August 24, 2015

Docket ID: **EPA-HQ-OPP-2015-0389**

U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Subject: "Risk Management Approach to Identifying Options for Protecting the Monarch Butterfly."

Our scientific societies are nonprofit professional associations of academic research, extension, government, and industry scientists committed to improving the knowledge and management of weeds in managed and natural ecosystems. We appreciate the opportunity to comment on EPA's white paper titled "Risk Management Approach to Identifying Options for Protecting the Monarch Butterfly."

As stated in the white paper, this is the start of a process of stakeholder input and collaboration that will balance weed management needs with the conservation of milkweed for protecting the monarch butterfly. We are happy to be part of that process and would like to emphasize the following points:

1. More research is needed on milkweed species (*Asclepias spp*.).
2. Consideration for the management of herbicide resistant weeds.
3. Utilizing noncropped areas for milkweed habitat.
4. A complex issue without a "one size fits all" answer.

<u>More research is needed on milkweed species (*Asclepias spp*.)</u>

There are 100 plus species of *Asclepias* across the United States. While some research has been done on common milkweed (*Asclepias syriaca*), there is a paucity of scientific information on the Asclepiadaceae family, whose members are the main food source for monarch butterfly larvae. Because common milkweed typically does not drive weed management decisions, there has been little public or private investment on researching this perennial weed's long term growth and reproduction, population dynamics, response to herbicides, impact on crop yield, and distribution. We agree with the white paper that this type of scientific information will be crucial in developing options to conserve monarch butterfly habitat.

Consideration for the management of herbicide resistant weeds

We believe it is critical for the Agency to balance weed management needs, especially the management of herbicide resistant weeds, with efforts to assist the monarch butterfly. Programs for herbicide-resistance management should employ the following best management practices:

1. Understand the biology of the weeds present.
2. Use a diversified approach toward weed management focused on preventing weed seed production and reducing the number of weed seed in the soil seedbank.
3. Plant into weed-free fields and then keep fields as weed free as possible.
4. Plant weed-free crop seed.
5. Scout fields routinely.
6. Use multiple herbicide mechanisms of action (MOAs) that are effective against the most troublesome weeds or those most prone to herbicide resistance.
7. Apply the labeled herbicide rate at recommended weed sizes.
8. Emphasize cultural practices that suppress weeds by using crop competitiveness.
9. Use mechanical and biological management practices where appropriate.
10. Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
11. Manage weed seed at harvest and after harvest to prevent a buildup of the weed seedbank.
12. Prevent an influx of weeds into the field by managing field borders.

Some of the above best management practices counter what is outlined in the white paper's "Analysis and Actions" section that discusses the possibility of lowering herbicide rates, modifying application timing, or establishing field buffers. These are all critical areas of concern to agricultural producers and should not be considered without a thorough discussion with producers and registrants to gauge their impact.

Utilizing noncropped areas for milkweed habitat

The utilization of noncropped lands to develop perennial milkweed habitat makes good biological sense. In general, higher infestations of perennial plants are expected in undisturbed areas. In addition, transportation rights-of-ways and utility corridors are uniformly distributed across the landscape which may aid monarch butterfly migration.

Weed scientists can advocate steps to promote habitats where pollinators and other iconic insects such as the monarch butterfly can flourish, beginning with the adoption of a prudent approach to weed management. While it is crucial that we control invasive, noxious, and herbicide-resistant weeds that can overtake crops and native plants, other weeds such as common milkweed might be left to grow in areas where it is likely to do no harm. The key is to exercise good judgment about which weeds to control, when and where.

A complex issue without a "one size fits all" answer

Initiatives like the Monarch Butterfly Conservation Fund, the Iowa Monarch Conservation Consortium, and other science-based conservation initiatives will allow private and public landowners to develop local knowledge of milkweed species for their area. Milkweed conservation efforts will vary according to the management of other weed species present in their area and there will not be a "one size fits all" solution. For example, recommending reduced

mowing or herbicide use on weeds in ditches where kochia (i.e. tumbleweed) is prevalent could create a public safety hazard due to the buildup of kochia carcasses.

We hope that EPA's actions are consistent with the Interagency Pollinator Health Task Force Report that recognized the importance of evidence-based decision making, collaborative public private partnerships, and expanded research that will balance local weed management needs with the conservation of the monarch butterfly.

We appreciate this opportunity to make initial comments on the white paper "Risk Management Approach to Identifying Options for Protecting the Monarch Butterfly" and look forward to working with the Agency on this important topic.

Sincerely,

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cc: House Committee on Agriculture
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