. 185

*Trifolium alexandrinum* (Egyptian Clover, berseem clover; Berseem)



Source: [www.agriculture.pk](http://www.agriculture.pk)



Source: [www.flowersinisrael.com](http://www.flowersinisrael.com)

**Scientific Name:** *Trifolium alexandrinum*

**Synonyms:**

**Common Name (Eng.):** Egyptian Clover, berseem clover

**Local Name:** Berseem

**Family:** Fabaceae

### **Description**

Clover is a species of clover native to Europe, North Africa, and West Asia. It has been widely introduced elsewhere in the world as a pasture crop. It is a herbaceous perennial plant. It is a low growing, with heads of whitish flowers, often with a tinge of pink or cream. The heads are generally 1.5-2 cm wide and are at the end of 7 cm peduncles or flower stalks. The leaves are trifoliate, smooth, elliptic to egg-shaped and long-petiole. The stems function as stolons, so white clover often forms mats with the stems creeping as much as 18 cm a year and rooting at the nodes. Besides making an excellent forage crop for livestock, clovers are a valuable survival food: they are high in protein, widespread, and abundant. They are not easy to digest raw, but this can be easily fixed by boiling for 5-10 minutes. Dried flower heads and seedpods can also be ground up into a nutritious flour and mixed with other foods. Dried flower heads also can be steeped in hot water for a healthy, tasty tea-like infusion.

### **Sources**

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)



Feed no. 186

*Trifolium resupinatum* (Persian Clover, Bird-eye clover; Shaftal)



Source: feedipedia



Source: www.missouriplants.com

**Scientific Name:** *Trifolium resupinatum*

**Synonyms:** *Trifolium clusii*

**Common Name (Eng.):** Reversed Clover, Persian Clover, Bird-eye clover

**Local Name:** Shaftal

**Family:** Fabaceae

### Description

Reversed Clover is a prostrate, ascending or erect hairless annual herb. Leaves are trifoliate, with leaflets 7-30 mm long, obovate-wedge-shaped. Inflorescence is a stalked, roundish, many-flowered head, 1.0-1.5 cm wide. The stalk carrying the cluster is longer than the subtending leaf. The plant can be identified by its pink flowers and inflated fruits. The flowers are flipped upside-down (resupinate), with respect to the usual pea-shaped flowers. This is what gives it the common name, Reversed Clover. Calyx is inflated in fruit, 5-10 mm long. Standard petal is 6-10 mm long. Fruit is shortly ovoid, enclosed by inflated calyx. Reversed Clover is native to Pakistan, Afghanistan.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)

Feed no. 187

*Triticum aestivum* (Wheat; Gandum, Kanak)



Source: [zaraimedia.com](http://zaraimedia.com)



Source: [www.pakistantoday.com.pk](http://www.pakistantoday.com.pk)

**Scientific Name:** *Triticum aestivum*

**Synonyms:** *Triticum sativum*, *Triticum vulgare*

**Common Name (Eng.):** Wheat

**Local Name:** Gandum, Kanak

**Family:** Poaceae

### Description

Wheat is an annual grass with simple culms, erect, hollow or pithy, up to 1.2 m tall. Leaves are flat, narrow, 20–38 cm long, about 1.3 cm broad. Flower-spikes are long, slender, dorsally compressed, somewhat flattened. Rachis is tough, not separating from spikelet at maturity. Spikelets are 2–5-flowered, relatively far apart on stem, slightly overlapping, nearly erect, pressed close to rachis. Glumes are keeled in upper half, firm, glabrous, shorter than the lemmas. Lemmas are awned or awnless, less than 1.3 cm long; palea as long as the lemma, remaining entire at maturity; caryopsis free-threshing, soft or hard, red or white.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.pakflora.com](http://www.pakflora.com)

Feed no. 188

*Typha elephantina Pers.* (Small Bulrush, Lesser Cat tail)



www.alamy.com - EBN611

Source: [www.alamy.com](http://www.alamy.com)



Source: [Wikipedia](https://en.wikipedia.org/wiki/Typha_elephantina)



**Scientific Name:** *Typha elephantina Pers*

**Synonyms:** *Typha angustifolia*

**Common Name (Eng.):** Small Bulrush, Lesser Cat tail

**Local Name:**

**Family:** Typhaceae

**Description**

Perennial 1.5-4.0 m tall. Leaves linear or broadly linear; trigonous above the sheath, angularly keeled dorsally, 3-angled; lamina 25-40 mm broad. Upper part flat, about as long as inflorescence; male and female parts separate; axis of the male spike covered with hairs; female spike cylindric, blackish brown or brown; pistillodes present; female flowers bracteate; stigma lanceolate, bracts spatulate and longer than the hairs.

