



Common Name: PICKERING'S MORNING-GLORY

Scientific Name: *Stylisma pickeringii* var. *pickeringii* (Torrey ex M.A. Curtis) Gray

Other Commonly Used Names: Pickering's dawnflower

Previously Used Scientific Names: *Bonamia* (or *Breweria*) *pickeringii* (Torrey ex M.A. Curtis) Gray

Family: Convolvulaceae (morning-glory)

Rarity Ranks: G4T3/S2

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **vine** with **stems** up to 6 feet (2 meters) long, rising from a central crown and branching to form large mats. **Leaves** 1 - 2¾ inches (2.5 - 7 cm) long and ⅛ inch (1 - 3 mm) wide, held upright. **Flowers** ½ - ¾ inch (1.2 - 1.8 cm) across, white, funnel-shaped with 5 rounded lobes; **sepals** 5, covered with golden hairs; up to 5 flowers per stalk. **Flower stalk**, 1¼ - 2¾ inches (3 - 7 cm) long, hairy, rising from the angle of leaf and stem, with 2 leaf-like **bracts**, ½ - 1 inch (1.5 - 2.5 cm) long. In the center of the flower are 5 stamens and a pistil with its **style** barely divided into two very short branches, each branch topped by a tiny, knob-like **stigma**. **Fruit** a round capsule, ¼ inch (6 mm) wide.

Similar Species: Dawnflower (*Stylisma patens*) is another white-flowered morning-glory vine with narrow leaves that occurs in sandhills. Its leaves are held horizontally; the bracts on the flower stalk are less than ¼ inch (5 mm) long, very narrow, and not leaf-like; the style is deeply divided into two long branches.

Related Rare Species: See silky morning-glory (*Evolvulus sericeus* var. *sericeus*) on this website.

Habitat: Bare, sandy soils of sandhills on the Fall Line and sand ridges along Coastal Plain rivers, with scattered turkey oak and longleaf pine; also roadsides through these habitats.

Life History: Pickering's morning-glory is a perennial herbaceous vine that reproduces sexually. Plants flower profusely, with individual plants producing hundreds of fruits and seeds. The flowers open in early morning and are pollinated by bees. Seeds germinate best on bare, mineral soil such as created by fire and flood scouring and often germinate shortly after falling from the fruit if soil conditions are right. After germination, the earliest seedling growth takes place within a cavity in the seed that remains underground, protecting the new growth from the harsh conditions – drought, fire, high levels of sunlight – that occur in sandhills and sand ridges. All subsequent aboveground growth derives from these protected shoots.

Survey Recommendations: Surveys are best conducted during flowering (late May–mid-August) and fruiting (June–October).

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

Threats: Conversion of habitat to pine plantations, pastures, fields, and developments; fire suppression and encroachment by woody plants.

Georgia Conservation Status: Fewer than 30 populations are known, about half occurring on public lands.

Conservation and Management Recommendations: Burn sandhills every 2-3 years. Protect sandhills from clearcutting, site preparation, conversion to pine plantations and developments, and excessive vehicle traffic.

Selected References:

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Todd, B.L., H.R. Owen, and J.M. Coons. 2001. Reproductive potential of *Stylisma pickeringii* (Patterson bindweed), an endangered plant of Illinois sand prairies, in disturbed and undisturbed areas. Transactions of the Illinois State Academy of Science 94:52.

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Author of Species Account: Linda G. Chafin

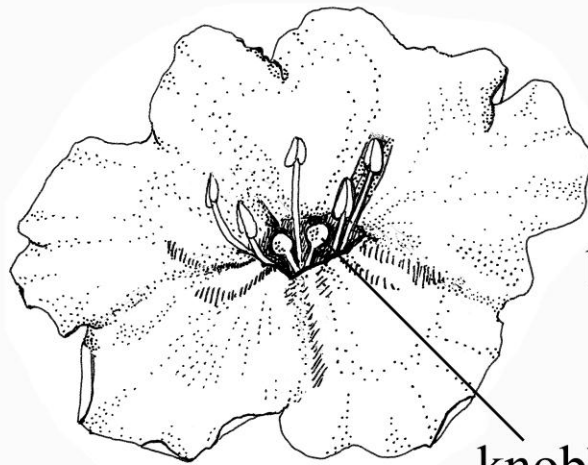
Date Compiled or Updated:

