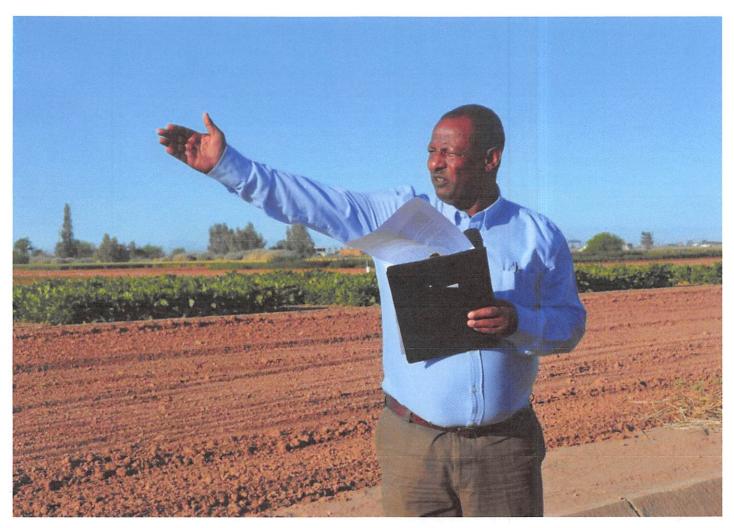
https://www.thedesertreview.com/agriculture/uc-hosts-field-day-to-discuss-alternative-pesticides-and-water/article\_577a25ea-5f65-11e9-be7f-7b4801ba294a.html

## UC hosts 2019 field day to discuss alternative pesticides and water conservation

By Stephanie Garcia Apr 15, 2019



Oli Bachie, University of California CE Agronomy Advisor speaks during the 2019 Agronomic Crops and Irrigation Water Management Field Day, Thursday, April 11.

Photo by Stephanie Garcia

**HOLTVILLE** – The University of California Cooperative Extension (UCCE) organized the 2019 Agronomic Crops and Irrigation Water Management Field Day, Thursday, April 11, to discuss alternative pesticides and crop life in the Imperial Valley and water conservation.

Local farmers and Imperial Irrigation District (IID) workers rode around sugar beet, onion, and quinoa fields as Oli Bache, UCCE Agronomy Advisor, Jairo Diaz, UC ANR Desert Researcher, and Ali Montazar, UCCE Irrigation and Water Management Advisor, all presented information for the field day.

The first route took place at a sugar beet field where Bache announced that sugar beets in the Imperial Valley were grown on 24,929 acres in 2017 with an average production of about 45 tons/acre of beets at a total value of \$53,599,000, according to the Imperial County Crop report. Sugar beet planting begins in the first week of September and is completed by the last week of October.

According to the UC Insect Pest Management Guidelines, the intensity of pest activity is greater during the earlier planting dates, and when severe infestation occurs, insects may cause significant economic losses.

Common insect pests of sugar beets during early seedling emergence are flea beetles, crickets, and cut worms. Currently, chlorpyrifos controls insect pests. However, its use is under consideration and is expected to be banned due to a suspected carcinogenicity to the nervous or endocrine systems to humans and other animals.

In the event of the ban, growers of the Imperial County may not have alternative insecticide chemicals with proof or efficacy for sugar beet insect control as an alternative to chlorpyrifos, but the UCCE is planning on collaborating with neighboring county farm advisor Michael Rethwisch and UC extension specialist Steve Kaffka to undertake an alternative to chlorpyrifos.

The trials include testing and identifying potentially safe and effective sugar beet insecticide chemicals under actual production conditions of Imperial Valley that would protect the safety of growers and reduce dependence on chlorpyrifos while providing environmental benefits.

Montazar presented the Alfalfa Sub-Surface Drip Irrigation trial where UCCE will evaluate the wateruse in alfalfa via sub-surface drip irrigation (SDI) and identify the economic viability of deficit irrigation management practices that can optimize alfalfa forage production while conserving water in the Imperial Valley using Tule Technology.



Diaz also informed guests on the updated onion research, which included the different water management techniques and fertilizer rates in onion production. The main goal of the onion research is to evaluate different water management techniques and fertilizer rates in onion production in arid regions.

Growing quinoa is a new experiment being tested in Imperial Valley fields, which has many desirable traits such as high protein content, moderate carbohydrates, and no gluten. According to Bachie, quinoa is said to adapt to various hot and dry environments and is sought for its drought tolerance, however, the low altitude of the Imperial Valley may be a climate barrier.

Quinoa was planted in mid-December and germinated about seven days after planting. Most of the varieties have shown excellent seedling establishment and vigor during the few weeks after germination.

UCCE will evaluate potential insect pests, plant pathogens, and weed problems to monitor the health and conditions of the quinoa varieties. High temperatures in the Imperial Valley can be a hazard to quinoa, as high heat can sterilize the pollen and lower the yield of quinoa, according to Bachie.



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