New ARS Technique Aids Herbicide Evaluation

Agricultural Research Service plant physiologist W. A. Gentner has developed a new technique enabling scientists to evaluate mere specks of herbicides, according to the U. S. Dept. of Agriculture.

Previously as much as 10 grams of an herbicide were required to do a similar evaluation. This could be problematic, as some experimental herbicide samples are expensive and often available only in small amounts.

With Gentner's simple device, scientists can determine exactly a plant's tolerance to a chemical. This knowledge will make possible more precise application of herbicides by drawing a sharper line between a plant's tolerance of and ill effects from an herbicide.

Glass wool that serves as a filter is placed in a test tube with a ¼-in. hole in its bottom. The tube is then filled to about 1½ ins. from the top with quartz sand, into which is planted the seed to be tested. The tube, fitted with a rubber collar, is suspended in an Erlenmeyer flask containing a nutrient solution and concentration of the herbi-

cide to be evaluated. Once a day the tube is dipped into the solution

Gentner points out that while his apparatus gives precise data on the effect that the structure of an herbicide molecule has on the plant's activity, it does not give the complete story. Many techniques, including field studies, are necessary to completely evaluate the effects of herbicides.

Gentner's work is part of an ARS research program to improve pesticide effectiveness and avoid potential residue hazards.

Cornell University Publishes DED Leaflet

A new tree pest leaflet from Cornell University is now available. It is entitled "Municipal Decisions in Dutch Elm Disease Control," and is authored by Drs. W. A. Sinclair, W. T. Johnson and J. A. Weidhaas. Dr. Weidhaas is now an extension specialist at Virginia Polytechnic Institute, Blacksburg, Va.

The new publication gives background facts on problems which face communities seeking to establish DED control programs. The authors list the alternatives of a community beset with the disease. They discuss requirements for municipal control programs along with public information and funding. They also list some reasons why programs fail.

Copies of the new publication are available from New York State College of Agriculture, Cornell University, Ithaca, N.Y. Ask for Cornell Tree-Pest Leaflet A-4.

Urban Environment Causes Problems for Plant Growth

Cultivating plants in urban communities may become extremely difficult with time, cautions F. O. Lanphear, Purdue University research horticulturist.

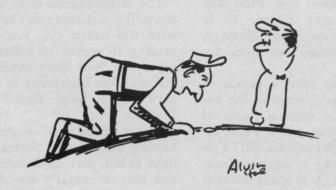
Effects from increased air pollution, salt used on highways as deicing agents and lack of sufficient area for proper root development can hamper the growth of plants trying to survive in urban environments, he says.

Some plants (such as the Austrian pine), once thought to be adaptable to city conditions, are now found to be susceptible to increased air pollution. Lanphear cites the case of a Chicago-area grower of orchids who estimates that air pollution costs him \$150,000 annually due to crop injury.

Many other species, however, continue to appear tolerant (such as sweet gum, hackberry, American elm, gingko, pin oak, Norway maple and ash).

Lanphear feels these injurious conditions should be remedied, as plants are capable of benefitting urban communities in many ways.

As urban temperatures generally range 10°-15° higher than those of the countryside, he notes that the use of green space (composed of various forms of vegetation) may help modify



SURE IT'S DOCLAR GRASS, 17'S GOT "IN GOD WE TRUST!" ON IT!"

climate as well as provide recreation.

Shrubs and trees planted between sources of noise and areas where people congregate can serve as buffers.

Plants, too, are not only capable of acting like "air conditioners" by removing dust and soot from the air, but they can enrich the air with oxygen, according to Lanphear.

Furthermore, he says, the fragrant aromas of some plants help to compensate for less desirable odors that exist in the city.

Citgo Establishes New Beautification Program

Cities Service Oil Co., (CITGO), a subsidiary of Cities Service Co. of New York, has produced a film presentation depicting the visual impact of its current service station beautification program.

