“It is quality of our work which will please God and not quantity”.

-Gandhi

“So, after a few months, the tree has turned into a kind of soil or compost that can be used in the garden as fertilizer”.

-Helge May

1) *Delonix regia* (Bojer ex Hook) Raf.

**Family: Caesalpinaceae**

**Vernacular names:** Marathi: Gulmohar, Hindi: Gulmohri, English: Flamboyant, alamboronala, sarongadra, tsimbivositra, hintsakinsa, tanahou, flor de fuego, guacamayo.

A deciduous tree 5 to 20 m tall. Cylindrical unbranched trunk of 50 cm or more in diameter. Leaves mostly with 8 to 25 pairs of pinnae, with 30 to 60 or more opposite leaflets each, rachis grooved, leaflets oblong, 4 to 12 mm long, not coriaceous. Flowers very large and showy, in corymbs above the foliage, bright scarlet-red, the upper petal with large white to creamy yellow blotch streaked and flecked with red and with a red margin. Pods very large, strap shaped, flattened, slightly curved, most 400 to 700 mm long, woody, brown to blackish, rather glossy, containing 20 to 50 seeds. All these characteristics make this species very distinctive within the genus. Branches brittle, leafless during the dry season. Wood almost white, feeble, soft and light in weight (Naik, 1998).

*Delonix regia* is native to West and North Madagascar, now widely cultivated in many tropical countries as an ornamental tree at up to 300 m altitude. In its natural habitat grows in limestone karst and escarpments, often in the taller forest of gullies and river gorges, or in
sandy soil over limestone. It is used for Ornamental, shade, its large pods are used as rattles.

2) *Zea mays* Linn.

**Family: Poaceae.**

**Vernacular names:** Marathi: Maka, Hindi: Makai, Makka, Butta, Junri, Kukri, Bara jowar, English: Indian corn, Maxie and Maize.

Maize is a native of America, widely cultivated throughout the world (Canada, China, India, Brazil, France, Indonesia and South Africa).

It is an all monoecious annual grass with overlapping sheaths and broad conspicuously distichous blades. Plants have staminate spikelets in long spike like racemes that form large spreading terminal panicles (tassels) and pistillate inflorescence in the leaf axils, in which the spikelets occur in 8 to 16 rows, approximately 30 cm long, on a thickened, almost woody axis (cob). The whole structure (ear) is enclosed in numerous large foliaceous bracts and a mass of long styles (silks) protrudes from the tip as a mass of silky threads. (Hitchcock and Chase, 1971).

Maize is high yielding, easy to process, readily digested and costs less than other cereals. It is also a versatile crop, allowing it to grow across a range of agro ecological zones. Every part of the maize plant has economic value: the grain, leaves, stalks, tassels and cobs can all be used to produce a large variety of food and feed products. It represents a staple food for a significant proportion of the world’s population. No significant native toxins are reported to be associated with the genus *Zea* (International Food Biotechnology Council, 1990). It is an important source of carbohydrates, protein, iron, vitamin B and minerals. Green maize (fresh on the cob) is eaten parched, baked, roasted or boiled and plays an important role in filling the hunger gap after the dry season.
In industrialized countries, maize is largely used as livestock feed and as a raw material for industrial products, while in low income countries it is mainly used for human consumption.

3) *Spinacea oleracea* Linn.

**Family : Chenopodiaceae.**

**Vernacular names:** Marathi : Palak, Hindi: Palak shak, English : Spinach, Spinage.

Spinach is native of Asia, probably of Persian origin, being introduced into Europe about the fifteenth century. It grows well in temperate climates. Today, the United States and the Netherlands are among the largest commercial producers of spinach.

The Spinach is a cool season annual plant, cultivated for the sake of its succulent leaves. It is a fleshy leaf annual herb that grows in a rosette. The leaves are glabrous (non-hairy), broad and tender. The leaves may be Savoy (puckered or crinkled), semi-Savoy and flat or smooth. The plant can bear either male or female flowers (primarily dioecious) on the same plant. The flowers are inconspicuous, greenish-white and are borne in clusters on a spike. Male plants usually grow faster than female. The female flowers develop into seed like fruit. The plant turns yellow as the seeds are reaching maturity. The seeds are round or prickly depending on the cultivator selected.

Spinach is used as a leafy green vegetable and eaten raw in salads. It is also used as a cooked green (potherb) much like turnip greens or collard greens. It is rich in vitamins and minerals, especially folate (folic acid), vitamin A and K, calcium, magnesium, manganese, iron, sodium, phosphorus and potassium. It is exceptionally rich in carotenoids including beta-carotene and lutein and also contains quercetin, a
phytochemical with antioxidant properties. It also has high levels of protein.

Ninety-one per cent of spinach weight is water. A serving of spinach contains carbohydrates 4.3 gm protein 3.2 gm and fat 0.3 gm. It also contains vitamin C, thiamin, riboflavin and niacin. Green leafy vegetables like spinach with its delicate texture and jade green color provide more nutrients than any other food.

4) *Trigonella foenum-graecum* L.

**Family: Fabaceae**


It is a native of South Eastern Europe and West Asia. India is one of the major producers and exporters of fenugreek. This spice occupies third place in area and fourth in production among all the minor spices grown in this country. It is an annual herb, 30 to 60 cm tall; the long slender stem bears tripartite, toothed obovate leaves. It is popularly known as fenugreek, methi, Greek clover etc. Fenugreek is used both as food and food additive as well as in medicines. Fresh tender pods, leaves and shoots are eaten as curried vegetable while seeds are largely employed both as spice and medicine.

Fresh fenugreek leaves are beneficial in the treatment of indigestion, flatulence, sluggish liver. The seeds are used in dysentery, diarrhoea, chronic cough and enlargement of liver and spleen, also used as carminative and tonic. Fenugreek seeds reduce the amounts of calcium oxalate in the kidneys which often contributes to kidney stones. Fenugreek plants are also used as oriental cattle fodder. In India, fenugreek is often cultivated as a cover crop by citrus-fruit groves to take
advantage of their leguminous nature. The yield of extractable protein from fenugreek was maximum when the foliage was harvested 40 days after sowing (Chandramani et al., 1975). It was found to be the most suitable plant material for leaf protein preparation (Ajaykumar, 1989; Mungikar and Ajaykumar, 1995).

5) *Beta vulgarium* L.

**Family:** Chenopodiaceae.

**Vernacular names:** Marathi: Beet, Hindi: Beet, English: Beet Root.

Beet root can be grown across a wide range of climates. It is sown as a warm season crop in most regions, but performs best during the cooler, drier months in tropical zones. Beet root can be planted from August to February in temperate and subtropical climates with successive plantings providing a continuous harvest from late spring through until early winter. In tropical zones plants are best established from May to September providing a harvest from late winter until early summer.

*Beta vulgaris* is an herbaceous annual plant with leafy stems growing to 1 to 2 m tall. The leaves are heart-shaped, 5 to 20 cm long on wild plants (often much larger in cultivated plants). The flowers are produced in dense spikes, each flower very small, 3 to 5 mm diameter, green or tinged reddish, with five petals; they are wind-pollinated. The fruit is a cluster of hard nutlets.

It is harvested for their swollen root tuber. The flesh is generally red with brown/purple skin; although yellow and white fleshed varieties are also available. White beet root is most commonly eaten as a cold, salad vegetable pickled in vinegar, it also makes a delicious hot vegetable. Grated beet root may also be eaten raw.