IPM Outreach to the Latino Farming Community

April 21, 2021
Webinar Details

- Welcome

- A recording of this webinar will be available within a week at
  - http://www.neipmc.org/go/ipmtoolbox
We Welcome Your Questions

• Please submit a question at any time using the Q&A feature to your right at any time

• If you’d like to ask a question anonymously, please indicate that at the beginning of your query.
Extension Speaker/Introductions

Maria Gorgo
Extension Educator, Penn State Extension
• Commercial Horticulture
• Integrated Pest Management
• Farm Food Safety - FSMA and GAP
• Latino Community Outreach
• New & Beginning Farming
New Extension Introduction

Itzel Diaz
- Spanish Program Assistant
- Horticulture Program - Penn State Extension
- Specialist in outreach projects to the Latino community
Some Questions
for You
Penn State Extension Resources for Latino Farmers
LATINOS IN AGRICULTURE IN THE US

Northeastern IPM Center
Latinos in the USA – 2010 Census

- Largest minority; representing 16.3% total population
- 50.5 million individuals

Between 2000 and 2010:
- 43% of the nation’s population growth
- Accounts for over one-half (55.5%) Four times the growth rate of total population (9.7%)
- 38.2% of Hispanics under the age of 19
- 2050 Projection: ratio 1 : 3 of Hispanic origin
Hispanic Population Trends

Latinos in PA

• 6.8 % of population (719,660)

Source: National Census, 2015
So...what is the percentage of Latinos working in Ag?

43% employed in farming, fishing and forestry
Comparison of Occupation of Hispanics vs Non-Hispanics

Figure 6
Comparison of Occupations among Hispanics and Non-Hispanics
(percentage of population civilians 16 and older)

- Hispanic
- Non-Hispanic

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Hispanic Percentage</th>
<th>Non-Hispanic Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>0.5%</td>
<td>2%</td>
</tr>
<tr>
<td>Construction and Maintenance</td>
<td>8.2%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Production and Transportation</td>
<td>11.7%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Professional</td>
<td>18.2%</td>
<td>38.9%</td>
</tr>
<tr>
<td>Sales</td>
<td>21.9%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Services</td>
<td>15.4%</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau 2008
The number of Latinx principal agricultural operators in the country now stands at 112,451, up from 90,344, the figure reported in the 2012 census.
Producers by Ethnicity and Race

Consistent with Office of Management and Budget specifications for federal statistical agencies, the Census of Agriculture asked separate questions for ethnicity and race.

- Hispanic (any race): 112,451
- American Indian/Alaska Native: 58,199
- Asian: 22,016
- Black: 45,508
- Native Hawaiian/Pacific Islander: 3,018
- More than one race: 26,749

3.2 million producers are white, 95 percent of the U.S. total.
Average Age Continues to Rise

The average age of all U.S. farm producers in 2017 was 57.5 years, up 1.2 years from 2012, continuing a long-term trend of aging in the U.S. producer population. Producers also tend to be experienced; they had been on their current farm an average of 21.3 years.
Questions
What is Extension doing to address these changes?
What is Extension doing to address these changes?

- Increasing Spanish programming (educational materials and trainings).
- Providing professional development in cultural competency for Extension Educators.
- Hiring more bilingual Extension Educators.
- Assisting and supporting new minority farmers.
- Improving diversity within the College.
- Recruiting minority students – later work for government agencies and educational institutions.
Demographics of Farmworkers who attend Penn State Extension Bilingual Trainings

From Needs Assessments Interviews:
USDA-NIFA Beginning Farmer and USDA-PDA Specialty Crop Block Grants

• > 60% have family farms in their native countries
• < 3% are growing vegetables and fruit as part-time farmers
• > 65% aspire to be growers or specialized managers
LAN Meeting Planning Team
Penn State Research on Andragogy Principles and Best Extension Practices for Latinx Learners


Ratings of Methods of Learning Based on Experiences and Preferences

Survey participants (n=61) said they liked a variety of educational methods.

**Top Choices**
- On-Farm Demonstrations
- Study Circle Networks
- Tours of Other Growers’ Farms
- Self-Paced, Interactive On-Line Courses and Videos
- Interactive Workshops
Like a Mix of Educational Formats

During on-farm presentations you are able to ask; in the fact sheets and production guides there are things a speaker doesn’t have time to address; and during in-depth workshops there’s lots more information.

Desarrollando un Plan de Negocio

By Lynn Kime

Como la frase indica, un plan de negocios es una "hoja de ruta" para guiar el futuro del negocio o proyecto.