**Sources**

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.efloras.org](http://www.efloras.org)

Feed no. 192

*Vetiveria zizanioides* (Vetiver; Khus grass)



Source: [www.herbgarden.co.za](http://www.herbgarden.co.za)



Source: [www.floristtaxonomy.com](http://www.floristtaxonomy.com)

**Scientific Name:** *Vetiveria zizanioides*

**Synonyms:** *Andropogon muricatus*, *Phalaris zizanioides*, *Vetiveria muricata*

**Common Name (Eng.):** Vetiver

**Local Name:** Khus grass

**Family:** Poaceae

### Description

Tufted perennial; culms up to 2 m high. Leaf-blades up to 90 cm long, 4-10.5 mm wide. Panicle oblong, usually contracted, 13-30 cm long, its longest raceme up to 5(-7.5) cm long. Sessile spikelet 3.5-5 mm long including the callus; callus c. 1 mm long, glabrous, rounded to fit the slightly hollowed tip of the internode; lower glume spinulose; upper glume awnless; upper lemma awnless or shortly mucronate. Fl. & Fr. Per.: September.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.efloras.org](http://www.efloras.org)

Feed no. 194

*Vigna radiata* (Wild moong, Wild black gram; Mung bean)



Source: [www.farmweekly.com.au](http://www.farmweekly.com.au)



Source: [wikipedia.org](http://wikipedia.org)

**Scientific Name:** *Vigna radiata*

**Synonyms:** *Phaseolus sublobatus*, *Phaseolus trinervis*, *Vigna sublobata*

**Common Name (Eng.):** Wild Moong, Mung bean, Wild black gram

**Local Name:** Mung bean

**Family:** Fabaceae

### Description

Wild Moong is the wild form of mung or green gram (*Vigna radiata* var. *radiata*) and probably of urd or black gram [*Vigna mungo*]. It is an annual, herb or climber, to 1 m high. Flowers are white, yellow or purple. Stem are twining or prostrate. Leaflets are frequently lobed. Pods are cylindric, straight and densely hairy.

### Sources

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)
- [www.efloras.org](http://www.efloras.org)



Feed no. 195

*Zea mays* (Maize, Corn; Makai)



Source: [www.pfaf.org](http://www.pfaf.org)



Source: [garden-photos.com](http://garden-photos.com)



Source: [aphotoflora.com](http://aphotoflora.com)

**Scientific Name:** *Zea mays*

**Synonyms:**

**Common Name (Eng.):** Maize, Corn

**Local Name:** Makai

**Family:** Poaceae

**Description**

Maize is a cereal grain domesticated in the American continent. After European contact with the Americas in the late 15th century and early 16th century, corn spread to the rest of the world. The stems superficially resemble bamboo canes and the internodes can reach 20–30 cm. Maize has a very distinct growth form; the lower leaves being like broad flags, 50–100 cm long and 5–10 cm wide. The stems are erect, usually 2–3 meters in height, with many nodes, casting off flag-leaves at every node. Under these leaves and close to the stem grow the "ears". They grow about 3 cm a day. The ears are female inflorescences, tightly covered over by several layers of leaves, and so closed-in by them to the stem that they do not show themselves easily until the emergence of the pale-yellow silks from the leaf whorl at the end of the ear. The silks are elongated stigmas that look like tufts of hair, at first green, and later red or yellow. The apex of the stem ends in the tassel, an inflorescence of male flowers. Each silk may become pollinated to produce one kernel of corn.

**Sources**

- [www.feedipedia.org](http://www.feedipedia.org)
- [www.eol.org](http://www.eol.org)
- [www.flowersofindia.net](http://www.flowersofindia.net)

Feed no. 197

*Zizyphus nummularia* (Jajube; Karken Ber, Koken Ber)



Source: [www.ruthusher.com](http://www.ruthusher.com)



Source: [www.richardlyonsnursery.com](http://www.richardlyonsnursery.com)

**Scientific Name:** *Ziziphus mauritiana*

**Synonyms:** *Zizyphus nummularia*

**Common Name (Eng):** Jajube

**Local Name:** Karken Ber, Koken Ber

**Family:** Rhamnaceae

### Description

Ber is a small or medium sized subtropical tree, popular for its small berry like fruit. It grows wild in forests and also on wastelands throughout the mid-hills up to elevations of 1,400 meters. The small fruits are liked by children as well as by adults. A small spreading tree, with drooping branches; height, 5 to 8 meters; trunk girth, 85 cm; bark, rough, gray or dull black, irregularly cracked, covered with a thick layer of green moss in the case of older trees and, thus, looking green. Leaves, ovate, petiolate (petiole, 5 mm long), having very fine serration, 3.8 cm long, 2.9 cm broad, dark green and shining from above, white tomentose from beneath. The flowers are yellowish and born in clusters along the leaf axils and this is shortly followed by the rounded fruit which can be anywhere from three-quarters of an inch to an inch-and-a-half in size. Trees are easily propagated by seeds, however, seedlings take two to three years to start fruit production.

### Sources

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