# WEED SCIENCE

### JOURNAL OF THE WEED SCIENCE SOCIETY OF AMERICA



**VOLUME 25** 

**JANUARY 1977** 

NUMBER 1

Page

### ---CONTENTS--

- 1 Techniques for Greenhouse Evaluation of Herbicides on Saltcedar. P.C. Quimby, Jr., E.B. Hollingsworth, and R.L. McDonald
- 5 Influence of Postemergence and Subsurface Layered Herbicides on Horsenettle and Peanuts. P.A. Banks, M.A. Kirby, and P.W. Santelmann
- 9 Metabolism of Sandoz 6706 in Soybean and Sicklepod. P.S. Motooka, F.T. Corbin, and A.D. Worsham
- 13 Biocontrol of Purple Nutsedge by Bactra verutana Zeller in a Greenhouse. K.E. Frick and P.C. Quimby, Jr.
- 18 Effect of Herbicides on In Vivo Nitrate and Nitrite Reduction. R.L. Finke, R.L. Warner, and T.J. Muzik
- 23 Susceptibility of Pea Cultivars to Trifluralin. Robert G. Harvey and Earl T. Gritton
- 27 Influence of Fonofos on the Distribution and Metabolism of <sup>14</sup>C-Terbacil in Peppermint. Andre J. Weierich, Zeldon A. Nelson, and Arnold P. Appleby
- 30 Uptake and Translocation of Sandoz 6706 in Soybean and Sicklepod. P.S. Motooka, F.T. Corbin, and A.D. Worsham
- 36 Effects of Growth Regulators and Gibberellic Acid on 2,4,5-T Translocation. Eddie Basler
- 41 Washing Equipment for Separating Weed Seed from Soil. Jack A. Thorsen and Garvin Crabtree
- 43 Fall Panicum Interference in Peanuts. A.C. York and H.D. Coble
- 48 Range Forage Production and Consumption Following Aerial Spraying of Mixed Brush. C.J. Scifres, G.P. Durham, and J.L. Mutz
- 55 Metribuzin Persistence in Soil. K.E. Savage
- 60 Use of Single Leaf Cells to Study Mode of Action of SAN 6706 on Soybean and Cotton. Earl M. Porter and Paul G. Bartels
- 65 News Note
- 65 Erratum Notice
- 66 Longevity of Foxtail Taxa in Undisturbed Sites. M.M. Schreiber
- 73 Weed Control in Narrow and Wide-Row Soybeans. L.M. Wax, W.R. Nave, and R.L. Cooper
- 79 The Physiology and Mode of Action of the Dinitroaniline Herbicides. S.J. Parka and O.F. Soper
- 88 Effect of Trifluralin and Metribuzin Combinations on Soybean Tolerance to Metribuzin. James S. Ladlie, William F. Meggitt, and Donald Penner
- 94 Report of Soil Terminology Subcommittee, Weed Science Society of America, 1976
- 96 Sustaining Members, Weed Science Society of America, 1976

## 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	R. E. Meyer	L. Thompson, Jr
J. L. Anderson	E. E. Schweizer	Bryan Truelove
W. L. Barrentine	H. D. Skipper	G. D. Wills
W. B. Duke	E. W. Stoller	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