Ag Alternatives Series

• 21 bulletins in Spanish
Pest Management and Education

Agriculture
Public/Homeowners
Educators and Teachers

SEE ALL PEST MANAGEMENT AND EDUCATION

GET CONNECTED

Beginners and experts alike can learn the ins and outs of pest management and stay in the loop with timely alerts.

SIGN UP

RESOURCES

Meet the Pest Management and Education Experts
Past Management and Education News

2017 Penn State Agronomy Herbicide Trial Report
This weed field trials report is a summary of the 2017 herbicide trials conducted in corn, soybean, and other field crops by the Department of Plant Science at...

FIND OUT MORE

View Pest Management and Education Education by Type:

Articles  News  Online Courses  Guides and Publications  Videos  Workshops

- Total current asthma prevalence: 8.2%
- Male: 7.0%, Female: 9.3%
- 0–17 years: 7.7%, 18 years and over: 9.6%
- White: 7.8%, Black: 11.1%
- American Indian or Alaska Native: 8.8%
- Asian: 11.1%
- Non-Hispanic white: 8.2%, Non-Hispanic black: 6.3%
- Total Hispanic: 11.1%
- Puerto Rican: 4.9%, Mexican: 16.6%
- Below poverty: 7.3%, 100%–<200% poverty: 8.5%, 200% poverty and above: 11.6%
- Metropolitan: 8.1%, Nonmetropolitan: 8.7%
- Northeast: 8.3%, Midwest: 8.8%, South: 7.5%, West: 7.7%

NOTE: Estimates (except age-group-specific estimates) are age-adjusted to the year 2000 U.S. standard population.
SOURCE: CDC/NCHS, National Health Interview Survey.
Household Use
Dear Friend of Congreso,

I'm writing to invite you to Congreso's Housing Program's 1st Annual Housing Fair on [insert date] to support the Congreso Housing Program in the fight against homelessness!

With gratitude,

Cheneta M. Yates, MSA
Support Services Director

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Sincerely,

Changlu Wang
Assistant Extension Specialist
PA IPM
Latino Child Care Providers
Trainings
Mushroom IPM Training in Spanish
Spring Pesticide Meeting – Chester Co.
FREE Pesticide Applicator License Study Course in Spanish
For Mushroom Farm Workers

Dates: June 30, July 7, July 14, July 21
Time: 1:00PM–4:00PM
Location: American Mushroom Institute
Address: 1284 Gap Newport Pike, Avondale, PA 19311

Coursework includes National Core Manual Training plus additional requirements for private applicators
Meeting #1: Chapters 1-3 plus insects
Meeting #2: Chapters 4-6 plus weeds
Meeting #3: Chapters 7-11 plus diseases
Meeting #4: Option to take Exam.

Also Includes:
- Study Guide Material for each participant
- Demonstrations including toxicity, exposure, personal protective equipment, first aid, and labels
- Pesticide education consumer fact sheets

To register please contact:
Katie Puppiti at kapt5@psu.edu
OR: Maria Gorgo-Gourwich at mag38@psu.edu

The course is FREE but requires pre-registratson. Space is limited, please contact us as soon as possible to reserve your spot.

The program is offered by the PA Integrated Pest Management Program and the Pesticide Education Program and supported, in part, with funding from the Northeastern IPM Center and Penn State Extension.

extension.psu.edu
FREE On Farm Trainings in Spanish
For Mushroom Farm Workers

Penn State Extension and PA IPM will offer on farm trainings in Spanish for employees.

The following topics are available for presentation:

- Basics of IPM
- Exclusion Techniques
- Fly Life Cycles
- Personal Protective Equipment
- Szygites
- Fungal Disease Life Cycle
- Verticilium and Trichoderma

Each presentation will be limited to 35-45 minutes and will be offered through fall 2014. Two consecutive presentations can be made per visit.

To request a presentation please contact Maria Gorgo-Gourovitch at mag38@psu.edu to schedule a time.

Funding for trainings is provided by a grant from the Northeast IPM Center.

