

Common Name: TRAILING MEADOWRUE

Scientific Name: Thalictrum debile Buckley

Other Commonly Used Names: southern meadow-rue

Previously Used Scientific Names: Thalictrum arkansanum Boivin, Thalictrum texanum

(Gray) Small

Family: Ranunculaceae (buttercup)

Rarity Ranks: G2/S1

State Legal Status: Threatened

Federal Legal Status: none

**Federal Wetland Status: FAC** 

**Description:** Perennial **herb** with slender, sprawling stems 4 - 18 inches (10 - 45 cm) long. **Leaves** alternate, each leaf divided into many rounded, 3- or 5-lobed leaflets up to ½ inch (0.5 - 1.5 cm) long and wide, upper surface green, lower surface pale. **Female and male flowers** are on separate plants, in open, branching clusters on slender stalks up to half the length of the plant. **Flowers** lack petals but have 4 pale green or purple sepals, about ½ inch (1 - 3.5 mm) long; female flowers produce 3 - 5 tiny, ribbed **fruits**; male flowers contain 12 - 18 yellow stamens.

**Similar Species:** Early meadowrue (*Thalictrum dioicum*) also has female and male flowers on separate plants. It is 12 - 32 inches (30 - 80 cm) tall with erect stems; its largest leaflets are wider than ½ inch (1.3 cm).

**Related Rare Species:** Leatherleaf meadowrue (*Thalictrum coriaceum*, Special Concern) occurs in open, deciduous woods in Union County. It has erect stems up to 5 feet (150 cm) tall, and its leaves are divided into many leaflets with pointed lobes or teeth. It flowers May–July. Also see Cooley's meadowrue (*T. cooleyi*) on this web site.

**Habitat:** Forested floodplains over limestone.

**Life History:** Trailing meadowrue is a perennial herb with a tuberous rootstock; it dies back to the rootstock each winter and resprouts in the spring, producing one or more stems per tuber cluster. The plants flower in early spring before trees leaf out and produce fruits until late May. The stems die back quickly after the fruits mature. Trailing meadowrue lacks rhizomes and does not seem to reproduce vegetatively. The female flowers are on separate plants from the male plants and are pollinated by wind. Since trailing meadowrue is dependent on sexual reproduction to maintain or increase population size, disturbances which fragment populations and separate female plants from male plants will eventually eliminate those populations.

**Survey Recommendations:** Surveys are best conducted during flowering (early March–late April) and fruiting (mid-March–May). Plants wither away by the end of May.

Range: Georgia, Alabama, and Mississippi.

**Threats:** Logging and other clearing in floodplains. Invasion by exotic pest plants. Impoundment of streams.

**Georgia Conservation Status:** Only one population, on private land in Gordon County, has survived. Another population in Floyd County was destroyed by road construction.

**Conservation and Management Recommendations:** Eradicate exotic pest plants, avoid logging and clearcutting in floodplains, protect floodplains during road construction, avoid stream impoundments.

## **Selected References:**

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## **Date Compiled or Updated:**

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





