"No more legislation a possibility," Washington Ag. Director Moos Tells Pacific NW Sprayorama in Seattle

Area Spraymen Form Regional Assn., Elect Officers

By MARILYN IRWIN

Eventual elimination of the need for additional Federal and local controls in our field of endeavor will come if individual professional applicators show increasing concern for improving and upgrading the image of pesticides in the public mind. This was the outlook forecast by Donald W. Moos, Director, Washington State Dept. of Agriculture, keynote speaker at the 1965 Sprayorama. Sponsored by The Washington Association of Ground Sprayers, the two-day meeting headquartered at the new Seattle Center, Sept. 20-21.

Moos said there are great opportunities for growth in the professional application of pesticides, but underlined the heavy responsibilities which go hand in hand with the future of spraymen.

Hosted by W.A.G.S.' president, Jack Daniels, the conference moved into high gear with a talk on turf diseases by Dr. Charles J. Gould, plant pathologist at Western Washington Experiment Station in Puyallup. He stressed the value of regular, well-timed applications of good fungicides, and pointed up the importance of two fall applications, one about Sept. 15 and the other around the end of October.

Proper preparation of areas before planting, plus good management of already planted areas, play as important a role in effective weed control for ornamental plantings, as do herbicide applications, according to counsel given delegates by Arthur Myhre, association horticulturist at Puyallup. The amount and type of herbicide necessary vary with areas and types of weeds, but the principles of sound preparation and management do not change. If they are ignored they can render impotent, or only partially effective, an otherwise good weed control program, Myhre cited.

Don't Overuse Surfactants

"An increase of 50% and more effectiveness can be gained from pesticides with the addition of oil-type surfactants," Tom Hall of Colloidal Products, Yakima, Wash, explained in his talk that was accented with full-color microphotographic slides. He used this method to illustrate how results vary with and without surfactants in the spray. But, he cautioned, "Overuse can be even worse than using no surfactant at all." Follow label and manufacturer's instructions, Hall urged.

"Lush Look" Fertilization

Nitrogen fertilizer applied after August 1 each year is vital to proper turf care in the Northwest climate, according to Dr. Roy Goss, extension agronomy specialist, Western Washington Experiment Station. He underlined the basic importance of



Prophetic prediction of less legislation was given northwest applicators in Seattle by Washington State Dept. of Agriculture Director, Donald W. Moos at opening session.

regular fertilizer application for best results. Healthy turf situations resulting from proper fertilization, coupled with careful local selection and usage of herbicides fitted to specific problems, will produce that "lush look" that all customers desire, Goss explained.

Presided over by King County Extension Agent, Art Mehas, second day of the conference centered on plant diseases. Dr. Otis Maloy, extension plant pathology specialist, Washington State University, illustrated at length the complete plant disease pathology, indicating symptomatic detecting techniques which must be employed if proper identification and treatment are to follow.

Misread Symptoms Foil

"Too often," Dr. Maloy reminded the applicators, "improper identification of a disease, due to misreading of symptoms.



Sprayorama host, Jack Daniels (standing), emceed banquet. At the table with him are (left to right) Claude Mills and Mrs. Mills, Lake Grove, Oregon; Errett Deck, Washington Dept. of Agriculture; Mrs. Daniels; Mrs. and Jim Overton, Portland, Oregon; Tom Hall, Yakima, Wash.; Clark Brown, Washington Dept. of Agriculture; and Mrs. Jack Irwin, W.A.G.S. secretary.

results in an ineffective spray program. In fact, most people are not trained enough to recognize a *normal* plant. For example, *Pseudomonas* spp. bacterial blight is very hard to distinguish, in some cases, from a simple Boron deficiency."

Dr. Maloy insists that basic organisms must be isolated and identified before positive identification of disease is possible. The speaker does recognize that often the professional applicator, for obvious reasons, is unable to



George Mock, Jr. (left), past W.A.G.S. president and former chairman of Washington State Pesticide Advisory Board, talks with Harry Kline, owner of Puget Sound Tree Service, about progress spraymen have made.

go this far with his on-the-spot diagnosis.

