**Lygodium microphyllum,**
Old World climbing fern

**Invasive**

**Lygodium japonicum,**
Japanese climbing fern

**Appearance:** *Lygodium microphyllum* is a perennial climbing fern that will remain, in warm climates, green throughout the year unless freezing temperatures occur. The fronds (leaves) can climb 90 ft. or more into treetops. Vines, which consist of the climbing leaf stems which arise from horizontal stems (stolons and rhizomes) on and beneath the ground, are thin, wiry, and can become very dense.

**Foliage:** The fronds (leaves) consist of opposite, twice compound pinnae (leaflets of a fern), 2 to 5 in. (5-12.7 cm) long with thick pinnules. It may have two types of leaflets on its climbing leaf. The leaflet without finger-like projections on the margin of the pinnule is a normal vegetative leaflet. Reproduction: Pinnules of fertile fronds have finger-like projections around the margin, where sporangia are covered with rolled leaf tissue. The sporangia produce numerous, tiny wind dispersed spores which can produce new plants.

**Lygodium palmatum,**
American climbing fern

**Appearance:** *Lygodium palmatum* is a perennial climbing fern with long and creeping stems, climbing to about 9 feet.

**Foliage:** Sterile pinnae are very broadly ovate, deeply and palmately 3-7-lobed, 1-4 x 2-6 cm; blade tissue pubescent abaxially with transparent hairs. Fertile pinnae are 3-5-forked or lobed, ultimate divisions palmately and sometimes irregularly lobed. Fertile pinnae are smaller than sterile pinnules, 2-4 x 2-8 cm, otherwise similar; ultimate segments narrowly triangular to linear-triangular. Along the margins, rolled leaf tissue cover sporangia that produce wind dispersed spores.

*Lygodium palmatum* is generally local and rare except for the Cumberland Plateau of Kentucky and Tennessee where it is locally abundant in poorly drained, acidic soils, especially after disturbance. This species is not tolerant of shading.

Reference: www.efloras.org

Images: Peggy Greb, USDA Agricultural Research Service, Bugwood.org; Karan A. Rawlins, University of Georgia, Bugwood.org; Troy Evans, Great Smoky Mountains National Park, Bugwood.org.

Lygodium japonicum, Japanese climbing fern

Lygodium microphyllum, Old World climbing fern

Lygodium palmatum, American climbing fern

Native