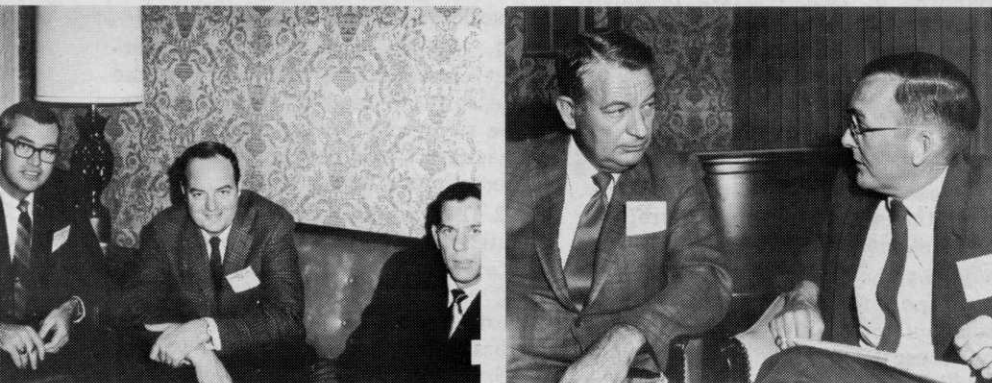


Southern Weed Science Society Report:

Look at Weeds As Pest Haven



They may be talking business or just visiting. Chances are the subject is contract applying in the left picture. From the left are Emery McEithen of Amchem, Ambler, Pa.; Frank Cady, contract applicator and owner of Rowco, Inc., San Antonio, Tex.; and John Kirch, also of Amchem. In the right picture are Jay D. Wright, left, Stauffer Chemical Co., Orlando, Fla., and Will Waters, University of Florida, Apoka.



Utility right-of-way maintenance is a good bet for the subject here. From the left are C. E. Walls of Du Pont Company, Columbia, S. C.; Hyland Johns, Asplundh Tree Expert Company, Jenkintown Pa.; L. A. Conn, Du Pont Company, Wilmington, Del.; and Dave Peterson, Stull Chemical Company, San Antonio, Tex.

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MEMBERS of the Southern Weed Science Society—900 strong—held their 23rd annual meeting Jan. 20-21 at Atlanta, Ga. This weed science group continues to stage a program noted for its practical approach to weed control via new technology.

This year, more than 140 papers were delivered. Nine different sections were required to accommodate the many types of weed control under study. These consisted of weed control in agronomic crops, horticultural crops, forests and rangelands, rights-of-way and industrial sites, and aquatic areas. Other sections consisted of the ecological, physiological and edaphic aspects of weed control, teaching and research, developments from industry, and application of herbicides.

Common to this Society's sessions is the great involvement of top commercial company personnel along with researchers.

Dr. William R. Furtick, director of the International Plant Protection Center at Oregon State University, Corvallis, raised some interesting questions regarding the change in weed problems which occurs as the environment changes.

Frequently, he said, we may consider plants to be weeds but their presence may not have any detrimental effect on man's desires and they cannot be considered a weed problem. On the other hand, there is increasing evidence that plants growing in or adjacent to agricultural land, which have been considered unimportant in the past, may have major significance as weed problems in the future.

The plants Furtick referred to are those species that host important insects or disease pests. The study of weeds as intermediate hosts of other pests is perhaps the most neglected area of weed control, he said, particularly in recent years during which modern pest control has received major research attention.

The importance of weed control as a major element of integrated pest control, Furtick stated, has been frequently overlooked. Integrated control involves designing pest control programs that utilize all the control means to the best possible degree.

