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DATA ACCESSION NO(S).

PRODUCT MANAGER NO. L.Rossi (21)

PRODUCT NAME(S) Dagger® G (P.fluorescens)

COMPANY NAME Ecogen, Inc.

SUBMISSION PURPOSE Review Tier II nontarget plant data to support conditions of registration

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	% A.I.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 2 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Ecogen, Inc. Submission of Tier II Nontarget Plant Effects Data on Dagger®-G Conditional Registration

FROM: Zig Vaituzis, Microbiologist
Ecological Effects Branch, TS-769C
Environmental Fate and Effects Division

THRU: Raymond W. Matheny, Head Section 1
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James W. Akerman, Chief
Ecological Effects Branch
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TO: Lois Rossi, PM-21
Herbicide/Fungicide Branch
Registration Division TS-767C

BACKGROUND

On November 22, 1988 Ecogen, Inc. submitted additional information as required under the conditions of registration for Dagger®-G Biofungicide EPA Reg. No. 55638-5. The information consisted of confirmation of identity and percent active ingredient in target area phytotoxicity tests, and a Tier II Seed Germination/Seedling Emergence (Guideline 122-1) study.

COMMENTS

A. Target Area Phytotoxicity studies.

The test material used in the Tier I plant studies was a typical formulation of Pseudomonas fluorescens strain 1053, the a.i. in Dagger® G. The titers were assayed during the test period and were found to be well within the label guarantee of 10^5 to 10^9 CFU/g for Dagger® G.

This information upgrades the originally submitted target area phytotoxicity studies (MRID #'s 403848-22 and 403848-24) to core status.

B. Nontarget Phytotoxicity - Tier II
Seed Germination/Seedling Emergence Study

The submitted study (MRID # 409079-01) was performed to determine the effects of Dagger® G on the seed germination and seedling emergence and subsequent early growth of soybean, lettuce, carrot, tomato, cucumber, cabbage, oat, ryegrass, corn, and onion. These studies were conducted using the formulated end product Dagger® G at the rates of 3.75, 7.5, 15.0 30.0 and 45.0 lbs/a. Probit analysis of the data from the crops which exhibited a dose response resulted in EC_5^0 concentrations greater than the maximum label rate of 15 lb/a.

CONCLUSION

The submitted information fulfills the nontarget plant studies (Guideline 154-22) requirements for the Section 3 registration of Dagger® G Biofungicide EPA Reg. No.55638-5.