Entitled "More Than A Bed Of Roses," the brief film shows how CITGO stations have benefitted from using the latest in design, landscaping, lighting and merchandising methods.

In the film, CITGO emphasizes its belief that an attractive place of business is beneficial not only to the company but to the community it serves, as well.

Suppliers Staff Changes

S. E. Cook, Jr. has recently been appointed assistant district manager for agricultural chemicals in the Hercules Inc. San Francisco office.

Amchem Products, Inc. announced two staff changes: Herbert L. Groshens has rejoined the company as agricultural chemical sales representative of the mid-Atlantic district after a two-year absence; John G. Neckerman has been appointed agricultural chemical sales rep in the Pacific Northwest.

Thompson-Hayward Chemical Co., Kansas City, Kans., has appointed Mamoru Matsuzaki technical sales representative of its office in Fresno, Calif. The company also named Donald Fox director of field research and development of its North Central region.

Diamond Shamrock Chemical Co., a unit of Diamond Shamrock Corp., Cleveland, O., announced the establishment of its newly organized Bio-Chemicals Division. Dr. Melvin Hochberg has been appointed to head the new division as vice president of Diamond Shamrock Chemical Co. and Bio-Chemicals Div. general manager. M. F. Wilkerson has been designated director of marketing and sales for the new division. Harry A. Batley has been appointed president of the Nopco Chemical Division and a vice president of Diamond Shamrock Chemical Co. Warren Dusenbury has been named administrative vice president of the Nopco Division.

Duane L. Closs has been appointed Director of Sales for all single engine business, pleasure, training and agricultural aircraft marketed by the Aero Commander-Albany (Ga.) Division of North American Rockwell Corporation.

Norman Ronemus has been named Manager, Product Development of Colloidal Products Corp., Sausalito, Calif.

Barton P. Jenks III has been appointed to the law department of the J. I. Case Co., Racine, Wisc., in the capacity of assistant general counsel.

Jack Q. Miller has been named area manager at Fox Tractor Division of Koehring Co., Appleton, Wisc. The division also appointed Harold E. Bayless and Robert E. Evensen as regional sales managers. The Brady Division of Koehring Co., Des Moines, Iowa, has named Ted J. Auer its central region sales manager.

Nalco Chemical Co., Chicago, has announced several changes within its Industrial Division: R. W. Graff and E. H. Hurst have been promoted to regional managers in Chicago; W. H. Clark will replace Grass as Michigan district manager; R. J. Menard will replace Hurst as manager of the South Atlantic district; P. J. Hallson has been promoted to district manager of the Wisconsin district; and C. A. Smith will become manager of the expanded Carolina district.

Merton W. Klemm has been designated a territory manager for the Brady Div. of Koehring Co., Des Moines, and will be responsible for farm machinery sales to dealers in southeast Wisconsin.

W. E. Kautenberg Co., a subsidiary of Furst-McNess Co., both of Freeport, Ill., has recently appointed Frank A. Rever to the post of assistant to the president. Mr. Rever's initial responsibilities will concern new product development and market expansion.

C. Kenneth Claunch has been named Product Marketing Manager for the Industrial Chemicals Div. of Mallinckrodt Chemical Works.

Nathaniel Matlin has established The Matlin Company, Inc., 21 S. Main St., Yardley, Pa., to provide marketing assistance and communications and product development service to clients in scientific, technical, medical, industrial and agricultural fields.

Dr. J. Benton Jones has joined the staff of St. Louis Testing Laboratories, Inc. as a Consulting Agronomist.

Jack T. Langley has been appointed a sales and technical representative of Retzloff Chemical Co. in their southeastern regional office at Atlanta, Ga.

John G. Messenger has joined Allis-Chalmers as manager of marketing for its farm equipment division.

Richard E. Whitson, Jr. has been designated Manager of Insecticide Clay Sales for the Oil-Dri Corporation of America, headquartered in Chicago.