

WEED TECHNOLOGY



VOLUME 36 | NUMBER 3

MAY - JUNE 2022

ISSN 0890-037X | WETEE9 32(6) 659-767 (2018)

<https://doi.org/10.1017/wet.2022.51> Published online by Cambridge University Press



WEED TECHNOLOGY

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

Jason K. Norsworthy, *Editor*

The Weed Science Society of America publishes original research and scholarship in the form of peer-reviewed articles in three international journals. *Weed Science* is focused on understanding “why” phenomena occur in agricultural crops. As such, it focuses on fundamental research directly related to all aspects of weed science in agricultural systems. *Weed Technology* focuses on understanding “how” weeds are managed. As such, it is focused on more applied aspects concerning the management of weeds in agricultural systems. *Invasive Plant Science and Management* is a broad-based journal that focuses not only on fundamental and applied research on invasive plant biology, ecology, management, and restoration of invaded non-crop areas, but also on the many other aspects relevant to invasive species, including educational activities, policy issues, and case study reports. Topics for *Weed Technology* include all aspects of weed management in agricultural, horticultural, ornamental, forestry, aquatic, turf, recreational, rights-of-ways, and other settings; weed resistance to herbicides; herbicide resistant crops; biological weed control agents; new weed management techniques; impacts of weed competition with crops; vegetation management with plant growth regulators; weed surveys; weed-related grower surveys; education; and extension. Symposia papers and reviews are accepted. Consult the editor for additional information.

Associate Editors (Assignment Year)

Jason Bond, *Stoneville, MS* (2010)

Kevin Bradley, *Columbia, MO* (2012)

Barry Brecke, *Jay, FL* (2013)

Peter Dittmar, *Gainesville, FL* (2016)

Aaron Hager, *Urbana, IL* (2012)

Charles Geddes, *Lethbridge, AB* (2022)

Katherine Jennings, *Raleigh, NC* (2021)

Prashant Jha, *Ames, IA* (2016)

Amit Jhala, *Lincoln, NE* (2018)

David Johnson, *Des Moines, IA* (2019)

William Johnson, *West Lafayette, IN* (2007)

Vipan Kumar, *Hays, KS* (2020)

Drew Lyon, *Pullman, WA* (2018)

Robert Nurse, *Guelph, ON* (2016)

Sandeep Rana, *Galena, MD* (2021)

Darren Robinson, *Ridgetown, ON* (2008)

Larry Steckel, *Jackson, TN* (2007)

Daniel Stephenson, *Alexandria, LA* (2013)

Michael Walsh, *Crawley, Australia* (2016)

Eric Webster, *Baton Rouge, LA* (2018)

Rodrigo Werle, *Madison, WI* (2022)

R. Joseph Wuerffel, *Vero Beach, FL* (2020)

Tracy Candelaria, *Managing Editor*

Officers of the Weed Science Society of America

<http://wssa.net/society/bod/>

Weed Technology (ISSN 0890-037X) is published by the Weed Science Society of America, 12011 Tejon Street, Suite 700, Westminster, CO 80234. It is published bimonthly, one volume per year, six issues per year beginning in February.

Membership includes online access to *Weed Technology*, *Weed Science*, *Invasive Plant Science and Management*, and the online *WSSA Newsletter*. Dues should be sent to WSSA, 12011 Tejon Street, Suite 700, Westminster, CO 80234 no later than December 1 of each year. Membership in the society is on a calendar-year basis only.

New subscriptions and renewals begin with the first issue of the current volume. Please visit the *Weed Technology* subscription page at <https://www.cambridge.org/core/journals/weed-technology/subscribe>; Email: subscriptions_newyork@cambridge.org in USA, journals@cambridge.org outside USA.

Weed Technology publishes six times a year in February, April, June, August, October, and December. Annual institutional electronic subscription rates: US \$403.00; UK £280.00.

Please use Editorial Manager to access manuscript submissions (<http://www.editorialmanager.com/wt>). Authors are asked to pay \$85 for the first page and \$65 per page thereafter as a portion of the cost of publication, plus an additional processing charge of \$55 per manuscript if none of the authors are WSSA members. The Editor can make exceptions in advance when justified.

The Weed Science Society of America fully subscribes to the belief that progress in science depends upon the sharing of ideas, information, and materials among qualified investigators. Authors of papers published in *Weed Technology* are therefore encouraged, whenever practicable and when state and federal laws permit, to share genotypically unique propagative materials they might possess with other workers in that area who request such materials for the purpose of scientific research.

Weed Technology published by the Weed Science Society of America.

Copyright 2022 by the Weed Science Society of America.

All rights reserved. Reproduction in part or whole prohibited.

Cover

A late-emerging Palmer amaranth plant outgrowing dry bean after a preemergence-alone program. Photo credit: Joshua Miranda Teo.

