

Waterchestnut—*Eleocharis dulcis* (Burm. f.) Trin. ex Henschel¹

James M. Stephens²

Chinese waterchestnut has other common names such as waternut, horse's hoof, matai, hon matai, kweilin matai, pi chi, pi tsi, sui matai, and kuro-kuwai. It is a rush-like plant grown in ponds for its round corms or tubers, whose chestnut brown skin color together with the chestnutty flavor and texture of the white flesh, give rise to the name waterchestnut. Waterchestnuts are seldom grown in Florida and the rest of the United States, although limited attempts have been made here and in California and Hawaii. It is an important crop in China and is imported to the United States to be used in Chinese cookery. Trials in Gainesville in polyethylene-plastic lined ponds filled with sand gave fair results, although the operation was very labor-intensive.

Description

The plants resemble other sedges with numerous upright tubular stems 3–5 feet tall. Underground roots and lateral rhizomes growing from each plant produce other plants and the edible corms. In size and form, the corms resemble gladiolus bulbs, being round, vertically compressed, with a firm, crisp, white interior.

Culture

Conditions for waterchestnuts as an annual crop must include controlled irrigation and a growing period of 220 frost-free days. It is not a crop for swamplands or marshlands, unless ditches and dikes control water levels. About 4 to 6 inches of water should be maintained over the soil surface where waterchestnuts are grown.



Figure 1. Waterchestnut, above-ground part.
Credits: James M. Stephens, UF/IFAS

For a permanent planting, corms are placed 4–5 inches deep in the soil and 30 inches apart in similarly spaced rows. After planting, the plot is flooded and kept submerged for a day. Then the water is allowed to drain naturally to settle the soil and establish the young plants. When plants are 12 inches high, the area is flooded again for the remainder of the season.

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Under favorable conditions, plants develop rapidly. In 6 to 8 weeks, secondary plants will begin to appear around the parent plant. After growing throughout the summer, the corms reach edible size in late fall. Water is drained from the area about 30 days before harvest.



Figure 2. Waterchestnut tubers.
Credits: Blue Goose, Inc.