

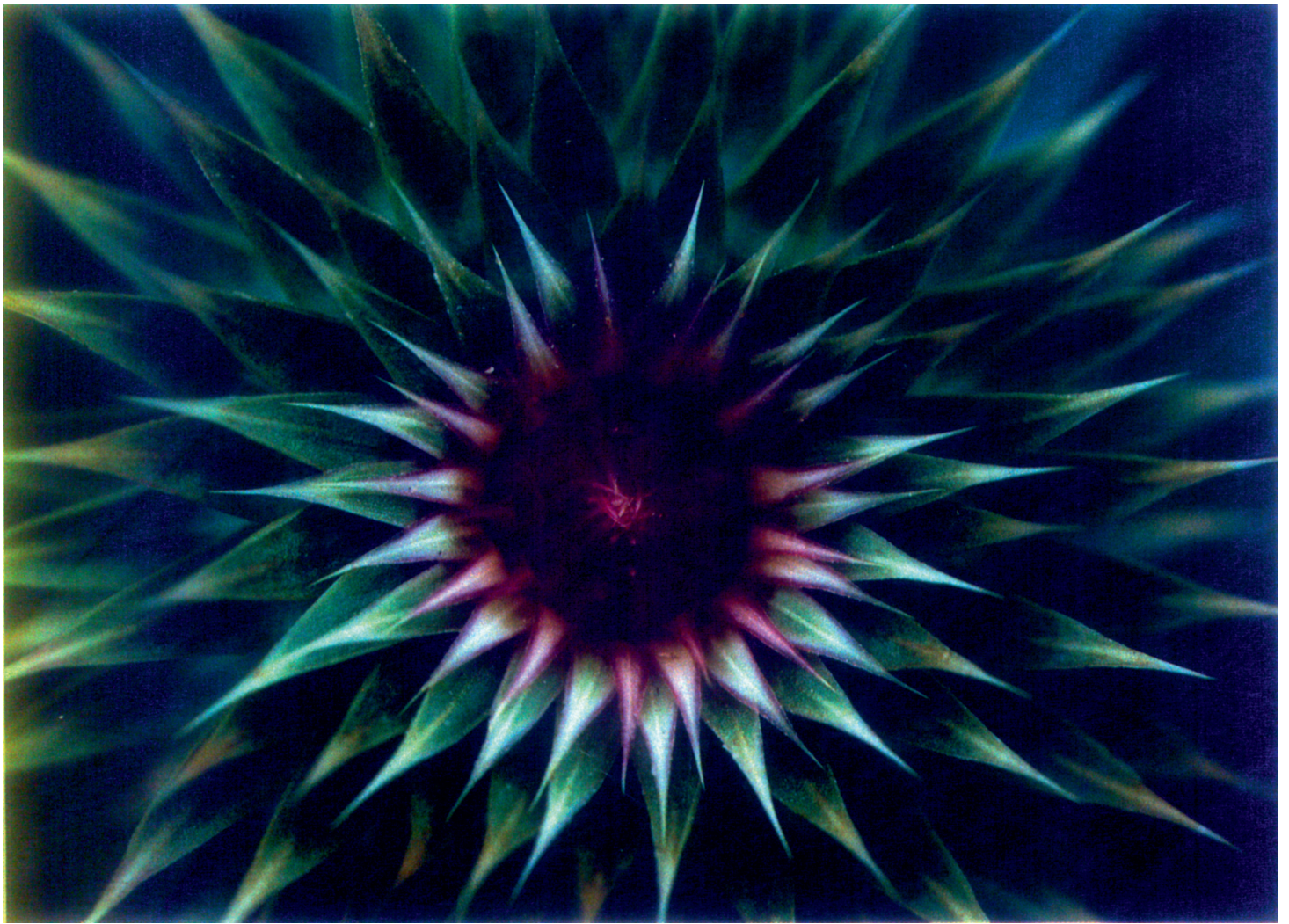
WEED TECHNOLOGY

A Journal of the Weed Science Society of America

VOLUME 1

APRIL 1987

NUMBER 2



ISSN 0890-037X

WETEE9 1(2)121-188 (1987)

WEED TECHNOLOGY

A Journal of the Weed Science Society of America

Weed Technology (ISSN 0890-037X) is a publication of the Weed Science Society of America, 309 West Clark Street, Champaign, IL 61820 (AC/217-356-3182). It is published quarterly, one volume of four issues per year beginning in January.

Membership in the Weed Science Society of America is \$40 per year, student affiliate membership \$20, which includes receipt of *Weed Science*, *Weed Technology*, and *WSSA Newsletter*. Dues should be sent to the WSSA, 309 West Clark Street, Champaign, IL 61820 not later than December 1 of each year. WSSA membership is on a calendar-year basis only.

Subscriptions for *Weed Technology* are \$20 per year (volume). New subscriptions begin with the first issue of the current volume and orders should be sent to WSSA, 309 West Clark Street, Champaign, IL 61820. Subscribers (institutions, libraries, etc.) can obtain both *Weed Science* (volume of 6 issues per year) and *Weed Technology* (volume of 4 issues per year) for \$50 per year.

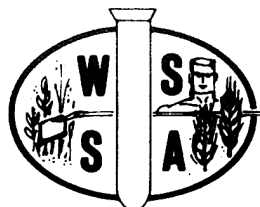
Change of address affecting the mailing list, inquiries about copies lost in the mail, requests for back issues, and all matters pertaining to placement of advertisements and to receipt of journals, membership and subscription information should be sent to WSSA, 309 West Clark Street, Champaign, IL 61820. Claims for copies lost in the mail 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 Editor, Calvin G. Messersmith, Agronomy Dep., North Dakota State Univ., Fargo, ND 58105. Directions for contributors are published in the January 1987 issue of *Weed Technology*. Authors are charged \$50 per page to cover a portion of the publication cost. The Editor can make exceptions in advance when justified.