WEED TECHNOLOGY

VOLUME 36

MAY–JUNE 2022

NUMBER 3

• RESEARCH ARTICLES

- Control of acetolactate synthase-inhibiting herbicide-resistant Palmer amaranth (*Amaranthus palmeri*) with sequential applications of dimethenamid-*P* in dry edible bean
Joshua W.A. Miranda, Amit J. Jhala, Jeffrey Bradshaw and Nevin C. Lawrence 325
- Multiple resistance of silky windgrass to acetolactate synthase- and acetyl-CoA synthase-inhibiting herbicides
Aristeides P. Papapanagiotou, Christos A. Damalas, Irene Bosmali, Panagiotis Madesis, Georgios Menexes and Ilias Eleftherohorinos 334
- Multiple resistance to imazethapyr, atrazine, and glyphosate in a recently introduced Palmer amaranth (*Amaranthus palmeri*) accession in Wisconsin
Felipe A. Faleco, Maxwell C. Oliveira, Nicholas J. Arneson, Mark Renz, David E. Stoltenberg and Rodrigo Werle 344
- Tolerance of plasticulture strawberry to 2,4-D choline applied to row middles
Kira C. Sims, Katherine M. Jennings, David W. Monks, David L. Jordan, Mark Hoffmann and Wayne E. Mitchem 352
- The addition of very low rates of protoporphyrinogen oxidase-inhibiting herbicides to glufosinate does not improve control of glyphosate-resistant horseweed (*Erigeron canadensis*)
Meghan Dilliott, Nader Soltani, David C. Hooker, Darren E. Robinson and Peter H. Sikkema 358
- Confirmation of glufosinate-resistant Palmer amaranth and response to other herbicides
Grant L. Priess, Jason K. Norsworthy, Navdeep Godara, Andy Mauromoustakos, Thomas R. Butts, Trenton L. Roberts and Tom Barber 368
- Integrated use of the stale seedbed technique with preemergence herbicides to control weedy rice in wet seeded rice
Masilamany Dilipkumar, Mohd Shahril Shah Mohamad-Ghazali, Erwan Shah Shari, Ng Lee Chuen, Bhagirath Singh Chauhan and Tse Seng Chuah 373
- Effect of simulated synthetic auxin herbicide sprayer contamination in sweetpotato propagation beds
Thomas M. Batts, Levi D. Moore, Stephen J. Ippolito, Katherine M. Jennings and Stephen C. Smith 379
- Response of smooth pigweed (*Amaranthus hybridus*) accessions from Argentina to herbicides from multiple sites of action
Julio A. Scursoni, Daniel Tuesca, Federico Balassone, Juan P. Morello, Daniela Medina Herrera, María C. Lescano, Nicolás Montero Bulacio, Roberto J. Crespo, Mara B. Depetris and Martin M. Vila-Aiub 384
- Exploring the influence of weeds on cranberry yield and quality
Jed Colquhoun, Thierry Besançon, Katherine Ghantous and Hilary Sandler 390
- Efficacy of halosulfuron-methyl in the management of Navua sedge (*Cyperus aromaticus*): differential responses of plants with and without established rhizomes
Aakansha Chadha, Singarayer K. Florentine, Kunjithapatham Dhileepan, Christopher Turville and Kim Dowling 397
- Soybean yield loss from delayed postemergence herbicide application based on weed height, days after emergence, accumulated crop heat units, and soybean growth stage
Nader Soltani, Christy Shropshire and Peter H. Sikkema 403
- Tolerance of southern highbush blueberry to 2,4-D choline postemergence-directed
Kira C. Sims, Katherine M. Jennings, David W. Monks, Wayne E. Mitchem, David L. Jordan and Mark Hoffmann 409
- Weed control and rice response from clomazone applied at different timings in a water-seeded system
Aaron Becerra-Alvarez, Alex R. Ceseski and Kassim Al-Khatib 414
- Tolerance of four dry bean market classes to flufenacet, acetochlor, and S-metolachlor applied preplant incorporated
Hannah E. Symington, Nader Soltani, Allan C. Kaastra, David C. Hooker, Darren E. Robinson and Peter H. Sikkema 419
- Population dynamics of naturally occurring weed flora in response to crop rotation and HPPD-inhibiting herbicide-based treatments
Lauren M. Schwartz-Lazaro, Nicholas E. Korres, Taghi Bararpour, Muthukumar Bagavathiannan, Jeremy Green and Jason K. Norsworthy 426
- Cucumber tolerance to glufosinate applied preplant or preemergence
Taylor M. Randell, Jenna C. Vance, Lavesta C. Hand, Timothy L. Grey and A. Stanley Culpepper 436
- ## • EDUCATION/EXTENSION
- Surveying stakeholder's perception of glufosinate and use in North Carolina
Eric A. L. Jones, Charles W. Cahoon, Ramon G. Leon and Wesley J. Everman 443
- ## • NOTE
- Potassium carbonate effects on spray mixture pressure changes and final pH
Thomas C. Mueller, Randall L. Landry, Joseph E. Beeler and Lawrence E. Steckel 451