

LETTERS

Antibiotics for Apple Blight

DEAR SIR:

Your Sept. 16 edition of AG AND FOOD carried an article on page 817 entitled, "Antibiotic Spray Useful Against Apple Blight."

This article included an error in the fourth paragraph, starting with "The Streptomycin-Terramycin mixture. . . ." This paragraph should read:

The Terramycin-Streptomycin mixture was applied to greenhouse plants as a foliar spray. Twenty-four hours afterwards, the inoculum was administered by means of a hypodermic syringe, at a point midway between the apex and the first node of a vigorous shoot. Complete control of the disease was obtained, thus indicating that the antibiotic sprayed on the foliage had spread throughout the plant system in the twenty-four hour period.

ROBERT N. GOODMAN
Assistant Professor of Horticulture
University of Missouri

Priority Claims on 2,4-D

DEAR SIR:

In the Sept. 16 issue on page 818, a reporter identifies Dr. E. J. Kraus as "the discoverer of 2,4-D."

In 1940, Pokorney of the C. B. Dolge Co. synthesized 2,4-D and 2,4,5-T and published his work in the March 1941 issue of the *Journal of the American Chemical Society*. In February of 1942, J. F. Lontz of Du Pont and the writer, then with American Chemical Paint Co., discovered the biological activity of 2,4-D. This work resulted in the issuance of U. S. Patent 2,322,761 to Lontz and of U. S. Patent 2,390,941 to me. The Lontz patent covers the use of 2,4-D in stimulating plant growth as a hormone, while my patent covers the use of 2,4-D, 2,4,5-T, and similar compounds as herbicides. Several foreign patents issued to me further substantiate my claim, in other words, Lontz discovered the hormone properties and I discovered its weedkilling or plantkilling effects, independently and at about the same time.

All three of the above are chemists and the record of the work is in ACS publication. Dr. Kraus has not published work which establishes a priority over the above.

FRANKLIN D. JONES
Consulting Chemist
Ardmore, Pa.

EDITOR'S NOTE—An apology and correction are due from AG AND FOOD for a misinterpretation. Dr. Kraus did

not claim that he was the discoverer of 2,4-D. In fact, in his speech in which he discussed his interest and thoughts in 1941 on the matter of using growth regulators in destructive action, Dr. Kraus made the following statement:

"...I noted a paper by Dr. P. W. Zimmerman dealing with the relative potency of certain growth regulators, among them some of the chlorophenoxyacetic acids. He generously supplied me with a small sample of several of them and later I was able to secure, through a chemical company, a large supply, not only of the compounds he furnished me, but others in addition."

We presume that the paper to which Dr. Kraus referred is that by P. W. Zimmerman and A. E. Hitchcock entitled "Substituted Phenoxy and Benzoic Acid Growth Substances and the Relation of Structure to Physiological Activity," preprinted April 18, 1942, from contributions of the Boyce Thompson Institute, 12, 321-43 (1942). This appears to be the first scientific paper reporting findings on the growth-influencing properties of 2,4-dichlorophenoxyacetic acid.

Buffeted Between the Orthodox and Advanced

DEAR SIR:

The article under "Perspective" in your June 24 issue (page 540) supplements in a fine manner some principles which we have been reiterating in connection with the need and use of trace elements, first by soil life, then by plant life, and finally by animals and humans.

The JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY renders many current ones obsolete. I have been buffeted between orthodox and advanced concepts for a long time and have combatted both, so I welcome some ideas along the principles of exact science, by which biology and metabolism are governed whether we understand it or not.

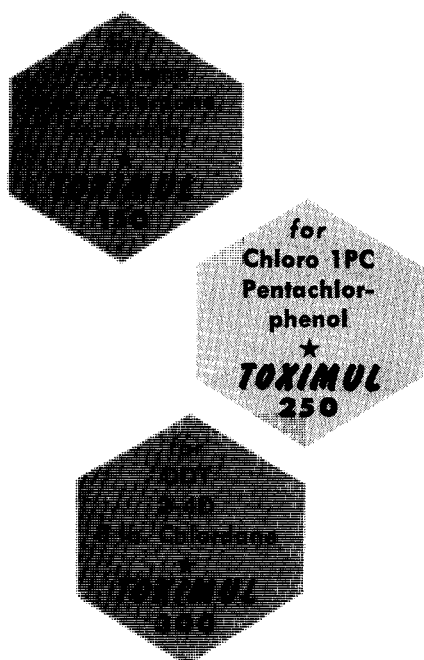
J. F. WISCHHUSEN
Inorganic Bioelements, Inc.

Fine Coverage

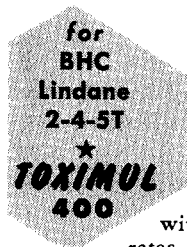
DEAR SIR:

On behalf of our board and members of the industry, I wish to express our appreciation for the fine coverage which your organization gave us during our 20th annual meeting at Spring Lake. We are indeed grateful for the manner in which you publicized our association and its past and present leaders.

L. S. HITCHNER
Executive Secretary
National Agricultural
Chemicals Association



BLENDED EMULSIFIERS

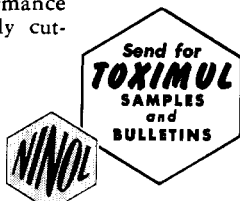


The Keys to BETTER FORMULATIONS

Spontaneous emulsification and fine-grained emulsions with low creaming rates are among the definitely superior results you can get in pesticidal sprays with anionic-nonionic blends. Recent developments in emulsion technology indicate that these effects are due to the lower interfacial tension between oil and water brought about by the combination of ionic charge and molecular structure.

You'll find exceptionally effective applications of this principle in the TOXIMUL series of blended agricultural emulsifying agents, which combines special anionic and non-ionic components to make better emulsifiers for your products. For example, emulsifiable concentrates based on the TOXIMULS exhibit *high flash dispersion* and *low creaming rates* in both soft and hard waters.

Furthermore, the unusually *low price* of these useful NINOL products makes it possible to improve formulation performance while actually cutting production costs.



NINOL LABORATORIES, INC.
1717 S. CLINTON ST., CHICAGO 16, ILLINOIS
Canada: Chem. Dev. of Can., Ltd., Montreal 1
Detergents — Emulsifiers — Wetting Agents