

Our company is primarily a producer, processor and wholesale marketer of fine turfgrass seeds. Our production centers primarily around 15 different Kentucky bluegrass varieties with our long suit being Merion, and more recently, the new variety Fylking. In addition to the bluegrasses, we produce some fine fescues and four of the new fine-textured Perennial ryegrass varieties including Norlea, NK100, Pelo and Pennsylvania's new Pennfine.

Until the end of World War II the somewhat technical turfgrass industry as we know it today was virtually non-existent. True, there were a few different kinds of grasses to market for home lawns but nothing like the myriad of varieties which we know today. We now have a wide choice of turfgrass varieties for specialized areas varying in range of disease resistance growth characteristics, and even different grades or quality categories.

Reflecting even further, until the mid-1950's, almost every lawn, whether home, industrial or institutional, was established through seeding. Then, in the 1950's, some of the more affluent members of our society asked for and received instant lawns at quite a cost premium per square yard over the traditional method of seeding lawns. This was the beginning of the instant lawn business or what we refer to today as the sod industry.

In a recent survey conducted by the Weeds Trees and Turf magazine, it was reported that the average number of years experience among U.S. sod growers was only 9.4 years per grower, indicating the youthfulness of this new industry and its probable potential for the future. Even more dramatic, however, is the 1969 record sales of \$150 million posted by the industry at the grower level and the over \$400 million generated at the retail or consumer level. Truly this is a dramatic and growing agricultural commodity which warrants close attention from its suppliers and, particularly, seed suppliers.

In analyzing today's sod grower, our company has concluded that:

1. He is an intelligent agriculturist and businessman familiar not only with the basic agronomic essentials of producing

**This presentation on sod quality seed from the standpoint of industry was made by Mr. Jacklin before the Biennial Conference Association of American Seed Control Officials, meeting at Portland, Ore., Sept. 12-17.**

# SEED for SOD QUALITY

## An Industry View

By Doyle W. Jacklin

sod, but quite well versed in financial and business management techniques;

2. He is conscious of his production expenses and is continually striving to keep them low enough to provide him with a steady yet reasonable profit;
3. He is anxious and quite willing to try new products which will result in a better sod at a lower cost. These new products would include not only fertilizers, herbicides and equipment but more important to our own industry, new turfgrass varieties; and
4. Probably even more close to home, is the high quality product he produces which relates directly to the quality of the seed which he purchased to establish his fields. Seed quality therefore is important to the sod grower and even more revealing is his willingness to pay for that quality.

Although most sod producing land in the United States has historically produced other agriculture crops, there is increasing acreage of virgin land being cleared specifically for sod production. Over 50 percent of sod producing land is high in organic content and is commonly referred to as peat or muck soil. There is much conjecture as to the best soil type for producing sod but it is now generally agreed that both mineral and peat soils have their advantages and disadvantages. Varietal performance is a more important production factor than soil type.

If given proper care, sod can be lifted as early as 12 months after seeding. The average sod grower

prefers to have one to two-year-old sod before harvesting to insure the development of more mature rhizomes capable of knitting properly to new soil.

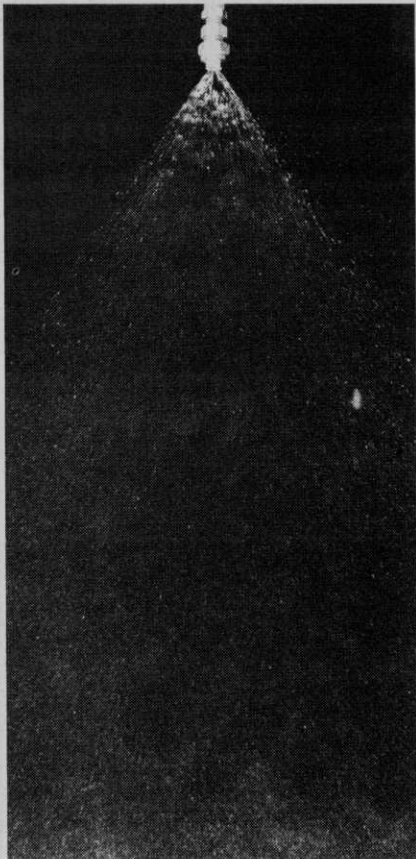
New varieties are now becoming available which can produce a liftable sod within six to ten months after seeding with an even denser turf. Ironically, these same new varieties can be a problem to the homeowner if not cared for properly after sodding. With a denser sod and a higher number of leaf tillers and rhizomes and feeder roots, it stands to reason that more water will be required to keep all the plant parts turgid and living while the rooting process takes place. Sod growers, therefore, are now recommending that the new, dense varieties receive a higher frequency of watering immediately after transplanting so that they can root properly with minimum wilt and damage.

