

# Amaranth—*Amaranthus* spp.<sup>1</sup>

James M. Stephens<sup>2</sup>

There are several cultivated species of the genus *Amaranthus* collectively called amaranths. Some of the individual representatives of this group are tampala, hon-toi-moi, bush greens, pigweed, and Chinese spinach. These amaranths are used for food regularly in different parts of the tropics and, occasionally, in the United States. Leaf shape and color vary considerably. Some are red, others are green, while others may be variegated, usually with purplish patterns on a green background.



Figure 1. Amaranths.

## Description

The green form of *A. gangeticus* L. is most commonly cultivated for use as boiled greens. Like most, it is an upright branched annual. While some are quite large and broad-leaved (5–6 inches wide), others are much smaller and narrow-leaved. The red-leaved variety probably is *A.*

*tricolor* L. Plants of wild amaranth often grow to over 6 feet tall.

*Amaranthus edulis* is a grain amaranth reported to be exceptionally high in lysine - a critical amino acid often deficient in plant protein.

## Culture

Amaranth grows well and rapidly at all altitudes in the West Indies. It grows vigorously in Florida gardens. The green-leaved variety, tampala, which can be obtained from United States seedsmen, is satisfactory. Direct broadcast seeding is practiced, and the seedlings are thinned to 3 inches apart when quite young. Young seedlings may be eaten. Amaranth is killed by cold, so plant for warm season growth. The major pest observed in Florida is caterpillars, which can chew leaves rapidly in autumn.

## Use

The young leaves and shoot tips are eaten 3–6 weeks after sowing. Some produce an edible seed head that forms a fuzzy spikelet. When heated, seeds are said to burst like popcorn. The most common use for grain amaranth is to grind the grain into flour to make breads, noodles, pancakes, cereals, cookies, etc. Many amaranth products are currently on the U.S. market.

The wild types are weed pests in fields and gardens. Usually, the garden species do not self-seed to become serious pests following cultivation. Wild amaranth is edible but not tasty.

1. This document is HS539, one of a series of the Horticultural Sciences Department, UF/IFAS Extension. Original publication date April 1994. Revised August 2015. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

2. James M. Stephens, professor emeritus, Horticultural Sciences Department, UF/IFAS Extension, Gainesville FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.