

USDA Agricultural Research Service
National Program 305
Crop Production
External Panel Retrospective Review: 2018-2023

EXECUTIVE SUMMARY

The 2023 Retrospective Assessment Panel wishes to thank the NP 305 USDA -ARS Crop Production Team, for the opportunity to participate in this 5-year retrospective review of NP 305. The Retrospective Review Team included both stakeholder leaders, and University experts. The Review team wanted to make sure they were invited to the future planning session.

The review team's comments for each Problem Statement were submitted by perspective Team Members, to one of two Review Team members knowledgeable for the retrospective sections:

Dr. Oscar Liburd, University of Florida summarized the comments sections for Component 1: Integrated Sustainable Crop Production Systems.

Chris Hiatt, Vice President, and Executive Board Member, American Honey Producers Association, summarized the comments sections for Component 2: Bee and Pollination.

Special thanks to **Dr. Claire Kremen**, who came through even though she had recently moved her program from UC Berkeley to University of British Columbia. Dr. Kremen was also instrumental in setting an example for the Problem recaps.

Bob Jones, The Chef's Garden. Bob is an industry leader, innovator, and stakeholder advocate for multiple industry CEA projects.

Dr. Mike Bledsoe, Village Farms. Has been a Controlled Environment Agriculture (CEA) advocate for over 25 years. Has Chaired the Commodity Liaison Committee (CLC) for the IR-4 program and championed Pesticide registrations for Greenhouse use in both the USA and Canada.

This year was difficult to get all the presenters and Review team together for both the training and the 5-year recap presentations. Following the presentations, the retrospective team established how to proceed. In the following pages you will see the specific comments and suggestions for each Component and Problem.

One of the program's strengths noted was the Grand Challenges that were discussed and presented. Today, it is difficult to discuss any discipline, such as Pathology without including Entomology and Weed Control. At the previous NP 305 stakeholder session, it was pointed out not to segregate Pathology, Entomology, and Weed Control and that other disciplines need to be considered in the future. An example cited was in the Greenhouse Vegetable industry, many of the pathogens were carried by arthropods. This is also true for mechanically transmitted virus like tomato brown rugose fruit virus (ToBRFV). It is good to see the USDA-ARS has continued to embrace the Grand Challenge approach.