# For Controlling OLD WORLD CLIMBING FERN, ACCORD CONCENTRATE, RODEO or PATHFINDER II is the Herbicide

Old World climbing fern (Lygodium microphyllum) is an invasive exotic twining vine that is spreading rapidly in Florida, especially in the central and southern part of the state. A pale-green fern with climbing fronds reaching 90 feet, it forms dense mats of plant material on the forest floor and climbs into tree canopies, smothering its host plants. This creates fire hazards by enabling small ground fire to climb into tree canopies and reach temperatures that kill many native plants within the fire's path. Also, during fires, fern parts are often kited away to start distant blazes.

Cutting, burning and pulling does not kill the root rhizomes, so root resprouting most often occurs. Control requires the application of an herbicide.



### **Commitment:**

Eradication is difficult because of the large rhizome root system, and the rapid germination from remaining spores. The treated areas must be checked often, and newly developed plants controlled. The removal of the dead thick mats can accelerate native plant growth, but care must be taken to avoid spreading spores. Any soil disturbances will enhance spore germination.

# **Timing:**

Herbicide sprays should be applied when the plant has full foliage, is actively growing and not under environmental stress.

### **Herbicides:**

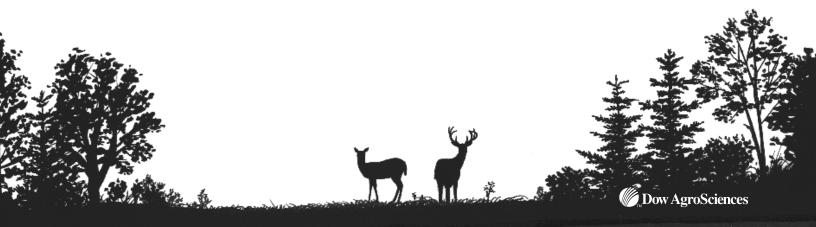
For Power Driven hand spraying applications: The frequently recommended foliage spray mixture is 1 to 2 percent of either Accord<sup>®</sup> Concentrate or Rodeo<sup>®</sup> herbicides in clear water. Add ¼ to ½ percent surfactant to improve wetting and penetration.

Accord Concentrate and Rodeo are registered for wetland and aquatic sites.

Stem/foliage application for control of Old World climbing fern:

For control of Old World climbing fern, where the plants twine high into trees, apply Pathfinder\* II herbicide.

Pathfinder II herbicide is a ready-to-use product, containing the same active ingredient as in Garlon\* 4.



# **Equipment:**

The backpack sprayers are usually Solo Model 475 or a Swissmex SPI, with diaphragm pumps. These are equipped with a spray wand having an adjustable spray tip.

For low volume basal, adjust the spray tip to produce a medium spray, or install Teejet 1502 or 1503 flat spray tip so the spray angle is vertical to the ground.

For streamline basal bark (southern states), a Spraying Systems Model 30 Gunjet is installed on the backpack sprayer and a Teejet 0002 spray tip or DE-2 disk is installed into this gun.

# **Applications:**

For backpack spraying:

Adjust the spray tip to produce a heavy spray, or install a flat spray tip such as a Teejet 503 or 4004E. For heavy/dense infestations, install on the backpack spray unit, a Spraying Systems Model 30 Gunjet with a rollover valve. This allows for two different spray tips to be on the spray gun, a Teejet 1503 for spraying close stems, and for distant stems, a Teejet DE-2.

For backpack basal applications.

To apply low volume basal, adjust the spray tip to produce a medium spray, or install a Teejet 1502 or 1503 spray tip so the spray angle is vertical to the ground. Thoroughly wet foliage and stems in a one- to three-foot band. Use low nozzle pressure and caution must be taken not to let Pathfinder II come in contact with the bark of the host tree unless damage or loss of the tree can be tolerated. Apply when the ferns are actively growing and not under environmental stress.

Special Use Precautions: Direct the spray onto target plants and prevent the spray from coming into contact with the bark or foliage of the host tree; otherwise the host tree may be severely damaged or destroyed by the treatment. Where necessary, use an impervious shield of wood, plastic, or metal to prevent spray from contacting the host tree.