The other side of proper identification is correct application of the right materials. Spray *timing* is of utmost importance in plant disease control. "Generally speaking, any of the good fungicides will be effective against most of the more common plant diseases *if* they are applied at the proper time," Dr. Maloy continued, "but if application timing is poor, no effective control is possible regardless of the material used."

Systemics Evaluated

Systemics still leave something to be desired as pesticides, Dr. Jack Warren of Chemagro Corp., Yakima, Wash., made clear to the group. Though these materials have exciting possibilities, they are not as yet effective against chewing insects and present serious problems of safety in application, he reported. Warren feels the best method of application is by root injection. It is safer, surer (all material tends to be taken up into the plant's leaf structure), and can be done regardless of weather conditions. The least satisfactory method of systemic use, he opined, is the foliar-spray technique.

Dr. Warren called for additional research into better methods of getting systemic solutions into trees more safely and simply since, in an opinion he reportedly shares with many others, present methods of systemic application are not wholly adequate to accomplish complete control of insects.

Success of "Appearance"

The key to a successful applicator's operation must begin with the applicator himself, according to A. J. "Jim" Overton, Miller Products Co., Portland, Oregon, as revealed in his talk on public relations and the pesticide applicator.

By clever use of examples from real life, he pointed up the importance of a sprayman's public image by first describing what a sprayer ought not to look like. The man he described was a bit "creepy." Following this he indicated how, by intensive attention to self deportment, the ordinary applicator can upgrade himself. He summarized by saying that "while we may be operating within an indispensable industry, no one professional applicator is himself necessarily indispensable and, therefore, if he doesn't sell himself to the public through proper PR, a competitor who does will very likely move in." Overton suggested a thorough self analysis as being vital to the successful operation of any pesticide application business.

Applicator problems and solutions was the subject of a fourmember panel at an afternoon session. Panelists were: Ray Collier, Collier Spray Service, and William L. Owen, General Spray Service, both of Portland; and Donald Mock, Shamrock Spray Service and Stan Raplee, Washington Tree Service, both of Seattle.

Don Mock pointed out the need for more diversified equipment in a one-man-type operation to make more efficient use of work time.

Stan Raplee told of the pressing need for sound ethical practices in competitive bidding, since the careless or improper bid can lead to difficulty for the low bidder (sometimes even causing failure to complete the job), and will reflect a dim light of poor business practice on the entire applicator field.

Bill Owen said any applicator may forget that his public "image" is made up of all his "unconscious" day-to-day business practices. He reminded his fellow spraymen that everyone



"**Regular fertilization** is absolutely necessary," Dr. Roy Goss (right) seems to be reiterating during between-session chat with fellow speaker, Stan Raplee of Seattle.

in the field needs to practice rigid self scrutiny of his personal behavior, appearance, speech, telephone technique, appearance of equipment, etc., to upgrade himself and his own business. Each thereby helps bring credit to his profession, Owen observed.

Ray Collier reflected on the many years of experience the applicator industry has with pesticides as a sound argument for renewed enthusiasm for its

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- Nebraska Association of Nurserymen Annual Convention, Cornhusker Hotel, Lincoln, Nov. 15-16.
- Pennsylvania Grassland Conference, Nittany Lion Inn, State College, Nov. 22-23.
- National Weed Committee of Canada, Western Section Meeting, Palliser Hotel, Calgary, Alberta, Nov. 30-Dec. 2.
- Illinois Turfgrass Conference, University of Illinois, Urbana, Dec. 2-3.
- North Central Weed Control Conference, Broadview Hotel, Wichita, Kans. Dec. 5-7.
- Minnesota State Nurserymen's Assn. Convention and Annual Meeting, Curtis Hotel, Minneapolis, Dec. 6-7.
- Connecticut Nurserymen's Assn. Annual Meeting, Hotel Statler-Hilton, Hartford, Dec. 30.
- North Carolina Nurserymen's Assn. Annual Meeting, North Carolina State University, Raleigh, Jan. 3-4, 1966.
- Western Association of Nurserymen Annual Convention, Hotel Continental, Kansas City, Mo., Jan. 3-5.
- Rutgers Winter Turf Course, College of Agriculture, New Brunswick, N. J., Jan. 4-Mar. 11.
- Northeastern Weed Control Conference, The Hotel Astor, New York, Jan. 5-7.
- Indiana Association of Nurserymen Annual Winter Conference, Claypool Hotel, Indianapolis, Jan. 5-7.
- lowa Nurserymen's Assn. Annual Convention, Hotel Roosevelt, Cedar Rapids, Jan. 7-9.
- National Landscape Nurserymen's Assn. Convention, LaSalle Hotel, Chicago, Ill., Jan. 8-9.
- North Carolina State Annual Pesticide School, North Carolina State University, Raleigh, Jan. 10-11.
- New York State Arborists Assn. Winter Meeting, Statler Hotel on Cornell campus, Ithaca, Jan. 16-18.
- First Annual Pennsylvania Shade Tree Symposium, Nittany Lion Inn, University Park, Jan. 11-13.

