

Immersive Food Safety Training to Support Technical Assistance for Small and Mid-Sized Farmers

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USDA/NIFA, Food Safety Outreach Competitive Grants Program



NC STATE UNIVERSITY



Problem Statement / Issue Definition:

- All individuals who grow, harvest, process, or handle food have a responsibility to practice safe food handling practices despite the size of their operation
- Owners and operators of small to mid-sized farms, beginning farmers, socially disadvantaged farmers, small processors, and small produce merchant wholesalers face numerous challenges in obtaining food safety training and technical assistance that meet their needs and can help them improve food safety and protect public health
- Need for training that is:
 - Context specific
 - Innovative
 - Provides a “hands-on” approach to learning

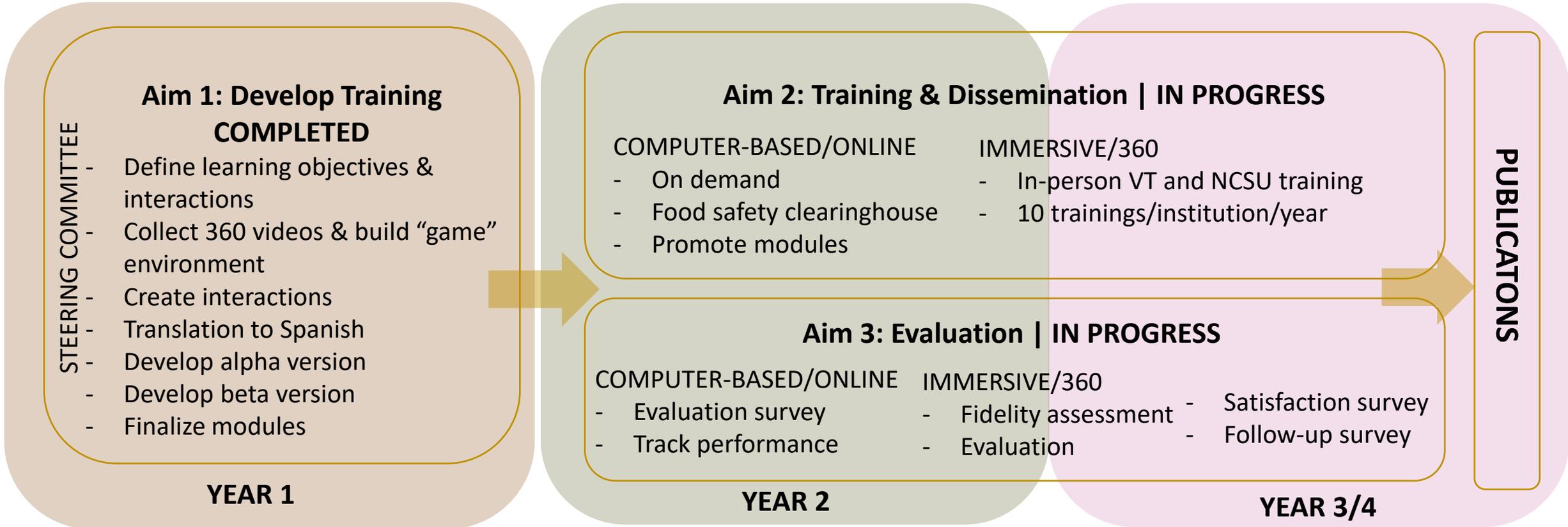


Interactive computer-based modules



Immersive HMD modules

Approach / Methods

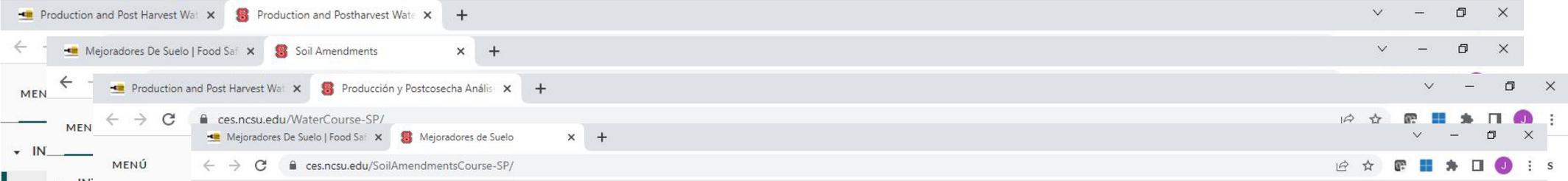


Target audience: beginning farmers, socially disadvantaged farmers, small processors, and small produce merchant wholesalers
 Team: Juliana Ruzante (RTI), Renee Boyer (VT), Lester Schonberger (VTech), Ellen Shumaker (NCSU), and Benjamin Chapman (NCSU)

Results

ONLINE COURSES
(<https://ncfreshproducesafety.ces.ncsu.edu/>)

The screenshot shows the website ncfreshproducesafety.ces.ncsu.edu. The page features a navigation bar with 'NC STATE EXTENSION', 'COUNTY CENTERS', 'TOPICS', and 'GIVE NOW'. A search bar is located in the top right. The main content area is titled 'NC Fresh Produce Safety' and includes a sidebar with menu items: 'Meet Our Staff', 'Events', 'COVID-19 Resources for Fruit and Vegetable Growers', 'Food Safety Modernization Act (FSMA)', 'Good Agricultural Practices', and 'Growers'. The 'Online Learning Modules/ Módulos De Enseñanza' section is highlighted with a blue background and lists several topics: 'PRODUCTION AND POST HARVEST WATER TESTING AND SAMPLING', 'ANÁLISIS Y MUESTREO DE AGUA PARA LA PRODUCCIÓN Y POST COSECHA', 'SOIL AMENDMENTS', and 'MEJORADORES DE SUELO'. A red arrow points from the text on the left to this section, and another red arrow points to the first item in the list.



