Common Name: AWNED MEADOWBEAUTY

Scientific Name: *Rhexia aristosa* Britton

Other Commonly Used Names: awnpetal meadowbeauty

Previously Used Scientific Names: none

Family: Melastomataceae (meadowbeauty)

Rarity Ranks: G3/S2

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: OBL

Description: Perennial **herb** with underground tubers. **Stem** 16 - 28 inches (40 - 70 cm) tall, erect, rigid, much-branched, with a spongy, thickened base; 4-sided, each side about the same width, the angles often narrowly winged. **Leaves** about 1 inch (2 - 3 cm) long and ½ inch (1.3 cm) wide, bright green, lance-shaped, opposite, nearly erect, with hairs at the base, 3 conspicuous veins, and finely toothed, hair-tipped margins. **Flowers** with 4 pink-lavender petals and 8 stamens with yellow, curving anthers. Base of the flower enclosed by a small, vase-shaped **floral tube**, with stiff, yellowish hairs concentrated around the neck and 4 triangular segments at the top, each segment tipped with a bristle. **Fruit** enclosed in the floral tube, which expands to about ⅜ inch long when mature; seed curved like a snail shell.

Similar Species: West Indies meadowbeauty (*Rhexia cubensis*), Maryland meadowbeauty (*R. mariana*), and hairy meadowbeauty (*R. nashii*) stems have unequal sides: 2 sides are wider, dark green, and rounded; 2 other sides are narrow, light green, and flat.

Related Rare Species: Nuttall's meadowbeauty (*Rhexia nuttallii*, Special Concern) occurs in wet pine flatwoods and bogs in southeast Georgia. Also see on this web site: small-flowered white meadowbeauty (*Rhexia parviflora*) and panhandle meadow-beauty (*Rhexia salicifolia*).

Habitat: Limesink and depression ponds, Carolina bays, wet savannas.

Life History: Awned meadowbeauty is a perennial herb that reproduces both sexually and vegetatively, forming colonies by the spread of rhizomes and sprouting from tubers. Its flowers are pollinated by insects, probably by bumblebees. The bright yellow anthers (pollen-bearing structures in the flower) are curved and appear to be hinged at the junction with the stamen's filament, or stalk. Bees grasp the anther and "buzz" it, causing pollen to shake from a tiny pore at the tip of the anther. The seeds of awned meadowbeauty remain in the soil seed bank for years, and germinate in response to fluctuations in the water table.

Survey Recommendations: Surveys are best conducted during flowering (June–July).

Range: Georgia, Alabama, South Carolina, North Carolina, New Jersey, Delaware.

Threats: Lowering of groundwater table due to withdrawal for irrigation and urban uses; draining and filling of ponds and savannas; conversion of habitat to pine plantations; fire suppression.

Georgia Conservation Status: Once known from at least 25 sites, only about 15 populations have survived, most on a single conservation area. Population size fluctuates widely, depending on water levels in ponds.

Conservation and Management Recommendations: Allow fire in surrounding uplands to burn into ponds and wetlands; avoid placing firebreaks in pond margins. Avoid soil compaction and disturbances to ground cover.

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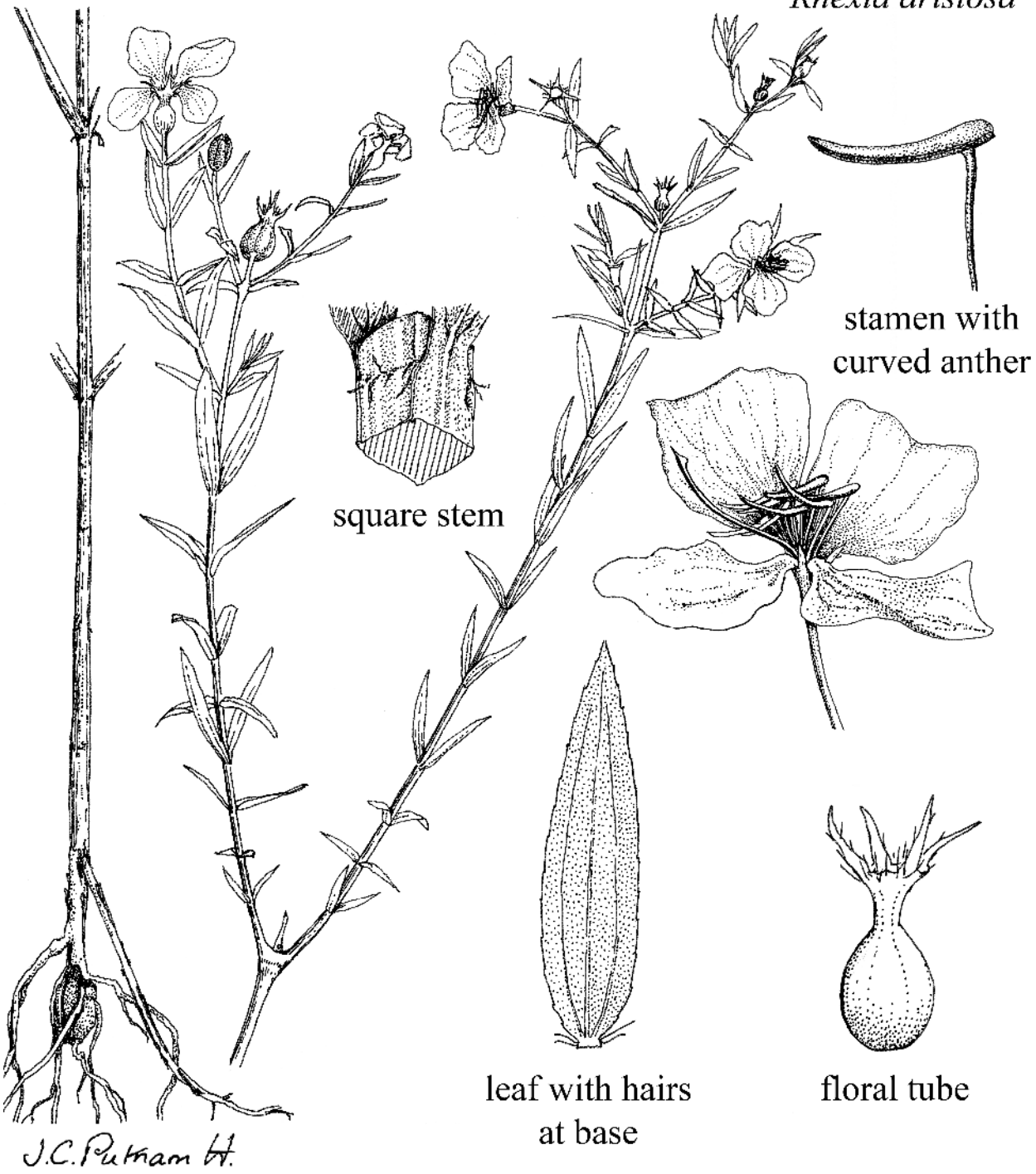
Date Compiled or Updated:

L. Chafin, July 2008: original account
K. Owers, Feb. 2010: added pictures

AWNED MEADOWBEAUTY

Rhexia aristosa



Inflorescence