Japanese Climbing Fern

T. Bodner

Japanese Climbing Fern 5171

Lygodium japonicum (Thunb. ex Murr.) Sw. **LYJA**

Plant. Perennial viney fern, climbing and twining, to 90 feet (30 m) long, with lacy finely divided leaves along green to orange to black wiry vines, often forming mats of shrub- and tree-covering infestations. Tan-brown fronds persisting in winter, while others remain green in Florida and in sheltered places further north. Vines arising as branches from underground, widely creeping rhizomes that are slender, black, and wiry.

Stem. Slender but difficult to break, twining and climbing, wiry. Green to straw-colored or reddish. Mostly deciduous in late winter.

Leaves (fronds). Opposite on vine, compound once- or twice-divided, varying in appearance according to the number of divisions, generally triangular in outline. Three to 6 inches (8 to 15 cm) long and 2 to 3 inches (5 to 8 cm) wide. Highly dissected leaves, appearing lacy. Light green turning dark to tan brown in winter.

Flowers. Fertile fronds usually smaller segments with fingerlike projections around the margins, bearing sporangia (spore producing dots) in double rows under margins.

Seeds. Tiny, wind-dispersed spores.

Ecology. Occurs along highway right-of-ways, especially under and around bridges, invading into open forests, forest road edges, and stream and swamp margins. Scattered in open timber stands and plantations, but can increase in cover to form mats, smothering shrubs and trees. Persists and colonizes by rhizomes and spreads rapidly by wind-dispersed spores. Dies back in late winter with dead vines providing a trellis for reestablishment.

Resembles Old World climbing fern, *L. microphyllum* (Cav.) R. Br., and American climbing fern, *L. palmatum* (Bernh.) Sw., both of which are distinguished by five to seven palmately lobed, finger-like fronds. American climbing fern—a native occurring in swamps, stream beds, and ravines—does not spread beyond small areas to form extensive infestations. Old World climbing fern, also introduced, is a major invasive pest in southern Florida.

History and use. Native to Asia and tropical Australia and introduced from Japan in 1930s. An ornamental still being spread by unsuspecting gardeners.

States with suspected infestations are shown in gray.