



**IMPACTS OF
OFRF GRANTS:
2006-2014**

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EXECUTIVE SUMMARY

The Organic Farming Research Foundation (OFRF) is a non-profit organization founded in 1990 with the goal of advancing organic agriculture through scientific research. OFRF provides grants for organic farming research and education, with a particular focus on practical solutions to organic farming challenges. This report was conducted to review and analyze the past nine years of OFRF's grant making program, (2006-2014), with the goal of refocusing, strengthening and expanding the program for the future.

Organic farming and organic farming research have grown tremendously in recent years. When OFRF was founded in 1990, organic farming research was not a well-studied field of inquiry, and the US Department of Agriculture was more than a decade away from certifying organically grown products. Today there are more than 15,000 certified organic producers in the US, a growth of 250% since 2002, and organic farming research is now being conducted at universities around the world (USDA, 2015).

This growth validates OFRF's commitment to funding practical research and science-based solutions to production challenges faced by this rapidly growing agricultural sector.

This report offers a detailed review of OFRF-funded research and education projects initiated between 2006-2014. This report is an update to the 2006 report, "Investing in Organic Knowledge," and offers insights into the most recent period of OFRF grant making. This evaluation clearly indicates that OFRF investments have resulted in important advances in organic farming knowledge and practice, particularly for targeted crops and research areas. The report also identifies emerging research needs, and suggests how OFRF's grant program can be strengthened to fill knowledge gaps and better address farmers' priorities.

OFRF awarded 106 grants from 2006-2014, investing a total of \$1,452,517. The average one-year grant amounted to \$13,967.

While modest in size, OFRF grants have played a crucial role in advancing the careers of young scientists, many of whom have subsequently advanced to influential research, teaching and public-service careers in organic agriculture.

Results from OFRF-supported research, which are freely available on the foundation's website, have added substantially to the body of scientific knowledge guiding modern organic farming practices.

In addition, the foundation's unique partnership with organic farmers has kept its research program current, relevant, and focused. OFRF regularly surveys organic farmers about their experiences, challenges and information needs, and uses farmer feedback to craft its research funding priorities.

OFRF funds projects based on scientific merit, combined with the potential to address identified organic farming challenges. Funding from 2006-2014 focused on insect pest management, plant breeding, disease management, and weed management - all major challenge areas for organic farmers. For example, OFRF-funded research has advanced the methodology and knowledge surrounding how to best solve the problem of soilborne disease, how to utilize beneficial organisms like bats and birds for pest control, and how growing new crops like goji berries can be economically advantageous. The most significant impacts of the projects from this period are advances in knowledge regarding crop breeding and disease management, two areas that have been prioritized for OFRF funding. Advances have also been made in insect management, and the creation of impactful educational resources and training programs.





Techniques and findings from OFRF-funded research have been widely implemented by organic farmers over the years, with information disseminated online, in sponsored publications, and at farming conferences and field days.

Many OFRF-funded projects address farming challenges confronting all cropping systems. However our analysis shows a greater historical focus on vegetable, fruit, and grain cropping systems, with a lesser focus on animal research, herbs, and tree nuts. It is recommended that future funding include more projects focused on livestock, animal research, pasture management and livestock health.

OFRF's diverse pool of research project directors includes university professors, postdoctoral researchers, extension agents, non-profit organizations, and farmers. The most common OFRF grant recipients are university professors. However, OFRF grants have proved particularly influential on the careers of graduate students and early-career scientists.

Grant recipients have used initial OFRF awards to leverage significant additional funding from state and federal agencies. For example, a research project led by Dr. Carol Shennan and Dr. Joji Muramoto at UC Santa Cruz to examine organic management of soilborne diseases in strawberry production, initiated with \$28,000 in OFRF grants, eventually led to \$2.8 million in additional USDA funding. Funding innovative work at the early stages becomes enhanced and very impactful when researchers are able to grow their programs and continue the work at a larger scale.

One unique facet of OFRF grant projects is close collaboration with farmers as research directors and participants. Projects with strong farmer collaboration tend to be grounded in the real-world challenges faced by producers. Farmer involvement translates into strong projects, which often produce results that are quickly adopted by the industry. Continuing to include farmers in a diverse pool of research project directors, along with students, academics and extension personnel, is a priority for future OFRF funding.

OFRF grants are most commonly awarded in the western U.S., where organic farming has seen the most growth. The foundation has also made progress in strengthening funding in other parts of the country. From 2006-2014, OFRF

funded projects in 25 states and increased the number of projects funded in the southern U.S. OFRF will continue to support projects throughout the nation and increase outreach to underserved regions where organic farming has experienced slower growth.

Overall, OFRF grant funding has advanced scientific knowledge and improved the practices, ecological sustainability and economic prosperity of organic farming. These successes support our goal of researchers and farmers working collaboratively to support the improvement and widespread adoption of organic agriculture. This longstanding collaboration has created a strong network of scientists and farmers who share research results and innovate together to craft solutions to organic farming challenges.

This report recommends continued support for insect, disease, and weed management research efforts as well as special attention to research needs related to post-harvest handling and food safety, pasture management, crop rotations, and livestock disease.

OFRF is already improving its grant-making program based on current and past recommendations. OFRF has created an online application system for the 2015 grant cycle to streamline the application process. In the 2015 call for proposals, OFRF is directing future funding toward emerging areas of need, such as soil health and drought management. OFRF is also conducting strategic outreach to encourage proposals from a diverse group of applicants including graduate students, farmers, and extension agents.

OFRF is committed to supporting the research needed to meet the current challenges of organic farming, and to help organic farming continue its rapid growth. Through these efforts, OFRF is creating a more resilient and sustainable agricultural system that values healthy environments and healthy people.

OVERALL, OFRF GRANT FUNDING HAS ADVANCED SCIENTIFIC KNOWLEDGE AND IMPROVED THE PRACTICES, ECOLOGICAL SUSTAINABILITY AND ECONOMIC PROSPERITY OF ORGANIC FARMING