

DEVELOPMENTS IN COMMERCIALY PRODUCED

MICROBIALS AT BIOCHEM PRODUCTS

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Biochem Products is part of a large industrial and scientific family - the Solvay Group. Solvay, headquartered in Brussels, Belgium is a multinational company with 46,000 employees worldwide. In the U.S., our working partners include a large polymer manufacturer, a peroxygen producer and a leading poultry and animal health products company. Biochem Products is a division of the latter - Salisbury Laboratories, Inc. Biochem Products in the U.S. was started in 1979. It is committed to research, development and marketing of microbial products for insect pest management. Our first product was Bactospeine® Wettable Powder. Then we obtained a registration for Bactimos™ Wettable Powder (our B.t.i. product). Since then, we have concentrated our efforts at developing and marketing various formulations of each.

With regards to forestry, we initially acquired Novabac-3 from another company and developed the Canadian registration of this product for use against the spruce budworm in forests and woodlands. This product contains 32 BIU per U.S. gallon. The registration was obtained in 1981. At the same time, we were developing a modified liquid formulation of B.t. in the U.S. known as Bactospeine Flowable Concentrate. Bactospeine FC contains 35 BIU per U.S. gallon. This product has a registration (registered in the U.S. in 1981) for use against approximately 40 different pests in forestry and agriculture including the spruce budworm and gypsy moth. In Canada, registration was received in early 1984 for Bactospeine-F (forestry) and Bactospeine-A (agriculture). In the past two years, our interests have been in reducing the total volume of spray mix required per acre and still achieve effective control. This objective has been achieved.

While the above were being developed, a cooperative research effort between Biochem Products and Environment Canada's Laurentian Forest Research Center led to the development of Futura® Flowable Concentrate. Futura contains 54.5 BIU per U.S. gallon. Futura is designed for effective low volume application. Highly successful and consistent results have been obtained with a 1.5 Liter per Hectare dosage rate in a total volume of 2.5 Liters per Hectare. Futura was registered in the U.S. in 1983 and in Canada in early 1984.

Future developments will be in undiluted applications of these products with the objective of providing economical and effective control.