Common Name: HAIRY RATTLEWEED

Scientific Name: *Baptisia arachnifera* Duncan

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Fabaceae/Leguminosae (pea)

Rarity Ranks: G1/S1

State Legal Status: Endangered

Federal Legal Status: Endangered

Federal Wetland Status: none

Description: Perennial **herb**, 15 - 32 inches tall (40 - 80 cm), all parts covered with white, cobwebby hairs. **Leaves** ¾ - 2⅜ inches (2 - 6 cm) long and ½ - 2 inches (1.5 - 5 cm) wide, simple, alternate, oval to broadly heart-shaped. **Flowers** yellow, typical of pea flowers with an upright banner petal and 2 wing petals enclosing a keel petal; flowers in elongated clusters at the ends of stems. **Fruit** a tough, round pod, ¼ - ⅝ inch long, with a curving tip that is nearly as long as the pod.

Similar Species: Most *Baptisia* species have compound leaves with 3 leaflets. The only other *Baptisia* species in Georgia with simple leaves is perfoliate wild indigo (*B. perfoliata*), which has hairless stems, and hairless, leathery leaves that completely encircle the stem so that the stem appears to pass through the leaf.

Related Rare Species: Leconte's wild indigo (*Baptisia lecontei*, Special Concern) occurs in sandhills in south-central Georgia; it has yellow flowers, a round pod with a short, pointed tip, and leaves with 3 oval, grayish-green leaflets. Also see the species account for Apalachicola wild indigo (*B. megacarpa*) on this web site.

Habitat: Pine flatwoods with a shrubby layer of saw palmetto, gallberry, rusty lyonia, and blueberries; also pine plantations, powerlines, and rights-of-way through flatwoods habitats.

Life History: Hairy rattleweed has widely spreading, rhizomatous rootstocks and may be somewhat clonal. The large rootstock suggests that plants are long-lived. It is probably self-incompatible, relying on insect pollinators to effect cross-pollination. Seeds are dispersed when stems break off at ground level and are blown, tumbleweed-style, across the ground; weevils may also disperse some seeds. Because of the drastic reduction in population size over the last 20 years, research has focused on possible causes of this decline; one study found that hairy rattleweed produces many fewer seeds than a common, closely related *Baptisia* species, and its seeds are also heavily eaten by weevils. Another study found that plants require a relatively open canopy to flower, a condition difficult to sustain in the populations that occur in pine plantations.

Survey Recommendations: Plants flower late June–early August and fruiting August–October, but the hairy stems and leaves are distinctive throughout the growing season.

Range: Found only in 2 counties in southeast Georgia.

Threats: Fire suppression, lowering of water table, site drainage, conversion of habitat to pine plantations.

Georgia Conservation Status: Approximately 26 populations are known, all but 2 on private timber lands. For 9 populations that have been monitored, there has been a drastic reduction in population size and plant growth and reproduction since 1986. The species is apparently on the brink of extinction.

Conservation and Management Recommendations: Purchase or place under conservation management all lands containing hairy rattleweed. Burn flatwoods every 2 - 3 years. Avoid clearcutting and other mechanical disturbances such as bedding and roller drum chopping. Continue yearly monitoring of populations and support research into causes of decline.

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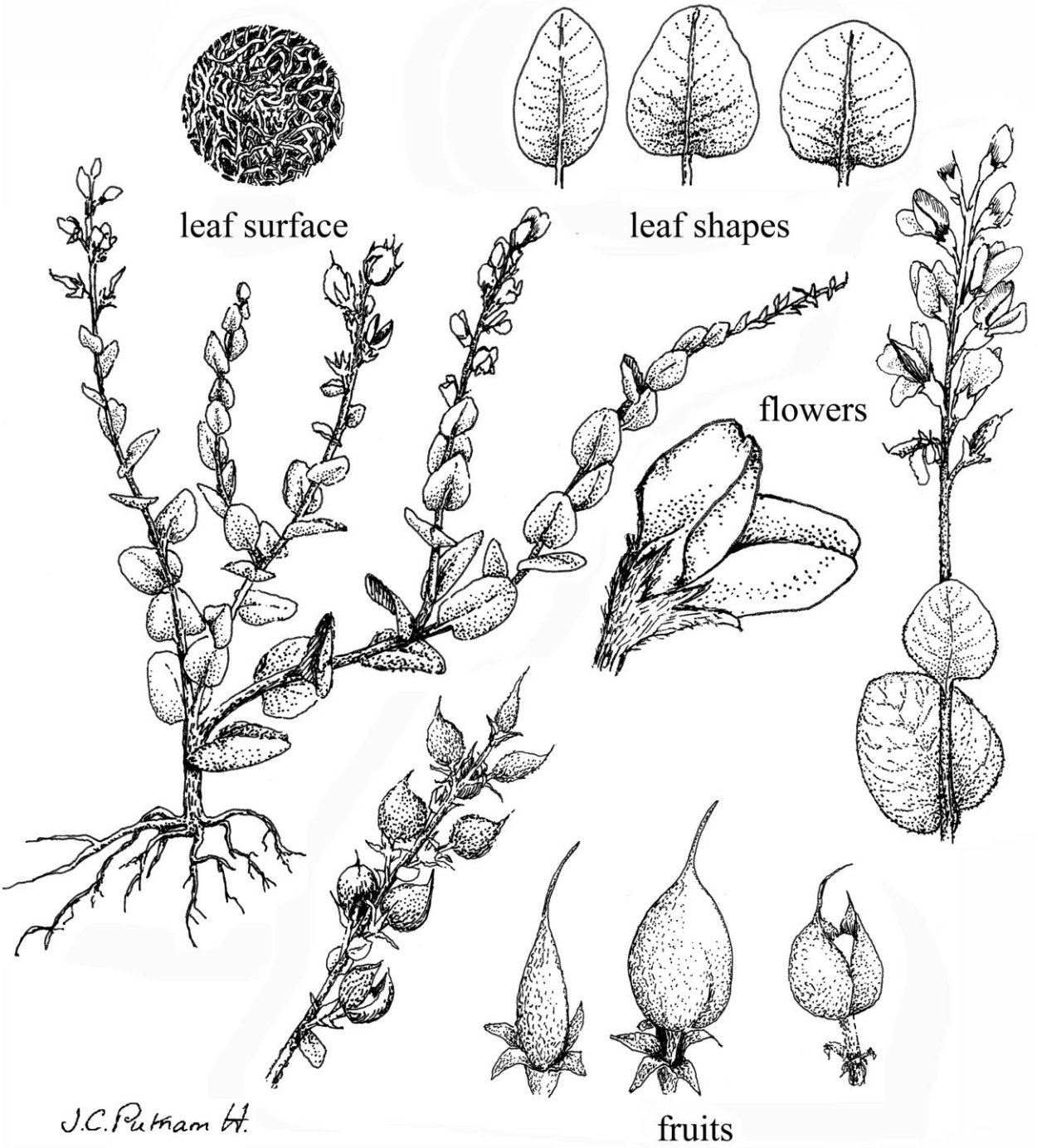
Date Compiled or Updated:
L. Chafin, Feb. 2007: original account
K. Owers, Jan. 2010: updated status and ranks, added pictures
Z. Abouhamdan, April 2016: removed broken link

HAIRY RATTLEWEED

Baptisia arachnifera



Inflorescence

Fruit