

# Memo

(2)

**To:** Alan Hosmer  
Manager, Ecological Toxicology  
Syngenta Crop Protection, Inc.

**From:** Atrazine Endocrine Ecological Risk Assessment Panel (Ron Kendall, Chair, Texas Tech University; James Carr, Texas Tech University; John Giesy, Michigan State University; Tim Gross; US Geological Survey-BRD; Ernest Smith; Texas Tech University; Keith Solomon, University of Guelph, Canada; Glen Van Der Kraak, University of Guelph, Canada.)

**Subject:** Atrazine in Frogs – Gonadal data

**Date:** 13 May 2002

**CC:** Robert Bruce, Ecorisk, Inc

The Atrazine Endocrine Ecological Risk Assessment Panel wants to clarify its position relative to your May 7, 2002 letter and express its dismay with respect to the recent accusations (Tyrone Hayes E-mail, May 9, 2002) that the Panel had access to data on gonadal effects on *Xenopus* from atrazine as far back as the Berkeley meeting of January 26 and 27, 2001. First of all, the Panel did not have access to gonadal data at the meeting of the Panel at the University of California at Berkeley in January 2001. We attach the Berkeley meeting minutes that the Panel has previously approved, related to that meeting as documentation, along with the meeting outline. We bring to your attention the meeting outline, which was scheduled, for a two-day meeting. You will note in our meeting minutes that the meeting ended approximately halfway through the Closed Discussion section as referenced on Day 1. The rest of the meeting did not occur and gonadal data were not discussed.

The first suggestion that the Panel received related to the effects of atrazine in *Xenopus* on the gonads resulted from a public presentation of Dr. Tyrone Hayes in Japan, March 3 and 4, 2001, following our Berkeley meeting. We also note for you that Dr. Hayes resigned as a Panel member with our group in November 2000. Following the Japan meeting, which the Panel only heard of the presentation of Dr. Hayes' data, we had members of our Panel attend a public presentation and meeting at Tulane University, in October, 2001 on endocrine effects, as well as at the Society of Environmental Toxicology and Chemistry meeting in November 2001. Members of our Panel were present at these meetings although there was still only photographs presented and no numbers or hard data.

The first data that we have seen related to gonadal effects was in the recent publication of the Proceedings of the National Academy of Sciences by Dr. Tyrone Hayes, et al. 2002. As you know,

Hosmer Letter

Page 2

May 13, 2002

the Panel has been underway, since Dr. Hayes' departure from the Panel, on its own research program engaging both field and laboratory research on the response of *Xenopus* to atrazine. The publication that is ready for submittal to the peer-reviewed literature by Carr et al. addressing the response of *Xenopus* to atrazine in terms of larynx and gonadal effects, at this point, does not corroborate Dr. Hayes' findings. We will be available to share this information with EPA, as requested, by Syngenta, as needed. We emphasize that our Panel operates in a collegial and interdisciplinary mode and all Panel members are involved in some aspect of the laboratory and field response of frogs, including *Xenopus*, to atrazine. Therefore, any presentation at EPA should involve our Panel.

If we can provide any further clarification to this request, as to the access to gonadal effects data from atrazine in *Xenopus*, we would be pleased to further clarify, if necessary. Again, we reemphasize that the Atrazine Endocrine Ecological Risk Assessment Panel, in terms of its trip to Berkeley, California and meeting at the University of California at Berkeley being hosted by Dr. Hayes were not allowed access to data on gonadal effects. At the Berkeley meeting, Dr. Hayes discussed laryngeal effects issues, prior to the conclusion of the meeting. We also make reference that the data sets that Dr. Hayes presented were checked for quality assurance by Dr. Bob Sielken of Sielken, Inc. revealed many data errors. Since that time, the Panel requested the correction of the data sets and the submission of the final report by Dr. Hayes and has not received such, nor has Ecorisk, Inc. received such.

We look forward to continuing our investigations on the response of *Xenopus* in both the field and laboratory, including native habitat of the species in South Africa and we will be continuing to report our science, as it becomes available. Thank you very much for the opportunity to clarify some of the recent accusations towards the Panel, and again we will be available to meet with EPA and discuss the details of the continuing work of the Panel, as needed.

Att: 2