

Richer Green, Luxuriant Sod



FYLKING* KENTUCKY BLUEGRASS

Quality Rarely Equaled

A distinctively-new Kentucky Bluegrass, Fylking maintains a dense turf and a deep, rich green color, even under close mowing. Turf quality is rated "best obtainable" by noted authorities, as proven by 5 years of nationwide testing.

Disease Resistant

Fylking has proven resistant to Stripe smut, Leafspot, Stem rust, Leaf rust and Fusarium roseum, making it a prime bluegrass choice.

Outstanding Color

Fylking sustains its full deep green from spring through late fall. Early greenup and longer color retention in the fall, are plus advantages to superior summer color, even under drought conditions, heavy usage.

Less and Lower Mowing

The "low-growing" characteristics cause slow vertical growth, insure a dense turf capable of withstanding close cutting and less mowing. A vigorous rhizome producer, Fylking quickly fills in gaps and voids.

For additional information and names of authorized distributors, write Jacklin Seed Co., Inc., Dishman, Wash., 99213.

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Contractor Prices Vary Little In Detroit Area

Who shows the best net profit? The landscape contractor who sods the new lawn, or the one who seeds? Donald D. Juchartz, county agent, Wayne County, Mich. recently put this question to 400 operators in the Detroit area. Replies showed that it depends on what the operator is best geared up to handle. Those who have the equipment and skilled help to do both jobs equally well say they make the best profit on seeding lawns.

Charges ranged for each operation. Operators charged 80c to \$1.50 per yard for sodding, though most were in the \$1 to \$1.25 bracket. For seeding, charges ran from 35c to \$1 per yard, most being 65c to 70c. For adding 2" of good topsoil when needed, the charge has been 5c to 10c per square yard of lawn covered.

All but one operator used a high nitrogen fertilizer—10-6-4, 12-8-4 or 12-12-12—though the thinking of Michigan State agronomists is that a low nitrogen mixture is best for seeding or for new sod. One contractor did report using a 5-10-10. Charges made for fertilizing ranged from \$5 to \$10 per thousand square feet. These landscape contractors also reported that they charged more for such services during the spring when they were busy than during late summer or fall.

Guarantees varied along with charges, according to Juchartz. Most sod men will generally replace patches or strips which fail during the first 12 months, if the owner has taken proper care of the lawn. Seed men say they reseed spots as necessary. Sixty operators replied to the question as to how often they call back on a job to check results. Seedmen generally make 2 to 4 callbacks, sodmen usually 1.

Crew Size And Recommendations Vary

Contractors laying sod normally used crews ranging from 2 to 5 men with equipment. Seeding crews number from 2 to 3 plus equipment. These Detroit

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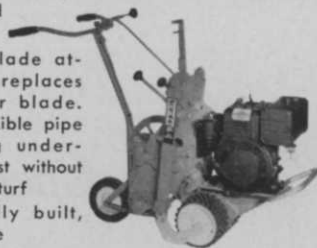
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Core it...Rake it...**
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RYAN JR SOD CUTTER

- Cuts over 11 sq. yds. of sod per min.

- Mole blade attachment replaces sod cutter blade. Installs flexible pipe or tubing underground fast without disturbing turf

- Ruggedly built, easy to use



RYAN ROLLAIRE

- Handy back-and-forth power rolling

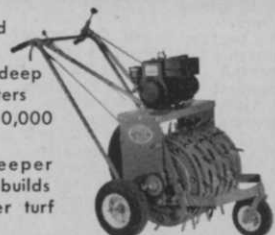
- Vibrating Rollaire provides over 1/2 ton compaction. Vibratory action can be engaged, disengaged as you roll
- Has many uses including blacktopping



RYAN MOTORAIRE

- Self-propelled coring aerator

- Pulls uniform, deep cores on 5" centers
- Covers up to 10,000 sq. ft. per hour
- Promotes deeper root growth—builds thicker, healthier turf



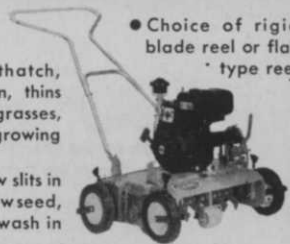
RYAN REN-O-THIN

- Power raking

- Removes thatch, controls grain, thins running stem grasses, cuts out low growing weeds

- Cuts narrow slits in soil to catch new seed, let fertilizer wash in

- Choice of rigid blade reel or flail type reel



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area operators figure they get about 100 yards per man day in sodding. In a seeding operation, they figure on 200 yards per man day.

