

WEED SCIENCE

JOURNAL OF THE WEED SCIENCE SOCIETY OF AMERICA

CONTENTS

	Page
Weed Science in Perspective. Dayton L. Klingman	401
The Impact of Government Decisions and Attitude on Pest Control. Fred H. Tschirley	405
The Role of Weed Science in Developing Countries. C. Parker	408
Influence of Dicamba on Development of Range Grass Seedlings. J. C. Halifax and C. J. Scifres	414
Phytochrome Controlled Changes in Dormancy and Germination of Buried Weed Seeds. R. B. Taylorson	417
Nutrient Removal by Waterhyacinth. H. H. Rogers and D. E. Davis	423
Effects of Continued Use of Herbicides in Asparagus Plantings. William V. Welker, Jr. and Jennie L. Brogdon	428
Effect of Repeated Annual Applications of Herbicides in Red Raspberry Plantings. William V. Welker, Jr. and Carter R. Smith	432
Effects of DCPA on Tomato Hypocotyl Tissue. J. LaMar Anderson and Bijan Shaybany	434
Antagonistic Effects Between Picloram and Bromacil with Oats. J. P. Sterrett, J. T. Davis, and W. Hurtt	440
Influence of Fenac on Anatomy and Carbohydrate Reserves in Mugwort Rhizomes. A. B. Rogerson, S. W. Bingham, C. L. Foy, and J. P. Sterrett	445
Droplet Size and Phytotoxicity of Herbicides. K. S. McKinlay, S. A. Brandt, P. Morse, and R. Ashford	450
Control and Ecology of Weeds in Continuous Corn Grown Without Tillage. G. B. Triplett, Jr. and G. D. Lytle	453
Response of Kochia Selections to 2,4-D, Dicamba, and Picloram. Allyn R. Bell, John D. Nalewaja, and A. B. Schooler	458
Light Period, Temperature, and Kochia Flowering. Allyn R. Bell, John D. Nalewaja, and A. B. Schooler	462
Inhibitor of Microbial Enzyme Prolongs Dodder Control with Chlorpropham. J. H. Dawson	465
Effect of Time of Application of Diphenamid on Pepper, Weeds, and Disease. Y. Eshel and J. Katan	468
Hormonal Aspects of Seed Dormancy in Yellow Foxtail. G. E. Kollman and D. W. Staniforth	472
An Ultrastructural Study of the Effects of 2,4-D on Tobacco Leaves. J. A. White and D. D. Hemphill	478
Effects of Fertilization on Aquatic Plants, Water, and Bottom Sediments. J. B. Ryan, D. N. Riemer, and S. J. Toth	482
Movement and Persistence of Picloram in Soil. J. H. Hunter and E. H. Stobbe	486
Cocklebur Control in Soybeans with 2,4-DB and Chloroxuron. B. J. Gossett, L. R. Reinhardt, and W. P. Byrd	489
Sources of CO ₂ for Nuisance Blooms of Algae. Claude E. Boyd	492
Leaf Removal Interval Effect After Sprays to Woody Plants. R. E. Meyer, R. W. Bovey, T. E. Riley, and W. T. McKelvy	498
Broadcast or Banded Chloramphen with Tillage Variables in Soybeans. R. S. Moomaw and L. R. Robison	502
Absorption of Herbicides by Soybean Seeds and Their Influence on Emergence and Seedling Growth. R. E. Phillips, D. B. Egli, and L. Thompson, Jr.	506
Soybean and Weed Response to Dinoseb and Chloroxuron Applied Topically. F. L. Baldwin and R. E. Frans	511
Minutes of the Business Meeting, Weed Science Society of America, February 8, 1972	515
Major Actions of the Executive Committee, Weed Science Society of America, February 1972	516
Changes in Manual of Operating Procedures, Weed Science Society of America	517
Committee Reports, Weed Science Society of America, February 1972	518
Officers, and Places and Dates of Meeting of the Weed Science Society of America and the Member Weed Organizations	532
WSSA Placement Service	533
News Notes	534
Sustaining Members	535
English-Metric Equivalents	536

VOLUME 20

SEPT. 1972

NUMBER 5

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

T. J. SHEETS, Editor, Pesticide Residue Research Laboratory, North Carolina State University, Box 5215, Raleigh, North Carolina 27607

ASSOCIATE EDITORS

D. E. DAVIS, Department of Botany and Microbiology, School of Agriculture, Auburn University, Auburn, Alabama 36830

C. L. FOY, Department of Plant Pathology and Physiology, Virginia Polytechnic Institute, Blacksburg, Virginia 24061

T. J. MUZIK, Department of Agronomy and Soils, Washington State University, Pullman, Washington 99163

R. A. PETERS, Plant Science Department, University of Connecticut, Storrs, Connecticut 06268

EDITORIAL COMMITTEE

ARNOLD P. APPLEBY, Department of Farm Crops, Oregon State University, Corvallis, Oregon 97331

JOHN D. BANDEEN, Crop Science Department, University of Guelph, Guelph, Ontario, Canada

D. E. BAYER, Department of Botany, University of California, Davis, California 95616

P. A. FRANK, Plant Science Research Division, Room 240, South Building, Plant Industry Station, Beltsville, Maryland 20705

K. C. HAMILTON, Department of Agronomy and Plant Genetics, University of Arizona, Tucson, Arizona 85721

J. L. HILTON, Plant Science Research Division, ARS, USDA, Beltsville, Maryland 20705

R. H. HODGSON, Metabolism and Radiation Research Laboratory, Plant Science Research Division, ARS, U. S. Department of Agriculture, University Station, Fargo, North Dakota 58102

L. S. JORDAN, Department of Horticultural Science, University of California, Riverside, California 92502

C. G. McWHORTER, Plant Science Research Division, Crops Protection Research Branch, Southern Weed Science Laboratory, Stoneville, Mississippi 38776

R. E. MEYER, Plant Science Research Division, ARS, USDA, Texas A&M University, College Station, Texas 77843

A. J. RENNEY, Department of Plant Science, University of British Columbia, Vancouver 8, British Columbia, Canada

H. D. SKIPPER, Monsanto Co., V. Building, 800 N. Lindbergh Blvd., St. Louis, Missouri 63166

T. W. WALDREP, Eli Lilly and Co., Box 708, Greenfield, Indiana 46140

J. B. WEBER, 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 the Pesticide Residue Research Laboratory, North Carolina State University, Raleigh, North Carolina 27607. 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