WEED SCIENCE SOCIETY OF AMERICA



VOLUME 24

NOVEMBER 1976

NUMBER 6

Page	— CONTENTS —
529	Volatility of Eleven Dinitroaniline Herbicides. J.V. Parochetti, G.W. Dec, Jr., and G.W. Burt
533	Nitrite Accumulation Within Herbicide-Treated Leaves. Lowell A. Klepper
536	Translocation of Bentazon in Soybeans and Common Cocklebur. G.D. Wills
541	Triallate Mobility in Soils. G.B. Beestman and J.M. Deming
545	Effects of Temperature on Absorption and Translocation of Profluralin and Dinitramine, K. Hawxby and E. Basler
549	Surfactant Effects on Picloram Adsorption by Soils. J.D. Gaynor and V.V. Volk
553	Control of Spurred Anoda in Cotton. Francisco Solano, J.W. Schrader, and H.D. Coble
557	Absorption, Translocation, and Metabolism of 2,4-D and Glyphosate in Common Milkweed and Hemp Dogbane. J.B. Wyrill, III and O.C. Burnside
567	Effectiveness of Bentazon Applied at Various Times of the Day, David L. Doran and Robert N. Andersen
571	Effect of Light Intensity and Quality on Toxicity of Fluorodifen to Green Bean and Soybean Seedlings. Tomas Pollak and Garvin Crabtree
574	Germination, Growth, and Development of Spurred Anoda. Francisco Solano, J.W. Schrader, and H.D. Coble
579	Structure Versus Activity of Substituted Pyridazinones as Related to Mechanism of Action. J.B. St. John and J.L. Hilton
583	Persistence and Movement of Diuron and 3,4-Dichloroaniline in an Orchard Soil. S.U. Khan, P.B. Marriage, and W.J. Saidak
587	Effects of Prometryn, Diuron, Fluometuron, and MSMA on Chlorella and Two Fungi. D.E. Davis, C.G.P. Pillai, and B. Truelove
594	Early Chemical Control of Weeds in Europe. Allan E. Smith and D.M. Secoy
598	The Light Requirement for Herbicidal Activity of Diphenyl Ethers. Omosuyi Fadayomi and G.F. Warren
601	Phytotoxicity and Soil Activity of HOE 23408. Chu-Huang Wu and P.W. Santelmann
605	Herbicidal Weed Control in Stubble No-Till Planted Corn. George Kapusta and C.E. Strieker
612	Effect of Stage of Growth on Metribuzin Tolerance. J.F. da Silva and G.F. Warren
616	Effect of Alachlor, Propachlor, and Prynachlor on GA_3 -induced Production of Protease and α -Amylase. V. Sivaji Rao and William B. Duke
619	Basis for Interactions of Ethofumesate and Desmedipham on Sugarbeets and Weeds. Y. Eshel, R.L. Zimdahl, and E.E. Schweizer
627	Soil Persistence of Atrazine and Cyanazine. A.W. Libik and R.R. Romanowski
630	Directions for Contributors to Weed Science
632	Sustaining Members, Weed Science Society of America, 1976
633	Membership List, Weed Science Society of America, 1976
652	Author Index to Volume 24, Weed Science
654	Subject Index to Volume 24. Weed Science

WEED SCIENCE

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

D. E. Davis, *Editor*, Department of Botany and Microbiology Auburn University, Auburn, Alabama 36830

Associate Editors

- D. E. Bayer, Botany Department, University of California, Davis, CA 95616
- R. H. Hodgson, United States Department of Agriculture, Metabolism and Radiation Laboratory, State University Station, Fargo, ND 58102
- J. L. Hilton, Agricultural Environmental Quality Institute, Agricultural Research Center, Beltsville, MD 20705
- C. G. McWhorter, United States Department of Agriculture, Agricultural Research Service, Southern Weed Science Laboratory, Stoneville, MS 38776

Editorial Committee

R. N.	Andersen
J. L.	Anderson
W.L.	Barrentine
W. B.	Duke

R. E. Meyer E. E. Schweizer H. D. Skipper E. W. Stoller L. Thompson, Jr. Bryan Truelove G. D. Wills R. Y. Yih

Officers of the Weed Science Society of America

F. W. Slife, President
C. L. Foy, President-Elect
Paul W. Santelmann, Vice-President
G. R. Miller, Secretary
T. J. Sheets, Editor-in-Chief
W. D. Carpenter, Treasurer
C. J. Cruse, Executive Secretary

Weed Science is the official publication of the Weed Science Society of America, 113 N. Neil St., Champaign, IL 61820. It is published bi-monthly, one volume per year, six issues per year beginning in January.

Membership is \$20 per year, student affiliate membership \$10, which includes receipt of the Weed Science, Weeds Today, and WSSA Newsletter. Dues should be sent to WSSA, 113 N. Neil St., Champaign, IL 61820 not later than December 1 of each year. Membership in the society is on a calendar year basis only.

Subscriptions (institutions, libraries, etc.) are \$25 per year, one volume per year of six issues beginning January. New subscriptions and renewals begin with the first issue of the current volume and should be sent to WSSA, 113 N. Neil St., Champaign, IL 61820.

Change of address affecting the mailing list for members, students, and subscribers, inquiries about copies lost in the mail, requests for back issues, and all matters pertaining to the receipt of the Journal, membership, and subscription information should be sent to WSSA, 113 N. Neil St., Champaign, IL 61820. Claims for copies lost in the mails must be received within 30 days (90 days foreign) of the date of issue to insure replacement at no charge.

Manuscripts must be sent to the office of the Editor located in the Department of Botany and Microbiology, Auburn University, Auburn, AL 36830. Directions for contributors are published annually in the January issue of *Weed Science*.

Weed Science published by the Weed Science Society of America.

Second class postage paid at Champaign, IL and at additional mailing office.

Copyright 1977 by the Weed Science Society of America. Printed in the USA.

All right reserved. Reproduction in part or whole prohibited.

Return POD form 3579 to WSSA, 113 N. Neil St., Champaign, IL 61820