

ASTM INTERNATIONAL Selected Technical Papers

# Pesticide Formulation and Delivery Systems: 35th Volume

Pesticide Formulations, Adjuvants, and Spray Characterization in 2014

STP 1587 Editor G. Robert Goss



# SELECTED TECHNICAL PAPERS STP1587

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Pesticide Formulation and Delivery Systems: 35th Volume, Pesticide Formulations, Adjuvants, and Spray Characterization in 2014

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## **Foreword**

THIS COMPILATION OF Selected Technical Papers, *STP1587, Pesticide Formulation and Delivery Systems: 35th Volume, Pesticide Formulations, Adjuvants, and Spray Characterization in 2014*, contains peer-reviewed papers presented at a symposium held October 7–9, 2014, in New Orleans, LA. The symposium was sponsored by ASTM International Committee E35 on Pesticides, Antimicrobials, and Alternative Control and Subcommittee E35.22 on Pesticide Formulations and Delivery Systems. The Symposium Chairperson was Alan Viets, BASF Corp., Cincinnati, OH, USA.

STP Editor:

G. Robert Goss Oil-Dri Corp. Chicago, IL, USA

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### Overview

The 35th Symposium on Pesticide Formulations and Delivery Systems was held in New Orleans, LA, on October 7–9, 2014. ASTM International Committee E35 on Pesticides, Antimicrobials, and Alternative Control was the sponsor. The symposium was organized under the auspices of E35.22, Pesticide Formulations and Delivery Systems. The symposium chair was Alan Viets. G. Robert Goss, Oil-Dri Corporation, Chicago, IL, was the editor of this publication.

This series of publications has been, and continues to be, one of the foremost publications on pesticide formulations and delivery systems. Without these selected technical publications (STPs), the intercommunication between professionals in the area would be limited. Control of pests is a very important aspect of feeding the world and this STP series contributes to that effort. Most contributions to this series of STPs include industry, government, and academia.

This STP addresses current topics on formulations, adjuvants, and delivery systems. Addressing formulations, the paper by Castelani, Antunes, and Leal addresses oil dispersions (OD) formulations. The paper by Guzmán, Martínez, and Montaño describes a novel method to use solvents as a snail attractant. And the paper by Gavlick, Wright, MacInnes, Hemminghaus, Webb, Yermolenka, and Su provides a new method to assess relative volatility of auxin herbicides. Adjuvants are often an invaluable aid to active ingredient performance. The paper by de Ruiter, Geuijen, and Hof describes an adjuvant to increase performance of abamectin. The paper by Zollinger, Howatt, Bernards, and Young discusses use of phosphate compounds to increase effectiveness of glyphosate and dicamba. Without a delivery system, pesticides could not function. Pesticides are often sprayed. Hoffmann, Fritz, and Yang discuss droplet size from a rotary atomizer, an important parameter for both effectiveness and drift potential. The paper by Fritz, Hoffmann, and Anderson discusses an experimental design and methodology to assess nozzle droplet size distribution.

The editor could not do this without the help of many others. In particular, thank you to my wife, Jenny; the ASTM E35.22 chair, Curt Elsik; committee E35; and my company, Oil-Dri Corp.

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