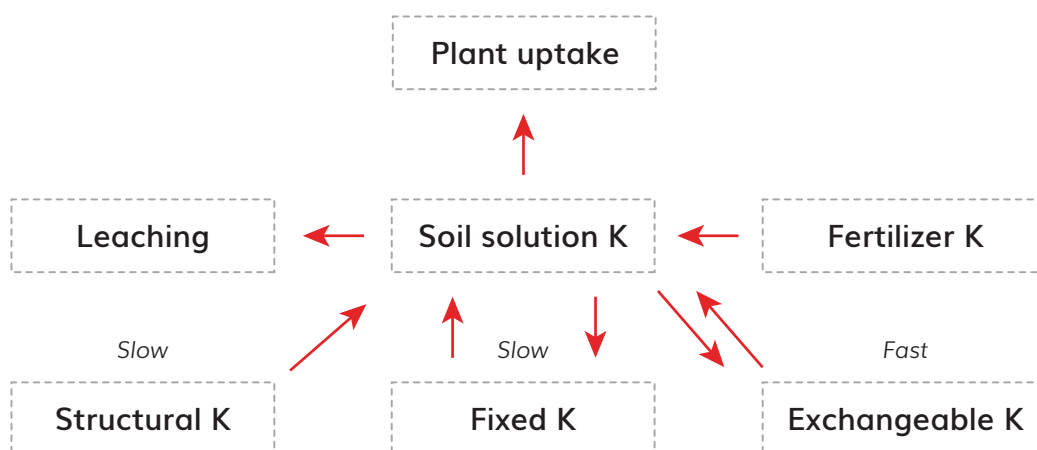




Introduction

Potassium improves a plant's ability to absorb and retain soil moisture, therefore improves the plant resistance to droughts. Assuring that plants have no shortage of potassium, leads to effective photosynthesis and plants produce more amino acids.

When the root system is strong and well developed, it is more efficient in symbiosis with microbials, increasing better resistance to diseases and accordingly leads to better plant health. Potassium is a part of soil sorption complex, meanwhile, absorbed potassium is hardly assimilated by plants and the lack of this element becomes a problem for the plant with clearly expressed characteristics. Optimal potassium balance enables plants to use solar energy efficiently by chlorophylls and accelerates sugar transportation inside the plant.



Challenges

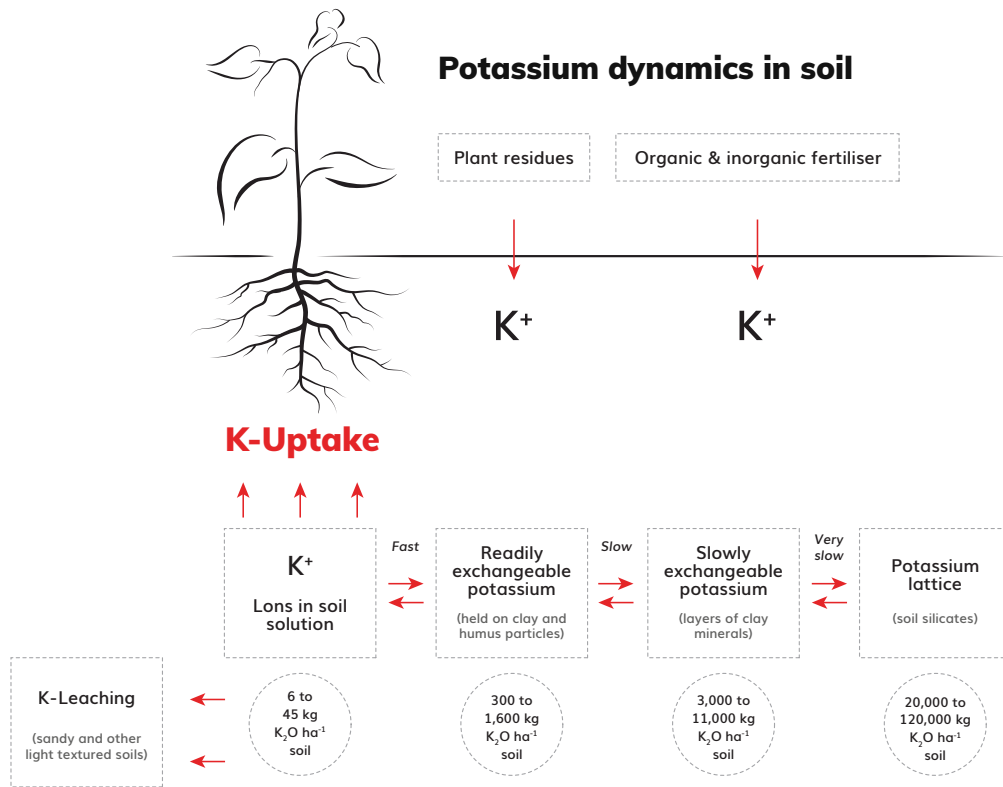
Potassium is one of the key elements in plant nutrition. There are many forms of potassium in the soil, some of them are unavailable for plants. Plants cannot uptake insoluble potassium. Due to shortage of potassium in the plant, leaves contain mineral nitrogen that can not be exchanged to organic compounds, then plants are not resistant to droughts, they dry out earlier and the plant health cycle is interrupted. In order to respond to those problems, biological products for potassium mobilization are widely used.

