

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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

July 6, 1990

MEMORANDUM

SUBJECT: Request for Environmental Fate and Groundwater

Branch to Review a Driff Study with Avermectin

FROM: James W. Akerman, Chief

Ecological Effects Branch

Environmental Fate and Effects Division H7507C

TO: George LaRocca PM 15

Insecticide/Rodenticide Branch Registration Division H7505C

The registrant of Avermectin, Merck & Co., Inc. has submitted a drift study to support their exposure assessment. According to Merck, this study suggests that Avermectin is unlikely to drift greater than 3%. The chemical tested in the study was deltamethrin, however, Merck feels this research is relevant since both chemicals are EC formulations and are used at similar rates.

The EEB is requesting that a copy of this study, attached, be submitted to EFGWB for their review. We have several questions:

- 1. Is this study scientifically sound?
- 2. Is it appropriate to use deltamethrin as a surrogate test material for drift measurement?
- 3. Is drift measured from aerial application useful in estimating drift from air blast treatment with ULV? and
- 4. Does it provide enough information to allow an estimation of drift, if so, how much drift occurred?

Riley, C.M., C.J. Wiesner, and W.R. Ernst, Off-target Deposition and Drift of Aerially Applied Agricultural Sprays, Pesticide Science, 1989, Vol 26, pp 159-166.

While EFGWB is reviewing this study, the EEB will continue to assume that drift will be 5% of the applied. If you have questions, please contact Dan Rieder.