# PROBLEM MANAGEMENT

by Balakrishna Rao, Ph.D.

### When wildflowers won't do

**Problem:** What is an attractive cover for an area that gets highly filtered sun under a forest canopy. Wildflowers won't work. What about grasses or ferns? (Montana)

Solution: From your question, it appears that the forest area is heavily shaded. Reports indicate that under heavy shade (less than 25 percent of the daily available sunlight) it is difficult to establish and maintain turfgrass. Therefore, a shade tolerant groundcover is needed.

There are a number of turfgrass cultivars that adapt well to shade conditions. The important thing is to determine the amount and duration of light

filtering through.

In the North, several Kentucky bluegrass cultivars, including Bristol, Glade, Nugget, Touchdown and Birka, have shown good establishment under less than 70 percent shade. Still, these cultivars would do better with more light. In areas with more than 70 to 80 percent shade, tall fescues

#### Ground Covers Tolerant of Shady Locations

Ajuga species	Bugleweed
Aegopodium podagraria variegatum	
Asperula odorata	
Convallaria majalis	Lily-of-the-Valley
Epimedium species	Epimedium
Euonymus species	Wintercreeper
Gaultheria procumbens	Wintergreen
Hedera helix	English Ivy
Hosta species	Plantain Lily
Hypericum calycinum A	
Liriope spicata	
Lonicera species	Honeysuckle
Lonicera species	Dwarf Holly Grape
Mitchella repens	
Pachistima canbyi	
Pachysandra terminalis	Japanese Pachysandra
Teucrium chamaedrys	Germander
Thymus serphyllum	
Vinca minor	
Xanthorhiza simplicissima	

Check with your local cooperative extension service and/or nurseries for plants suitable to grow in your area.

and fine fescues have shown good establishment.

If the shade is above 85 percent, it would be difficult to grow turfgrass. Consider using some improved turf-type tall fescues such as Rebel II, Falcon, Mustang, Arid, Jaguar, Cimarron or Bonanza.

Some of the fine fescue varieties with good shade and root competition, drought tolerance and winter hardiness include: sheeps fescue (Bighorn), hard fescue (Biljart and Reliant), chewings fescue (Jamestown and Banner) and creeping fescue (Fortress, Ruby and Ensylva).

These are only some of the cultivars to choose from. I suggest you consult your local county extension office for its list of turfgrass cultivars available for shaded areas. You might also consider some of the following ground covers in addition to turfgrass as a groundcover:

## Herbicide damage to spruce

**Problem:** Recently your article on herbicides and ornamentals was brought to my attention. What made it particularly interesting was my own experience with Rockland Triple D and Colorado blue spruce.

I am rather conservative when using herbicides, and in this case applied it at about two-thirds the recommended rate to a lawn bordered by 20 evergreen and deciduous shrub and tree species. Nineteen showed no damage, and the lawn lost its weeds. But the Colorado spruce lost many of its first and second year needles. Our extension office examined a specimen and implicated the herbicide. Do you have any details for this species under test? (New York)

Solution: My experience stems from treatments that were applied during the entire growing season starting in early spring and three more times at six-week intervals. Therefore, the treatments were exposed to dry and/or wet conditions during the season.

The treatments were made using Davey's sprayer unit and application technique, which provides minimum drift, and were applied about one foot from the ground and four to six inches from the dripline of the

spruce plant.

The delivery system has good control over placement and the spray mix can be easily diverted away from the non-target plants by simply twisting the spray wand. This system allows the applicator to apply close to non-target plants like spruce. The plants were seven to eight years old with good root growth.

Your problem may be caused by moisture stress, application method and/or chemical composition of the materials used—ester formulations are more volatile than amine formulations. We have used amine formulations of herbicide which are comparatively safer.

Since you have experienced injury even at twothirds the recommended rate, I suggest you evaluate the weather data around your application period and application method as well as the chemical composition of the product.

## Wolmanized lumber no problem

**Problem:** Is it safe to use pressure-treated wolmanized lumber in the garden? (Illinois)

Solution: I have not found any literature that specifically addresses your question, but from my observations I do not believe wolmanized lumber is a problem.

Wolmanized lumber is currently being used in many landscape designs. I have observed plants adjacent to the lumber in nursery and landscape settings doing well. Several of these areas were well irrigated and, if leaching of chemicals was a problem, it should have occured. I have not seen any evidence to show that.

You may want to grow plants surrounded by wolmanized wood in a smaller area to first see if you get any injury.

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