How does the landscape contractor prepare the homeowner to keep the new lawn? Juchartz says there is also a great variation here. And it's at this point that he feels contractors need to get together and agree on recommendations, that is, for the area they serve. Good use could be made of a garage sheet or leave piece of some type containing instructions which would help insure success of the new job. Recommendations given for this area by the operators replying usually called for daily watering the first 10 to 20 days and then gradually tapering off, monthly fertilizing, mowing at a 1½-inch height, and no use of weedkiller.

Biggest problems in doing the job were listed as the same for both seeding and sodding. These were obtaining proper grade, fighting compacted soil, and getting the homeowner to spend enough money to do the job right.

Thinking of the contractors about what the industry needs most centered on two major points. First, more education for the public. And secondly, state inspection of sod to insure standards.

Chemical Residues Leave Soil by Various Routes

Contract applicators concerned about chemical residues in the soil—as an aftermath of spraying for weed or insect control—have a number of natural forces working in their favor, it is reported by the Institute of Agriculture, University of Minnesota.

One of these forces, and a primary one, is microbial decomposition. Tiny soil microorganisms attack virtually all chemical molecules in one way or another.

There are other ways in which pesticides are lost or inactivated. Some are lost through vaporization (volatilization). Some residues leach down into the soil where they cause no further problem.

Some disappearance is due to

plant removal or the breakdown of pesticide molecules as they are taken up by plants. Finally, there is some chemical breakdown of pesticides, although very little has been proven by research to occur.

Since soil microorganisms are so important, they have long been in the scientific limelight where the residue problem is concerned. According to Russell Adams, Jr., soil chemist at the University, there seems to be no pesticide molecules that will not be attacked eventually by some soil microorganisms.

Considerable concern has been voiced about adding unnatural organic compounds to soil. However, recent research has shown that chlorinated hydrocarbons can undergo breakdown through action of soil microorganisms.

Microorganisms Can Adapt To A Pesticide

Apparently, microorganisms can adapt themselves to a pesticide. In one study, organisms were subjected to 2,4-D, and a lag period elapsed as the compound was slowly and then more rapidly attacked as the metabolizing organism developed.

Then, later additions of 2,4-D were more quickly decomposed.

There is some scientific controversy over how this adaptation develops—whether it is due to formation of enzymes or mutations. In any case, once an organism becomes able to break down a pesticide, it retains this ability for some time.

Do insecticide or herbicide chemicals affect microorganisms? At normal field applications, research shows, there is rarely any effect. In some cases, small quantities of pesticides actually stimulate microbial activity.

Another important factor in pesticide residues is sorption, or the process by which soil takes up and holds the chemical. Importance of sorption—adsorption or absorption—of molecules depends on the type of soil.

Organic residues disappear most quickly from sand, but develop strong bonds with clay, particles of which have charged sites on the surface. Pesticides

Meeting Dates



Nebraska Program on Selection and Handling of Pesticides, University of Nebraska, East Campus, Lincoln, Apr. 3-4.

Western Aerial Applicators Short Course, Landis Auditorium, Riverside City College, Riverside, Calif. Apr. 3-4.

Western Aerial Applicators Short Course, Caravan Inn, Sacramento, Calif., Apr. 5-6.

Canadian Chapter, International Shade Tree Conference, Annual Convention, Holiday Inn, Ottawa, Ontario, Apr. 27-28.

Florida Turfgrass Trade Show, Diplomat Hotel, Hollywood By The Sea, Fla., Apr. 27-29.

Western Chapter, International Shade Tree Conference, Annual Meeting, Hotel Coronado, San Diego, Calif., Apr. 30-May 3.

Florida Nurserymen and Growers Association, Annual Convention, Robert Meyer Motor Inn, Orlando, May 25-27.

The Hyacinth Control Society, Annual Meeting, Holiday Inn, Fort Myers, Fla., June 18-21.

American Association of Nurserymen, Annual Convention, Americana Hotel, Bal Harbour, Fla., July 8-13.

Third National Grassland Field Day and Conference, University of Nebraska, Lincoln, July 12-14.

Miss Lark Trade Show and Convention, Convention Auditorium, Hot Springs, Ark., Aug. 10-12.

Penn State 1967 Field Day, Pennsylvania State University, University Park, Aug. 16-17.

Nursery and Garden Supply Show, Texas Association of Nurserymen Annual Convention, City Auditorium, Austin, Aug. 20-23.

International Shade Tree Conference, 43rd Annual Convention, Marriott Motor Hotel, Philadelphia, Pa., Aug. 27-31.

Texas Fertilizer Association's 1967 Agricultural Exposition, KoKo Inn, Lubbock, Nov. 9-10.

which are taken up to these charged sites are *adsorbed*, and are thus inactivated.

However, molecules taken up in such a way are a constant source of the pesticide in the soil solution.