

'Ferris Wheel' Sod Production Could Revolutionize the Industry

A NEW METHOD of sod production which could conceivably revolutionize the industry has been developed by Richard E. Schmidt, associate professor of agronomy at Virginia Polytechnic Institute and State University.

Under traditional sod production methods, land is prepared and seeded to the desired turf varieties. It takes two years before a marketable turf is produced.

With Schmidt's method, turf is produced in a greenhouse on a mechanism which resembles a ferris wheel. Containers of a growing medium, usually either 100 percent municipal sludge, or sludge with the addition of other waste materials such as hog hair, fly ash, or broiler litter, are seeded to desired grass varieties.

The ferris wheel rotates eight carriers through a cycle timed to give each carrier a certain exposure to the best lighting available in the greenhouse. The device is operated by a time clock and the rotation is continued throughout the day and stopped at night. Watering is done automatically by a solenoid controlled by the time clock.

Schmidt figures conservatively that his method will produce sod 25-

fold over the present conventional method. With his apparatus, he can produce four crops of sod per year and can stack them via his ferris wheel to give a multiple of four over a single flat area in the greenhouse. Then, it should be remembered that these figures are for one year's production versus the two years for conventional production methods.

In addition to more efficiency of production, Schmidt lists these additional advantages: sod can be produced nearer to markets; market projections over a 12-week period will be more accurate than over a two-year period; soil will not be moved from county to county with sod, lessening weed problems; use of municipal sludge or other waste materials means that prime land can return to food production; and the greenhouse-produced sod, being lighter, will cost less to transport.

Schmidt believes that the theoretical aspects of his process have proven out and now risk capital of about \$60,000 is needed to build a pilot operation to prove the commercial aspects of the system.

If the system performs as he believes it will, it would be possible for a sod producer to have small operations near large metropolitan



Richard E. Schmidt, associate professor of agronomy at Virginia Tech, exhibits his new method of sod production. Note the various levels on which the sod is grown, which revolve like a ferris wheel to give each the proper light exposure.

areas. Such operations can produce sod the entire year, Schmidt said.

The agronomist also sees the possibility of growing shallow-rooted food crops such as lettuce by his new method. He cautions, however, that in this case, the municipal sludge used would have to be tested against the presence of heavy metals or other harmful ingredients.

A patent is pending on the new products, Schmidt said.



Northern California Turfgrass Council's new president, Grady L. Simril (right) of East Bay Regional Park District, accepts a certificate of merit from outgoing president, Paul J. Albright, Jr., of Berger & Plate.

Turfgrass Council Elects Officers

Grady L. Simril, horticultural specialist with the East Bay Regional Park District in Oakland, Calif., is the new president of the Northern California Turfgrass Council, succeeding Paul J. Albright, Jr. of Berger & Plate seed company in San Francisco.

The Council consists of some 325 members in Washington, Oregon and northern California, including commercial suppliers, landscape contractors and architects, horticulturalists, and administrators of city and county parks, golf courses and campuses.

Other officers are: G. S. Sandhu, first vice president; Phil Wyatt, second vice president; and Richard Perona, secretary-treasurer.

The Board of Directors of the Council includes Albright, John Deming, John Dovic, William Patterson and Richard Harrison.