

RECENT DEVELOPMENTS IN THE ZOECON CORPORATION
AND THE THURICIDE^R FORESTRY FORMULATIONS

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Sandoz is pleased to announce the acquisition of Zoecon Incorporated of the United States and Canada. Effective November 15, 1983, all Zoecon and Sandoz Crop Protection Division personnel, facilities and products will be combined under the Zoecon, Inc. name. Zoecon will be a wholly owned subsidiary of Sandoz Ltd. with major offices in Palo Alto, Calif. and Dallas, Texas.

Thuricide^R forestry formulations will continue to be important products in the Zoecon product line. A. Temple Bowen will continue to handle government sales as the Thuricide Forestry Sales Manager for the United States and Lon Seymour will remain as product manager. Thuricide will be manufactured at our plant in Wasco, Calif. under the supervision of Tom Freaney.

William R. Beck, Product Development Representative, will continue to handle the forestry research and development in the northeast United States and eastern Canada.

In the past Sandoz has demonstrated the ability to combine its commercial expertise with government and university research programs in the development of innovative, environmentally safe products. This can best be illustrated by the diversity of the biological control agents that have been developed by Sandoz in recent years:

1. Elcar^R Microbial Insecticide is a formulation of the Heliothis nuclear-polyhedrosis virus (NPV), registered for suppression and control of the tobacco budworm (Heliothis virescens) and cotton bollworm (Heliothis zea). Elcar has no effect on beneficial arthropods found in the field.
2. CertanTM Bacterial Insecticide is a water dispersable concentrate of Bacillus thuringiensis Serotype 7 strain for the control of the Greater Wax Moth, Galleria mellonella. CertanTM has no detrimental effects on honey bees or honey production and the product may be applied directly to the honeycomb.
3. TeknarTM Biological Insecticide is a preparation of Bacillus thuringiensis Berliner, var. israelensis, Serotype H-14. It is selectively toxic to most species of mosquito larvae and blackfly larvae (Diptera: Culicidae and Simuliidae). Teknar is exempted from residue tolerance requirements and provides a unique opportunity for microbial control of mosquito and blackfly larvae

without harmful effects on humans, domestic animals, wildlife, beneficial insects, fish or other aquatic life.

4. Thuricide^R Microbial Insecticides are aqueous spray formulations based on the bacterium, Bacillus thuringiensis Berliner var. Kurstaki (b.t.) which is active against lepidopterous larvae, many of which are pests of shade trees and forests. Sandoz was the first company to successfully produce an aqueous formulation of b.t. capable of being applied by aerial application to the forest environment. Over the years Sandoz continued to improve the Thuricide formulation, progressing from the original Thuricide 16B to the present standard Thuricide 32LV and Thuricide 48LV formulations. This progression has resulted in formulations that can be pumped through aircraft systems undiluted and with sufficient atomization to provide excellent droplet spectrums and deposit on the target foliage. Thuricide formulations may also be diluted with any amount of water desired enabling the applicator to adjust the actual spray volume to meet his needs.

Zoecon will continue this tradition of innovative research and development of biological control agents for agriculture and forestry. This is evidenced by the recent development of the NRD-12 strain of Bacillus thuringiensis. Zoecon was the first company to successfully formulate and field test this strain as SAN415 against the spruce budworm in Maine in 1983. The success of this program has triggered an expansive testing program in forestry and agriculture in 1984.

In addition to the search for new more effective strains of b.t., Zoecon is continuing to develop new formulations of Thuricide. The success of the Thuricide 32LV and 48LV aqueous formulations has encouraged Zoecon to continue to develop more concentrated formulations. Research plans for 1984 include the testing of a 64 BIU per gallon aqueous formulation of b.t. These new more concentrated formulations have demonstrated the ability to be applied undiluted at low volumes providing improved efficacy while reducing the cost of application.

While the Zoecon corporation has placed its emphasis on biological control agents that are compatible with their fermentation technology, the company will continue to be receptive to other microbial agents that have the potential for commercial development.

As of November 15, Sandoz, Inc. Crop Protection in San Diego has moved to the Zoecon location in Palo Alto, Calif.

The new address and phone number for Thuricide are:

Zoecon Corporation
Crop Protection Division
425 Sherman Avenue
P. O. Box 10975
Palo Alto, CA 94303
(415) 857-1130

For more information regarding these products, please contact one of the Zoecon sales representatives listed below:

Lon Seymour
480 Camino Del Rio South
San Diego, CA 92108

Temple Bowen
23 Sherbrook St.
Augusta, Maine 04330

Dick Schneider
8048 Lincoln Way West
P. O. Box 243
St. Thomas, PA 17252

Paul Bystrak
R. R. #2
Box 137
Berrien Springs, MI 49103

We are looking forward to providing you with the quality product and service that has long been a tradition with Sandoz Ltd. and will now continue under the Zoecon banner in the United States and Canada.