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.
Mushroom Phorid Flies IPM Research & Extension

• Prior to 2012, Diazinon was used to control mushroom phorid flies

• In 2012, the Environmental Protection Agency repealed the use of Diazinon on mushroom farms

• Since then, growers have no effective control methods
  • Exclusion is nearly impossible
  • Populations grow exponentially
Megaselia halterata
Mushroom Phorid Fly

- Larvae only eat mushroom mycelia
  - Flies are not reproducing in homes
  - Not living in your drains or yard
- Adult fly lifespan is ~4-5 days
- Lifecycle is ~22-24 days on farms

- Attracted to light
- Active during dawn and dusk
- They like to go “up”
- Prone to desiccation
  - Attracted to humidity
- Blown to your neighborhoods by the wind

Do Not Sting • Do Not Bite • Do Not Vector Disease
Suppress mushroom phorid fly populations

- Testing new insecticides in the lab
- Field trials of new insecticides
- Facilitate adoption of new insecticides
Testing new insecticides in the lab
Electrostatic Screening

- Statically charged
- Powdered pesticide adheres to screen
- Excellent delivery system for powdered insecticides
24 hour mortality (%)

Day 0  Day 30

Delta Dust (0.05%)
D-fense (0.05%)
Tempo (1%)
Tempo Ultra (10%)
OHP Decathlon WP (20%)
Demon WP (40%)
Cynoff Dust
Drione Dust
EcoPCO
Alpine Dust
Merit WP
Cyprinid Dust
Carbaryl Dust
Sevin
EcoVia WD
Diatomaceous Earth
Cimexa
Surround

*FIFRA 25(b) exempt

Pyrethroids
Imidacloprid
Plant essential oils + silica

Testing new insecticides in the lab
Field trials of new insecticides
Where do we apply insecticides?

Apply knowledge of insect behavior and mushroom farming:

• Flies are leaving the growing rooms to go outside

• Flies are entering the growing rooms from the outside

• Fly populations do not die out in the winter
  • Can move from room to room without going outside

Target the ports of exit and entry (externally and internally)
The Plan

- Windows were redesigned and outfitted with electrostatic screening
- EcoVia WD applied to screens after fill and reapplied weekly
- Progress monitored every other week

How often should we apply insecticide?

- “As needed”- workers trained to watch fly behavior on screens daily and apply insecticide according to the behavior
The Plan

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**How often should we apply insecticide?**

- “As needed”- workers trained to watch fly behavior on screens daily and apply insecticide according to the behavior
- Near elimination of flies on the farm

Experimental period: August-December
Pros and Cons

Pros

• Cheap
• Easy to apply
• Pesticides are not applied to crops

Cons

• Dedicated worker
  • Not a ‘set it and forget it’ treatment
• Application differs based on farm architecture and growing protocols
• Takes time to “feel” results

Start Early
Prevent the Buildup
Suppress the phorid fly populations

- Testing new insecticides in the lab
- Field trials of new insecticides
- Facilitate adoption of new insecticides
Take home messages

• Impactful research takes time
  • Learn about mushroom phorid flies
  • Learn about mushroom farming protocols across the industry
  • Make industry connections

• Significant mushroom phorid fly reductions at 2 test farms this season
  • During peak fly populations
  • Other farms in the area experiencing mushroom phorid invasions

• Building on positive results from this year

• Start early- prevent the buildup
Current Projects

• Continue insecticide testing
  • Products for farms and homes

• Work with additional farms
  • Farms often have unique architecture and growing protocols
  • Requires management strategies specific for each farm

• Developing educational materials
Study Circle Networks

Interview Responses
Study circles are an opportunity to

• *Share experiences*
• *Compare field results*
• *Generate new ideas*
Self-Paced, Interactive On-Line Courses and Videos

Explorando e Identificando Enfermedades en Tomates
By Marley E Skinner, Montserrat Fonseca Estrada, Tian... Length 8:37
Este video revisa los fundamentos de la exploración adecuada y la identificación de enfermedades comunes y sus síntomas.

Razones para Lavar los Productos Frescos
By Luke LaBorde, Ph.D., Lee Stivers Length 14:49
Las consideraciones de seguridad alimentaria son de importancia crítica durante e inmediatamente después de lavar las frutas y hortalizas fres...
Bilingual Farm Safety Trainings

Mushroom Industry – Apple Industry – Poultry Industry - Dairy Industry
Bilingual Farm Food Safety Trainings (FSMA)
Mushroom, Vegetable and Fruit Growers
Cross-Team Coordination

- Horticulture and food safety – FSMA certification
- Community vitality and horticulture – Risk management
- Pesticide education, agronomy and horticulture – Applicator certification
- Rural sociology, horticulture and community vitality – Supervisor training
Cooperative Efforts to Protect Essential Agricultural Employees during COVID-19
Maria Gorgo, Tara Baugher, Daniel Weber, Kathy Sexsmith, Michael Masiuk

Protecting Agricultural Employee Health during COVID-19

• Summer 2020: 5 Interactive webinars in partnership with ag health providers and the PA Department of Agriculture
Posters and pamphlets in English and Spanish to communicate practices and services to protect Ag workers from COVID-19
Bilingual downloadable Brochures on Farmworker Health Guide During the COVID-19 Pandemic

