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

JUL 13 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#8E3616 (DEB No. 5184) - Metolachlor on Bell Peppers
Evaluation of Amendment Dated February 23, 1989
(Information Regarding Bell Pepper Production in Texas)
No Accession Number

FROM: Martin F. Kovacs, Jr., Ph.D., Chemist
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Health Effects Division (H7509C)

THRU: Debra Edwards, Ph.D., Section Head
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TO: Hoyt L. Jamerson, PM-43
Minor Uses Officer
Emergency Response & Minor Use Section
Registration Support Branch
Registration Division (H7505C)

and

Toxicology Branch II
Herbicide, Fungicide & Antimicrobial Support
Health Effects Division (H7509C)

Background

The petitioner, IR-4 (Jerry J. Baron, Ph.D., Assistant Coordinator) has submitted this amendment consisting of a cover letter dated February 23, 1989 which includes a February 14, 1989 letter from Michael Braverman, Extension Vegetable Specialist and a February 16, 1989 letter from David A. Bender, Assistant Professor, both from Texas A&M University. Both letters, which provide information on bell pepper production in Texas, were inadvertently omitted from the petitioner's previous October 3, 1988 amendment submission to EPA (see DEB's M. F. Kovacs, Jr., March 24, 1989 review of PP#8E3616).

Summary of Deficiencies that Need Resolution

None.

Conclusions

1. The submitted information (letters) from the IR-4 cooperators in Texas indicates that <10% of bell peppers grown commercially in Texas are transplanted. DEB can conclude that additional residue data from Texas reflecting transplanted bell peppers is not needed and Deficiency I is resolved.

2. DEB can now accept the arguments put forward by the petitioner for DEB's acceptance of residue bridging data between preplant and post-transplant applications of DUAL 8E herbicide to bell peppers in lieu of the petitioner generating additional residue data from CA, FL, and MD reflecting all of these use patterns for transplanted bell peppers (see DEB's M. F. Kovacs, Jr. March 24, 1989 review of PP#8E3616). Deficiencies 4b, 4c, 4d, and 4e are now resolved.

3. DEB can now conclude that sufficient residue data are available in this petition which reflect the proposed use and consequently support the proposed tolerance.

Recommendations

Toxicological considerations permitting, DEB now recommends in favor of the establishment of a tolerance for the combined residues of the herbicide metolachlor (2-chloro-N-(2-ethyl-6-methyl phenyl)-N-(2-methoxy-1-methylethyl)acetamide) and its metabolites, determined as the derivatives, 2-[(2-ethyl-6-methyl phenyl)amino]-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone in or on the raw agricultural commodity (RAC) bell peppers at 0.1 ppm.

Present Considerations

Deficiencies cited in DEB's March 24, 1989 review of PP#8E3616 will be discussed below, followed by the petitioner's responses and DEB's comments/conclusions.

Deficiency I

The petitioner must submit to DEB for our review and evaluation the letter cited in the current amendment cover letter from Texas A&M University explaining that only limited acreage of Texas bell pepper production is completed using transplants (the only use pattern now proposed in the currently amended Section B) and therefore no new Texas residue trials reflecting this use are

needed.

DEB will reevaluate the petitioner's arguments relative to residue bridging data when the information requested under Deficiency I has been submitted.

Until the information requested in Deficiency I above has been submitted to DEB and favorably evaluated, Deficiencies 4b, 4c, 4d and 4e remain outstanding as follows:

4b. DEB concludes that insufficient residue data are available in this petition which reflect the proposed use and consequently support the proposed tolerance.

4c. ...Residue data reflecting both preplant soil incorporated and post-transplant broadcast applications to California and Texas transplanted bell peppers and preplant soil incorporated application to Florida bell peppers are needed. Additional residue data reflecting both preplant soil incorporated and post-transplant broadcast applications to Maryland transplanted bell peppers and post-transplant broadcast applications to Florida bell peppers are also needed.

4d. Submitted residue data must reflect the revised Section B/label. [Preplant or pest transplant broadcast application to transplanted bell peppers at a 1.5lb ai/A rate with a 60-day PHI in effect.]

4e. Submitted residue data must also be accompanied by recovery data, sample calculations, and all sample chromatograms and prepared sample extracts must be analyzed as soon as possible following preparation.

Petitioner's Response Re: Deficiency I

The following two letters were submitted to Jerry W. Baron, Ph.D., Asst. Coordinator, IR-4 program from (1) David A. Bender, Asst Professor Texas A&M University, Lubbock, TX, dated 2/16/89 and (2) Michael Braverman, Extension Vegetable Specialist, Texas Agr. Extension Service, Weslaco, TX, dated 2/14/89:

(1) "Peppers are produced on approximately 15,000 acres in Texas, and have a market value of $40 million. Major production areas are the Lower Rio Grande Valley (75%), the High Plains, the Winter Garden and the Trans-Pecos region near El Paso. Smaller acreages, primarily for local or regional markets, are scattered throughout the state. A large portion of the total acreage is devoted to bell peppers, but production of jalapenos, chiles and processing peppers is growing rapidly in response to the increasing popularity of ethnic cuisine, especially Mexican food. Dehydrating peppers, primarily chiles and cayennes, are also

produced in the Trans-Pecos and the High Plains.

> Most of the peppers grown commercially in Texas are direct seeded. The only commercial use of transplant peppers has been in the High Plains region, and this only on a small scale to hit a July-August market window. In most other areas, no economic advantage can be achieved by the use of transplants. Although transplanting does have the potential to significantly increase returns for some producers in the High Plains, this represents a limited market. The current regulatory climate is turning vegetable growers away from any cultural practice which requires additional labor. Thus it is unlikely that transplant pepper acreage in Texas will increase substantially in the near future.
>
> If I can provide further information on the Texas pepper industry, please feel free to contact me."

(2) "In reference to our telephone conversation on February 14th, there are about 4,000 acres of peppers grown in the Rio Grande Valley. Greater than 90% of the peppers are direct seeded with the remainder being transplanted."

DEB's Comments/Conclusions Re: Deficiency I

The submitted information (letters) provided by the IR-4 cooperators from Texas clearly indicates that <10% of the bell peppers grown commercially in Texas are transplanted. Therefore, on the basis of this submitted information, DEB can now conclude the additional residue data from Texas reflecting transplanted bell peppers would not be practical and Deficiency I is hereby resolved.

DEB can now also accept the arguments (see DEB's M. F. Kovacs, Jr., March 24, 1989 review of PP#8E3616) put forward by the petitioner for DEB's acceptance of residue bridging data between preplant and post-transplant applications of DUAL 8E herbicide to bell peppers in lieu of the petitioner generating additional residue data reflecting all of these use patterns for transplanted bell peppers.

The preplant and post transplant trials conducted in MD at 1 and 2x rates yielded essentially equivalent residue levels at a post treatment interval of 64 days (PHI = 60 DAYS). Thus, the pre-plant trials in CA and the postplant trials in FL, in conjunction with the MD trials, provide sufficient residue data to support the proposed use and tolerance.

Other Considerations

An International Residue Limit Status Sheet is attached to this

review. There are no Codex, Canadian, and Mexican tolerances for metolachlor on bell peppers. Therefore, no compatibility questions exist with respect to Codex.

Attachment

cc: R.F., Circu., Reviewer (M. Kovacs), PP#8E3616, Metolachlor Registration Standard File, PMSD/ISB (Eldredge), P. Tomerlin (TAS/SACB)

RDI:D.Edwards:7/12/89:R.Loranger:7/12/89
H7509C:DEB:CM#2:Rm812A:557-7689:mb:6/27/89