These would include cultural practices that minimize the potential for the pest or enhance ease of control, such as favoring natural predators, use of highly favored plant species as trap crops at intervals to concentrate insects for destruction without spraying a whole field, and the elimination of weeds that act as the breeding ground where insects or



New officers of the Southern Weed Science Society are, seated, from the left: President-elect—J. N. Orsenigo, Belle Glade Experiment Station, Belle Glade, Fla.; president—D. D. Boatright, Horne-Boatright Chemical Co., Birmingham, Ala.; and vice-president—T. J. Hernandez, Du Pont Company, Houston. Standing: Past president—J. B. Baker, Louisiana State University, Baton Rouge; executive board member—W. L. Lett, Colloidal Products Corporation, Memphis, Tenn.; executive board member—W. D. Hogan, Chevron Chemical Company, Orlando, Fla.; secretary-treasurer—P. W. Santelmann, Oklahoma State University, Stillwater; and editor—A. D. Worsham, North Carolina State University, Raleigh. Also named to the executive board, but not pictured, were James F. Miller, University of Georgia Cooperative Extension Service, Athens, G. A. Buchanan, Auburn University, Auburn, Ala.; and J. S. Baker, Delta Experiment Station, Greenville, Miss.

disease increase and later invade the developing crop.

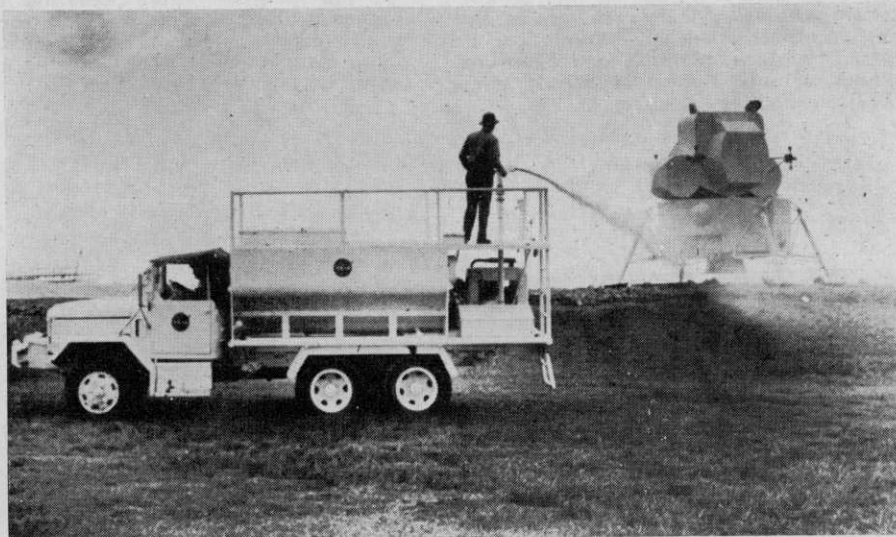
The role of weed control for this purpose, Furtick continued, is almost universally unexplored in relation to most crop pests. What are the weed species that host major insect and disease pests? What distance of weed-free barrier is needed to prevent the spread from weeds to crops of the individual species

involved? These and a host of other similar questions are perhaps some of the most important questions that need answering.

Another example of interdisciplinary failure, Furtick said, has been the concentration on fertilizer introduction around the world with, in many cases, little, if any, thought of the impact on weeds and weed control.

In most areas of the world, there has been a rapid trend toward urbanization. This is often creating decreased labor availability on the farm. The rapidly increasing use of fertilizer is changing the kinds of weeds that dominate the rapidity of their development and their aggressiveness in relation to the crops. Often adequate control requires a substantial increase in weeding labor at a time the supply is dwindling.

This problem has been solved in the United States by rapid introduction and use of pre-emergence and other herbicides and high levels of mechanization. The heavy use of herbicides as a substitute for hand labor and some of the traditional cultivation practices is already giving evidence of causing rapid shifts in the primary species of importance in our fields. This is another good example of dynamic weed ecology. The shift that is occurring is away from the annual species such as *Digitaria*, *Setaria*, *Echinocloa*, *Elusine*, *Amaranthus*, etc., with a take over of the more difficult perennial species such as *Cyperus*, *Sorghum*, *Convolvulus*, and perennial *Panicum*. The problems being created may be much more costly to handle than those originally solved.



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