## Turfgrass Questions Answered by Grau

If you've got a question you want Dr.
Fred V. Grau to help you answer in
this department, please address it to
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INTEREST in grass and sod nurseries is on the increase. The need for nurseries is greater than ever before. It is encouraging to find charm who

ing to find chmn. who encourage the supt. to provide good nursery areas for the club. A good nursery represents inexpensive insurance. It keeps club personnel ahead of the crowd on

The Nursery: Inexpensive Insurance

new grasses, new equipment and the effect

a new chemical has on grasses.

Area: Plant at least one full size putting green in two or more of the most promising grasses for your area. Plant at least one full size tee in tough grasses adapted to your area. Don't be afraid to try a new grass even though someone says it may not work. If you have not had first hand experience with it you can't honestly say whether or not it will succeed. But do not put water-loving grass right next to grass that will die if it gets too much—water. Keep complete control over the amount of water applied.

Soil preparation: Well drained soil is essential along with lime as needed to bring pH to about 6.5 to 7.0. Complete fertilizer to supply about 2 pounds each, N, P, K to 1,000 sq. ft. (equivalent to 20 pounds 10-10-10). Seedbed should be firm but capable of being loosened without becoming cloddy. Preplanting treatment is a must. You have a choice of Cyanamid or Dowfume, or perhaps one of the newer ones like Vapam or liquid Cyanamid. Freedom from weeds and contaminating grasses can reduce expenses and increase confidence in results.

Solid sod or rows of stolons (or sprigs): We suggest both so as to gain the fullest measure of information from trials. One sq. ft. of full bodied sod or nursery row stolons, pulled apart carefully by hand, can plant about 100 running (linear) ft. of nursery row, laying the sprigs or stolons about end-to-end. One bu. of sprigs or stolons should plant from 500 to 1,000 linear ft. of row, depending upon several

factors such as "plumpness" of the bu., care in planting, condition of material. One bu. should plant from 100 to 500 sq. ft. when material is pulled apart and scattered uniformly over the seed bed for solid sod such as in planting a stolon bent green. Fast growing, vigorous grasses need smaller quantities of planting material.

Management: No two grasses thrive under exactly the same management. Make an honest attempt to learn and study the MR (management requirement) of each grass and to provide what is most likely to bring out the best in the grass.

Records: Don't let detailed notes rob the nursery project of the fun that's in it. At the same time, record enough information so that you will have an authentic background. Performance counts! During a season, you probably won't need many notes to know that one grass is easier to handle than another. When the conference chmn. asks you to present a paper, you'll be very glad to have notes ready.

Publicity: Let the rest of the club know about the nursery. It belongs to them. Encourage them to walk over the plots and to learn the grasses from the signs you put

up.

Some nurseries are five acres in extent. Some of the most interesting nurseries are only a few hundred sq. ft. in size. A high level of maintenance is essential. Poorly kept plots are worse than none at all.

This may sound strange but I offer it at the risk of offending a few. Warm-season grasses (Bermudas, Zoysias) should be planted at the beginning of or during hot weather. Cool-season grasses are best planted in spring or fall. Fertilizers for maintenance should be applied during the active growing period of the grass and not during a dormant period. This is elementary but significant for planting of new grass for the first time.

Q. Will you please explain thoroughly what you mean by vertical mowing? (Mich.)

A. Reel-type and rotary mowers are designed to cut on a horizontal plane (parallel to the



soil surface). Grass that stands erect is cut off. Creeping grass and many other turfgrasses grow in such a way that many of their stems and leaves do not stand upright but are parallel to the ground. At first they develop what we know as "grain." Reel and rotary mowers can not cut these prostrate stems. They accumulate, causing the mower to continually ride higher on the developing thatch and mat.

Vertical mowers are built so that cutting blades revolve in a perpendicular (vertical or upright) plane - like a rolling wheel. Adjusting the height of the spinning blades in relation to the turf, they can be made to cut the flat blades and stems of grass at the surface, thus removing, at the source, much of the trouble (grain, thatch, mat, and accompanying trouble from diseases which flourish in the "moist incubator" of matted grass) that we find with creeping bent greens. Vertical mowing of greens need not be done more often than once a week or once every two weeks as compared to daily mowing with the greensmower. Use of the vertical mower actually improves the putting surface by removing unseen irregularities which destroy accuracy in putting. Development of vertical mowing ranks high on the list of accomplishments in turfgrass maintenance.

Q. Please explain the apparent difference in recommendations between 50 lbs. to 1,000 sq. ft. of Aero Cyanamide and 13 lbs. of calcium-cyanamide per cu. yd. of top dressing. Are these two different names for the same product?

A. Sometimes we become careless in use of familiar terms. The correct name of the product to which you refer is Aero Cyanamid Granular. The chemical symbol is CaCN<sub>2</sub> — calcium cyanamid. The rate of 50 lbs. (sometimes 75 lbs.) to 1,000 sq. ft. is recommended for treating the surface of seed beds prior to planting. The rate of 13 lbs. to a cu. yd. is recommended for killing weed seeds in compost or topdressing prior to use. Pamphlets on the best ways to use this material may be obtained from American Cyanamid Co., 30 Rockefeller Plaza, New York, N. Y.

Q. A large percentage of the grass on the greens at our course is composed of Poa Annua and Seaside bentgrass. Will the application of 10 lbs, of lead arsenate to 1,000 sq. ft. prevent germination of Seaside bent seed, both proposed to be used this fall on the greens? (N.J.)

A. Yes, the germination of bent seed will be affected and retarded if 10 lbs. of arsenate of lead are used at the time of seeding the bent. I assume that your intention probably is to retard germination of the Poa.

Seaside bent is not one of the best putting grasses in your area. I'm sure that if you stay with bent, Cohansey (C-7) will prove much more satisfactory. If you want a grass that will give maximum satisfaction throughout the summer with minimum care and will allow Poa to come in to give you winter color, you might devote some of your test nursery area