



Common Name: DWARF GINSENG

Scientific Name: *Panax trifolius* Linnaeus

Other Commonly Used Names: ground nut

Previously Used Scientific Names: none

Family: Araliaceae (ginseng)

Rarity Ranks: G5/S1

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** with a single stem 2 - 8 inches (5 - 20) tall. **Leaves** 3 in number, in a whorl at the top of the stem, each leaf divided into 3 - 5 oval, coarsely toothed **leaflets** up to 3 inches (8 cm) long, with rounded tips. **Flower cluster** 1 per plant, about ¾ inch (2 cm) wide, on

a stalk $\frac{3}{4}$ - $2\frac{3}{8}$ inches (2 - 6 cm) long; **flowers** with 5 white petals. **Fruit** an oval or round, yellow-green berry, $\frac{3}{8}$ inch (1 cm) wide.

Similar and Related Rare Species: American ginseng (*Panax quinquefolius*, Special Concern) was once widespread in the Piedmont and in north Georgia, and occurred as far south as Clay County, in the Chattahoochee River drainage. Collection of roots for medicinal use has severely reduced the number of plants and is now regulated in Georgia by the Ginseng Protection Act. It is illegal to dig ginseng on state or federal lands without a permit. To request a permit, call the Georgia Natural Heritage Program, Department of Natural Resources, 706-557-3032.

Habitat: Rich, moist hardwood forests.

Life History: Dwarf ginseng is a perennial herb that reproduces sexually. It is called a “sex-changing” plant because a plant may produce male flowers (with stamens and no pistil) one year, and then another year produce flowers that have both stamens and pistils. Younger, smaller plants produce only male flowers; pollen takes less energy to produce than fruits, and younger plants have fewer reserves stored in their roots than do older ones. As the plant ages and has more stored reserves, it partially changes sex – producing flowers with both female (pistil) and male (stamens) parts. As the pistil matures, it draws on the carbohydrates stored in the plant’s roots to support the development of fruits.

Survey Recommendations: Surveys are best conducted during flowering (April–June) and fruiting (August–October).

Range: Georgia, north to Nova Scotia and west to Ontario and Minnesota. It is rare in Georgia, North Carolina, Virginia, and Indiana.

Threats: Destruction of habitat by logging, clearing, and development. Invasion by exotic plants, especially Nepalese browntop grass and Japanese honeysuckle, and rooting by wild hogs.

Georgia Conservation Status: About eight populations are known, most on National Forest or state conservation lands.

Conservation and Management Recommendations: Avoid logging or clearing. Eradicate exotic pest species, especially Nepalese browntop grass, Japanese honeysuckle, and wild hogs. Protect sites from foot and off-road-vehicle traffic.

Selected References:

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Schlessman, M.A. 1990. Phenotypic gender in sex changing dwarf ginseng, *Panax trifolium* (Araliaceae). American Journal of Botany 77(9): 1125-1131.

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.
<http://www.herbarium.unc.edu/flora.htm>

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Date Compiled or Updated:

L. Chafin, July 2008: original account

K. Owers, Feb. 2010: added pictures



Inflorescence

DWARF GINSENG

Panax trifolius

