Re. MS: Research Priorities

These comments are submitted on behalf of Beyond Pesticides. Beyond Pesticides, founded in 1981 as a national, grassroots, membership organization that represents community-based organizations and a range of people seeking to bridge the interests of consumers, farmers and farmworkers, advances improved protections from pesticides and alternative pest management strategies that reduce or eliminate a reliance on pesticides. Our membership and network span the 50 states and groups around the world.

Thank you for this opportunity to participate in an ongoing conversation about the need for research to support organic production. We have a few comments on the topics suggested.

1. Whole Farm Systems Research
This is an important topic on its own and also important as an approach to other research topics. All of the questions mentioned, for example, with the possible exception of the food safety question, are relevant and important considerations that should be addressed by researchers investigating the topics of copper sulfate use in rice production, alternatives to antibiotics for fire blight, organic aquaculture, and even methionine alternatives. Organic farmers are innovators, and solutions developed on farms do not always fit into the restricted framework of typical research. As research on management methods moves from farmer to research institutions to more farms, these questions need to be integrated into research proposals.

2. Copper Sulfate in Rice
As noted above, this topic could be better studied in light of questions involving whole farm systems. How can biodiversity that eliminates/reduces the need for intervention be supported? Can rotation be used in rice production to reduce problems? How can the rice agroecosystem interact with the surrounding ecosystem in a beneficial way?

3. Antibiotics for Fire Blight
There are many apple and pear growers who are EU-compliant—meaning that they do not use antibiotics. Researchers would do well to start with the success of those who do not use antibiotics—what do they do that antibiotics-dependent growers do not (and vice versa). Paul Steiner has noted that the production of pome fruits has changed over the past three decades in ways that promote fire blight epidemics. Can those changes in cultural practices be reversed?
Again, these are questions that need to be addressed in the context of the diversity of habitat, crops, and biological life on an organic farm.

The new yeast products that look so hopeful were developed from naturally-occurring organisms. How can apple and pear producers conserve those naturally-occurring organisms to reduce the need for intervention? (Much as it is now common practice to conserve “beneficial” insects to reduce the need for insecticides.)

3. Organic Aquaculture
How do organic principles apply to aquaculture? What is the analogy to “feeding the soil” in an aquatic system? What does “essentiality” mean in an aquaculture system? These questions are not exactly research questions, but must be answered in order to frame research questions. How can working with the natural world by including diversity of habitat, cropping systems, and biological life benefit an organic aquaculture system?

4. Methionine Alternative
The Livestock Subcommittee has framed this issue in a way that promises to be productive, in the discussion document on omnivore diets. We suggest that an area of research that might be productive is the culture of insects and worms to meet the animal protein needs of domestic omnivores. Do mealworms, crickets, and earthworms have a balance of amino acids that would make them a good supplement? How practical is it to raise them as feed?

5. Carrageenan
While we are happy to see the board acknowledge shortcomings of the decision regarding carrageenan, the answers to most of the questions posed about carrageenan have been answered by respected researchers. We wonder why the findings of those researchers did not lead to the removal of carrageenan from the National List by the board at the Albuquerque meeting. Research into the health impacts of carrageenan does not fit the criteria for the kind of research to be addressed by this priority list because it is not lacking in primary research. What is lacking is careful consideration by the board of the evidence available in the independent scientific literature. Similarly, evidence was submitted to the board showing alternatives to carrageenan.

Thank you for considering these comments.

Sincerely,

Terry Shistar, Ph.D.
Board of Directors