



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

AUG 28 1981

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

DATE: August 24, 1981

SUBJECT: Amended registration for PP#9E2145; Gibberellins A₃, A₄ and A₇ on all Raw Agricultural Commodities. Request for an exemption. CASWEL #467 Accession#099782

NOTE: The present review superseeds Woodrow's review of June 17, 1981 for the same petition.

FROM: William S. Woodrow, Ph.D. *WSW 8/25/81*
Toxicology Branch/HED (TS-769) *W*

TO: Minor Crops Officer
Registration Division (TS-767) *WWS*

Petitioner: Dr. G.M. Markle
IR-4 Project Associate
Coordinator
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Action Requested:

Drs. G.M. Markle and R.H. Kupelian on behalf of the IR-4 Technical Committee request an exemption from the need for tolerances for residues of Gibberellins A₃, A₄ and A₇ on all Raw Agricultural Commodities.

Toxicology Branch Recommendations:

1. The request for exemption of Gibberellins A₃, A₄ and A₇ from the requirement of tolerances on all Raw Agricultural Commodities is not toxicologically supported at the present time.

68

f. Cellular Immune Response, mouse (technical chemical)

- 1) Blood cell counts (RBC, WBC differentials). Performed on day 0, and 14 days post-treatment.
- 2) Serum protein determined by electrophoresis performed on day 0 and 14 days post treatment. Include amounts of albumin, and globulin fractions (to determine any alteration in specific antibody fractions).

3. No new toxicology data were submitted.

Residue Chemistry Branch Considerations

Residue Chemistry Branch recommended against the proposed exemption of Gibberellins A₃, A₄ and A₇ on all RAC's (See May 28, 1981 memo, R. Perfetti) due to lack of information RCB previously requested regarding application rates, times of application, levels of Gibberellins occurring naturally in crops, adequate analytical methods for identifying and quantifying Gibberellins, and limited residue data.

Background Information

Gibberellins have been designated Biorational Pesticides because they do fulfill most of the important Biorational Pesticide definition criteria. Present and future human hazard toxicity data reviews will be performed according to the approved review scheme (attached) for toxicology data. This scheme considers toxicity data on hand for Gibberellins and varying recommended use rates for the Gibberellin family of plant growth regulating chemicals with regard to reduced toxicity data requirements prescribed for Biochemical Biorational Pesticides presented in the Subpart M Biorational Pesticide Guidelines.*

Thus, Gibberellins A₃, A₄ and A₇ are considered naturally occurring Gibberellins. According to the attached scheme for reviewing Gibberellin toxicity data, an exemption from the requirement of tolerances on all Raw Agricultural Commodities for Gibberellins A₃, A₄ and A₇ would eliminate any data requirement distinction based on application rates (less than or greater than 20g per acre), since future application rates are unknown.

Therefore, Subpart M Biorational Pesticide Guideline Tier 1 tests would be required for Gibberellins A₃, A₄ and A₇.

*Guidelines for Registering Pesticides in the U.S., Subpart M Draft of September 29, 1980.

70

The request for toxicity tests shown above for Gibberellins A₃, A₄ and A₇ under, "Toxicology Branch Recommendations", reflect existing Subpart M Biorational Pesticide Tier 1 toxicity data gaps, depending on toxicity data now available to Toxicology Branch.

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