



Common Name: CREAM-FLOWERED TICK-TREFOIL

Scientific Name: *Desmodium ochroleucum* M.A. Curtis ex Canby

Other Commonly Used Names: none

Previously Used Scientific Names: *Meibomia ochroleuca* (M.A. Curtis ex Canby) Kuntze

Family: Fabaceae/Leguminosae (pea)

Rarity Ranks: G1G2/S1

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** with hairy, slightly zigzag stems up to 3 feet (1 meter) long, trailing along the ground with only the flowering branches erect. **Leaves** alternate, each with 3 leaflets; **leaflets** 1 - 2³/₈ inches (2.5 - 6 cm) long, the middle leaflet largest, oval or diamond-

shaped with bluntly pointed tips, hairless, often with a pale streak along the midvein; **leaf stalk** up to 2 inches (1.5 - 5 cm) long, hairy, with 2 small, triangular **stipules** at the base. **Flowers** small, white or cream-colored, with a round banner petal and 2 wing petals partially enclosing the keel petal; the keel petal surrounds the stigmas and style. **Fruit** a flattened pod to 2 inches (5 cm) long, with 3 - 5 segments, deeply notched along one side, veiny, and hairless except along the edges.

Similar Species: Round-leaf tick-trefoil (*Desmodium rotundifolium*) has large, round leaflets, pink-purple flowers, and hairy pods. Other *Desmodium* that grow in the same habitat have oval leaflets and delicate, twining stems.

Related Rare Species: Sessile-leaf tick-trefoil (*Desmodium sessilifolium*) has erect, hairy stems and narrow leaflets with very short or no leafstalks. It is widespread in the eastern U.S., but occurs in only one Georgia county (Chattahoochee County), in dry, open woodlands of the Fall Line sandhills.

Habitat: Limestone glades with red cedar, persimmon, and redbud; sunny openings in upland mixed hardwood forests with calcium-rich soil.

Life History: Tick-trefoil flowers are pollinated by long-tongued bees, which are drawn to the flowers by lines and dots on the banner petal. When bees alight on the keel petal, their weight presses the keel down, exposing the stigmas and stamens; as the bee enters the flower looking for nectar, the stamens brush the bee's abdomen, depositing pollen which is then carried to the next flower the bee visits. Once mature, tick-trefoil fruit pods break into segments, each with a single seed, which are carried away on the fur of animals; the segments have hooked hairs along the edges which attach to fur and clothing.

Survey Recommendations: Surveys are best conducted during flowering (late summer–early fall).

Range: Historically known from 11 eastern states, from Florida north to New Jersey; now rare, with fewer than 25 sites throughout its range.

Threats: Logging and other mechanical disturbances to soil. Fire suppression. Invasion by exotic pest plants.

Georgia Conservation Status: The Walker County population is protected on a conservation area. The other documented population, in Lee County, has not been seen since the 1940s.

Conservation and Management Recommendations: Avoid logging and soil disturbance in glades and surrounding hardwood forests. Hand-clear or use fire to maintain openings in woods. Eradicate exotic pest plants.

Selected References:

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Radford, A.E., H.E. Ahles, and C.R. Bell. 1968. Manual of the vascular flora of the Carolinas. University of North Carolina Press, Chapel Hill.

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Weakley, A.S. 2007. Flora of the Carolinas, Virginia, Georgia, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.

Author of species account: Linda G. Chafin.

Date Compiled or Updated:

L. Chafin, Feb. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures



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