

# ASK THE EXPERT

DR. BALAKRISHNA RAO



## Galls on Scotch pines

**Problem:** We see galls on a client's Scotch pines. Two trees have many galls, while six more pines have just a few. Some of the galls have yellowy spores on them. Is this a rust gall? (Canada)

**Solution:** Based on the description of your field observations, the problem on pines appears to be related to pine gall-rust disease caused by *Endocronartium harknessii*. This disease is also known as western gall rust. It has been reported on two- and three-needled pines in Canada and the United States.

The rust fungus produces round or sometimes pear-shaped woody galls primarily on branches but also on stems. These galls enlarge year after year until the branches are girdled. This causes dieback of affected branches. Often, secondary fungi or canker-causing fungi can also affect these trees.

The fungus infects young branches on the stalk of female cones. From the cones, the fungus moves down the branches. During the year of infection, no symptoms appear; however, galls begin to swell the following year. They can enlarge to 1 to 10 centimeters in diameter. By the second or third year, galls may develop bark collars at one or both ends. Secondary fungi and insects can attack these galls and kill them. The galls break open annually and release yellowish-orange spores during pine-candle elongation, beginning two to four years after infection.

The galls produced by the pine gall-rust fungi *E. harknessii* would be difficult to distinguish from the globose galls also produced by pine-oak galls rust caused by *Cronartium quercuum*. Generally, if rust-galls on pines are seen in the absence of oaks (alternate host), the problem is attributed to pine gall-rust caused by *E. harknessii*. For further diagnosis, laboratory analysis of spore germination is necessary.

As far as managing the pine gall-rust problem on pines, consider treating once with fungicides, such as mancozeb, when yellow pustules of rust break through bark on galls. Selectively prune branches with rust-galls and discard them or preferably rogue them before May 1. Severely infected trees may be unstable and subject to windthrow. Therefore, proper care of infected plants is highly desirable.

Read and follow label specifications.

## Managing Kudzu

**Problem:** What is the best way to manage Kudzu weeds growing around residential and parking lot properties? We have used Roundup with some luck. (North Carolina)

**Solution:** Kudzu (*Pueraria lobata*) is a difficult weed to manage. It presents a serious problem close to wooded areas. You could use Roundup as in the past to manage this. Label recommendations are to use four quarts/acre, if broadcast spraying, or a 2 percent solution, if using a backpack sprayer.

Roundup should be applied when the plants are actively growing. Repeated applications may be necessary. Roundup is a nonselective post-emergence herbicide, so be careful while applying it

around desirable plants. Even a small drift can injure desirable plants.

Arsenal, from American Cyanamid is a non-selective systemic pre- and post-emergence herbicide for grassy and broadleaf weeds. Generally, one application should be enough per season.

Pre-emergent activity should last three to four months when applied at a rate of 4 to 6 pints/acre. Because of its pre- and post-emergence activity, this would be your best choice to manage Kudzu. It gives good residual activity against a wide variety of annual, perennial grass and broadleaf weeds. Make sure the weeds are actively growing. For optimum control, Arsenal should be applied at a rate of 70 gallons of water per acre, according to a company spokesperson. Also, since it is a non-selective herbicide, avoid contact with desirable plants.

Arsenal is a slow-acting herbicide; therefore, the plant may not show chlorosis or necrosis of newest leaves for two to three weeks, and complete kill may not occur for several weeks. Do not apply in areas where potential for soil erosion exists, or herbicide may be washed off to non-target sites. In these situations, the roots of desirable plants may absorb this herbicide and may be injured.

Read and follow label specifications for better results.

## Poison ivy control

**Problem:** What is the best way to control poison ivy? (New York)

**Solution:** Treatments with Amitrol (trade name: Amizole, Aminotriazol or Weedazol), a post-emergence herbicide, reportedly provide excellent control of poison ivy. It is a non-selective herbicide made to be applied on foliage of perennial broadleaf weeds such as poison ivy.

Avoid contacting desirable, non-target plants because it will turn the leaves yellow, white and then brown. Use Amitrol as a spot treatment for perennial weeds like poison ivy in or near nursery crops or landscaping. For best results, treat weeds at full leaf, about four to six inches high, and before blooming.

Check with your county extension agent for clearance to use this product in your area. All registrations for the use of Amitrol on food crops, including pastures, have been canceled. Avoid using in an area where there is a chance for food or feed contamination. A waiting period of six to eight weeks is required before planting any plant material.

Roundup is also registered for managing poison ivy plants. Apply four to five quarts of Roundup per acre as a broadcast spray or as a two percent solution with hand-held equipment.

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**Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.**