

Stop 10 Continued

Red Fescue Variety Evaluations - Eighteen entires in 5' x 9' plots.

## 1963 Red Fescue Variety Performance.

| Entry | Variety       | Turf Quality Rating<br>(1-best; 9-poorest)           |   | Density<br>10/5/63<br>(shoots per<br>12.5 sq.in.) | Spring<br>Greenup<br>4/16/63<br>(1-best,<br>9-poorest) |
|-------|---------------|--|---|---|--|
|       |               | East Lansing<br>Planted 6/11/62<br>Ave. of 4 ratings | Traverse City<br>Planted 5/15/63<br>Ave. of 4 ratings |   |  |
| 1     | S-59          | 2.1  | ----  | 247   | 3.7  |
| 2     | Golfrood      | 2.7  | ----  | 349   | 5.7  |
| 3     | MSU-47-Fr     | 2.9  | 4.8   | 231   | 4.7  |
| 4     | Rainer        | 3.7  | 3.9   | 145   | 3.3  |
| 5     | Pennlawn      | 3.7  | 3.7   | 140   | 4.3  |
| 6     | Com. Creeping | 4.1  | 5.3   | 127   | 3.3  |
| 7     | Illahee       | 4.2  | 3.4   | 168   | 4.3  |
| 8     | Com. Chewings | 4.6  | 2.6   | 119   | 3.7  |

At East Lansing the four creeping red fescues (Rainer, Pennlawn, Common Creeping and Illahee) have performed quite similar during the initial two years. Common chewings has been slightly inferior to the creeping red fescues especially in density. At Traverse City on 91% sand common chewings red fescue has been the outstanding perennial grass during the initial establishment year. In addition to the top three selections listed above, Syn A, Syn B, Duraturf, Highlight and S.L. 3 have ranked higher than the four commercially available creeping red fescues.

STOP 11

Dr. Fred Elliott and John Schillinger

Breeding and Selection of Improved Red Fescues, Ryegrasses, and Tall Fescues - Sixty-five selections originating from the breeding program are being evaluated under turf conditions in replicated 4' x 6' plots. A number of promising selections have been observed which are superior to currently available varieties. The red fescue entries MSU-3-Fr, MSU-11-Fr and MSU-18-Fr have been outstanding. Although slow to establish, they rank high in turf quality, density, and Helminthosporium leafspot resistance. Five perennial ryegrass selections show 100% winter survival through two years and are also rust resistant. The tall fescue selections, MSU-5-Fe and MSU-6-Fe have improved texture plus 90% winter survival.

Stop 11 Continued

Red Fescue Polycross Nursery - A polycross planting for seed increase to be used in regional testing.

Bermudagrass Variety Evaluations - Of the original 31 bermudagrass entries, only the two Michigan selections, MSU-22-Cd and MSU-23-Cd, have survived the past two winters.

STOP 12

Dr. E. C. Doll

Fertilization of Turfgrasses - The best way to find out what fertilizer your turf needs is to have samples of your soil tested. If you fertilize without testing, then you must assume that your soil tests low.

When seeding a turfgrass, 10 to 15 pounds of 12-6-6, 12-12-12 or 10-6-4 per 1000 sq. ft. is generally adequate. (Apply twice as much for Merion bluegrass). Somewhat lighter applications of complete fertilizer should be applied each spring to established turfs. Ample nitrogen is necessary to maintain a green turf throughout the season. Applications of nitrogen in addition to that applied with the spring fertilizer is generally necessary; the exact amount needed varies with the different kinds and varieties of grasses.

STOP 13

Prof. Leyton Nelson

Management Factors in Thatch Formation of Merion - A long term investigation of optimum management practices to minimize thatch and disease problems. Factors under evaluation are cutting height, clipping return vs. removal, mechanical thatch removal vs. none, and six nitrogen rates in all combinations of 144 treatments.

Reported below is the amount of thatch removed from irrigated Merion bluegrass turf one year after establishment when maintained under four different management systems.

| Cutting Height | Pounds per acre of thatch removed<br>(Expressed on a dry weight basis) |                    |
|----------------|--|--------------------|
|                | Clippings Removed  | Clippings Returned |
| 1"             | 209  | 975                |
| 2"             | 485  | 1,135              |