

# All-natural fungicides for produce growers moving ahead as Akorn Technology wins NSF grant to replace synthetic products

*Essential oil-powered solution protects citrus, mangos, avocados, and other high-value crops - commercial trials start Q4, 2025.*

BERKELEY, CA, CA, UNITED STATES,

September 22, 2025 /

[EINPresswire.com/](https://www.einpresswire.com/) -- [Akorn](#)

Technology, Inc. announced today it has been awarded a prestigious [National Science Foundation](#) (NSF) Phase IIB Small Business Innovation Research (SBIR) grant to advance groundbreaking plant-based edible coatings for fresh produce. This next-generation solution will enable the first commercial post-harvest application of essential oils combined with other natural plant extracts to control devastating plant pathogens without synthetic fungicides.



Post-harvest treatment on oranges in packing house

By combining natural antimicrobial agents with proprietary upcycled plant protein technology, Akorn will deliver a safe, sustainable, and highly effective solution that extends shelf life, reduces food waste, and improves food safety. The technology has broad applicability for many high-value crops including mangos, avocados, sweet potatoes, citrus, and other produce affected by common diseases such as anthracnose, stem end rot, and blue and green mold.

Common chemical fungicides frequently lead to the development of resistant strains of pathogens, forcing growers to use higher doses or switch to new chemicals. This vicious circle frequently ends with producers getting shut out of major markets due to poor quality or Maximum Residual Limit (MRL) breeches. Akorn's formulation, by contrast, contains a broad range of plant-derived active compounds that work in synergy, making it far more difficult for resistance to develop and helping break this costly and unsustainable cycle.

“Our mission has always been to tackle the global challenge of food waste with sustainable, science-based solutions,” said Anthony Zografos, CEO of Akorn Technology. “This NSF award is both a recognition of our progress and a critical boost to our efforts to replace harmful synthetic fungicides with safe, natural alternatives. We’re bringing together the best of nature and science to protect fresh fruits and vegetables from farm to table.”

The award aligns with the Make America Healthy Again initiative of the U.S. administration to remove harmful chemicals from foods. “This research directly supports that goal,” Zografos explained. “By reducing post-harvest losses and eliminating toxic residues, we can make a meaningful contribution to public health, environmental sustainability, and the global food supply chain.”



Akorn-coated mangoes on packing line



Akorn Logo 3

Emphasizing the market opportunity, Zografos said Akorn was inviting interested growers to contact the company to secure a place in the first round of commercial trials, starting in Q4, 2025. “This is a chance to be at the forefront of an agricultural breakthrough that will improve product quality, meet consumer demand for clean-label produce, and open doors to premium export markets,” he added.

“

By reducing post-harvest losses and eliminating toxic residues, Akorn can make a meaningful contribution to public health, environmental sustainability, and the global food supply chain.”

*Anthony Zografos, PhD,  
Founder and CEO*

The announcement marks the fourth consecutive NSF grant awarded to Akorn to develop and launch its platform of all-natural, highly effective post-harvest solutions.

Akorn Technology will be highlighting its full range of solutions for fruit and vegetable producers at the [IFPA Global Produce and Floral Show](#) 2025 in Hall A, Booth TA2 in the Tech Accelerator Pavilion's Innovation Hub from October 16-18, 2025 in the Anaheim Convention Center, Anaheim, CA.

## About Akorn Technology

Akorn Technology, Inc., based in Berkeley, California, develops and commercializes innovative, plant-based edible coatings that extend the shelf life of fresh produce while maintaining its quality, flavor, and nutritional value. Akorn's proprietary water-dispersible vegetable protein technology is plant-based, sustainable, and compatible with existing packinghouse equipment, enabling easy adoption worldwide.

Anthony Zografos

Akorn Technology

+1 415-612-0497

[email us here](#)

Visit us on social media:

[LinkedIn](#)

[Instagram](#)

[Facebook](#)

[YouTube](#)

[X](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/849612001>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.