

August 28, 2001

Ms. Christie Todd Whitman, Administrator
Public Information and Records Integrity Branch
Information Resources and Services Division (7502C)
Office of Pesticide Programs
Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: Docket OPP-00678B

Dear Ms. Whitman:

As concerned scientists, we are writing to ask you to postpone the renewal of permits for growing all Bt crops until you have developed a rigorous program for assessing their ecological risks and until you can ensure that strong, effective resistance management plans are in place.

The recent controversy surrounding the impact of Bt pollen on monarch butterflies indicates the EPA has yet to establish a strong regulatory program overseeing the risks of these new crops. A March 2001 report released by the agency's own Scientific Advisory Panel identified a number of weaknesses in EPA's current Bt-crops program including inadequate risk assessment process and resistance management plans. According to the report, EPA also erroneously rushed to conclude, based on inadequate data, that Bt corn is unlikely to harm monarchs under field conditions. The SAP indicated that the impact of Bt corn on monarch butterflies remains unanswered.

We believe that the EPA should suspend registration of Bt crops until impacts to non-target organisms, such as the monarch and federally protected endangered butterflies, are fully researched and effective resistance management plans are developed.

IMPACT TO NON-TARGET ORGANISMS MUST BE ADDRESSED

Bt crops may pose unacceptable risks to butterflies such as the Monarch and the endangered Karner Blue. At least one type of Bt corn (Event 176), approved in 1995, is likely to be lethal to monarch larvae under field conditions. Monarch butterfly larvae are killed when they consume pollen from Bt plants that drifts to milkweed, their only source of food. Although the EPA has some limited data from short term studies showing that two other types of Bt corn may not be lethal to monarchs, we believe that more research is needed to ensure that monarchs are not negatively impacted in the long term by ingesting pollen. All Bt corn strains need to be studied to determine whether their pollen impedes larval development or adversely impacts fecundity or dispersal of the species.

Bt pollen may threaten endangered butterflies like the Karner blue, Fender's blue, Mitchell's satyr, Saint Francis' satyr, and the Kern primrose sphinx moth. The butterflies and moth listed above are all endangered or threatened species and, therefore, are protected under the Endangered Species Act. The EPA must ensure that these Lepidoptera are not adversely impacted by Bt crops.

Bt crops may pose unacceptable risks to other non-target species. Work by Angelika Hilbeck and colleagues at the Swiss Research Station for Agroecology and Agriculture also has shown

that Bt corn may have direct and indirect impacts on non-target beneficial insects such as lacewings. In addition, more data is needed to determine Bt's impact on soil organisms.

Much more comprehensive non-target organism testing is needed and must include both acute and sub-acute effects, as well as tritrophic level studies. EPA must fully assess the impact of these crops on non-target organisms before approving the use of Bt crops.

EFFECTIVE RESISTANCE MANAGEMENT PLANS NEED TO BE DEVELOPED

Bt is an invaluable tool used by organic farmers to control insects. However, this biological control may be lost as insects are expected to develop resistance to Bt pesticidal plants in a short time unless effective resistance management plans are in place. EPA has yet to ensure that Bt crops are grown under stringent resistance management plans, which are needed to delay the evolution of pest resistance to Bt toxins. The EPA must guarantee that effective resistance management plans are developed and adopted before approving the use of Bt crops.

CONCLUSION

The regulatory and scientific review necessary to establish a comprehensive new program will take at least two years. You should allow the Bt crop permits to lapse and keep the products off the market for at least two years while the agency follows through on a comprehensive risk assessment of Bt crops.

Now is the time for the agency to do what it should have done years ago, before it approved any Bt crops: establish a first-class program for assessing ecological risks and ensure the proper use of strong, effective resistance management plans.

Sincerely,

Lincoln Brower, PhD (monarch researcher), Department of Biology Sweet Briar College;

Robert M Pyle, PhD, biologist, author, The Xerces Society founder;

Stephen R. Kellert, Tweedy Ordway Professor of Social Ecology, Yale University, School of Forestry and Environmental Studies

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Scott Hoffman Black, Executive Director, The Xerces Society