L.Chafin, Sep. 2008: original account

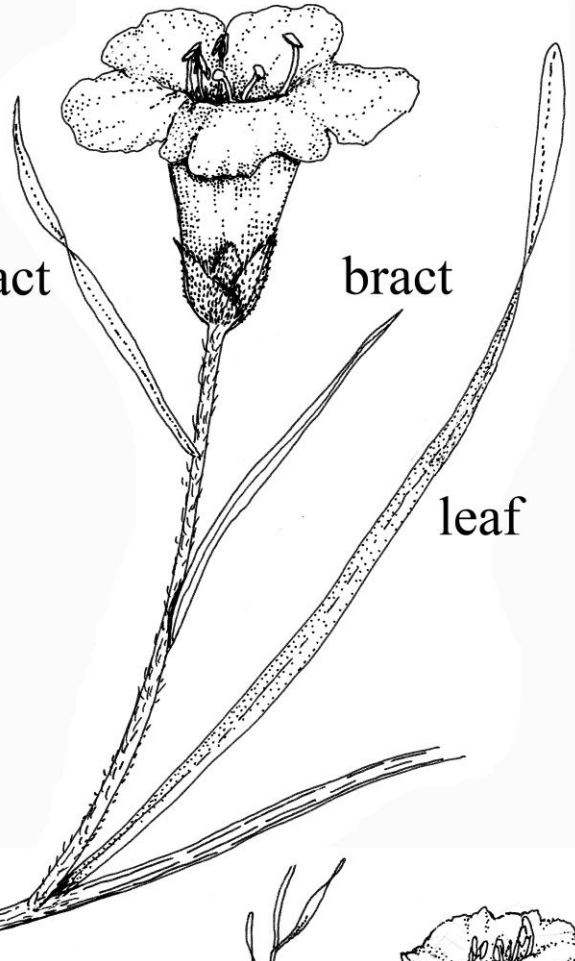
D.Weiler, Feb. 2010: added pictures



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Stylisma pickeringii var. *pickeringii*



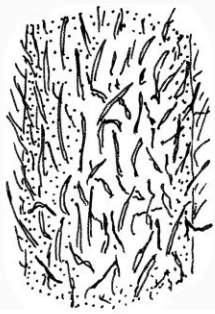
knobby
stigmas



bract

bract

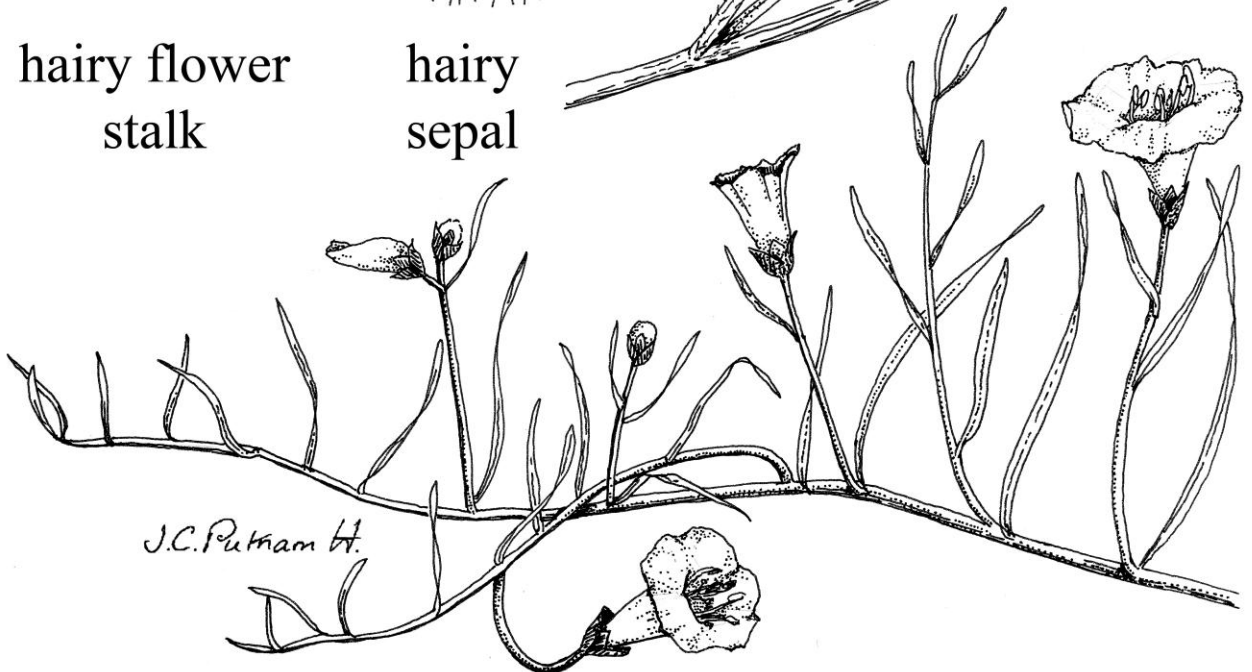
leaf



hairy flower
stalk



hairy
sepal



J.C. Putnam H.