

Transitioning Pesticide Credit Bearing Continuing Education Meetings to Online Formats During the COVID19 Pandemic.

Educational Objectives

Prior to the COVID-19 pandemic, methods to conduct pesticide recertification credit bearing online 'Twilight' or extension-based education meetings were not readily available, nor were they standardized or accepted by the New Jersey Department of Environmental Protection (NJDEP) Bureau of Licensing and Registrations. In response to mounting agricultural and green industry concerns over their need to acquire recertification credits during the COVID-19 pandemic, a team of Rutgers University Agricultural Agents worked together to develop Standard Operating Procedures that satiated strict policies from both state agency and university. The team deliberated with these groups in an effort to make the online continuing education experience accessible to the broadest level of technology inclined clientele. The team sent out detailed pre-meeting information that educated growers on utilizing these, at the time foreign, digital meeting platforms.

Training materials for stakeholders included how to navigate these virtual meeting platforms, uploading proof of identity and license documentation, and how to follow the evolving new protocols i.e. video feed and chat room functions as the pandemic continued and SOPs were refined. The team also devised an additional form that was utilized to document the attendees' attentiveness, participation, and camera requirements to guard against any concerns of distraction.

In addition to training growers, the team worked to train other Agricultural Agents and Program Associates, all with different specialties, throughout the Rutgers University Cooperative Extension system. The team provided education on setting up these meetings, user interfaces, what to educate growers on, pitfalls, and compliance with state and university policies for obtaining pesticide credits in this digital format.

Program Activities (10 Points) (workshops, field days, home study courses, tours, etc.)

A total of seven virtual pesticide credit bearing continuing education meetings were held by the team members for this initial transition project. Pesticide credits (listed in the evaluation section) were awarded for each meeting.

Following the in-service training five more credit bearing meetings have or will be held in the near future. The developed SOP will be used for all online pesticide credit bearing continuing education meetings moving forward.

For the seven initial meetings and the five meetings subsequent to the in-service, the team led one-on-one detailed discussions with colleagues at the New Jersey Agricultural Experiment Station wishing to develop pesticide credit bearing educational meeting. This was to ensure that their colleagues were competent when developing, day-of conductance, and required communication with the state agency.

Teaching Methods (10 points) (how was the information disseminated (workshops, field days, home study materials, hands on learning, etc)

The team navigated the virtual programming and communicated this with the NJDEP to develop a detailed Standard Operating Procedure (Results Section) that has been distributed to Rutgers University Agriculture and Natural Resources faculty and staff wishing to conduct credit bearing meetings.

One in-service training was provided to all Rutgers University Cooperative Extension faculty and staff (Powerpoint attached). This was not only helpful to those looking to host pesticide credit bearing courses, but could be readily adapted by colleagues awarding continuing education credits across a number of disciplines via virtual formats.

Results (20 points) (number of participants, collaborations that resulted from the program, number of people who have changed production practices, acres converted to preferred crop, tillage method, etc.)

The project coordinators compiled a Standard Operating Procedure that was guided by the NJ Department of Environmental Protection Requirements and Rutgers University identity policies.

The following are now accepted (by the New Jersey Department of Environmental Protection) online pesticide recertification credit bearing methodologies. Methods included: 1. Applicators must pre-register for the session and upload photos of their government issued ID and applicator license to receive credits.

2. We utilize video feed monitoring for our “twilight meetings” (audiences less than 50 attendees) and random polling for larger audiences (more than 50 attendees) with specific questions to verify attendee attendance and engagement during the sessions.

3. There will be a 10-minute grace period or “tardy” window for attendees getting online and into the correct session, but that anyone arriving / logging in later than 10 minutes after the start of the session will be denied credits. All attendees, no matter when they arrive, MUST remain until the end of the session to receive their credits. Log in and log out times will confirm this for each applicator.

Additionally, in order to meet NJDEP-required identity verification requirements, each attendee must provide a copy of a Government issued photo ID (passport, driver's license, municipal, or county ID) and their New Jersey Pesticide Applicator License as part of their registration. Uploaded through Rutgers Connect.

The SOP was utilized at all seven principal credit bearing continuing education meetings.

In the Fall of 2020 after the first set of classes were taught, information gained from these teaching opportunities was compiled to present the programmatic methods to the entire Rutgers University New Jersey Agricultural Experiment Station at an InService Training (~200

educators). Although only the Agriculture and Natural Resources Department handles Continuing education for Pesticide Credits, many parts of this program/standard operating procedure that we developed could be adapted by other departments offering Continuing Education Credits.

Impact Statement (20 points) (knowledge gained, monetary gain, positive environmental results, attitude change,

As a result of the programmatic work this team put forth over 192 New Jersey pesticide applicators were given over six opportunities in 2020 to obtain continuing education (pesticide credits), to ensure their certification is maintained. An additional 700 New Jersey pesticide applicators have recently been or will be given this opportunity at five more education credit bearing meetings.

The continuing educational training for this licensings ensures that growers are complying with federal and state DEP regulations, and are continuing to receive the necessary knowledge to farm in an environmentally friendly sustainable manner.

Evaluation

The impact of this programming on growers was largely measured by the number of virtual pesticide credit bearing classes offered through the Rutgers University New Jersey Agricultural Experiment Station in 2020. As well as the number of participants for the classes, and the total number of pesticide credits awarded as illustrated below.

Meeting	Attendees	CORE Cred.	Cat. 1A Cred.	Cat. 10 Cred.	Cat. PP2 Cred.	Cat. 3A Cred.	Cat. 3B Cred.
Wine Grape Twilight Mtg. 1	16		4	4	4		
Tree Fruit Twilight Mtg. 2	12	1	4		4		
Tree Fruit Twilight Mtg. 3	19	1		3	3	3	
Tree Fruit Twilight Mtg. 4	15	1	4	4	4		
Nursery Mtg. 1	40			1	1	1	1
Nursery Mtg. 2	40	2					
Nursery Mtg. 3	50			1	2	2	

The standard procedure for organizing and awarding pesticide credits in a virtual format initially resulted in 7 credit bearing program opportunities, where a total of 55 credits were offered to growers.

After the Experiment Station wide in-service, an additional six virtual credit bearing programs (listed below) have been or are in the process of being organized, the organizers for all of these meetings have utilized our standard operating procedures for and advice for awarding pesticide credits.

The Mid-Atlantic Fruit and Vegetable Convention ~300 attendees

The New Jersey Vegetable Growers Association Meeting ~150 attendees

The Central Jersey Vegetable Grower Meeting ~100 attendees

The Central Jersey Turf and Ornamental Conference ~75 attendees

North Jersey Ornamental Horticulture Symposium ~ 75 attendees

A number of growers have provided the team with testimonials as to how helpful our assistance with the virtual pesticide credit bearing programming has been for them.

‘Megan, I greatly, appreciate your out reach and help with pesticide credits.’

‘I just wanted to say thanks to you for all the work you put into this meeting for us to receive pesticide credits. It is really greatly appreciated and I know it was not an easy task.’

‘Thank you for setting up this informative session. I am looking forward to the Sept session.’

‘Tim, Thanks for the training last week; good information that I can relay to our customers at Growmark FS.’