The Organic Center

September 29, 2015

Ms. Michelle Arsenault
National Organic Standards Board
USDA-AMS-NOP
1400 Independence Avenue, SW
Room 2648-So., Ag Stop 0268
Washington, DC 20250-0268

Docket: AMS-NOP-15-0037

RE: Materials Subcommittee - Research Priorities 2015

Dear Ms. Arsenault:

Thank you very much for this opportunity to provide comments on the Materials Subcommittee proposal on Research Priorities for 2015.

The Organic Center is a non-profit organization with the mission of convening credible, evidence-based science on the environmental and health benefits of organic food and farming and communicating them to the public. We are a leading voice in the area of scientific research about organic food and farming, and cover up-to-date studies on sustainable agriculture and health while collaborating with academic and governmental institutions to fill knowledge gaps.

The Organic Center thanks the Materials Subcommittee for its recommendation on Research Priorities. We appreciate the creation of the Research Priority Framework and the efforts made by each Subcommittee to bring forth its research priorities for 2015.

The Organic Center has reviewed the list of topics included for 2015, and we are happy to see the inclusion of research priorities related to livestock management and the development of alternatives for materials on the National List. The Organic Center relies on the annual NOSB Research Priorities to guide the development of our own research projects.

For instance, we directly addressed the 2012 and 2013 research priority "Alternatives to Antibiotics (Tetracycline and Streptomycin) for Fire Blight" in our recently completed fire blight project, which was carried out in collaboration with researchers from the University of Washington. This projected provided critically needed information on how to prevent fire blight from decimating apple and pear orchards without the use of antibiotics. The published report includes lessons learned from a systems approach to controlling fire blight without antibiotics which have been successfully used by dozens of Pacific Northwest organic orchardists. These strategies, along with previously existing materials, have been made available for organic orchardists to refer to as they shift to non-antibiotic control. The written report is publicly available and covers methods for controlling fire blight holistically as well as issues such as sanitation, vigor control, sequence and timing of control materials, spray coverage, and varietal susceptibility.

Our research project to find organic solutions to control citrus greening disease is an ongoing

project in collaboration with the University of Florida, the University of California, Davis, USDA-ARS, citrus growers, and other non-profits which directly addresses the 2014 priority for "Plant Disease Management" This project will determine the efficacy of organic pesticides for controlling the Asian citrus psyllid (ACP), test combinations of antimicrobial treatments to combat the causal pathogen of citrus greening disease, and test non-GMO resistant varieties of citrus for use in organic systems. To date we have identified effective organic compliant insecticides to combat the ACP and are analyzing preliminary data on the effectiveness of organic approved antimicrobials. This study will provide organic growers nationwide with information on how to protect their citrus groves from collapse due to citrus greening. It will also provide policy makers with data needed to incorporate organic alternatives to ACP control into area-wide treatment protocols.

We are also addressing the 2014 priority area "Soil Building Practices" through our ongoing collaboration with the National Soil Project at Northeastern University. This project examines different soil components such as humic acids, fulvic acids and humin, and develops a reference database that will enable agronomists, farmers, and environmental scientists to correlate soil health and productivity with agricultural practices. To date we have collected and analyzed almost 600 organic soils nationwide. This study will provide organic farmers, who rely on soil quality with a resource to facilitate remediation, maintenance and conservation of soil resources.

Finally, we are currently completing a research collaboration to determine the most common areas in the supply chain where pesticide drift contamination of organic food occurs and to identify methods to avoid low-level inadvertent pesticide contamination all together. This project addressed the 2014 priority area "Risk Reduction from Off-Target Exposure to Non-Permitted Materials"

The Organic Center is continually collecting information on research needs from multiple sectors of the organic community. We conduct industry roundtables, work with the Organic Trade Association's Farmers Advisory Council, meet with professors on our Science Advisory board and hold one-on-one meetings with individual companies, farmers, professors, and consumers. We feel that the proposed NOSB Research Priorities for 2015 are in line with the needs of the organic industry and appreciate the release of this report as an important resource to guide the Center's own research priorities and project development. Based on feedback we've received during our own outreach efforts we would also like to suggest that the areas of manure and compost safety and pollinator health be considered for inclusion in the Research Priorities for 2015.

Manure and Compost Safety

Certified organic producers are prohibited from using synthetic fertilizers on their crops. Instead, they often utilize animal-based soil amendments including manure and compost to improve soil fertility and quality. Currently, in order to prevent microbial contamination of crops with pathogens, organic farmers wait for a prescribed time between application of the soil amendment and harvest for consumption. However, current regulations for soil amendment wait times are based on little scientific information that shows that waiting time intervals between the use of soil amendment and the harvest reduce the microbial risk to minimal levels. Most recently, this knowledge gap created conflict when the proposed Produce Safety Rule of the Food Safety

Modernization Act (FSMA) initially included a 9-month wait time that conflicted with the NOP regulations. Organic farmers expressed concern regarding negative impacts on soil ecology, disruption of current cropping cycles, and profits. As a result, the 9-month interval was removed until more data is available however, had the regulation remained it would have created substantial hardship for organic farmers underscoring. This conflict underscores the need for the organic community to actively fill this knowledge gap in order to stay involved and relevant in future regulatory decisions.

The Organic Center is currently working to address this need through collaboration with researchers from U.C. Davis to assess current practices used by the organic industry related to manure and rotational grazing to identify potential food safety risks. Specifically, we are conducting needs assessments to gather information about the use of animal-based soil amendments in organic agriculture and evaluate and characterize the current practices and needs of organic producers. The results of this work will provide critical information for guidelines aimed toward developing research on risk mitigation of foodborne pathogens for organic and sustainable agriculture and will be used to guide a full research proposal investigating manure and compost safety in the next OREI cycle.

Pollinator Health

Many of the factors linked to bee declines are a direct result of common agricultural practices. Declines in bee pollinators have been linked to the use of toxic systemic pesticides, destruction of native habitat, and a decrease in nutritious forage due to reduced plant diversity within and around farmed fields. A recent review of the scientific literature conducted and published by The Organic Center confirmed the role of conventional agriculture in contributing to pollinator declines but also suggested that many techniques commonly applied in organic farming can improve the health of both honey bees and native pollinators. Currently more research is needed to confirm the beneficial effects and determine best practices for implementing them on farms.

Thank you for your consideration of these suggestions and again, on behalf of The Organic Center, I would like to extend my thanks to the Materials Subcommittee for your commitment to furthering organic agriculture.

Respectfully submitted,

Jessica Shade
Director of Science Programs
The Organic Center