

Adams, Vincanne. 2023. Glyphosate and the Swirl: An Agroindustrial Chemical on the Move. Durham, London: Duke University Press. 184 pp. Pb.: \$24.95. ISBN: 9781478016755.

Book review by

## Paul Durrenberger

University Of Iowa And Penn State (U.S.)

Vincanne Adams invites us to follow her into the looking glass to behold the swirl of glyphosate, where whatever you think might be real becomes a myth, where damage becomes renewal, where nothing is what it seems. In these days of separate-but-equal echo chambers each defining its own reality, what is real?

As an anthropologist, she might describe the corporate machinery that endlessly generates confusion and denial or the populist resistance to industrial agriculture in the US as a baseline. She declines both possibilities to follow the chemical itself as a character in an ever-changing drama of destruction and renovation. In the process, she provides a history of the substance from a pipe-cleaning agent to a universal weedkiller and inspiration for genetically modified crops that escape its damage, allowing farmers to increase food production for a hungry world.

Many nations and alliances, such as the US, EU, and UN, demand that their policies be based on the best available scientific information. This starts the drama of determining what is scientific, what counts as data, what methods are reliable, and what consensus might be about findings. At stake are corporate profits and public welfare. Legislatures, bureaucratic agencies, and courts all play roles in making and enforcing regulations and each is an arena for the contestation of facts. Adams discusses how corporations can coopt any of these. In addition, they incorporate agricultural universities into their organizations.

Also at stake is what form scientific consensus might take in any of those policymaking sites. The struggle over tobacco in the US proved that for every Ph.D., there is an equal and opposite Ph.D., as one author once quipped about expert testimony. In this milieu, Adams discusses the corporate capture of governing agencies and the mechanisms of science, as well as the control of the universities that produce the PhDs who do battle with their opposite PhDs in court.

So, tracking the path of this one agricultural chemical through all of these intricacies can result in a sense of vertigo. If it does, Adams writes, she has achieved her objective of describing the swirl of glyphosate. And that she has done.

She bases the metaphor of "swirl" on the constant and fluid configurations and re-configurations of birds, such as starlings in flight, always changing, never stable. However, as she describes the many faces of glyphosate, she transcends the metaphor to depict a reality despite its continual shape-changing. I am not sure that anthropology has developed terms for such phenomena in the social universe whose references and realities are determined by an evolving dance among the various levels of policy formation, with corporate giants in the lead and all others struggling to keep up with the latest formulations. She could have more comfortably situated her book in the echo chamber of alternative agriculture or the discussions of food-as-medicines/food-as-poisons, but this would have neglected other dimensions of the swirl.

Instead, she focuses on the nature of the thing itself, the many facets of glyphosate, as well as its champions and detractors. Is it a public health menace? Probably. Is it an effective weed killer? Yes. Has Monsanto, its corporate champion, violated every sense of ethics in its capture of academic and political arenas? Yes. Ask any question you like, and the answer is "yes" or maybe "no" depending... depending on what, exactly? Depending on a host of contested facts and observations that align in constantly changing ways to make it impossible to say. As such, this chemical substance becomes the archetype post-modern stuff as well as a fundamental neo-liberal commodity in the multi-national political economy.

Finally, Adams is to be congratulated for her use of straightforward and understandable language throughout when it would have been possible to add this book to the un-intelligibilities of the swirl.