Emerging Viruses in Cucurbits Working Group Discussion Topics

In the first year of its establishment, the Emerging Viruses in Cucurbits Working Group (EVCWG) addressed several discussion topics/questions. EVCWG members will rank responses to these topics/discussions from the highest to lowest priority and will determine the best steps to take to address the highest priorities for each discussion topic. The

- 1. What are the potential risk factors for viruses affecting cucurbits?
- 2. What approaches can we take to mitigate threats?
- 3. What can industry and academia do to coordinate efforts to reduce threats?

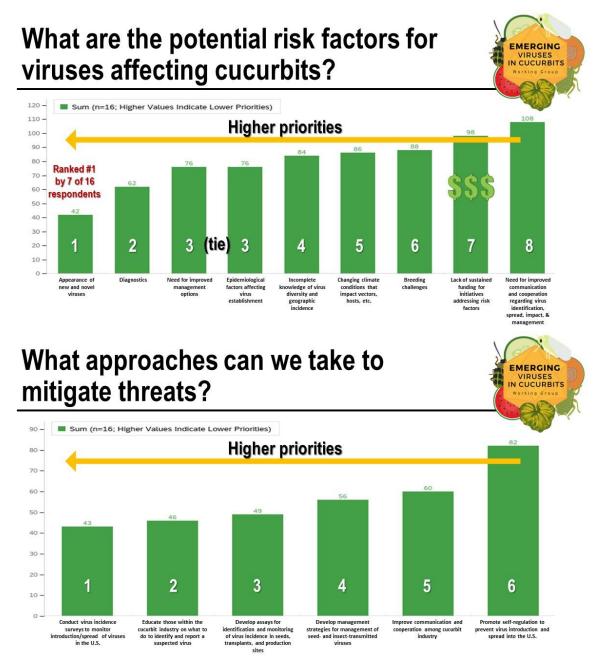


Emerging Viruses in Cucurbits Working Group Priorities (Not Ranked)

- 1. What are the potential risk factors for viruses affecting cucurbits?
 - Appearance of new and novel viruses
 - Need for improved management options
 - Breeding challenges
 - Changing climate conditions that impact vectors, hosts, etc.
 - Epidemiological factors affecting virus establishment
 - Diagnostics
 - Lack of sustained funding for initiatives addressing risk factors
 - Incomplete knowledge of virus diversity and geographic incidence
 - Need for improved communication and cooperation regarding virus identification, spread, impact, and management
- 2. What approaches can we take to mitigate threats?
 - Educate those within the cucurbit industry on what to do to identify and report a suspected virus
 - Promote self-regulation to prevent virus introduction and spread into the U.S.
 - Develop assays for identification and monitoring of virus incidence in seeds, transplants, and production sites
 - Develop management strategies for management of seed- and insect-transmitted viruses
 - Conduct virus incidence surveys to monitor introduction/spread of viruses in the U.S.
 - Improve communication and cooperation among cucurbit industry
- 3. What can industry and academia do to coordinate efforts to reduce threats?
 - Develop uniform regional, national, and/or international strategic plans to limit the introduction/spread of viruses affecting cucurbit crops

- Develop and make accessible "standard" protocols for virus detection that don't conflict with proprietary information
- Develop biotechnology tools/resources (e.g. CRISPR, genetic resources) for use in breeding to assist with development of virus-resistant varieties
- Develop a working group to bring collaborators together to address current and future virus-related challenges
- Develop a forum to facilitate communication throughout the cucurbit industry

Emerging Viruses in Cucurbits Working Group Priorities (Ranked – 10/2022)



Updated: October 2022

What can industry and academia do to coordinate efforts to reduce threats?



