Knowledge grows

AL-Bio7

AL-Bio7 is an innovative biostimulant, featuring a propriety strain of the bacteria Pseudomonas azotoformans, that enhances plant growth and resilience. Its formulation allows it to colonize both the plant's internal tissues and the surrounding soil, providing essential nutrients where plants need them most. This dual action improves nutrient use efficiency, supports growth, and helps plants better withstand environmental stressors.

AL-Bio7 Key Benefits Include:

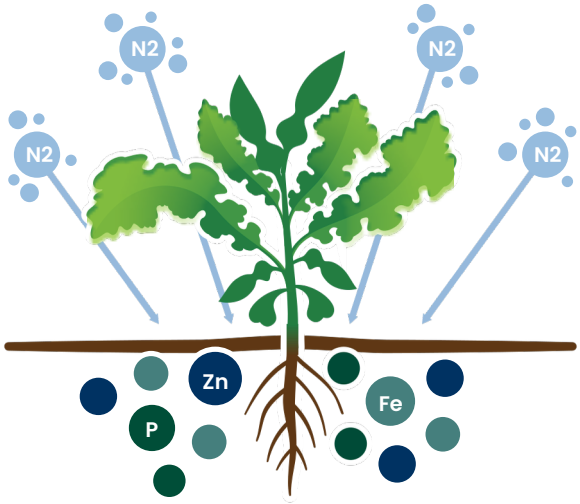
- **Improved Nutrient Availability:** By helping to release key nutrients phosphorus, zinc, and iron, AL-Bio7 enhances nutrient availability and uptake efficiency.
- **Reduced Plant Stress:** Enzymatic activities within AL-Bio7 help mitigate plant stress caused by drought, heat, and other environmental factors, allowing plants to thrive under variable conditions.
- **Better Yields:** AL-Bio7 stimulates the production of plant hormones that encourage robust root and shoot development, leading to healthier, stronger plants with improved establishment, and higher overall yields.

Technical Details

Active Ingredients	Pseudomonas azotoformans strain AL-336
Formulation	Soluble Concentrate (SC), 1x108 CFU/mL
Rate	0.2 L/Ac (0.494 L/Ha)
Dilution	1:100 with water
Application Method	In-Furrow at planting or as seedling dip at transplant

Applications

AL-Bio7 is adaptable for various crops. Its benefits in nutrient efficiency, growth promotion, and stress tolerance make it suitable for both small-scale and large-scale agricultural applications, from horticultural crops to extensive row crops.



- AL-Bio7 is a naturally occurring bacteria isolated from highly productive agroecosystems
- Functions as biofertilizer capable of releasing various nutrients from the soil
- Stimulates root growth
- Reduces transplant shock
- Improves tolerance to adverse conditions, such as high salt content soils

Image & Data Credit: A&L Biological Inc.

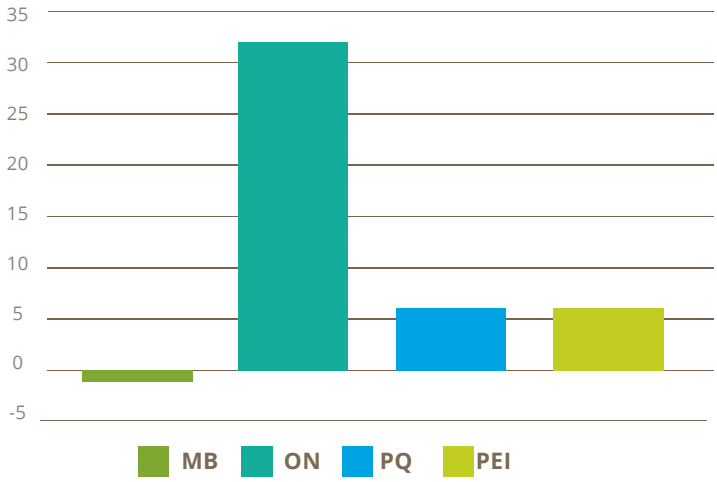
2-Yara-Bio-7-PDS-CA-0125-R5

Improved Yields with **AL-Bio7**

YIELD INCREASE (%) IN POTATO (2022)

AL-Bio7 AT 0.2 L/AC IN-FURROW

AL-Bio7 returned an average yield increase of 10% in 2021/2022 in third-party field trials conducted in Canada

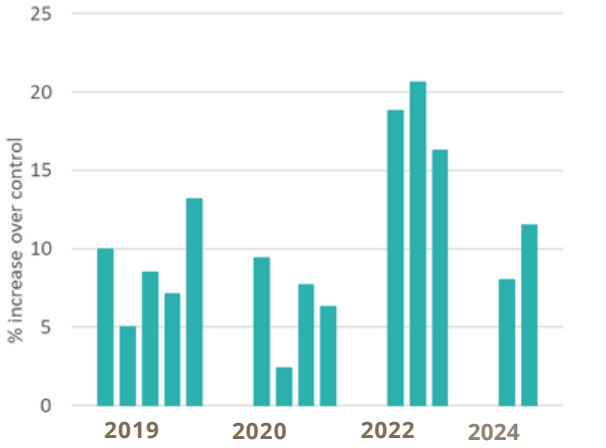


Data provided by A&L Biological Inc.

YIELD INCREASE (%) VS. CONTROL IN TOMATO

AL-Bio7 APPLIED AS SEEDLING DIP AT TRANSPLANT

AL-Bio7 returned an average yield increase of 10% in processing tomato field trials conducted from 2019 to 2022 in Ontario



NOTE: No trials were conducted in 2021 due to the Covid-19 pandemic.

Data provided by A&L Biological Inc.

AL-Bio7 has been extensively tested in growth rooms and field trials on a wide range of horticultural and field crops throughout North America and has consistently improved yield and quality. Third party trials in potato, initiated in 2021 and continued through 2022 have demonstrated an increase in both total and marketable yields.

Application Method	Rate	Directions
IN-FURROW APPLICATION AT THE TIME OF PLANTING	0.2L/Ac (0.494L/Ha)	Apply at planting directly over or behind the seed prior to covering.
FIELD TRANSPLANTING	1:100 with water	Apply to the planting row at the time of transplant. Contact Yara Canada regarding product compatibility with liquid fertilizers.
SEEDLING TRANSPLANT, ROOT DIP AND CUTTING APPLICATION	1:100 with water	Dip bare roots, basal end of cuttings, plugs or seedling trays in the solution for 1 - 2 minutes before planting
DRIP IRRIGATION	0.2-2L/ac	Apply product immediately after sowing or transplanting
SOIL OR MEDIA DRENCH	1:100 with water	Thoroughly drench the soil or growing media in trays, flats, plugs, pots or planting beds before or after seeding, sticking or transplanting. Follow water and fertilization programs as usual.

Please contact your Yara Canada representative today to learn more about **AL-Bio7**.