

# AQUAGRO® TURNS PROBLEMS INTO PROFITS.

Lawncare and landscape professionals all over the country are using AQUAGRO® soil wetting agents on their problem lawns. They're applying it on a regular basis to move water deep into hydrophobic and compacted soils, slopes and through thatch. And as a bonus they're seeing a dramatic improvement in overall turf quality, with reduced irrigation.

Their customers see it too, and are willing to pay for the difference AQUAGRO makes.

Here's what three AQUAGRO users have to say.



**Christopher Sann**  
Complete Lawn Service  
Wilmington, Delaware

"I first used AQUAGRO about seven years ago on a bluegrass lawn with thatch-bound roots. Over a three year period I saw a 50-75 percent reduction in the thatch layer from the bottom; the roots penetrated the soil about three inches and I eliminated the hot-spots. About 90 percent of my customers are on an AQUAGRO program, which I often combine with verticutting. As tough as this summer was, the difference in appearance between treated and untreated lawns was obvious...and that keeps my customers happy."



**Joseph Broyles**  
Lawn Doctor of Oyster Bay-Syosset  
East Norwich, New York

"The soils I deal with are heavy loam often with a compacted layer below the surface. AQUAGRO alleviates compaction by getting water to penetrate this layer. Eliminating standing water helps cure a major cause of fungus diseases...I've been offering AQUAGRO Liquid as an optional service for four years; recommending two, sometimes three applications a year. It's been a solution to a lot of problems, and in some cases helped set me apart from my competition."

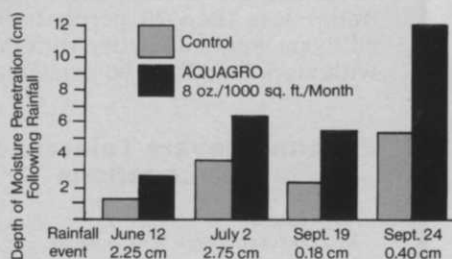


**Max Todd**  
Fairway Lawn Service, Inc.  
Sunnyvale, California

"I am using AQUAGRO Spreadable on about 80 percent of my jobs. Drought conditions have made my customers more interested in products that can both reduce water use and keep their lawns alive. It's clear to me that the wetting

agent increases the efficacy of fungicides, soil insecticides and fertilizers...I am able to sell the application as a companion to aerating and my customers recognize that the cost is offset by reduced water use and not having to pay for replanting."

## Getting More Water to the Root of the Problem.



AQUAGRO moves even the briefest rainfall or irrigation deeper into the soil profile so less is lost to evaporation and run-off. Deeper water penetration also stimulates deep root growth for greater drought resistance.

## The Difference Between a Good Lawn...and a Great One.

Discover why golf course superintendents around the world have used AQUAGRO for more than 30 years to solve their water related problems.

Used as directed, AQUAGRO is non-toxic to plants and animals and is biodegradable.

To find out how you can turn problems into profits and make your customers' lawns the envy of the neighborhood...and your competition. Call us.

1-800-257-7797, in N.J. (609) 665-1130

**AQUATROLS**  
The Water Management People

1432 Union Ave., Pennsauken, NJ 08110  
FAX: (609) 665-0875

# 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, Touch-down 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 | Groutweed                 |
| Asperula odorata                 | Sweet Woodruff            |
| 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              | Aaronsbeard St. Johnswort |
| Liriope spicata                  | Lily Turf                 |
| Lonicera species                 | Honeysuckle               |
| Mahonia repens                   | Dwarf Holly Grape         |
| Mitchella repens                 | Partridgeberry            |
| Pachistima canbyi                | Canby Pachistima          |
| Pachysandra terminalis           | Japanese Pachysandra      |
| Teucrium chamaedrys              | Germander                 |
| Thymus serpyllum                 | Creeping Thyme            |
| Vinca minor                      | Myrtle                    |
| Xanthorhiza simplicissima        | Yellowroot                |

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 two-thirds 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 occurred. 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.

LM

# A seeder for tight spots and small lawns.



## The Ryan® Spotseeder is ideal for lawn repair.

Nothing lets you renovate lawns as effectively or economically as the Ryan Spotseeder. Its 20-inch width lets you handle small yards, patch work, and hard-to-reach areas with greater ease than ever before. A fully adjustable seed delivery system drops any kind of grass seed in front of the vertical cutting blades for better seed/soil contact, facilitating a higher germination rate compared to drop-type and broadcast seeders.

## Cover more ground more quickly.

The Ryan Spotseeder gives you 1/8-inch slits in the soil on 2-inch centers, which works well with all

types of grasses, allowing you to have one pass seeding. The standard reel or one of the three optional reels combine to deliver high quality seeding and dethatching in a wide range of turfgrasses. The Ryan Spotseeder is the easy answer to lawn repair.

To see just how easy the Ryan Spotseeder can make your next renovation, contact your Ryan dealer or call toll-free: **1-800-228-4444**.

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