Comments from Western Stakeholders influence EPA Pesticide Registration Decisions Zihan (Lilac) Hong¹, Alfred J Fournier^{*2}

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Background

The Environmental Protection Agency (EPA) reviews all registered pesticides every 15 years to ensure that the safety standards of "no unreasonable adverse effects" to human health and the environment are met. As part of the pesticide review process, EPA accepts public comments at several stages, considering data that may influence their decisions. In each successive stage of review, EPA responds to substantive comments received in prior stages.

Four network coordinators working in tandem with the Western Integrated Pest Management (IPM) Center at University of California, Davis, developed information from growers and other stakeholders throughout the West to support comments submitted to the EPA. Network coordinators represent 17 states and territories in four sub-regions (Desert Southwest, California, Pacific Northwest and Pacific Islands). Comments may include (1) scientific data (e.g., pesticide use, efficacy, non-target effects) and (2) technical information from experts (e.g., Extension Specialists and Agents, growers, pest control advisors), to explain pesticide use patterns, benefits, potential alternatives and factors that can impact grower's pesticide choices.

This activity is important. Information provided has the potential to help EPA make more informed decisions that protect people and the environment while supporting productive and efficient agriculture throughout the West.



Results show that 90% of submitted comments provided substantive data that were considered in EPA's registration review process. This included 20% of comments for which the EPA revised risk models or altered proposed decisions in ways that addressed grower needs and practices while mitigating risks to protect public health and the environment.

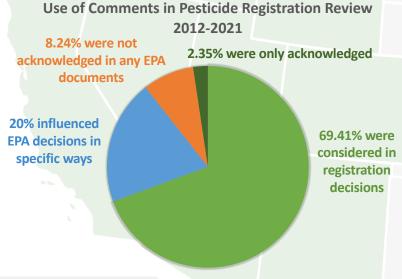


Figure 1. Comments submitted to EPA in collaboration with the Western IPM Center (n=85) were categorized for the extent to which information provided was considered in EPA registration review.

Case Study: Cycloate Comments Impact Southwest Growers

The herbicide Cycloate (e.g., Ro-Neet) has important uses on Arizona and California spinach and beets, where there are few alternatives. The Arizona Pest Management Center (APMC) submitted comments twice in 2021, in response to EPA's Draft Risk Assessments and Proposed Interim Decision. **Our data and stakeholder input led to better outcomes for Growers.** Based on our comments, EPA recalculated their risk estimates based on use patterns derived from pesticide use data, rather than model assumptions of maximum label rates on all crop acres. This resulted in shorter Pre-Harvest Intervals for spinach and beets, facilitating efficient production while protecting the health of workers.

Methods

We evaluated 85 comments submitted in coordination with the Western IPM Center between 2012 and 2021. We examined EPA documents on the <u>regulations.gov</u> website and extracted data for qualitative analyses, including citations of Western comments and EPA's responses. We identified the level of acknowledgement and use of comments, and outcomes of EPA decisions (Fig.1).

Conclusion

Comments submitted in the Western Region helped EPA accurately assess risks based on pesticide use patterns and grower practices. Many comments had significant and specific influences on pesticide registration decisions, which in turn have impacted availability and utility of pesticides for growers. This potentially saves growers money by keeping effective pesticides available, while also providing EPA with scientific information to fulfil its mandate of protecting human health and the environment.

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