- MENÚ
- INTRODUCCIÓN
 - Bienvenido
 - Agradecimientos
 - Encuesta
 - ¿Por qué?
 - Normativa
 - SEI Descripción
 - SEI SECCIÓN 1 | SECCIÓN 1 | CATEGORÍAS DE MEJORADORES...
 - SEI SECCIÓN 2 | SECCIÓN 2 | EJEMPLOS DE MEJORADORES DE...
 - SEI SECCIÓN 3 | SECCIÓN 3 | EVALUACIÓN DE RIESGOS ASOCI...
 - SEI SECCIÓN 4 | SECCIÓN 4 | PROCESOS DETALLADOS: ESTIER...
 - SEI SECCIÓN 5 | SECCIÓN 5 | TRABAJAR CON PROVEEDORES
 - SE SECCIÓN 6 | SECCIÓN 6 | REGISTROS
 - SE SECCIÓN 7 |
 - SE SECCIÓN 8 |

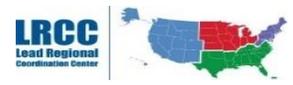
Mejoradores de Suelo



Bienvenido al módulo de Capacitación sobre Mejoradores de Suelo para propietarios de granjas pequeñas y medianas, y productores.

RECURSOS

SIGUIENTE >



United States Department of Agriculture

National Institute of Food and Agriculture

MENU

- INTRODUCTION
- SECTION 1 | CATEGORIES OF SOIL AMEND
- SECTION 2 | EXAMPLES OF SOIL AMENDMI
 - Overview
 - Typical Soil Amendments
 - Human Waste and Biosolids
 - Knowledge Check**
- SECTION 3 | EVALUATING THE RISK ASSOC
- SECTION 4 | DETAILED PROCESSES: RAW M
 - Overview
 - Using and Managing Raw Manure and Compost
 - Raw Manure Use and Management
 - Compost Use and Management
 - Materials to Avoid in Compost
 - Section Resources
 - Identify Compost Location:: Knowledge Check**
 - Knowledge Check
 - Knowledge Check
 - Knowledge Check
- SECTION 5 | WORKING WITH SUPPLIERS
- SECTION 6 | RECORDKEEPING

IDENTIFY COMPOST LOCATION: KNOWLEDGE CHECK

Where you place your compost pile can contribute to the risk of produce contamination.

Based on what you have learned about compost and composting, let's do a short exercise.

Of the five locations shown around this produce farm, drag and drop the compost pile (at the bottom) to the best location to reduce the risk of contamination.

Incorrect.

The compost pile should not be this close to the produce field to reduce the risk of runoff or contamination through the wind.

Try Again.

Learning management system and satisfaction surveys to evaluate online courses

Mejoradores De Suelo | Food Safety | Soil Amendments | LRS.io | Analytics

Veracity Learning

HOME FEATURES SOLUTIONS RESOURCES JRUZANTE@RTI.ORG

Back To LRS

Dashboards

- Activity Overview
- Agent Overview
- LRS Overview

Custom Dashboards

Search

+ New Dashboard...

Water Safety (English)

Settings

Computer Training Evaluation Survey

Thank you for taking the time to complete this short evaluation survey. We will use the information you provide to improve the course.

Page 1 of 7

There were enough interactive features (meaning the questions and exercises) in the course to keep me engaged.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

reset

Next Page >>

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ONLINE COURSES (<https://foodsafetyclearinghouse.org/>)

Mejoradores De Suelo

Added by Juliana Ruzante • Last updated May 26, 2022
AUTHOR: Juliana Ruzante, Ellen Shumaker, Benjamin Chapman, and Renee Boyer
TYPE: Short Course
TOPIC: Soil Amendments, Produce Safety Rule (PSR)
LANGUAGE: Spanish

Bienvenidos a este módulo de capacitación sobre Mejoradores de Suelo para propietarios de granjas, y pequeños y medianos productores.

Este módulo fue desarrollado por RTI International, North Carolina State University y Virginia Tech. Este trabajo fue financiado por el Programa de Divulgación sobre Seguridad Alimentaria del Instituto Nacional de Alimentos y Agricultura del USDA (en inglés, USDA National Institute of Food and Agriculture, Food Safety Outreach Program), Número de Acceso: 1023628.