Weed Technology is published by the Weed Science Society of America. Application to mail at second class postage rate is pending at Champaign, IL. Copyright 1987 by the Weed Science Society of America. Printed in USA. All rights reserved. Reproduction in part or whole prohibited. Return POD form 3579 to WSSA, 309 West Clark Street, Champaign, IL 61820.

WSSA OFFICERS

J. H. Dawson, President A. G. Dexter, Secretary
J. F. Ahrens, President Elect H. P. Wilson, Treasurer
H. M. LeBaron, Vice President B. Truelove, Editor-in-Chief
O. C. Burnside, Past President



Sustaining Members
April 13, 1987

ABC Laboratories, Inc.
ACRES Agric. Custom Research
A & L Agricultural Laboratories
Agri-Growth Research Inc.
Agway, Inc.
American Cyanamid Company
American Hoechst Corporation
The Andersons
Atchison, Topeka & Santa Fe Railway Company
BASF Wyandotte Corporation
Cenex
CIBA-GEIGY Corporation
Deere & Company
DeLavan Corporation
Dow Chemical USA
Eli Lilly & Company
Fermenta Plant Protection Co.
FMC Corporation
Gandy Corporation
Garst & Thomas Hybrid Corn
W. R. Grace & Company
Griffin Corporation
Growmark, Inc.
ICI Americas, Inc.
Kincaid Equipment Mfg.
W. R. Landis Associates, Inc.
Midwest Research Farms, Inc.
Mobay Chemical Corporation
Mobley Company
Monsanto Company
Mycogen Corporation
NOR-AM Chemical Company
Pan-Agricultural Labs., Inc.
PBI Gordon Corporation
Pennwalt Corporation
Pioneer Overseas Corp.
Rhône Poulenc Inc.
Rogers Engineering Inc.
Rohm & Haas Company
Sandoz Crop Protection
O. M. Scott & Sons Company
Spraying Systems Company
Stauffer Chemical Company
Stewart Agricultural Research Service Inc.
Thomson Publications
Union Carbide Ag. Products Company
Uniroyal Chemical Corporation
VanderSchaaf Agric Research Inc.
Virginia Chemicals Inc.
Watson Consulting & Enterprises

WEED TECHNOLOGY

April 1987

Volume 1
Number 2

A Journal of the Weed Science Society of America

Table of Contents

Technology Notes

121 News Notes of General Weed Science Interest

Feature

122 Herbicides from Natural Compounds. Stephen O. Duke and John Lydon

Research

129 Effect of Adjuvant and Spray Volume on Quackgrass (*Agropyron repens*) Control with Selective Postemergence Herbicides. James J. Kells and Gunawan Wanamarta

133 Yellow Nutsedge (*Cyperus esculentus*) Control with Herbicides. Paul E. Keeley, Charles H. Carter, and Robert J. Thullen

140 Effect of Atrazine Residue on Soybean Growth Under Three Tillage Systems and Various Herbicides. John A. Pawlak, James J. Kells, Michael Barrett, and William F. Meggitt

145 Smooth Crabgrass (*Digitaria ischaemum*) Control in Kentucky Bluegrass (*Poa pratensis*) Turf with Herbicides Applied Preemergence. Prasanta C. Bhowmik

149 Mefluidide as an Enhancing Agent for Postemergence Broadleaf Herbicides in Soybeans (*Glycine max*). Michael R. Blumhorst and George Kapusta

154 Effect of Soil-Applied Chlorsulfuron on Canada Thistle (*Cirsium arvense*) Root and Root Bud Growth. William W. Donald

162 Factors Affecting the Loss of EPTC Applied Through a Sprinkler. Alex G. Ogg, Jr.

165 Selectivity of Diphenyl Ether Herbicides between Tomato (*Lycopersicon esculentum*) and Eastern Black Nightshade (*Solanum ptycanthum*). John R. Teasdale

168 Combination Effects of Low Rates of Fluridone and Bentazon. J. P. Sterrett

Helpful Hints for Technical Writing

171 The Passive Voice – Its Use and Misuse. J. H. Dawson

Cover

Inflorescence of musk thistle (*Carduus nutans* L.) as the bud begins to open. This photograph was awarded first place in the 1987 WSSA Photography Contest, St. Louis, MO, and was taken by Dr. E. James Retzinger, Jr., American Cyanamid Co., Jonesboro, AR.

Symposium

172 Educating Weed Scientists

173 The Weed Science Curriculum. Robert L. Zimdahl

177 Training Weed Scientists for Teaching. Arnold P. Appleby

179 Training Weed Scientists for Industry. Joe Antognini

181 Training Weed Scientists for Extension. Ellery L. Knake

Intriguing World of Weeds

184 The Devil's Grass: Quackgrass. Larry W. Mitich

New Technology

186 Imazaquin (Scepter)[®]: A New Soybean Herbicide. W. Franklin Congleton, Anne M. Vancantfort, and Edward M. Lignowski

Miscellaneous

188 Erratum

EDITOR

Calvin G. Messersmith

TECHNICAL EDITOR

Charlene E. Lucken

ASSOCIATE EDITORS

Ronald E. Doersch

Russell R. Hahn

Larry W. Mitich

Alex G. Ogg, Jr.

P. Charles Quimby

Gerald R. Stephenson