

Pesticide Formulations and Application Systems

Fourteenth Volume

**Franklin R. Hall, Paul D. Berger,
and Herbert M. Collins, editors**

ASTM STP 1234

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ASTM Publication Code Number (PCN):
04-012340-48



ASTM
1916 Race Street
Philadelphia, PA 19103
Printed in U.S.A.

ASTM Publication Code Number (PCN):04-012340-48
ISBN: 0-8031-1890-2
ISSN: 1040-1695

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The quality of the papers in this publication reflects not only the obvious efforts of the authors and the technical editor(s), but also the work of these peer reviewers. The ASTM Committee on Publications acknowledges with appreciation their dedication and contribution to time and effort on behalf of ASTM.

Printed in Fredericksburg, VA
July 1995

Foreword

This publication, *Pesticide Formulations and Application Systems: Fourteenth Volume*, contains papers presented at the symposium of the same name held in Fort Worth, Texas, on 12-13 Oct. 1993. The symposium was sponsored by ASTM Committee E35 on Pesticides and its Subcommittee E35.22 on Pesticide Formulations and Application Systems. Franklin R. Hall, Ohio State University, Paul D. Berger, Witco Corporation, and Herbert M. Collins, Stepan Company, presided as symposium chairmen and are editors of this publication.

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Overview

The 14th Symposium on Pesticide Formulations and Application Systems was held in Dallas, Texas on 12 and 13 Oct. 1993, with presentations on the delivery and formulation of pest control agents for use in agriculture and the urban environment. The first section of the meeting encompassed Pesticide Atomization and Off-Target Effects with papers focused on drift and evaporation of pesticide sprays. Following a dynamic presentation by W. Griffiths (NOR-AM Corporation) on "U.S. Agriculture Under New Management: Meaning to The Agrochemical Industry," the second section dealt with the aspects of pesticide application technology, including spray cloud characteristics, electrostatics, and a practical tank mixing evaluation procedure. The third section encompassed advances in formulation technology with papers on polymers, surfactants, and water dispersible granules. A fourth section dealt with biological effects of formulation changes such as stability effects, adhesion, pH effects, and controlled release technologies.

For the first time in the history of the ASTM sponsored Symposia, in addition to the traditional oral presentations, there was a successful poster section (ca. 15), some of which are presented in this publication. Included was a history of the ASTM E35 Committee, studies on chemigation, airblast research in tree crops, and surfactant studies on herbicides.

The invitational presentations consisted of issues on the studies of inert ingredients, Pesticide Container Regulations, recycling, and updates on SDTF and ECPA (the European industry coalition). The final trust of the meeting consisted of new formulation developments highlighting efforts on immunoassays, aqueous foams, and the USDA Forest Service Spread Factor Database.

Once again, with a record attendance of ca. 300, the Symposia provided an open forum in which industry, academia, and government met together to present research papers and exchange information and ideas which contribute to an improved use of Crop Protection Agents (CPAs). As usual, the program covered a wide variety of topics and clearly represented the complex, interdisciplinary nature of pesticide application technology and the interaction with formulation and biological effects. The array of papers presented herein include ca. one half of the 52 presentations made at the 1993 meeting. The continued enthusiasm for this forum was indicated by the record attendance and the pressing issues of the need to "deliver the CPAs more efficiently!" Faced with changes in pesticide policy, a "reduced" philosophy, and a growing public concern about pesticides in the environment, as well as food safety, the participants in this Symposium Series have significant opportunities for pooling scarce resources and tackling the difficult problems posed by these ongoing events.

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ISBN 0-8031-1890-2