

Latino Farmer and Ranchers' Perceptions on Native Plants for Sustainable Agriculture in Missouri.

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Background

In sustainable agriculture, native plants place an important role:

- they provide habitat for native pollinators and other beneficial insects,
- can be used in conservation practices and
- if grown as specialty crops could provide additional income

We are not aware of any research done to determine Latino perceptions of native plants in farm conservation practices, nature, their importance for wildlife and other environmental issues.

IMPORTANCE OF NATIVE PLANTS IN AGRICULTURE

Seed-nursery production, floral industry and food

Native fruit trees like wild plum, gooseberries, elderberries and paw paws, as well as, herbaceous perennials like wild leeks, goldenglow and nettles, have shown great potential as specialty crops in on-going studies

Wild Leek
'Ramps'
Allium tricoccum

Prunus americana
American wild plum

Bee balm (*Monarda fistulosa*)

Native gooseberry (*Ribes missouriensis*)

Native pollinators are declining worldwide

Native plants provide food and cover for pollinators.

However…..Many farmers and producers still do not know the role of native plants and many think that they *are not good for anything*

Null hypothesis

Latino farmers and producers do not know about native plants in Missouri and their importance in conservation or as specialty crops

Description of the study

A research study was conducted in Central and Western Missouri regions to determine Latino farmers' perception about sustainable agriculture.

Part of the study included to evaluate their knowledge about growing and managing native plants as a sustainable farming method.

For this part of the study

Main goal:

Determine the level of knowledge about native plants among Latino farmers and producers in Missouri

Objectives

-Complete surveys conducting live interviews with Latino farmers in two regions

-Develop a curriculum to provide training on sustainable agriculture including the importance and uses of native plants

-Determine change of knowledge after training

100 (12% of Missouri) Latino farmers and ranchers, 98% male, were interviewed, whose native language is Spanish

Statements included in surveys

1. I establish native plants to attract pollinators and improve agricultural practices
2. I protect and manage native plants in my farm
3. I identify different native plants: herbaceous and woody
4. I consume native edible plants
5. I establish native plants that sustain the monarch butterfly
6. I know which native plants are host plants for monarch butterfly
7. I have native fruit trees in my farm like elderberry and wild plum

To rate the level of knowledge and interest regarding native plants was done in a scale from agreeing to disagreeing to a series of questions

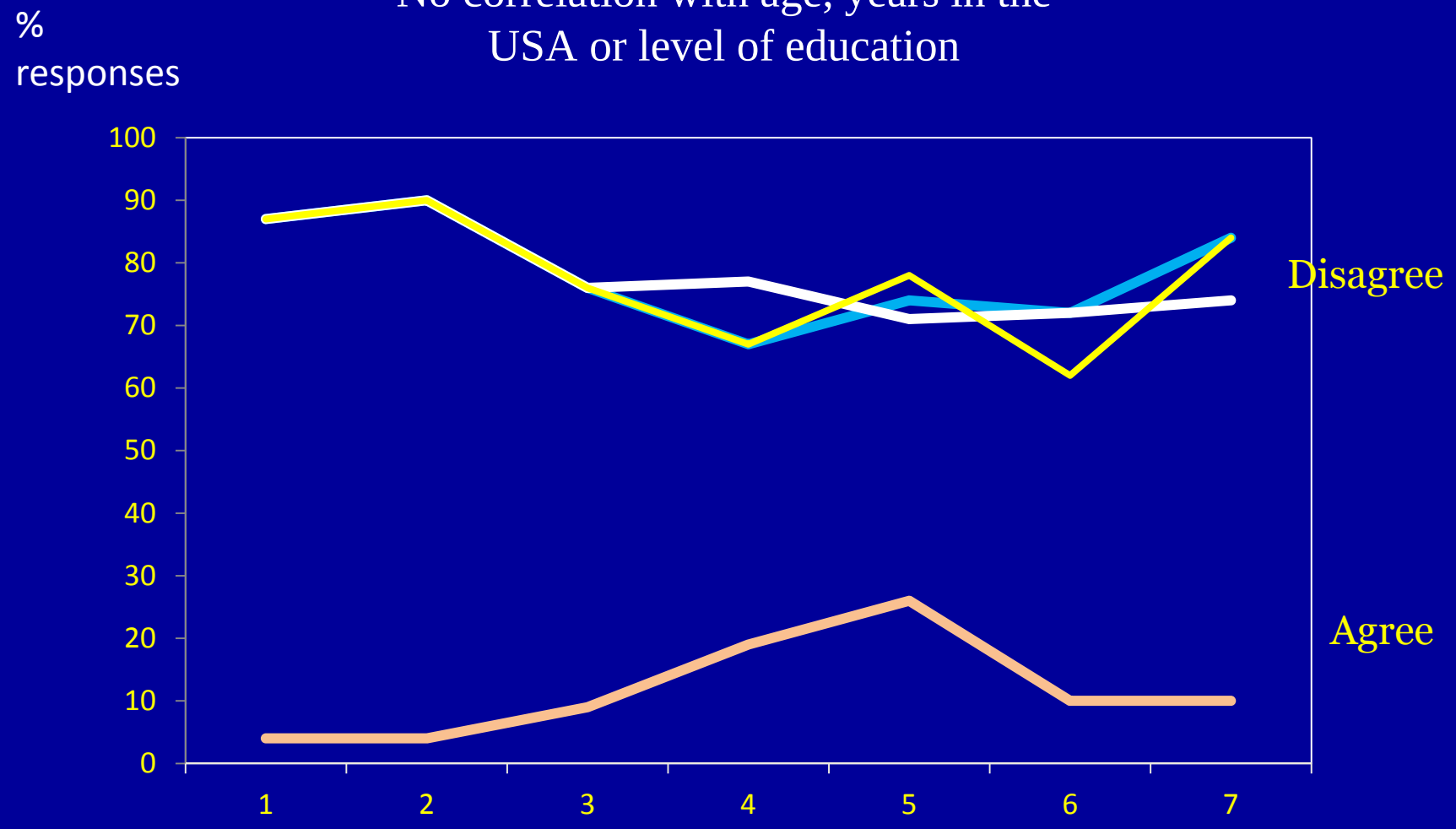
Definitely agree, agree, neutral, disagree and definitely disagree

5 variables used

Education level/years	No. people	Age	No. people	Years living in the US	No. people
<3	**35**	<25	6	<10	3
>3-6	**36**	25-35	10	10-15	9
>6-9	10	35-45	23	15-20	24
>9-13	16	45-55	**29**	20-25	20
>13	1	55+	**32**	25	**44**
N.A.	2				

And Gender and country of origin

All answers were very consistent
No correlation with age, years in the USA or level of education



Agree= Definitely agree + agree
Disagree=Definitely disagree + disagree

Only 4 to 20% indicated that they knew, consume, protect and grow them in their farms.

Based on these results training was justified and offered in spring and summer this year.

During training, special effort was made to involve youth and women as farmers or as spouses of farmers with the expectation that their participation will increase native plants inclusion in farms as a step forward to sustainability.

Expected Impacts

By getting trained on native plants and other sustainable practices, Latino farmers and producers will be empowered and be able to understand and apply for cost-share USDA programs.

By adopting native plants in their farms they will increase pollinators in their farms, reduce the use of chemicals, become resilient and able to adapt and succeed as farmers during these times of unpredictable and extreme weather events

Next step is to conduct an open survey with farmers that participated in training and apply for other sources of funding to conduct hands-on training

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