

ABOUT

Agri-Cultura Network

Agri-Cultura Network (ACN) is a farmer-owned brokerage based in Albuquerque's South Valley that markets and sells locally-grown, organic produce year-round.

ACN aggregates organic produce from 7 different farmers grown on 12 different farm sites across the South Valley. We market produce and salad greens to the local public school system, La Montinita Co-Op stores and Distribution Center, growers markets (Downtown, Nob Hill, Northeast, and Corrales) and restaurants. In addition, our La Cosecha Community Supported Agriculture (CSA) platform enables multiple growers to participate in a CSA that makes organic produce and nutrition education available to both full-paid and subsidized participants around Albuquerque.



TESTING TRADITIONAL PEST CONTROL

chemical-free
methods of pest control



RESEARCH

Focus on Life Cycle

Agriculture has been a way of life in New Mexico for countless generations, with Spanish settlers practicing sustainable methods for more than a dozen generations, with native communities having established those practices for countless generations before. Our project focused on researching traditional, chemical-free methods of pest control that have been passed down, mostly in an anecdotal way, for many generations.

The goal was to identify and document local methods of pest control as they have been practiced in New Mexico for centuries. We conducted interviews with New Mexico farmers and Native populations, with many of these videos available for

review on our website:

www.acnresearch.com

New Mexico is uniquely suited for this type of research, as traditional agriculture has been practiced here for centuries. The Pueblo Cultures, from the Anasazi to the Pueblos today, practiced farming as subsistence farmers who indeed relied on keeping their farming practices sustainable. Later, with the migration of Mexican indigenous peoples from Tlaxcala and Spanish settlers, these practices were further reinforced, with small-scale farmers by necessity practicing self-sufficiency and sustainable practices along the Rio Grande. These methods have been preserved and refined over centuries, yet many modern-day farmers have forgotten these traditional methods of their forefathers.

For the purpose of this project, we focused on squash bugs by running field trials on some of our farms. Squash bugs are a major problem in summer months, with infestations of the insects decimating crops rapidly during the summer months. The photo below illustrates the damage that these bugs do to squash plants.



Squash bugs have been very difficult for us to control without the use of chemicals. In the past, we've planted squash in the spring and harvested as much as we could before the bugs destroyed the plants, basically seeing the bugs as a force of nature that we had no power to control or counteract.



After trying a number of different traditional methods, we were unable to replicate the results that had been described. In general, the methods that were described to us were highly variable in terms of how they should be implemented and lacked the type of specificity we needed to make them work. However, in the course of our research and testing of methods, we were able to identify one key vulnerability in combating squash bugs: they have a very consistent and predictable life cycle. By focusing on this aspect of the squash bugs, we developed a new technique that combined old approaches (i.e. monitoring life cycles of the bugs) with newer technology.

HOW IT WORKS

A New Technique

Because the eggs hatch within 7-10 days of them appearing on the leaves, removing them on a 6-day cycle will prevent them from destroying your plants. The key to this approach is consistency. Although it is a bit labor intensive, going through and inspecting the plants every six days and removing any new egg clusters will ensure no infestations or widespread damage. The challenge is removing the eggs in a way that is fast and doesn't cause major damage to the plants.



After experimenting with various methods of removing the egg clusters, we discovered that the use of simple gray "duct" tape is the most efficient, effective way to do this. After testing various brands, we found that Gorilla Brand tape works the best. It's more expensive but very sticky. If you place the tape on the eggs and peel it off carefully, you won't tear the leaves and you will remove all the eggs. It takes a little practice, but if you do it on a regular schedule you can keep them under control.

