

PLANTING GUIDE

‘Big O’ Crab-apple *Malus coronaria* (L.) P. Mill.



**USDA-NRCS Jimmy Carter PMC
Americus, Georgia**

SPECIES: *Malus coronaria* (L) P. Mill

PLANT SYMBOL: MACO5

RELEASE NAME: ‘Big O’

GENERAL INFORMATION: Fruit from 54 crabapples was collected in 1974 from six states (Alabama, Florida, Georgia, North Carolina, South Carolina and Tennessee) and assembled at the Jimmy Carter Plant Materials Center in

Americus, Georgia for evaluation and testing. All assemblies were evaluated for growth, vigor, fruit production, fruit quality, fruit size, bloom color, insect resistance, and disease resistance. One particular accession collected from a native stand in Floyd County Georgia by Billy Tomlinson (District Conservationist in Rome Georgia) displayed superior qualities in almost every tested category. This accession was later named 'Big O'.

DESCRIPTION: Big O is a small deciduous tree that grows from 20-30 feet tall with a slender trunk. The leaves are elliptic lanceolate, 3.5-5.0 cm long and 1.5-2.5 cm wide with crenate margins. Leaf bases are rounded to cuneate. Flower sepals are glabrous on outside margins. Flower petals are pink/white fading to whitish. It blooms in mid-late March. The fruit is a green pome and matures to greenish yellow. Fruit size is approximately 45 x 35 mm with an average weight of 28 grams. The fruit matures in mid-November. In January some fruit of Big O is still firm, some drying, and some rotting. Big O is propagated from seed.

USES: The primary use for Big O is wildlife habitat enhancement. Crabapples have long been considered an excellent food for deer and other wildlife. Big O provides abundant crops of fruit for wildlife well into fall when some other wildlife plants are lacking fruit. In addition it can be used as windbreak, screen, or hedgerow. Since it produces bright colorful blooms in spring it can be used as an ornamental to enhance aesthetic value, and to beautify urban and suburban landscapes. Since Big O is a native it can also be used to help re-establish native plant communities.

ENVIRONMENTAL CONCERNS: Big O is a native crabapple from Floyd County Georgia and has shown no weedy or invasive characteristics. Big O was rated OK to release in the Environmental Evaluation of Plant Materials Releases Form.

ADAPTATION : Big O shows potential adaptation further north but is primarily adapted to the piedmont and coastal plain of the Southeastern United States.

ESTABLISHMENT: The first step in establishing Big O is to collect fruit in September and October. Extracted seed should be stratified at 40 degrees Fahrenheit. By March most of the seed will begin to sprout. Seed should then be placed into a greenhouse. After the young seedlings have been acclimated to greenhouse conditions they can be repotted and hardened off. One or two year old plants can be transferred to field conditions.

PLANTING DATE: For best results transplant in late winter/early spring to moderately well to well drained soils which have minimum plant competition.

FERTILIZATION: Big O transplants should receive 300-400 pounds/acre of 10-10-10 fertilizer (or equivalent) for the initial growth years.

PLANTING RATE: Plants should be spaced about 15-20 feet apart for maximum growth potential.

DISEASE AND INSECTS: Big O is susceptible to cedar apple rust but no more than most naturally occurring populations. It showed as much or more resistance to insects as other tested wild crabapples.

WHERE TO GET HELP: For more information, contact Donald Surrency, Plant Materials Specialist, Thomson, Georgia, 706-595-1339. E-mail don.surrency@ga.usda.gov. Mike Owsley, Jimmy Carter PMC, Americus, Georgia, 229-924-4499. E-mail mike.owsley@ga.usda.gov.

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