



My View

Author: Zimdahl, Robert L

Source: Weed Science, 59(3) : 285

Published By: Weed Science Society of America

URL: <https://doi.org/10.1614/WS-D-11-00010.1>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

My View

Robert L. Zimdahl*

After enjoying a strong-tasting food, it is common to pause for a small dish of sorbet to cleanse the palate so the taste of next course can be fully appreciated. Sorbet improves dining.

A similar pause has helped me think about my work, about what I know. Knowledge is always connected with interest and only becomes objective when the context is included. Browning said it well in *From Paracelsus* (1835): "Truth is within ourselves, it takes no rise, from outward things, whate'er you may believe. There is an inner centre in us all, where truth abides in fullness."

Part of my context, what I know, is that the intellectual center of weed science and weed management systems have been closely allied with and largely influenced by herbicide technology. The dominance of this scientific power came to be understood as the power to dominate nature. In the past decade or so, it has become clearer that what weed science has done for society is different from what it has done to society. It is that change that warrants a pause.

Weed science has been dominated by pragmatists, who value their contributions to agriculture. There has been little concern for environmental values or the social externalities of the food production system. Many research and extension scientists who developed and improved the system have advocated industrial agriculture and use similar arguments to support their advocacy. They are: only industrial agriculture can feed a growing population, it is possible to protect the environment and wildlife only if production is increased on existing farmland, and increasing production requires pesticides, synthetic fertilizer, and genetically modified crops. If we

pause to think about these arguments, we may find they are weak, if not wrong. There are advantages to industrial agriculture: ease of use and success of herbicides for weed management, externalization of environmental and health costs, the efficiency of large industrial farms, and government policies favoring intensive agriculture.

Everyone involved in agriculture favors sustainability. All do not agree on what achieving it entails. Most people think the system should maintain the resource base. Pausing for the sorbet moment may help us recognize, and perhaps work to resolve the disagreement about whether or not a sustainable system could be developed to minimize external inputs, manage pests with natural regulating mechanisms, and facilitate environmental recovery from required agricultural practices. Weed scientists are challenged by multiple problems: herbicide resistance, loss of older herbicides and slower introduction of new ones, fewer future herbicide control options, and increasing levels of public concern about what weed science has done to society, especially by externalizing costs.

So, if we pause with our dish of sorbet, the pause may help us think differently. Our thoughts could be aided by a few words of advice from Joseph Campbell, the American scholar and writer best known for his work in comparative mythology and religion:

A bit of advice. As you go the way of life, you will see a great chasm.

Jump. It is not as wide as you think.

Received January 25, 2011, and approved January 25, 2011.

DOI: 10.1614/WS-D-11-00010.1

*Robert L. Zimdahl, Department of Bioagricultural Sciences and Pest Management, Colorado State University, Fort Collins, CO 80524. Corresponding author's E-mail: r.zimdahl@colostate.edu