

Proposal Writing Instructions for Regular Hatch Projects

Title: A brief (140 letters and spaces or fewer), clear, specific statement of the subject of the research. Do not include phrases such as "research on," "investigation of," etc. The title will be used for information retrieval searches, so including specific keywords that are as descriptive of the project as possible is important.

Project Type: Hatch

Principal Investigator(s), Departmental Affiliation(s): Include SEBS/AES faculty that will be serving as co-investigators contributing effort

Expected Impact: The expected impact section should consist of a few paragraphs **in non-technical language**, which clearly states how the outcomes and results of the proposed project will affect and/or benefit the identified stakeholders. The non-technical summary is your opportunity to sum up the importance of your project in terms that general citizens can understand (i.e. citizens without scientific backgrounds).

Justification: This section should describe how the research being performed relates to the mission of the NJAES which is “To enhance the vitality, health, sustainability and overall quality of life in New Jersey by developing and delivering practical, effective solutions to current and future challenges to agriculture; fisheries; food; natural resources; environments; public health; and economic, community, and youth development.” As well, list one of the primary NJAES Critical Issue areas which best fit your research goals:

1. **Ensuring Positive Outcome for Our Youth:** A significant portion of New Jersey’s youth, especially in our urban areas, is at substantial risk for negative outcomes (e.g., poor health, substance abuse, pregnancy, school failure, and abuse). Sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity provide important life skills that ensure positive youth development. (Primarily 4-H)
2. **Build Sustainable and Resilient Communities:** As the most urbanized and densely populated state in the U.S., New Jersey faces unique challenges. NJAES research and RCE programs help our diverse population adapt to a rapidly changing society and improve their lives and communities through an educational process based on science-based knowledge. NJAES researchers and Extension educators make the capacity of a major research university available to various constituencies in New Jersey who are seeking to build viable businesses and industries and to improve their quality of life.
3. **Protect and Sustain Our Resources:** Manmade and natural environmental factors affect water, soil, plant, and air quality, and the ability of various land and aquatic species to thrive and evolve, both ecologically and spatially. New Jersey researchers and extension agents develop an array of integrated programs designed to manage our at-risk natural resources sustainably. From performing ecofriendly remediation, planning, and conservation to conducting environmental assessment and analysis, NJAES/RCE strives to improve ecological quality, increase nutrient use efficiency, implement alternative and renewable energy sources, use economic analysis to inform environmental policymakers, build resilience to weather variability, and develop best practices for land use.
4. **Ensure Healthy Outcomes: Food, Nutrition, Health:** Good health is essential to improving and maintaining individual productivity and quality of life, as well as to the wellbeing of the community at large. Fostering a culture of health and wellness for New Jersey residents of all ages is an important NJAES mission. NJAES/RCE promotes health and wellness through education, research, and integrated and multistate collaborations in food, nutrition, and healthy lifestyles. Obesity rates among children and adults have trended upward over the past two decades. Understanding the relationship between



lifestyle and food is a key component of good health. Diet and physical activity are also important in preventing many chronic diseases, including high blood pressure, heart disease, Type 2 diabetes, and some types of cancer.

5. **Maintain Viable Agriculture and Aquaculture:** Farmers and food producers everywhere deal with threats to their livelihoods posed by unfavorable weather, volatile market prices, high costs of production, and other conditions. These threats are exacerbated by global climate change. New Jersey agriculture also operates in a densely populated, highly regulated, high land-value state. A number of New Jersey farms are located on the urban-rural fringe; they are isolated islands of production located on expensive land in suburban locations. NJAES/RCE is committed to investigating novel ways to support all commercial growers while striving for economic and environmental sustainability, with integrated and multistate collaborations.

Finally, it should the specific problem(s) that will be addressed by this project. A description of how the project will deliver high quality, problem-solving research and/or outreach should be included. Also, this section should describe the expected outcomes that will promote research and/or provide valuable information and service to relevant stakeholders in NJ and abroad (if applicable). We expect that USDA reviewers will be looking specifically for a connection between your proposed research and a USDA-NIFA priority area, so please be sure to make this connection in your statement of justification.

Goals and Objectives: There is no minimum or maximum number of goals to include for a project, but all goals should be specific and attainable within the duration of the project and with the available resources. USDA-NIFA's definition from REEport states "By "Major Goals" NIFA means the over-arching goals of the project AND the objectives that will be undertaken to achieve those goals."

Expected Outcomes: NIFA considers the terms "outcomes" and "accomplishments" to be synonymous. Outcomes and accomplishments help lead to a project impact. An outcome/accomplishment is defined as a significant change in knowledge, action, or condition. Outcomes are generally short, succinct statements that start with phrases indicating the occurrence of change.

Methods: A detailed statement of the working plan and methods to be used in addressing each of the previously stated objectives. Procedures should correspond to the objectives and follow the same order. Phases of work to be undertaken currently should be designated. Location of the work and the facilities and equipment needed and available should be indicated. The procedures should reflect careful planning and should provide flexibility for changes if changes become necessary.

Previous work and present outlook: This section should be written as a brief literature review or introduction of the issues/problem addressed by this project. It should summarize previous research (citing important publications), status of current research, and the additional knowledge needed which the proposed project is expected to provide.

Internal and External Cooperation:

Internal: Indicate SEBS/NJAES units and any other units at Rutgers contributing essential services or facilities need to be indicated, as well as the responsibilities of each unit.

External: Describe any cooperation with the US Department of Agriculture or any other experiment stations, institutions, or other agencies cooperating formally or informally on the project.



Resource Commitment: Indicate the total estimated effort anticipated for each year of the project. The leaders involved in the project should be clearly identified in a list before the table.

List effort as a decimal, rounding to the nearest tenth (example – 30% = 0.3)

(Insert this table in outline under Resource Commitment)

Staff Support	Yr1	Yr2	Yr3	Yr4	Yr5
SY					
PY					
TY					

***SY - Scientific Year** - Scientists (Assistant Professor and above) who are responsible for creative scientific study, thought, originality, judgments, and accomplishments directly assignable to the activity report. Highly involved Postdoctoral Fellows can be listed here.

***PY - Professional Year** - Professional categories and who are assigned to research activities of the project. Such professionals usually hold a bachelors and/or masters degree(s). Graduate students, by virtue of their degree and acceptance into graduate school may be categorized as professionals.

***TY - Technical Year** - Technicians, aids, undergraduate participants and laboratory assistants assigned in support of a project or an activity.

Project Duration and Workplan: Please indicate the estimated time for the completion of each stage of the project. For the timetable, list major activities and/or objectives and their corresponding time of completion. The time for completion of projects will not exceed 5 years. If the need for a material change in project objectives arises in the course of an approved project, a new or revised project outline should be prepared and submitted via the Project Change module in REEport. A major change in procedure might also necessitate a revision of the project proposal.

Please provide a chart that consists of the major Tasks and Subactivities of each task. Also, describe the anticipated accomplishments of each subactivity in terms of months from initiation. An example of a work plan is given below.

Example: Work Plan

	Year 1	Year 2	Year 3	Year 4	Year 5
Design and implement cultural, mechanical, chemical and biological (if available) weed control experiments.	X	X	X	X	
Combine successful weed control techniques into an integrated program suitable for commercial implementation.			X	X	X
Demonstrate the integrated weed control program at Rutgers research farms and grower sites.				X	X
Report results at regional, national, and international scientific meetings, and in scientific journals.			X	X	X