

IMPACT ON CONSUMER SAFETY

ISSUE – FUNGAL GROWTH IN MICROGREEN TRAYS

- The Thrive and Grow farms in Arizona grows fresh produce for its customers.
- The farm owner noted widespread fungal growth in seedling trays used in their microgreen operation.
- They contacted the plant disease diagnostic lab at the School of Plant Sciences, University of Arizona in Tucson for help.



Fungal growth on germinating sunflower seeds

APPROACH – IDENTIFYING THE PROBLEM



Aspergillus Flavus, aflatoxinproducing fungi

- The plant disease diagnostic lab isolated two different fungus and performed DNA sequencing for identification.
- One fungal growth was identified as *Aspergillus flavus*, a known source of aflatoxin, a compound dangerous to human health.
- The lab promptly contacted the grower, who destroyed the entire crop.

ADDITIONAL IMPACTS

• Fungal monitoring of fresh-grown produce is important for the health and safety of the community by preventing pathogenic infections that could produce toxic secondary metabolites.

My lab was proud of being able to help this client. – Jiahuai Hu, Associate Specialist & Associate Professor The University of Arizona School of Plant Sciences

