April 1, 2005

Dan Rosenblatt, Chief
Minor Use, Inerts, and Emergency Response Branch (7505C)
U. S. EPA, Office of Pesticide Programs
Crystal Mall No. 2 - 2nd Floor
1801 Bell St.
Arlington, VA 22202

Dear Mr. Rosenblatt,

Re: Specific Exemption Request for Use of Quinoxyfen (Quintec, EPA Reg. No. 62719-375) to control powdery mildew (Podosphaera xanthii) on melons, winter squash, gourds, and pumpkin (non-edible-peel cucurbit) in New York State during the 2005 growing season

The New York State Department of Environmental Conservation, as the State lead agency for pesticide matters, hereby requests approval of the referenced application (see enclosure) under Section 18 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended. The enclosed application includes the information required in 40 CFR, Part 166, Subpart B (166.20).

Powdery mildew is capable of long-distance wind dispersal and it may be capable of overwintering in the soil or on alternate hosts. It is essential to suppress development of the pathogen on the undersides of leaves as well as on upper surfaces because conditions are more favorable for the pathogen on the undersides. It is difficult to deliver spray material to the undersides of curcurbit leaves, because of the dense canopy. Fungicides with systemic or translaminar activity have been the only option for effectively controlling powdery mildew (Appendix 2).

Contact protectant fungicides, such as Chlorothalonil, Sulfur and Oil are effective against powdery mildew where they are deposited, almost exclusively on the upper surfaces of curcurbit leaves. These products have shown limited control on the undersides of the leaves, but are not as effective as the systemic fungicides. Systemic fungicides are highly effective in control of this pathogen, when they are not compromised by occurrence of resistant pathogen strains. These systemic fungicides include the stobilurins (QoI), Tposin and demethylation inhibitor (DMI) fungicides. Occurrence of resistance and its impact on control has been documented through research conducted since 1990 (see Appendix 3).
Fungicide efficacy experiments have shown quinoxyfen to provide excellent control of powdery mildew on lower surfaces of leaves as well as on upper surfaces (Appendix 4). Control has been excellent even where fungicide resistance has affected efficacy of QoI fungicides. There has been no cross resistance with other fungicides. Excellent control achieved on the underside of leaves is thought to be due to redistribution through its vapor phase.

A maximum of three foliar applications of Quintec, none applied consecutively, per crop is requested. Quintec should be applied on a 10 to 14 day application interval in combination and alternation with other effective fungicides at their recommended rates and spray intervals. The first application should be made either preventively or shortly after detecting powdery mildew at the action threshold of at least 1 of 50 old leaves with symptoms. The recommended rate is 4.0 oz of Quintec/acre/application (1.05 oz. ai/acre/application). It is estimated that all of the 11,300 acres of non-edible-peeel curcurbits may be treated. The maximum anticipated use of Quintec is 1,075 gallons of product or 1,490 lb. of active ingredient. All applicable restrictions currently on the label would apply. A PHI of 3 days is requested.

The registrant, Dow AgroSciences, supports this request to use Quintec (EPA Reg. No. 62719-375) for control of powdery mildew on non-edible-peeel curcurbits. Quintec is currently registered by USEPA and New York State for use on grapes, hops and cherries.

This is New York’s second emergency exemption request for the use of quinoxyfen (Quintec) on non-edible-peeel curcurbits. A crisis exemption was issued last year on July 20, 2004. A 2004 use report is included.

The anticipated use season for quinoxyfen on the referenced non-edible-peeel curcurbits in New York State is from July 1, 2005 through September 30, 2005. Your attention to this request is appreciated.

Please contact Samuel Jackling, of our Pesticide Product Registration Section, at (518) 402-8768 if you require further assistance on this request.

Sincerely,

[Signature]

Maureen P. Serafini
Director
Bureau of Pesticides Management

Enclosures

cc: w/enc. - A. Enache, EPA Region II

cc: w/o enc. - W. Smith, Cornell University, PMEP
R. Zimmerman; R. Mungari, New York State Dept. Of Ag & Mkts.