FGCU Food Forest

Plant Database

Taro *(Colocasia esculenta)*

Quick Facts

Origin: South Central Asia
Description: Taro leaves are heart-shaped, bright to deep green and they can span over a foot in diameter.
Uses: Taro has a thick root that can be boiled and eaten.
Harvest: Ready for harvest 8-10 months after planting
Flower: none
Tolerance: Able to survive in cold climates

General Description: Taro is native to Southern India and Southeast Asia. It is a perennial, tropical plant primarily grown as a root vegetable for its edible starchy corm, and as a leaf vegetable. It is a food staple in African, Oceanic and South Indian cultures and is believed to have been one of the earliest cultivated plants.

- **Native Origin**: Taro plant has been mentioned many historical information dating back centuries in Southeast India and Southern India. It grows well in flooded countries much like rice. The raw form of the plant is inedible plant has presence of calcium oxalate crystals.
- **Harvesting Techniques**: Taro can be grown in paddy fields where water is abundant or in upland situations where water is supplied by rainfall or supplemental irrigation. Prepare rows, and use a guide string to plant 18-24 inches apart within rows 18-24 inches apart. Warm, stagnant water causes basal rotting. For maximum yields, the water level should be controlled so that the base of the plant is always under water. Like most root crops, taro and eddoes do well in deep, moist or even swampy soils where the annual rainfall exceeds 2,500 mm. Eddoes are more resistant to drought and cold. The crop attains maturity within 6 to 12 months after planting in dry-land cultivation and after 12 to 15 months in wetland cultivation. The crop is harvested when the plant height decreases and the leaves turn yellow. Harvesting is usually done by hand tools,

even in mechanized production systems. First, the soil around the corm is loosened then; the corm is pulled up by grabbing the base of the petioles. Taro is very susceptible to weed competition, especially during the first 3- 4 months after planting, when the leaf canopy is being formed.The global average yield is 6.2 tones/hectare but varies according to the region.

- **Season of Harvest**: Year Round Upland/Wetland
- **Culinary Uses**: The corms, which have a light purple color due to phenolic pigments, are roasted, baked or boiled, and the natural sugars give a sweet nutty flavor. The starch is easily digestible, and since the grains are fine and small it is often used for baby food. The leaves are a good source of vitamins A and C and contain more protein than the corms. In Hawaii, taro is made into a paste known as poi, which is often allowed to ferment before being eaten. The most popular variety of taro grown for food is dasheen. Virtually all of the taro grown in the United States is of this variety, which differs from most others in that the corms do not have a sharp, bitter taste. Taro leaves are also eaten, but they must be properly cooked to destroy their bitter taste.
- **Nutritional Value**: Taro or dasheen corms have more calories than potatoes. 100 g provides 112 calories. Their calorie mainly comes from complex carbohydrates known as amylose and amylopectin. However, the roots are very low in fats and protein than in cereals and pulses. Their protein levels can be comparable to that of other tropical food sources like yam, cassava, potato, banana, etc.

  The corms, however, are free from gluten. They feature high-quality phyto-nutrition profile comprising of dietary fiber, and antioxidants in addition to moderate proportions of minerals, and vitamins.

  It is one of the finest source dietary fibers; 100 g flesh provides 4.1 g or 11% of daily-requirement of dietary fiber. Together with slow digesting complex carbohydrates, moderate amounts of fiber in the food help gradual rise in blood sugar levels.

  Taro leaves as well as yellow-fleshed roots have significant levels of phenolic flavonoid pigment antioxidants such as ß-carotenes, and cryptoxanthin along with vitamin A. 100 g fresh taro leaves provide 4825 IU or 161% of RDA of vitamin A. Altogether; these compounds are required for maintaining healthy mucus membranes, skin and vision. Consumption of natural foods rich in flavonoids helps to protect from lung and oral cavity cancers.

  It also contains good levels of some of the valuable B-complex group of vitamins such as pyridoxine (vitamin B-6), folates, riboflavin, pantothenic acid, and thiamin.

  Further, the corms provide healthy amounts of some important minerals like zinc, magnesium, copper, iron, and manganese. In addition, the root has very good amounts of potassium. Potassium is an important component of cell and body fluids that help regulate heart rate and blood pressure.

Taro Scientific Classification	
Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Monocots
Order:	Alismatales
Family:	Araceae
Subfamily:	Aroideae
Tribe:	Colocasieae
Genus:	Colocasia
Species:	C. esculenta

Sources

http://ndb.nal.usda.gov/ndb/foods/show/3262?qlookup=11519&format=Full&max=25&man=&lfacet=&new=1http://www.britannica.com/EBchecked/topic/583637/tarohttp://www.ctahr.hawaii.edu/fb/taro/taro.htmhttp://science.howstuffworks.com/life/botany/taro-info.htmhttp://www.nutrition-and-you.com/taro.html