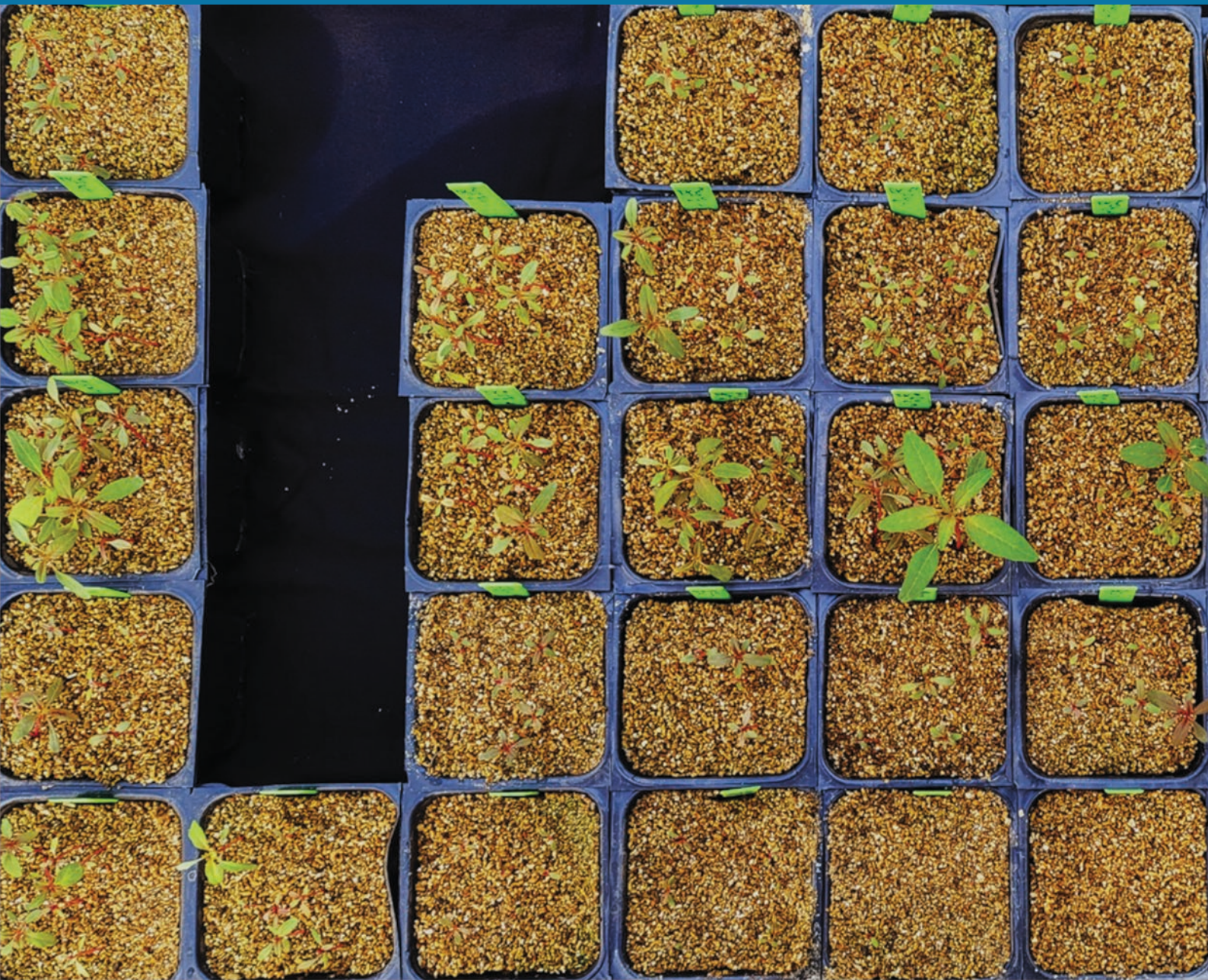


WEED SCIENCE



Control 0.015 0.05 0.15 0.5 1.5

S-metolachlor Concentration (μM)

WEED SCIENCE

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

William K. Vencill, *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 Science* include the biology and ecology of weeds in agricultural, forestry, aquatic, turf, recreational, rights-of-ways, and other settings; genetics of weeds and herbicide resistance; chemistry, biochemistry, physiology and molecular action of herbicides and plant growth regulators used to manage undesirable vegetation, and herbicide resistance; ecology of cropping and non-cropping systems as it relates to weed management; biological and ecological aspects of weed control tools including biological agents, herbicide resistant crops, etc.; effects of weed management on soil, air, and water. Symposia papers and reviews are accepted. Consult the editor for additional information.

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On the Cover:

Dose-response analysis of five waterhemp (*Amaranthus tuberculatus*) populations to varying concentrations of S-metolachlor using the Preemergence Resistance Identification Method (PRIM) soilless assay. *Amaranthus tuberculatus* populations (top-to-bottom) are: full-sib near-inbred (Group 15-resistant) parent; paternal-derived resistant F₁; maternal-derived resistant F₁; original field population (Group 15-resistant); and sensitive parent. The PRIM assay allows for rapid screening of field or greenhouse-derived weed populations with preemergence herbicides in the absence of confounding edaphic factors.

Photo Attribution: Dylan R. Kerr, Graduate Research Assistant, Dept. of Crop Sciences, University of Illinois at Urbana-Champaign.

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