

# The post-harvest period.

Vineyards and orchards face numerous abiotic stresses throughout the season, such as heat waves and drought. Trees and vines are often weakest post-harvest and require proper energy stores to fuel spring growth. Applying Acadian Plant Health™ (APH) *Ascophyllum nodosum* biostimulants can boost early growth and help growers maximize yield potential next season.

### Bioactive compounds in APH biostimulants help...

- Increase nutrient uptake and reserves in tree and vine root systems, especially after harvest when nutrient levels are depleted from the previous growing season.
- **Promote root growth** to establish a robust root system, supporting future growth.
- **Improve stress resistance.** Ascophyllum nodosum biostimulants enhance tree and vine tolerance to stress after harvest against fruit removal and environmental factors.
- **Reduce recovery time** by enhancing overall tree and vine health and resilience, preparing plants for the next growing season.

- **Fight early defoliation**, supporting next spring's shoot growth, bud and canopy development, as well as flowering.
- **Improve photosynthetic efficiency** of trees and vines, which helps produce more energy and faster recovery from the energy demands of the harvest period.
- **Boost soil health** by increasing microbial abundance and activity. Healthier soil supports better root development and nutrient uptake, which can help with faster recovery post-harvest.





### Strengthen nutrient reserves.

Poor accumulation of energy reserves post-harvest can greatly affect plants' performance next season. Without proper nutrient stores during dormancy, plants may face additional challenges during early growth. Applying APH biostimulants post-harvest helps with early growth. It also helps boost reproductive growth and fruit development before substantial canopy development can supply trees and vines with the required energy.

### Fight water stress.

Post-harvest water deficits can reduce plant respiration, root growth, and carbohydrate storage, impacting water and nutrient uptake. APH biostimulants promote the production of proline, a natural stress protector with beneficial effects during seasonal water shortages. Proline allows plants to maintain growth by protecting plant proteins and cell membrane integrity and preventing water loss.

### Support soil health.

Microbes in the rhizosphere called arbuscular mycorrhizal fungi (AMF) benefit soil with better aggregation and structure. This promotes water and nutrient retention, supports healthy root development, and increases organic carbon storage. APH biostimulants promote biome growth by nourishing AMF, increasing roots' surface area. Expanded roots offer plants better nutrient and water availability, helping boost energy reserves and crop performance.

ACADIAN™

BEYOND

PLANT HEALTH

SEA

#### APH extracts have complex carbohydrates and bioactives working to protect plants.

Polysaccharides

Increase antioxidant

levels and help protect

plants from stress



Mannitol Protects and adjusts the amount of water in plant cells during water-related stress



Betaines Help plants adjust water levels, salt, and other substances within cells to mitigate abiotic stress and protect chlorophyll



Oligosaccharides Elicit abiotic defense mechanisms



Proline Protects plant proteins and cell membrane integrity while preventing water loss

## Hit the ground running.

Post-harvest APH biostimulant applications in vineyards and orchards can help increase next season's plant productivity. Get set for a successful spring with Acadian Plant Health biostimulants.

Toll Free: 1 800 575 9100 · Tel: +1 902 468 2840 · AskUs@acadian.ca 30 Brown Avenue, Dartmouth, Nova Scotia, Canada, B3B 1X8

acadianplanthealth-na.com

© 2024 Acadian Seaplants Limited. All rights reserved. <u>Acadian Plant Health™ is a trademark of Acadian Seaplants Limited</u>