Le tomará aproximadamente 30 minutos para completar esta capacitación interactiva. Este curso proporciona información relacionada con mejoradores del suelo y ejercicios cortos para evaluar su conocimiento del material. Sus respuestas serán anónimas y no se recopilará su información (p. ej., nombre, empresa, dirección de correo electrónico). Sus respuestas serán recopiladas para preparar un informe que nos ayudará a mejorar el curso.

Al final de este curso, usted debería ser capaz de:

- Definir qué es un mejorador del suelo (incluyendo el mejorador biológico del suelo y el mejorador biológico del suelo de origen animal)
- Describir qué es un mejorador de suelo tratado y no tratado Identificar cómo los mejoradores del suelo pueden afectar la inocuidad de sus productos
- Enumerar los diferentes tipos de mejoradores del suelo
- Describir cómo puede reducir el riesgo al usar estiércol crudo

Production and Post Harvest Water Testing and Sampling

Added by Juliana Ruzante • Last updated May 26, 2022
AUTHOR: Juliana Ruzante, Ellen Shumaker, Benjamin Chapman, and Renee Boyer
TYPE: Short Course
TOPIC: Ag Water (Preharvest), Produce Safety Rule (PSR), Ag Water (Postharvest)
LANGUAGE: English, Spanish

Welcome to this Production and Post harvest Water Testing and Sampling training module for farm owners, small and mid-sized producers, and processors.

This module was developed by RTI International, North Carolina State University, and Virginia Tech and supported by the USDA National Institute of Food and Agriculture Food Safety Outreach Program, Accession No: 1023628.

This interactive training should take you roughly 30 minutes to complete. This course provides informative content related to production and postharvest water testing and sampling and short challenges to test your knowledge of the material. Your responses will be anonymous and none of your information (e.g.: name, company, email address) will be collected. Your answers will be aggregated to produce a summary report that will help us improve the course.

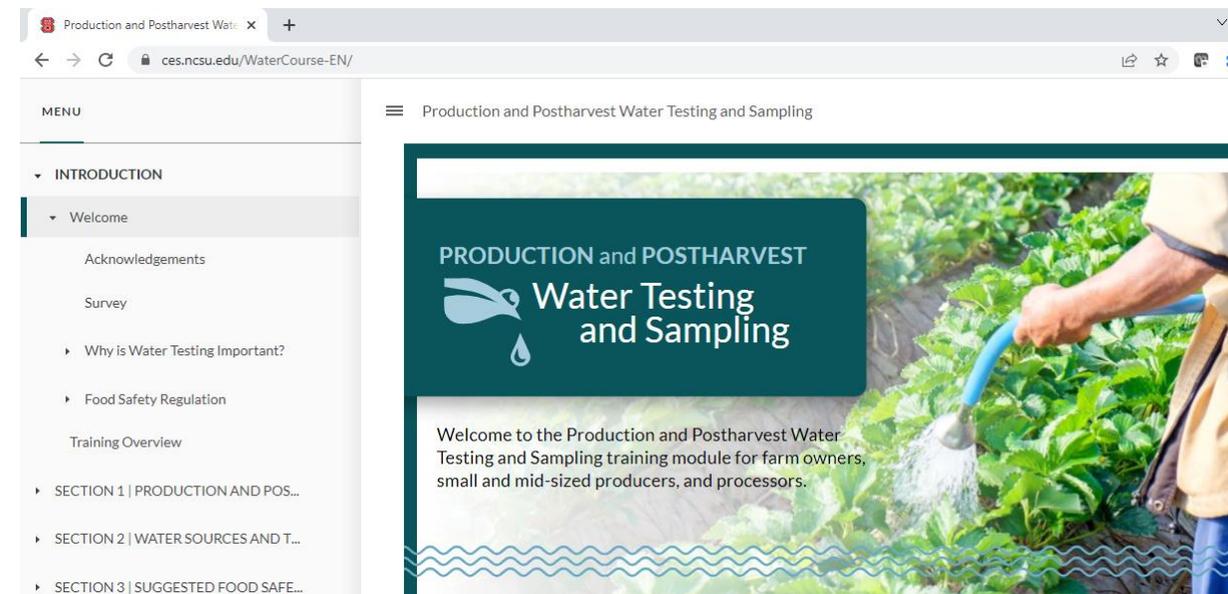
By the end of this course, you should be able to:

- Understand why it is important to test the water you use to grow and process produce at your operation
- Describe the differences between agricultural water, production water, and postharvest water
- Identify the different sources of water and their risks
- Describe how, where, and when to sample surface and ground water

ONLINE COURSES

- We estimate that about 50 individuals completed the online courses
 - 27% provided voluntary feedback via online survey and were mostly positive
- Included as part of VTech’s Enhancing the Safety of Locally Grown Produce course
- Courses received an “award of excellence” by the Society for Technical Communication (STC), Caroline chapter
 - Focus on editorial and visual quality, not technical content

**NEED YOUR HELP
DISSEMINATING!!**



Results

VIRTUAL TOURS and FACILITATOR'S GUIDE

- Farmer's market
- Small diversified farm



Results

- The virtual tours were used to train 36 family consumer science and other extension agents and 19 producers in NC as part of VT and NCSU in person trainings
- Have been well received and generated interest in the technology

“Very cool”

“Very engaging”

