

A new study from Federal geologists AND Tyrone Hayes! shows no frog harm from atrazine

By ACSH Staff — October 2, 2014



Look, there has never been any solid evidence at all that the

most common herbicide (weed-killer) used in America atrazine actually harmed amphibians. On the other hand, atrazine has been estimated to have saved billions of dollars in increased corn crop yields over the many decades it s been widely used in the corn-growing heartland.

Nevertheless, since the dawn of the 21st century, a University of California professor of Integrative Biology, Tyrone Hayes, has led a one-man campaign impugning atrazine as a destroyer of frogs, allegedly causing limb deformities and hermaphroditism (ambivalent or reverse-gender sexual development) among these and other amphibians. However, he had always declined to share his experimental data, even when those data seemed, to outside objective researchers (including those at the EPA) to be contradictory or implausible.

That s why his co-authorship of the article published in [the current PLOS-ONE](#) ^[1], an open-access, peer-reviewed journal, which seems to absolve atrazine of any role in frog deformities, is so surprising. Four of the five authors come from the U.S. Geological Survey (based in WI, MN and SD, respectively) and then there s Dr. Tyrone Hayes name as well. The researchers assayed amphibians whose habitats were of varying distances away from corn planting with its well-documented atrazine concentrations, and noted the rate of physical abnormalities. (They also noted infestation rates of the frogs with trematodes (flatworms), since such infestations were one theory for how atrazine might have impacted frog health).

The results: [Atrazine] concentrations increased in floodplain wetlands as water levels rose after rainfall.... Overall, our results suggest amphibian populations were not faring differently among these four conservation areas, regardless of their proximity to corn production † Translation: atrazine levels had nothing to do with the (low) rates of frog deformities in the wetlands where herbicide runoff is found, and by the way, trematode infestation levels, while high, were not related to atrazine levels at all, either.

ACSH s Dr. Gil Ross had this comment: So, is this the end of Tyrone ? As the lead anti-atrazine agitator, I mean? We shall see. His crusade has never been tightly tethered to science, nor to simple common sense either, so I for one am dubious that this study s results will stifle him in the

long run. But it s good to see that his endorsement here lends **more** rather than, typically, less credibility to an atrazine-related study.

For a full discussion of atrazine, herbicides, and pesticides, see [ACSH s 2012 publication](#) [2] here.

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Links

[1] <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0107018>

[2] <http://acsh.org/2011/12/acsh-releases-two-publications-on-pesticides-and-health/>