

Invasive Ferns

Japanese climbing fern [*Lygodium japonicum* (Thunb.) Sw.] is presently the only widespread nonnative invasive fern in the temperate parts of the South. Old world or small-leaf climbing fern [*L. microphyllum* (Cav.) R. Br.] is a severe invasive in south to central Florida.

Japanese Climbing Fern



Japanese climbing fern [*Lygodium japonicum* (Thunb.) Sw.] is a climbing and twining, perennial viney fern to 90 feet (30 m), often forming mats of shrub- and tree-covering infestations. It has lacy finely divided leaves along green-to-orange-to-black wiry vines. Tan-brown fronds persist in winter, while others remain green in Florida and in sheltered places further north. Vines arise as branches (long compound leaves) from underground widely creeping rhizomes that are slender, dark brown to black, and wiry that must be killed for eradication. Prior year's dead vines provide a trellis for reestablishment. Persists and colonizes by rhizomes, and spreads rapidly by wind-dispersed spores. The native American climbing fern [*L. palmatum* (Bernh.) Sw.] occurs in special habitats, does not have frilly foliage like Japanese climbing fern, and rarely forms extensive infestations except on rock cliffs.

Management strategies:

- Do not plant or use contaminated pine straw for mulch harvested from highly infested areas. Monitor areas where pine straw mulch has been used for seedling emergence. Control sprouts and seedlings. Bag and dispose of plants in a dumpster.
- Treat when new plants are young to prevent spore formation.
- Clean shoes, clothes, dogs, and equipment before leaving infested areas. Tiny spores can hitchhike, so extreme care must be used to prevent spread.
- Minimize disturbance within miles of where this plant occurs, and anticipate wider occupation when plants are present before disturbance.
- Burning treatments can worsen infestations and result in tree damage due to fire ladders.

Recommended control procedures:

- Thoroughly wet all leaves to as high as safe with a glyphosate herbicide as a 4-percent solution (1 pint per 3-gallon mix in water with a surfactant) directed at the fern to minimize nontarget damage (July to September before spore release).