"Sustainable Soil and Cropping Systems"

Status: NIFA REVIEW

Project Director
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Organization Project Number
-

Accession Number
7002072

Start & End Date
10/01/2020

Organization
University of Massachusetts

To Project / Program
"Sustainable Soil and Cropping Systems"

Primary Critical Issue
Sustainable Agriculture and Food Systems

Fiscal Year
2022

In 2-3 sentences, briefly describe the issue or problem that your project addresses.

The COVID situation certainly was the major limiting factor during 2022. Additionally, insufficient personnel in Crops, Dairy, Livesstock, and Equine team of UMass extension, resulted in not providing technical and educational assistance to the farmers, especially those located in far north and south of the coastal areas.

Briefly describe in non-technical terms how your major activities helped you achieve, or make significant progress toward, the goals and objectives described in your non-technical summary.

Despite the lack of personnel in CDLE team of UMass Extension, with the help of dedicated graduate students, we were able to acheive most of the goals and objectives of the project. Students were the key to the annual field days, educational workshops, maintaining the CDLE website, writing the published scientific journal papers.

Briefly describe how your target audience benefited from your project's activities.

The target audience benefited from the project in different ways:

1- Increased net income due to using cover crops and thus reducing fertilizer and herbicides.

2- Diversified their crrops which not only improves the general health of their agricultural soils, but as an insurance for unpredicted environmental extremes, including high temperature or drought.

3- Farmers learned about cultivation of several new crops that can be used as ethnic crops by increasing population of immigrants in the state.

Briefly describe how the broader public benefited from your project's activities.

Many of the projects are focused in protecting environment from pollutants, including nutrients, herbicides, soil particles. The projects such as grazing management, manure management, cover crops, transitioning to the no-tillage systems not only protects the water bodies, but also reduces carbon emmision to the atmosphere.

Comments (optional)

- UMass Extension Annual Field Day- Research Reports (1) - 88 participants
- Applied research on cover crops for improving sil health and recovery of nutrients - Cover crop termination strategies (1) - 60 participants
- One on one technical assistance to farmers Phone, email and in person consults (400) 400 participants
- CDLE Newsletter (3) - 2000 participants
- Fact Shweet - Soil Health (1) - 500 participants
- On-farm demonstrations: Best management practices for equine (3) 200 participants

- The Agronomy Journal and the Journal of Plant Production (12) 1000 participants
- Graduate Advisor SSA - 5 students
- SSA Graduate Advisory Committee - 11 participants
- Workshop presenting results of on-farm demonstrations and applied research on equine management practices (4) 800 participants