



## GRAU'S Answers to Turf Questions

BY FRED V. GRAU

### A Grass That's Free of Bugs and Disease

During late summer and fall we devote full time to the harvesting of our Penngift crownvetch seed crop.

Some fields lie next to heavy woods well-populated with deer, woodchucks (whistle pigs), racoons, rabbits and pheasants. We've even had a bear. It is discouraging to see the damage done by these animals as they gambol, seek food and just lie around. There isn't any seed where they operate.

Many of you have seen highway slope plantings of Penngift crownvetch and have remarked on the perfection of cover, the absence of weeds and erosion, the beauty of the blossoms, and the total lack of maintenance requirements.

A new use for this perennial legume was discussed during the first Crownvetch symposium held July 6-9, 1964, at Pennsylvania State University. Analyses of forages were presented and showed that protein and feeding value are equal to or better than alfalfa and birdsfoot trefoil. Many farmers have suffered severe losses of hay and of livestock through poison sprays used to kill weevil, spittlebug and other pests. For some unknown reason, Penngift crownvetch seems to be unaffected by bugs and diseases. This interests many farmers and should be of interest to supts. who keep livestock.

Why, you may ask, does Fred Grau

tell us all these things about crownvetch when our interest is in turf? In my travels I have sensed the interest of many supts. in livestock, farms, highway maintenance, beautification, erosion control, and soil building. Also, many are using this ground-cover on steep areas on golf courses that are out of the line of play. Some are using it to cover their soil beds for building topdressing material. Anyone interested in details of building soil with Penngift crownvetch on a half-acre soil bed may drop a post card to me at College Park, Md. A mimeograph will be prepared for mailing this winter in good time for early spring planting.

During mid-August our crew spent nearly two weeks gathering seed from the "Mother source" near Virginville in Berks County, Pa., almost within a brassie shot of Harry Carlson's Moselem Springs GC. Harry plans to cover some of his rough steep areas with Penngift. As we worked we could gaze on Harry's beautiful green fairways of Merion bluegrass — a lovely sight. On a previous visit we were impressed by his tees of Pennncross bent, which are as good as many putting greens. His Pennncross greens were utter perfection.

As we reflected, we couldn't help but wonder when we will have a fairway grass that can approach the quality of well-managed Merion but which can come close to perfection on low- and medium-budget courses. Will it be another bluegrass or must we look to the tall

fescues? We are thinking now of cool-season courses where Bermuda and zoysia will not perform well. Many years of effort tend to show that it will be possible to develop a tall fescue that will stand close mowing, that will be nearly evergreen and will be fine textured. Joe Duich at Penn State is well along in the development of a polycross tall fescue. We have been working for many years with a finer-leaved tall fescue that we call Traveler II. It is looking good in lawns. It still must be tested in fairway turf but it shows promise in that direction.

The need for a low-budget fairway grass that will stand up to disease, wilt, etc. is acute. Perhaps we need not limit this need to the low-budget course. Many courses are desperately seeking the "perfect" fairway grass to match the perfection attainable with Penncross on greens. It is our opinion that great effort should be devoted by turf experiment stations to developing the ideal fairway grass.

### Turf Schooling

**Q.** After three years of military service overseas my nephew will return. He has had 1½ years of college, is a good golfer and he wishes to prepare himself for a combination job of pro, supt. or manager of a small club. Are there short courses which specialize in turf management or must he take a 2 or 4 year course in agronomy? (Nebraska)

**A.** Your nephew may apply to two schools with which I'm well familiar, and offer short courses in turfgrass management: 1) Pennsylvania State University, University Park, Pennsylvania, Dr. Joe Duich. 2) University of Massachusetts, Amherst, Massachusetts, Prof. Joe Troll. Iowa State, Illinois, Ohio State and Purdue are other schools that have fine turf management courses.

### Compacted and Diseased

**Q.** Our greens of Midwest black soil are over 30 years old, compacted and diseased. We aerate 3-4 times a season, chopping the cores with a vertical mower, drag and overseed with Seaside bent, the original grass. We fertilize and spray for fungus alternate weeks.

- 1) How can we improve the existing soil to reduce or limit compaction?
- 2) Would spiking help?
- 3) Would overseeding with Penncross help? (Illinois)

**A.** Start changing the grass to Penncross by hydroseeding twice a year, spring and late summer, using ½ pound to 1,000 sq. ft. each time. Penncross is quite resistant to disease.

Improve soil texture by topdressing with a

## Turf Conferences

### SEPT.

- 9-VPI & Virginia Turfgrass Council, VPI, Blacksburg, Va.
- 9-10-Cornell University, Ithaca
- 10-11-Alabama-North Florida, Auburn University, Auburn, Ala.
- 14-15-Midwest Field Days, Purdue University, Lafayette, Ind.
- 16-17-Penn State Field Days, University Park, Pa.
- 18-Illinois Field Day, University of Illinois, Urbana
- 23-24-Lawn & Turf Conference, U. of Missouri, Columbia
- 23-25-Northwest Turf Conference, Vancouver, B. C.

### OCT.

- 10-Rutgers Field Day, New Brunswick, N. J.
- 21-22-Equipment & Materials Exposition, Brookside Park, Pasadena, Calif.
- 21-23-Central Plains Conference, Kansas State University, Manhattan
- 25-27-Sprinkler Irrigation Assn. Convention, Scottsdale, Ariz.

### NOV.

- 4-6-Oklahoma Turf Conference, Oklahoma State U., Stillwater
- 16-20-American Society of Agronomy, Kansas City, Mo.

50-50 mixture of medium sand and a good calcined clay. Keep up the aerating program to mix topdressing material with existing soil to prevent layering.

Spiking is only a partial answer, useful mainly in summer when heavy aerating is desirable.

Use every means possible to stimulate soil organisms which help significantly to improve soil texture. These methods include 1) sensible watering 2) using a good fertilizer as the source of nitrogen (the influence on bacteria is significant) 3) liming to keep soil pH values near 7.0. 4) keeping soil phosphorus low and using sulfate of potash each time nitrogen is applied.

### On Canada Cup Team

Arnold Palmer and Jack Nicklaus, who swept the Canada Cup matches for the U.S. in Paris last year, again will represent this country in the International Golf Association competitions which will be played at Maui, Hawaii, Dec. 3-6. Nicklaus won the 1963 individual title last year and paired with Palmer to take the team title. Spain was second, South Africa third and Canada fourth. U.S. has won six of 11 team titles, Australia two, and Japan, Ireland and Argentina, one each.