**REFERENCIAS Y RECURSOS**


Penn State Extension. “Coronavirus/COVID-19 Information.”
extension.psu.edu/coronavirus

Pennsylvania Department of Agriculture. “Food for Thought: Modifications to Seasonal Farm Labor Carry Requirements.”
agriculture.pa.gov/localforthought/Pages/Article.aspx?PostId=91

Si necesita un folleto gratis, llame al 717-334-0001 y dé su nombre, número de teléfono y dirección. Aquí la contactarán. Diríjase a la siguiente página para más información: keystonehealth.org/keystoneagricultureprogram

Las recomendaciones de CDC cambian regularmente. Visite cdc.gov/coronavirus para obtener la información más actualizada.

Gracias por su gran contribución durante esta pandemia como empleado de un negocio esencial de alimentos.

Publicación producida originalmente por Cornell Farmworker Program y adaptada con permiso para su uso en Pennsylvania por Penn State Extension y Keystone Health como parte de la colaboración Penn State Extension Multistate Impact.

**GUÍA DE SALUD PARA TRABAJADORES AGRÍCOLAS DURANTE LA PANDEMIA COVID-19**

**¿QUÉ ES EL CORONAVIRUS (COVID-19)?**
El coronavirus (COVID-19) es una enfermedad respiratoria que puede propagarse rápidamente de persona a persona. Actualmente no hay vacunas para prevenir esta enfermedad y por lo tanto la mejor manera de evitar que las personas se enfermen es evitar la exposición.

**¿CÓMO SE PROPAGA COVID-19?**
- El virus se propaga de muchas maneras incluyendo:
  - Entre personas que están en contacto cercano entre sí
  - A través del aire cuando las personas infectadas hablan, estornudan o toser.
  - Al tocar superficies contaminadas con el virus y luego tocarse la cara, la boca o los ojos.
Spanish Translations of Educational Resources

- **COVID-19 Extension Website**: Translation of 14 COVID-19 related articles.
  
  [https://extension.psu.edu/home-page-topics/coronavirus/shopby/spanish](https://extension.psu.edu/home-page-topics/coronavirus/shopby/spanish)

- Translation of 12 Commercial Horticulture Production articles.
  
  [https://extension.psu.edu/forage-and-food-crops](https://extension.psu.edu/forage-and-food-crops)

- Translation and Spanish recording of 10 Victory Gardens Reinvented! Webinar Series. Extension educators and Master Gardeners providing up-to-date, research-based information on best practices for growing vegetables in containers, raised beds, and in-ground beds.

- Translation of 9 Master Gardeners’ container gardening factsheets. Series of factsheets for home gardeners to help them grow fruit, vegetables and flowers.
Spanish Translations of Educational Resources

Agronomic Crops:

- Translation of 12 Soybean Sentinel Plot Reports - posted weekly at Agricultura en Espanol during the Summer of 2020

- Translation of 3 extension articles agronomic crops: posted on Agricultura en Espanol and also in Field Crops News

General Education:

- Translation of the article: Did you know that Penn State is at your service? Published in Agricultura en Espanol and the Extension Website
Food, Families & Health – EFNEP Nutrition Links

Suzanne Weltman & Translation Work Group: Olga Harper, Malu Tejado de Rivero Sawers, Pency Seraphin, Tabatha Valenti

Expanded Food and Nutrition Education Program: Nutrition Links

• **Outreach during COVID-19** to Pennsylvania’s under-served communities and families:

  Posted 21 healthy, low-cost SNAP-eligible recipe translations and tips on Nutrition Links Facebook page:

  [https://www.facebook.com/PennStateExtensionNutritionLinks/](https://www.facebook.com/PennStateExtensionNutritionLinks/)

• **Translation of 5 new Nutrition Links flyers** to market online classes to multiple agencies and audiences

• **Translation of 10 Easy Cooking from Pantry to Table** newsletters in progress

[https://extension.psu.edu/easy-cooking-from-pantry-to-home-newsletters](https://extension.psu.edu/easy-cooking-from-pantry-to-home-newsletters)
Reaching Latinx Audiences: 
Food, Families, and Health

• Bilingual presentation of Extension online resources 
  Requested by Mexican Consulate of Philadelphia 
  via Facebook Live
  Health & Wellness Team
  Family Well-Being Team
  Vector-borne Disease Team

• 2021 FFH presentation for Hispamos Unidos para Niños Excepcionales (HUNE)

• Alzheimer webinar series in Spanish in collaboration with the Alzheimer Association
Reaching Latinx Audiences: Vector-borne Team

