

Draft Japanese climbing fern BMP Guidelines list for Pine Straw producers

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1. Inspect site for noxious weeds (including Japanese climbing fern) prior to initiating a contract or lease for pine straw harvest. Control costs for noxious weeds will then be incorporated into the lease agreement to avoid surprises for the landowner or the harvester.
2. During inspection, check the stand itself, as well as adjacent ditches, and surrounding areas such as low-lying depressions and bottomland hardwoods. These are areas where Japanese climbing fern is commonly found, and would then be likely to spread into the pinestraw lease area.
3. Prior to harvest, spray all infested areas of the stand/lease. The herbicides that have shown effectiveness for Japanese climbing fern include: glyphosate, imazapyr, metsulfuron, and sulfometuron. The highest level of control, and the longest term control comes from applications of glyphosate and imazapyr, or tank mixes of those two herbicides. Treat the site at minimum every six months during the lease period. Try to achieve 2-3 treatments prior to the first harvest.
4. Conduct an assessment and treatment one month prior to the harvest date, and treat any remaining sprouts.
5. Ideally, no harvesting should occur during the peak period of spore release for Japanese climbing fern. In north Florida, peak spore release occurs in the fall and early winter. Unfortunately, this is also the standard period for pine straw harvest, increasing the likelihood of sale of pinestraw contaminated with Japanese climbing fern spores. This also increases the likelihood of contamination of equipment and personnel, and the resultant movement of spores to new sites as the harvest crew moves from one lease site to another.
6. If the crew does harvest in an infested stand, all equipment should be cleaned with a high pressure spray (water) prior to movement from the infested site, or at minimum, prior to movement to a new site. This will reduce the likelihood of spore movement to a new site. Equipment may include: rakes, hand balers, bale boxes, trailers, tractors, and personal gear.
7. If harvest does occur in infested site, hand-remove all fern foliage and stems from the bales.
8. If harvest does occur in infested sites, and fern remains un-treated on the site, do not rake within the areas where climbing fern occurs.
9. Be aware that if harvest occurs in an area where climbing fern is well established (either on the site, or in the adjacent areas), the site is likely to become infested at higher and higher levels with each subsequent harvest due to exposure of mineral soil to spore-fall as a side effect of the removal of the pinestraw. Treatment of the climbing fern prior to, and following harvest is the best way to reduce the likelihood of this increasing infestation.
10. No data currently exists to verify the efficacy of heat or fumigation as treatments to prevent spore germination.