statement was based on data obtained from research plots at the University of Missouri.

Others who participated in the conference program were, from the University of Missouri, Raymond A. Schroeder, chairman, department of horticulture: Charles Sacamano, extension horticulturist; Ronald Taven, associate professor of horticulture; Philip Stone, chairman, department of entomology; Mahlon Fairchild, associate professor of entomology; C. C. Burkhardt, assistant in entomology; Tom Wyllie, associate professor of field crops; J. A. Long, director, biochemical research, O. M. Scotts, Marysville, O.; Charles G. Wilson, sales manager and agronomist, Milorganite Turf Service, Milwaukee Sewerage Commission, Milwaukee.

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professionalism when its members consider how far the industry has come in a comparatively short time. "The best years are ahead of us if we take the proper approach," he predicted.

Cost Accounting Is Key

Are you really in business or should you sell out, invest your capital, and work for someone else? That's the question asked by Jennings P. Felix, Seattle attorney, in his talk on business planning and cost analysis.

Felix advised the group that, as small businessmen, they must undergo a thorough cost accounting survey to know the real facts about their profit and loss. Presenting a detailed analysis form to each operator, he urged its use as the first step to determine where costs, prices, and profits should be in a sound small business.

4 Assns. Form PNSA

Culminating months of discussions and meetings, the newly formed Pacific Northwest Spraymen's Association was brought to the initial stage of incorporation. It is made up of four separate spraymen's groups: The Washington Association of Ground Sprayers, The Northwest Chemical Applicators, The Oregon Chemical Applicators Association, and The Pesticides Sprayers Association of Portland.

A previously temporary board of directors, elected from each of the four associations, was elected to permanent board status, bylaws were tentatively approved, and permanent board officers elected. Elected to the board as President is William L. Owen. Vice President is Jack Daniels, and secretary-treasurer is Lester Wampole.

"Sole purpose of the Pacific Northwest Spraymen's Association is to provide a regional voice for the Northwest whenever and wherever a regional voice is needed. It is hoped that quick and firm liaison with the new National Spraymen's Association, headquartered in Florida, can be accomplished as one more step toward a truly representative and functional national association of spraymen," Bill Owen stated as he addressed the Sprayorama.

Iron Chlorosis Appears

Iron chlorosis, a disease which occurs in susceptible plants when iron is not available, has been recorded in many lawns and ornamental plants across Kansas, R. E. Odom, Kansas State University Extension Ornamental Horticulturist reports. Symptoms are generally a yellowing of the foliage due to failure of chlorophyll to develop normally.

Nourishment in the form of ferrous sulfate or iron chelates helps combat the iron lack. Ferrous sulfate can be applied as a foliar spray at the rate of two teaspoons per gallon of water, plus spreader-sticker. Repeat the spray in about 10 days if the yellowing persists.

Iron sulfate can also be applied to soil as a fertilizer. Apply to trees and shrubs in holes made in a circle just inside the spread of the branches. A 5-foot high shrub takes ½ lb. A tree should have about ¾ lb. for each inch of trunk diameter.

Close-growing plants such as grass should have 4 lbs. per 1,000 square feet.