FRIGHTENING FACTS



South Carolina and North Carolina Exotic Plant Pest Councils



SCIENTIFIC NAME: Lygodium japonicum COMMON NAME: Japanese Climbing Fern *Known to occur in SC and NC*

WHAT IS JAPANESE CLIMBING FERN?

Plant Type: Perennial fern/vine

Form/Size: Twining vine, can climb to 90 ft.; Stem is thin, wiry, green, orange or black. Dies back in winter. Forms mats, old stems provide trellis for new growth.

Leaves: Fern fronds opposite, triangular, usually twice compound, deeply



dissected, appear lacy, 3-6 in. long and 2-3 in. wide. Hairs on lower surface. Light green, turning tan in winter. Flowers: none; sporangia on fertile fronds produce spores. Fruit: none; large numbers of tiny spores produced Means of Spread: Spores and rhizomes. Spores dispersed by wind, water, animals, humans, vehicles, equipment. Plants and spores moved around in pine straw bales. Self fertilization assists in long distance dispersal.

Family: Lygodiaceae Similar Species: American Climbing Fern or Hartford Fern (Lygodium palmatum). Distinguished by palmately compound fronds with 5-7 finger-like lobes. Occurs in swamps, streambeds and ravines. Also see Old World Climbing Fern factsheet.



WHERE DID JAPANESE CLIMBING FERN COME FROM? Origin: Japan, Eastern Asia, tropical Australia Date of Introduction: Introduced into Florida 1932 Reason: used as an ornamental, escaped from cultivation



WHERE AM I LIKELY TO FIND JAPANESE CLIMBING FERN?

Habitat Type: damp soils, sunny or shady areas, disturbed areas, roadsides, ditches, timbered land; hardwood, pine or mixed forests, floodplains, along rivers and streams, wet flatwoods, estuarine habitats. Distribution in SC: all regions, multiple counties Distribution in NC: limited, only known in Lee County





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WHY IS JAPANESE CLIMBING FERN A PROBLEM?



Environment: -Displaces and smothers native plants reducing diversity and altering wildlife habitat structure.

-Provides abundant ladder fuel for fire resulting in hot crown fires; alters natural fire ecology. Hot fires kill native plants and alter natural communities.

-Removal methods damage natural communities. Chemical methods can kill native plants. Use of heavy machinery will cause soil compaction. **Economy:** -detrimental to timber industry by increasing fire intensity in timber stands.

-Detrimental to pine straw industry since spores are transported in pine straw bales.

-Control methods are expensive for landowners, timber companies, and government agencies.

WHAT SHOULD I DO IF I FIND JAPANESE CLIMBING FERN?

Report: take a photo, report the observation to EDDMapS: <u>http://www.se-eppc.org/</u> (location, size of infestation, etc.). *In SC:* Send digital photo to John Nelson at the USC Herbarium: <u>plantman@herbarium.org</u> for verification. **Control:** Repeated hand pulling in small infestations, pull aerial vines and treat with foliar herbicide, foliar herbicide treatments may be needed for larger

infestations but native plants may be killed. **Disposal:** Pulled material should be bagged prior to transport, and disposed of so as not to spread viable material.

CURRENT LISTINGS:

SC-EPPC Ranking: Severe Threat/Vine NC-EPPC/NCNPS: Significant Threat GA-EPPC: Category 1, State Noxious Weed in FL



LEARN MORE!

- Invasive.org (images): <u>http://www.invasive.org/species/subject.cfm?sub=3045</u>
- Natureserve: <u>http://www.natureserve.org/explorer/servlet/NatureServe?searc</u> <u>hName=Lygodium%20japonicum</u>
- Invasive Plants of the Eastern United States: <u>http://www.invasive.org/eastern/srs/JCF.html</u>
- USDA Plants Database: http://plants.usda.gov/java/profile?symbol=lyja
- University of Florida IFAS Extension: <u>http://edis.ifas.ufl.edu/FR280</u>

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