

STP 1520

Pesticide

Formulations and Delivery Systems

29th Volume: Application of Formulation and Adjuvant Technology

JAI Guest Editors

Richard Zollinger
Arlean Rohde



**Journal of ASTM International
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Pesticide Formulations and Delivery
Systems, 29th Volume: Application
of Formulation and Adjuvant
Technology**

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Foreword

THIS COMPILATION OF THE *JOURNAL OF ASTM INTERNATIONAL (JAI)* STP1520, on *Pesticide Formulations and Delivery Systems: 29th Volume, Application of Formulation and Adjuvant Technology*, contains only the papers published in *JAI* that were presented at a symposium in Miami, Florida, on September 30-October 2, 2008 and sponsored by ASTM Committee E35 on Pesticides and Alternative Control Agents.

The JAI Guest Editors are Richard Zollinger, North Dakota State University, Fargo, ND and Arlean Rohde, ExxonMobil, Houston, TX.

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Overview

The 29th Symposium on Pesticide Formulations and Delivery Systems was held in Miami, FL on September 30–Oct 2, 2008. It was sponsored by ASTM Committee E-35 on Pesticides and Alternative Control Agents and organized by Subcommittee E35.22 on Pesticide Formulations and Delivery Systems. The purpose of this symposium was to provide a forum for presenting the latest advances in crop protection technologies and to discuss updates on regulatory issues related to the use of pesticides and drift reduction technology. The symposium consisted of twenty five contributed papers from national, international speakers representing academia, agrochemical industry, and government agencies. A primary objective was to enlist more academics to present adjuvant and formulation research that has been conducted.

Technical papers of the symposium covered a wide range of topics. In this publication, they include: Adjuvants Technology, Formulation Technology, and DRT (Drift Reduction Technology).

Adjuvant Technology

Wolf et al. discussed the affect of how adjuvants impact coverage in low volume aerial applications. Peterson and Thompson evaluated activity of ammonium sulfate and various water conditioning agents with glyphosate. Klein et al. presented information on spray particle size and distribution as affected by various application parameters. Bernards and Penner quantified absorption and translocation of imazapyr as affected by herbicide formulation and adjuvants.

Formulation Technology

Kozuki et al. presented information on alternative solvents and affect of chelating agents on the stabilization of formulations as did Hazen and Bergstrom on the stabilization of suspension concentrates by double-comb polymers, Costello on the effect of processing shear time on EW formulations as did OConnell and Rusco on antifoaming and defoaming in spray tank mixes.

Drift Reduction Technology

Hoffman et al., Fritz et al. separately presented information on the drift reduction technology program as did Zabkiewicz et al. on using metal cations as tracers for spray deposits.

This publication is a collection of some of the symposiums peer-reviewed papers that were published in the *Journal of ASTM International (JAI)*. It does not include some presentations that either the authors elected not to publish or the paper was not in accordance with *JAI* Publication guidelines. The symposium chair and co-chairs gratefully acknowledge the efforts of the many contributors to this work; all who presented at the event, everyone

who prepared the manuscripts for publication, and especially those who reviewed the submitted papers.

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