

# PROBLEM SOLVERS

by Balakrishna Rao, Ph.D

## Quackgrass headaches

**Problem:** *I think we have a quackgrass problem in our lawn. Would you please describe how it can be identified and also how it can be controlled? I would appreciate your comments. (Pennsylvania)*

**Solution:** Quackgrass (*Agropyron repens*) is a perennial weed which spreads by lateral, underground, whitish stems called rhizomes with many nodes (joints) and pointed tips. These tips can turn upward and become fast-growing leafy shoots. The plant produces roots from the nodes. Every leaf has a membranous "ligule" at the base of the leaf where it joins the sheath, and a pair of small, hook-like "auricles" which clasp around the stem.

There is no herbicide registered for selectively removing quackgrass from established lawns. Non-selective herbicides like Roundup can be used but they will kill the desirable grass also. A quackgrass problem can be minimized by following good cultural practices.

Reports indicate quackgrass is not able to compete with a well-maintained turf with good density. Repeated mowing, especially if the mower is not set low, can create stress on quackgrass. Maintain a good turfgrass management program, such as mowing and fertilization, to improve the density and health of desirable turfgrass. Well-maintained turfgrass may crowd out and reduce quackgrass over a period of several years. Remember that reinfestation of quackgrass can occur through seeds or rhizomes from nearby areas or from topdressing materials.

## Moles a gridiron problem

**Problem:** *How do you get rid of ground moles in a football field? (Michigan)*

*Are there any new products to eradicate moles other than using Oftanol for grubs? (Indiana)*

**Solution:** Moles damage lawns and gardens through their tunneling activities in search of insect larvae and earthworms. They dig a network of deep tunnels (10-18 feet deep) for permanent use and a network of surface burrows with characteristic ridges of soil above them for temporary use.

These tunnels cause grass roots to die and present a problem while mowing. Moles are active tunnelers and can tunnel at a rate of 12-15 feet per hour. Sometimes surface tunnels can be formed at a rate of one foot per minute. Surface tunnels are used once for feeding and then abandoned.

Moles are difficult to control because they live mostly within their deeper tunnels. Common control measures include: trapping, elimination of food supply by use of insecticides, use of poisonous baits, or fumigation. Trapping and the elimination of in-

sects are the most effective control measures.

Traps (harpoon or choker seem to work best) should be set near tunnels that are in current use. To detect inhabited tunnels, roll or tramp down the ridge of soil. If the tunnels are raised the next day, set the trap in that place and repeat this for several days. Deeper tunnels can be located by pushing a pointed rod or stick into the ground.

If grubs are the major source of food they should be controlled with insecticides. Poisoned baits are usually not effective because moles, being carnivorous, generally ignore them. Gas treatments don't solve the problem because gases diffuse out of the tunnels.

However, reports indicate that a fumigant tablet called Phostoxin can effectively eliminate moles.

First, inspect the property and detect all active burrows showing signs of freshly excavated soil. Abandoned burrows often end abruptly and collapse. For effective control, large portions of active burrows should be treated. Carefully make holes in the top of the burrows and place two Phostoxin tablets every five to ten feet in the active burrows. Moist but not wet conditions are preferred for treatment. Seal the hole with wadded paper and soil. Wait for three days and then tramp or roll the untreated area. Repeat treatment may be necessary if new burrows develop. Read the label and follow the directions.

Another report suggests that Juicy Fruit gum (Wm. Wrigley Jr. Company) also can manage the mole problem. Wear gloves to avoid getting human scent on the gum, make holes in the active burrows, unwrap a fresh pack of gum, roll each piece like a carpet, place them in the burrows, and seal the openings with sod. Moles cannot digest chewing gum and die a day or so after eating it.

Unightly raised areas should be leveled with light rolling using a tank roller without the water. Make sure the area is moist but not wet to avoid compaction. This should help minimize problems during mowing.



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Questions should be mailed to Problem Solver, Weeds Trees & Turf, 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Please allow 2-3 months for an answer to appear in the magazine.