WEED SCIENCE

JOURNAL OF THE WEED SCIENCE SOCIETY OF AMERICA

CONTENTS

E. E. Schweizer	125
Diffusion of Herbicides to Seed. H. D. Scott and R. E. Phillips	128
Incorporation of Atrazine Side-Chain into Amino Acids of Corn. Donald P. Schultz and B. G. Tweedy	133
Influence of GA on Uptake and Accumulation of Naptalam by Bean Plants. Robert M. Devlin and Robert W. Yaklich	135
Absorption and Penetration of Picloram and 2,4,5-T into Detached Live Oak Leaves. J. R. Baur, R. W. Bovey, R. D. Baker, and Imogene Riley	138
Growth and Development of Johnsongrass Ecotypes. C. G. McWhorter	141
Effects of Trifluralin on Growth, Nodulation, and Anatomy of Soybeans. Cyril A. Kust and Esther Struckmeyer	147
Site of Uptake, Movement, and Activity of DCPA. R. K. Nishimoto and G. F. Warren	152
Shoot Zone Uptake and Translocation of Soil-Applied Herbicides. R. K. Nishimoto and G. F. Warren	156
Response of Sugarbeets and Weeds to Cycloate, Propachlor, and Pyrazon. J. H. Dawson	162
Effects of Trifluralin and Organophosphorus Compounds on Cotton Seedlings, Ghanem S. Hassawy and K. C. Hamilton	166
A Study of Soil Bioassay Technique Using Prometryne. P. W. Santelmann, J. B. Weber, and A. F. Wiese	170
Effects of a Dimethylpropynyl Benzamide Herbicide on Quackgrass Rhizomes. L. W. Smith, R. L. Peterson, and R. F. Horton	174
Herbicide Combinations in Irrigated Cotton. K. C. Hamilton and H. F. Arle	178
Effect of Herbicides on Seedling Emergence Force. O. C. Burnside	182
WSSA Placement Service	185
News Notes	189
Sustaining Members	191
The Metric System	192

VOLUME 19
MARCH 1971
NUMBER 2

WEED SCIENCE

Issued six times a year by the Weed Science Society of America

- FRED W. SLIFE, Treasurer-Business Manager, Department of Agronomy, University of Illinois, Urbana, Illinois 61801
- EARL G. RODGERS, Editor, 2183 McCarty Hall, University of Florida,
 Gainesville, Florida 32601

ASSOCIATE EDITORS

- D. E. Davis, Department of Botany and Plant Pathology, Auburn University, Auburn, Alabama 36830
- C. L. Foy, Department of Plant Pathology and Physiology, Virginia Polytechnic Institute, Blacksburg, Virginia 24061
- T. J. SHEETS, Pesticide Residue Research Laboratory, North Carolina State University, Box 5215, Raleigh, North Carolina 27607
- C. R. SWANSON, Southern Weed Science Laboratory, Crops Research Division, ARS, USDA, Stoneville, Mississippi 38776

EDITORIAL COMMITTEE

- JOHN D. BANDEEN, Crop Science Department, University of Guelph, Guelph, Ontario, Canada
- GALE A. BUCHANAN, Department of Agronomy and Soils, School of Agriculture, Auburn University, Auburn, Alabama 36830
- O. C. Burnside, Department of Agronomy, University of Nebraska, Lincoln, Nebraska 68503
- W. R. Byrnes, Department of Forestry and Conservation, Purdue University, Lafayette, Indiana 47907
- PETER A. FRANK, Crops Protection Research Branch, ARS, U.S. Department of Agriculture, Room 26, Building 56, Denver Federal Center, Denver, Colorado 80225
- K. C. HAMILTON, Department of Agronomy, University of Arizona, Tucson, Arizona 85721
- J. L. HILTON, Crops Research Division, ARS, USDA, Beltsville, Maryland 20705

- R. H. Hodgson, Metabolism and Radiation Research Laboratory, Crops Research Division, ARS, U. S. Department of Agriculture, University Station, Fargo, North Dakota 58102
- L. G. Holm, Department of Horticulture, College of Agricultural and Life Sciences, University of Wisconsin, Madison, Wisconsin 53706
- R. D. ILNICKI, Department of Soils and Crops, Rutgers University, New Brunswick, New Jersey 08903
- L. S. JORDAN, Department of Horticultural Science, University of California, Riverside, California 92502
- C. G. McWhorter, Crops Research Division, ARS, U. S. Department of Agriculture, Delta Branch Experiment Station, Stoneville, Mississippi 38776
- A. D. Worsham, Department of Crop Science, North Carolina State University, Raleigh, North Carolina 27607

WEED SCIENCE is a journal published by the Weed Science Society of America. The subscription price is \$20.00 yearly for six issues; single copies \$4.00.

Address all communications regarding subscriptions and reprints to F. W. Slife, Department of Agronomy, University of Illinois, Urbana, Illinois 61801. All checks, money orders, and other remittances should be made payable to the Weed Science Society of America.

The editorial office is located at 2183 McCarthy Hall, University of Florida, Gainesville, Florida 32601. Inquiries concerning manuscripts and other materials for publication should be addressed to the editorial office.

Printing is by the W. F. Humphrey Press, Inc., Geneva, New York.

To join the Weed Science Society of America, send remittance of \$15.00, payable to the Weed Science Society of America, to Dr. F. W. Slife, Department of Agronomy, University of Illinois, Urbana, Illinois 61801. Give name, official position (if any), and complete address. Dues are for the calendar year only.

Entered as second-class matter at the post office at Urbana, Illinois, with additional entry at Geneva, New York