

# Assam Jawa

*Tamarindus indica*

Common names	Tamarindo, tamarin, tamarinde, tamarandizio, tamarijn, taman, sampalok, tamarind, ampil, mak kham, ma-kharm, me, imli, amli, tamarind tree, tambaring, amilam, bakham.
Origin	Native to tropical regions of Northern Africa. The tree was long ago established in India and the Americas, and heavily cultivated in both of these regions. It is extensively cultivated in tropical areas of the world. It belongs to Fabaceae family.
Description	The asam jawa tree is a long-lived, medium-growth, bushy tree, which attains a maximum crown height of 12 to 18m (40 to 60 feet). The bark is light grey to brown, strongly fissured, rough and scaly. A blood-red gum exudes from the bole and branches when damaged.
Growth Habitat	The tree is highly adaptable to somewhat arid conditions and can withstand both high heat and periods of drought. It should be planted in full sun and is highly wind-resistant with strong, supple branches. Trees like dry conditions during fruit development.
Foliage	The bright green, pinnate foliage is dense and feathery in appearance. The leaves are normally evergreen but may shed briefly in very dry areas during the hot season. There are usually as many as 10 to 20 nearly sessile $\frac{1}{2}$ -1 inch, pale green leaflets per leaf and the leaflets close up at night.
Flowers	The inconspicuous, inch wide, five petalled flowers are borne in small racemes and are yellow with orange or red streaks. The flower buds are pink due to the outer color of the four sepals which are shed when the flower opens.

Fruits	The fruit is a pendulous pod, 12 to 15cm in length, with a hard, brown shell. The fruit has a fleshy, juicy, acidulous pulp. It is mature when the flesh is coloured brown or reddish-brown.
Soil	The tree tolerate a great diversity of soil types but do best in deep, well drained soils which are slightly acid. Trees will not tolerate cold, wet soils but are tolerant of salt spray and can be planted fairly near the seashore.
Pruning	Young trees are pruned to allowed three to five well-spaced branches to develop into the main scaffold structure of the tree. After this, maintenance pruning only is required after that to remove dead or damaged wood.
Fertilization	The asam jawa fruit well with or without the application of fertilizer due to their deep and extensive root system. Urea at 100 to 200g/tree is applied to commercially grown trees to support high yields. The amount of fertilizer can be gradually increased as the tree grows.
Propagation	Asam jawa is traditionally grown from seed. Veneer grafting, shield budding, and air layering may be used to propagate desirable selections.
Harvest	Asam jawa mature in late spring to early summer and may be left on the tree for as long as 6 months after maturity so that the moisture content will be reduced to 20% or lower. Fruits for immediate processing are often harvested by pulling the pod away from the stalk. Mature trees are capable of producing 350 lb of fruits a year.
Nutritional Properties	Asam Jawa pulp is rich in non starch polysaccharides, the dietary fiber like gums, hemicelluloses, mucilage, pectin and tannins. It is rich in tartaric acid which is a very powerful antioxidant. Asam Jawa contains many volatile phytochemicals like limonene, geramol, safrole, cinnamic acid, pyrazine, methyl salicylate and alkylthiazoles. It is a

	<p>good source of various minerals like potassium, copper, calcium, iron, selenium, zinc and magnesium. Asam Jawa also contains very good amounts of vitamins of the B complex group like thiamine and niacin, and some amounts of pyridoxine. It also contains some vitamin A.</p>
Health Benefits	<ul style="list-style-type: none"> <li>• The dietary fiber helps in lowering cholesterol by binding the bile salts and preventing their absorption. It is helpful in preventing constipation, binding toxins in the digestive tract and thereby reducing risk of colon cancer.</li> <li>• Tamarind purifies the blood while it also has digestive and laxative effects.</li> <li>• Tamarind is used to cure jaundice as it cures bile disorders.</li> <li>• Juice of tamarind flowers is used to treat piles.</li> <li>• Tamarind pulp relieves flatulence, indigestion and vomiting.</li> <li>• Gargling with tamarind water relieves sore throat.</li> <li>• Tamarind juice acts as an antidote in intoxication due to opium and other intoxicants.</li> </ul>
Commercial Uses	<p>Asam Jawa are commonly used to make candies, preserves, and for flavoring purposes in many desserts and dishes. In India asam jawa chutney is very popular. Asam Jawa is also used in jams, sweetened drinks, blended in drinks etc. It is a constituent of Worcestershire sauce and HP sauce, a brown sauce produced in the Netherlands. Asam Jawa has been used in various ways in carpentry. The wood has been used to make wooden flooring and furniture. Metal polish to clean and impart shine to metals like copper and brass is also made with asam jawa. Some varieties of the asam jawa tree have been used in gardens as ornamental trees.</p>
Food Suggestion	<p><b>Penang Nyonya Style Asam Prawn</b></p> <p>Ingredients:</p> <ul style="list-style-type: none"> <li>- 600 gram big white prawn, cut away the tentacles and legs.</li> </ul>

- 2 tablespoon of asam jawa.
- 2 tablespoon of dark soya sauce or cooking caramel.
- 1 tablespoon sugar.
- 1 tablespoon cooking oil.
- some greens like cabbage (optional)

Instructions:

1. Mix dark soya sauce, sugar, asam jawa and prawn in a mixing bowl.
2. Heat up cooking oil to medium/high heat.
3. Fry till the shells starts to show some caramelize a little. Serve on a couple cabbage leaves.