Viewpoint: New glyphosate study suggesting danger to honeybee microbiota is detailed, sophisticated—and wrong

Erick Motta and colleagues at the University of Hawaii just <u>published a paper</u> in PNAS entitled "Glyphosate perturbs the gut microbiota of honey bees." in which they claim that the herbicide is harming bees

The paper is long, detailed, and contains five rather complex figures Rather than evaluate the biology, I picked out some questionable data, explanations, and conclusions. If the study behind the paper is flawed then it doesn't matter how complex or sophisticated the biology is

1. Glyphosate dose

What does a dose of 5-10 mg have to do with the amount of glyphosate that would be found in, or consumed by, a bee foraging in weeds that contain a similar concentration? What is the relevance of this dose to real life? How much glyphosate is found in a bee that has not been fed glyphosate?

2. Lack of dose response

When lower doses of a chemical or drug produce more of an effect than higher doses, this is a screaming red flag. While the authors speculate that "The relative lack of effects of the G-10 treatment on the microbiota composition at day 3 posttreatment is unexplained, but may reflect other effects of glyphosate on bees," a more credible explanation is that there is nothing real going on, just statistical wobble.

Read full, original article: Glyphosate Bee Death Story Is Bee-S