Sod growers are interested in both quality and cost when considering seed. In terms of cost per yard, it has been documented that the average to produce one yard of sod is 29 cents. This includes all direct costs, overhead, taxes, etc.—everything! Of this 29 cents, 4½ cents goes toward purchase of seed, fertilizer, and chemical spray materials. The seed cost itself accounts for only one and one-quarter cent, or 4.6 percent of the total yard production cost. Seed cost then is relatively minor compared to the other costs. When seed of a higher quality is desired, an increase or decrease in seed cost per pound does little to alter the total sod production cost.

By contrast, when seed of inferior quality produces a sod with bunchy off-types, an unattractive sprinkling of annual bluegrass seedheads, or an unsightly mat of encroaching bentgrass, then the loss per yard due to the off-grade sod price can amount to as much as a dramatic five to 10 cents per yard, or four to eight times the actual cost of the seed. Thus, growers demand the highest quality seed available. They are willing to pay the extra price necessary to the seed producer to obtain high quality seed production.

Though sod growers have been demanding high quality seed, it wasn't until two years ago that there suddenly appeared between eight and 10 different quality specifications from a like number of state and regional sod grower organizations. Each set of specifications varied widely in crop and weed re-

*(Continued on page 39)*



Conventional Spray Pattern



Fomex Spray Pattern

**Seed** (from page 36)

quirements and threatened to create a hodge-podge of specifications. As a result, seed producers in Washington and Idaho, together with the Washington State Department of Agriculture, developed what is now known as Sod Quality Certified Seed Standards. These standards were promulgated by the Washington State Department of Agriculture in 1969 and were subsequently revised and updated in May, 1971.

These Washington State standards are much more rigid than even sod grower standards. It is quite unusual that the seed industry would purposely agree to establish higher standards than required by their sod industry customers. But, in our estimation, the quality seed can be produced and we'd just as well produce a product which meets or supersedes all other quality specifications.

Looking at the maximum allowance weed, for instance, the average allowance by other state sod certification programs averages .10 percent, or over three times as much as the Washington State sod quality seed standards. Additionally, all certified sod quality seed must be free of coarse and objectionable grasses. In the weed section, all sod quality seed must be free of dock, chickweed, crabgrass, Black medic, velvetgrass and all prohibited noxious weeds, in addition to, and probably most important, annual bluegrass.

The sod analysis certificate is based on a 25 gram purity and includes a search for all noxious and other weeds, all crop, and a 10 gram Poa annua check and germination. Each crop or weed found is listed on the analysis and this analysis accompanies every lot of seed shipped. The sod grower will examine this comprehensive seed test- (Continued on page 41)

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# classifieds



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## Seed (from page 39)

ing certificate before buying a particular lot for his use. The seed lots which meet the Washington State certified sod quality requirements will be eligible to carry the special gold, sod quality seed tag. The gold, sod quality tag carries simple, specific language including the lab test number of the official sample test of the lot.

Probably the two most important developments from the new sod quality, certified seed program have been:

1. The standardization of all specifications into one workable and acceptable program which meets the desires of both seed producers and sod growers; and
2. The actual establishment of a new program within the certification scheme which defines and sets premium quality seed specifications.

The program isn't just a name but is synonymous with high quality seed. More important, sod growers are not the only group of buyers interested in this type of seed. Golf course, park maintenance and cemetery superintendents are all interested in premium lawn seed and a considerable amount of gold tag, sod quality seed is being used in this trade.

Based on our own production and experience during the last two years since the sod quality certified program has been in existence, I predict that within the next one to two years over 80 percent of seed sold to sod growers must meet specifications such as are contained in the Washington State sod quality certified seed program. Sod growers want and will pay for quality if quality seed can be produced. The future of sod production and, indirectly, sod quality seed, indicate:

1. The sod business is increasing in two ways, first, original growers are producing and selling more acres of sod, and secondly, new growers are entering the business;
2. More and larger farms are in evidence and growers are turning more and more to mechanical, labor-saving equipment. They will, as a group, be doing more public relations and advertising which in part has been a direct result of new varieties and blends being produced which can be promoted according to their various attributes in competition with other sod growers' varieties;
3. The sod grower will continue to develop into one of the finest agricultural business men in existence today and, as a result, he will be more conscious of his in-

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come, expenditures, profits, etc.; and 4. Because of his increased awareness in the income and expenditures section he will be more aware of high quality seed which will be used to produce his product and the results obtained from using such high quality seed in comparison to a low quality seed which will usually result in a higher total cost at lower net profits.

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