- Summer 2021: Mini webinar series on Ticks and Tickborne Diseases in Pennsylvania
- Including: translation of key articles on the Extension website and as handouts
Latino/a Farming Community and Allies Networking Session

• Research indicates that networking can make Latino/a farmers even more successful by connecting to resources and fellow farmers. We created a network of Latino/a farmers and allies via Whatssup.
Virtual Spanish Language Session:
2021 Mid-Atlantic Fruit and Vegetable Convention
Leadership Training in Spanish Language for Farm Supervisors

Often workers are elevated to the role of management but because of intense work schedules, formal leadership training is needed to help them succeed in this new demanding role. This series introduces participants to the role of supervision and the many responsibilities that come with being a farm labor manager. This is done through a series of short lectures, discussion, and activities. In the turbulent business environment in which farms and agribusinesses operate, a supervisor’s role is highly demanding, stressful, and important to the overall success of the business. Farm business success depends greatly on a supervisor’s ability to fulfill many roles at the same time and with equal effectiveness while contributing to farm profitability.

A Series of 3 Virtual Workshops for Spanish-Speaking Supervisors to
Build Farm Leadership Skills

There is no fee for this pilot program thanks to a Science to Practice grant from Penn State Extension. Participants should plan to attend all sessions and have computer or smart phone Zoom video for interactive activities. Downloadable handouts will be shared in advance of the program.

Friday, January 15, 2021
2:30 – 3:30 pm
3:30 – 4:30 pm

From Manager to Leader
The Role of a Supervisor

Friday, January 22, 2021
2:30 – 3:30
3:30 – 4:30

Managing Stress
Dealing with Conflict

Friday, January 29, 2021
2:30 – 3:30
3:30 – 4:30

Managing for Trust
Mentoring Toolkit

Instructors:
Maria Gorge-Gourovitch, Extension Educator, Commercial Horticulture
Lyne Kime, Senior Extension Associate, New and Beginning Farmers
Carolyn Heni plaza, Ph.D. Student, M.Sc., OT, Graduate Assistant in Agricultural and Extension Education
Daniel Roberts, M.S. Student, Graduate Assistant in Agricultural and Extension Education
Linda Falcone, Extension Educator, Leadership and Community Vitality

For more information, please contact Tara Baughel, tw2350@psu.edu or Maria Gorge, mgorge@psu.edu

Please register at:
https://www.cvent.com/events/leadership-training-in-spanish-language-for-farm-supervisors/event-
Drinking Water Webinar
Extension Website and Facebook Pages

- [https://extension.psu.edu/](https://extension.psu.edu/)
  - Pop-up “Connect”
  - Or Customer Service → Manage E-Mail Preferences
    - [https://extension.psu.edu/email-preferences](https://extension.psu.edu/email-preferences)
- Multiple Facebook pages for Extension Offices & Units/Teams
Penn State Extension Agricultura en Español Facebook Page

- https://www.facebook.com/PennStateAgriculturaEnEspanol
Our Extension Social Media Pages

Business & Community Vitality Team:
• https://www.facebook.com/FarmBusiness
• https://www.instagram.com/psufarmbusiness/

Greenhouse Team:
• https://www.facebook.com/PSUExtGreenhouse

New & Beginning Farmer Team:
Coronavirus / COVID-19 Information

Health officials worldwide are closely monitoring and responding to the pandemic of the novel coronavirus (COVID-19). Penn State Extension is unique in the world as a trusted, unbiased, and cutting-edge partner in the translation of science that benefits all residents of Pennsylvania. During this current crisis, experts across all units of Penn State Extension have joined together to provide the resources you need during this time of uncertainty.

As the current COVID-19 situation continues to rapidly evolve, Penn State Extension is here to support you by continuing to provide science-based information and resources that you expect during these challenging times.

Even though our County Extension Offices are closed, Extension educators are still working and available by phone or email.
Find your local Extension Office and Educators.
THANK YOU
GRACIAS

Maria Gorgo B.S. M.S
Food Safety, IPM and Water Quality Extension Educator
Penn State University
mag38@psu.edu
Questions
Some Questions for You
Find a Colleague

• To post a profile about yourself and your work:
  http://neipmc.org/go/APra

• “Find a Colleague” site
  http://neipmc.org/go/colleagues
Recording of Tick IPM Webinar Series

• Past recordings and today’s Webinar will be available to view on demand in a few business days.

• http://www.neipmc.org/go/ipmtoolbox

• You can watch as often as you like.
Acknowledgments

- This presentation was funded in part by the Northeastern IPM Center through Grant #2018-70006-28882 from the National Institute of Food and Agriculture, Crop Protection and Pest Management, Regional Coordination Program.