WEED SCIENCE

JOURNAL OF THE WEED SCIENCE SOCIETY OF AMERICA

CONTENTS

Uptake and Translocation of 2,4-D-1-4C in Parrotfeather. David L. Sutton and S. W. Bingham	193
Additions to the Aliphatic Moiety of Chlorophenoxy Compounds. D. L. Linscott and R. D. Hagin	197
The Effect of Auxin on Sprouting in Poison Ivy. J. P. Sterrett, C. L. Foy, and S. W. Bingham.	199
Influences of Soil Temperature on Reproduction of Curly Dock. M. A. Maun and P. B. Cavers	202
Ammonium Nitrate and Phosphoric Acid Increase 2,4,5-T Absorption by Tree Leaves. Homer A.	
Brady	204
Utility of Maintained Weed Infestations Under Field Conditions. R. P. Upchurch, F. L. Selman,	000
and H. L. Webster	206
Release of Herbicides by Soybean Roots in Culture Solutions. K. Moody, C. A. Kust, and K. P. Buchholtz	214
Development of Axillary Buds from Johnsongrass Rhizomes, C. A. Beasley	218
A Mist Chamber for the Culture of Plants or Explant Segments. C. A. Beasley and W. P. Fox	223
Dodder Control in Alfalfa with Dichlobenil. J. H. Dawson	225
Atrazine Metabolism in Cotton as a Basis for Intermediate Tolerance. R. H. Shimabukuro and	
H. R. Swanson	231
The Effect of Frost on the Response of Spring Wheat to 2,4-D. I. K. Bradbury and R. Ashford	235
Paraquat for Range Seeding in Cismontane California. Burgess L. Kay and Richard E. Owen	238
Phytotoxicity of Bensulide and Trifluralin in Several Soils. R. M. Menges and J. L. Hubbard	244
Selectivity, Movement, and Persistence of Soil-Incorporated Herbicides in Carrot Plantings.	
R. M. Menges and J. L. Hubbard	247
The Response of Canada Thistle Ecotypes to 2,4-D, Amittole, and Intensive Cultivation. J. M.	050
Hodgson	253
Movement and Distribution of Pyrazon in Soil. D. T. Smith and W. F. Meggitt	255
Persistence and Degradation of Pyrazon in Soil. D. T. Smith and W. F. Meggitt	260 265
Changes in Dormancy and Viability of Weed Seeds in Soils. R. B. Taylorson	403
McReynolds, Jr. and James A. Tweedy	270
Control of Wild Cane in Corn. O. C. Burnside	272
Reaction of Wheat to Picloram. John D. Nalewaja	276
An Implanted Soil Mass Technique to Study Herbicide Effects on Root Growth. Zane F. Lund,	
R. W. Pearson, and Gale A. Buchanan	279
Dissipation of Endothall and Effects on Aquatic Weeds and Fish. R. R. Yeo	282
A Recirculating Spray System for Postemergence Weed Control in Row Crops. C. G. McWhorter	285
Selective Weed Control in Seedling Cool-Season Grasses. C. L. Canode and W. C. Robocker	288
Pine Seedling Response to Dichlobenil, Fluometuron, and Pebulate. R. E. Wilkinson and T. S. Davis	292
A History of Weed Control in the United States and Canada. F. L. Timmons	294
Canada Thistle Control on Roadsides, L. E. Foote, D. L. Kill, and C. S. Williams	307
WSSA Manual of Operating Procedures	311
WSSA Placement Service	321
News Notes	324
Sustaining Members	326
The Metric System	327

VOLUME 18
MARCH 1970
NUMBER 2

WEED SCIENCE

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

EARL G. RODGERS, Editor, 209 McCarty Hall, University of Florida, Gainesville, Florida 32601

FRED W. SLIFE, Treasurer-Business Manager, Department of Agronomy, University of Illinois, Urbana, Illinois 61801

EDITORIAL COMMITTEE

- N. B. AKESSON, Department of Agricultural Engineering, University of California, Davis, California 95616
- Ross Ashford, Department of Crop Science, University of Saskatchewan, Saskatoon, Canada
- W. R. Byrnes, Department of Forestry and Conservation, Purdue University, Lafayette, Indiana 47907
- 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
- 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
- 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
- STANLEY J. PARKA, Eli Lilly and Company, P. O. Box 708, Greenfield, Indiana 46140
- 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
- R. P. UPCHURCH, Monsanto Company, V Building, 800 N. Lindbergh Blvd., St. Louis, Missouri 63166

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 \$15.00 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 McCarty 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 \$12.00, 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