

Pesticide risk assessments seen as biased

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In the October issue of *BioScience*, a group of ecotoxicologists argue that the US Environmental Protection Agency's (USEPA) current practices for evaluating pesticide safety are inadequate and likely to result in decisions biased toward industry interests.

In their article, Michelle Boone of Miami University and her colleagues note that most pesticide toxicity tests used in risk assessments are conducted by pesticide manufacturers themselves, which the authors believe can result in untenable conflicts of interest. Moreover, rigid inclusion criteria often mean that potentially relevant studies are barred from the USEPA's assessment process. The article highlights the case of atrazine, which the agency reassessed on the basis of a single manufacturer-funded study. The herbicide was ultimately deemed safe to amphibians, despite the existence of a number of studies that could have led to a different conclusion.

The researchers also cite other problems with USEPA [risk assessment](#) practices, including inconsistent application of criteria among taxonomic groups and an overreliance on laboratory studies, among others. Taken together, these problems result in a "presumption of innocence" that Boone and her colleagues maintain may be inappropriate for the evaluation of potentially harmful substances. The authors conclude that "the risk assessment process can and should be improved so that decisions are made with the best available data with an evidence-based approach."

The authors pose several recommendations for reform. Chief among

them is the use of an independent third party to stand as a barrier between industry and research. This separation would serve to reduce concerns over conflicts of interest. In addition, they recommend a wider use of all available research—particularly field studies—and suggest that the assessment process should be made more transparent.

Provided by American Institute of Biological Sciences

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