

Bananas Assorted

Musa spp.



Female banana with flower



Male banana without flower

Common names	Pisang, saging, barbaro, zapolete, le bananier, banano, platano, platanero, guinea, plantain.
Origin	The primary centre of origin is thought to be Malesia (Malaysia, Indonesia, Philippines, and Papua New Guinea). It belongs to Musaceae family.
Description	Bananas are the largest herb in the world. The fruit of cultivated varieties develop parthenocarpically, i.e., they develop without the stimulus of pollination. They are also relatively infertile and only rarely contain seeds.
Growth Habitat	Bananas are cultivated throughout the tropics and in certain areas of the subtropics.
Foliage	The banana plant is not a tree but a large herb with a very juicy stem which is a cylinder of leaf-petiole sheaths growing from a fleshy rhizome or corm. It can grow to a height of 6 - 7m. Suckers grow around the main stem and the eldest sucker replaces the main plant when it fruits and dies. This process continues indefinitely.

Flowers	Each banana stem normally produces a single inflorescence or banana heart. Each inflorescence contains many bracts between rows of flowers. Female flowers, which can grow into fruits, grow in rows above the male flowers.
Fruits	The hanging cluster of fruits is called a bunch. Each tier can have up to 20 fruit and a bunch can have up to 3 - 20 tiers or hands per bunch. It takes 2-6 months to reach maturity after flowering. The peel of mature banana fruit is usually green and ripens to a yellow colour, but in some cases it is orange, reddish or red-brown. Fruit flesh color ranges from whitish to cream, yellow, yellow-orange, and deep orange.
Soil	They can be grown on a wide range of soils provided there is good drainage and adequate fertility and moisture. The best soils are usually deep, well drained, water retentive loams with high humus content. Volcanic or alluvial origin is preferred. Soil pH of 5.5-6.5 is desirable.
Pruning	To produce larger bunches of good quality fruit, the number of suckers selected for ratoon (resprout) crops is usually limited to 1-4 depending upon the original spacing at planting. Regular deleafing of the lower older leaves of the banana plants can also provide valuable mulch/weed control for other species and prevents disease, pests and fire hazard.
Fertilization	Fertilize the banana tree when it is actively growing. About 30cm from the stem or trunk. N-P-K should be 6-2-12 or 8-5-13. Use 200g of fertilizer every 2 weeks and increase by 200g for every 60cm of growth. For a 30cm stem use 200g, 90cm use 400g, 150cm use 600g. Spread it in a thin line from the furthest leaf growth or drip line. Add 2-3% magnesium.
Propagation	Bananas are usually propagated from suckers and bits (pieces of corms with attached growing points), but export-type commercial plantings more commonly use tissue-cultured plantlets.

Harvest	Bananas can be picked when they turn slightly yellow and the ends have become rounded. Export bananas are picked green, and ripen in special rooms upon arrival in the destination country. These rooms are air-tight and filled with ethylene gas to induce ripening.
Nutritional Properties	225g of banana contains 200calories, 2.5g of protein, 0.7g of fat, 11.3mg of calcium, 60.8mg of magnesium, 0.6mg of manganese, 50mg of phosphorus, 806mg of potassium, 19.6mg of VitC, 0.8mg of VitB6, 45mcg of folate and many other nutritional properties.
Health Benefits	<ul style="list-style-type: none"> ▪ Banana fruit is rich in calories, but very low in fats. The fruit contains good amounts of health benefiting anti-oxidants, minerals, and vitamins. ▪ Banana pulp is composed of soft, easily digestible flesh with simple sugars like fructose and sucrose that when eaten replenishes energy and revitalizes the body instantly; thus, for these qualities, bananas are being used by athletes to get instant energy and as supplement food in the treatment plan for underweight children. ▪ The fruit contains good amount of soluble dietary fiber (7% of DRA per 100 g) that helps normal bowel movements; thereby reducing constipation problems. ▪ It contains many health promoting flavonoid poly-phenolic antioxidants such as <i>lutein</i>, <i>zeaxanthin</i>, <i>beta and alpha carotenes</i> in small amounts. These compounds help act as protective scavengers against oxygen-derived free radicals and reactive oxygen species (ROS) that play a role in aging and various disease processes. ▪ It is also a very good source of vitamin-B6 (pyridoxine), provides about 28% of daily-recommended allowance. Pyridoxine is an important B-complex vitamin that has beneficial role in the treatment of neuritis, anemia, and decreasing <i>homocystine</i> (one of the causative factor for coronary artery disease (CHD) and stroke episodes)

	<p>levels in the body.</p> <ul style="list-style-type: none"> ▪ The fruit is also good source of vitamin-C (about 8.7 mg per 100g). Consumption of foods rich in vitamin-C helps body develop resistance against infectious agents and scavenge harmful oxygen free radicals. ▪ Fresh bananas provide adequate levels of minerals like copper, magnesium, and manganese. Magnesium is essential for bone strengthening and has cardiac-protective role as well. Manganese is used by the body as a co-factor for the antioxidant enzyme, <i>superoxide dismutase</i>. Copper is required in the production of red blood cells. ▪ Fresh banana is a very rich source of potassium. 100 g fruit provides 358 mg potassium. Potassium is an important component of cell and body fluids that helps control heart rate and blood pressure, countering bad effects of sodium.
Commercial Uses	<p>Bananas and plantains constitute a major staple food crop for millions of people in developing countries. In most tropical countries, green (unripe) bananas used for cooking represent the main cultivars. Also banana leaves are large, flexible, and waterproof. They are often used as ecologically friendly disposable food containers or as "plates" in South Asia and several Southeast Asian countries. Furthermore, the tender core of the banana plant's trunk is also used in South Asian and Southeast Asian cuisine.</p>
Food Suggestion	<p>Banana Cheese Fritters</p> <p><u>Ingredients :</u></p> <ul style="list-style-type: none"> • 6 medium-sized bananas (preferably pisang Abu, firm but ripe), peeled • 3 tbsp rice flour • 3 tbsp wheat flour • 1/2 tsp vanilla essence • 2 tbsp milk creamer

- grated cheese
- Oil for deep-frying
- A pinch of salt
- A pinch of sugar

Method :

1. Mix sugar, rice flour and wheat flour with water.
2. Soak bananas in the batter.
3. Heat the oil in a large wok.
4. Then drop one banana at a time into the oil. Cook only two bananas at a time as the temperature of the oil will drop if there are too many bananas.
5. When bananas are crisp and golden brown, remove from oil and drain on a paper towel and put aside.
6. Pour the milk creamer on top of the fried bananas.
7. Lastly, coat it with grated cheese.