Solution

Bacto-K – plant microbial stimulator, for optimal potassium balance.

Registration information and certificates

Suitable for: cereals, rapeseed, corn, sugar beet, vegetables, fruit trees, fruit bushes, berries.

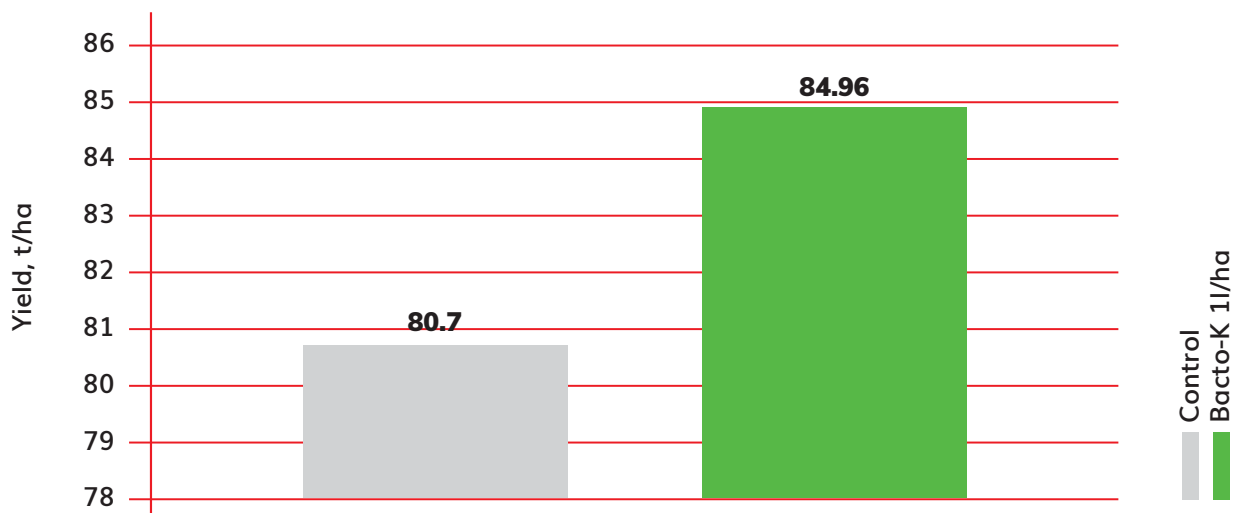


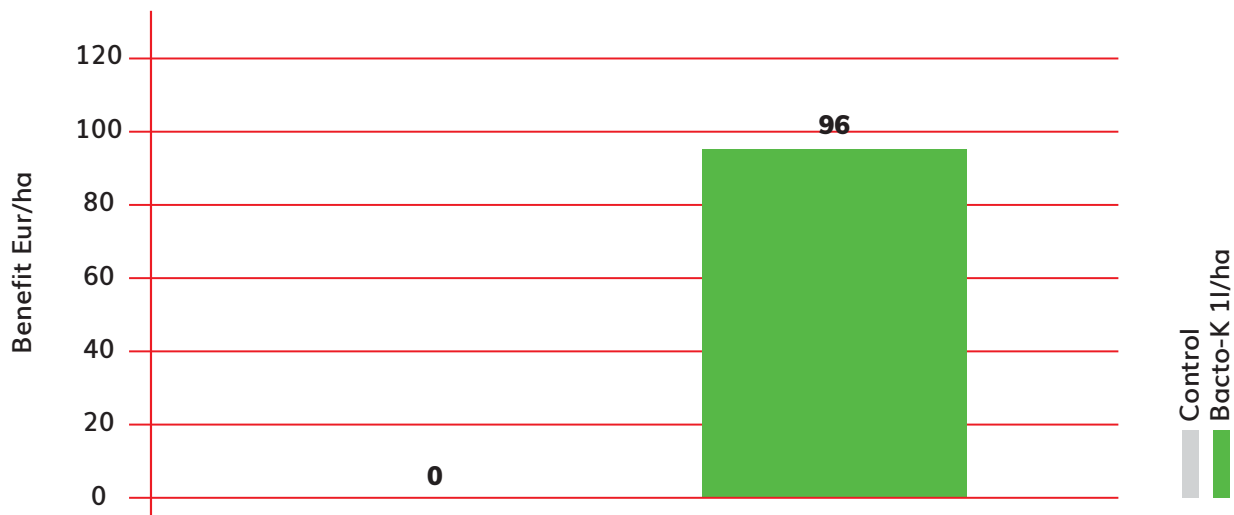
Mode of action

Active microorganisms exude enzymes, which decompose silicates and other compounds, and mobilizes potassium in forms that plants can easily absorb. The bacteria produce biologically active substances, stimulating plant growth and development.

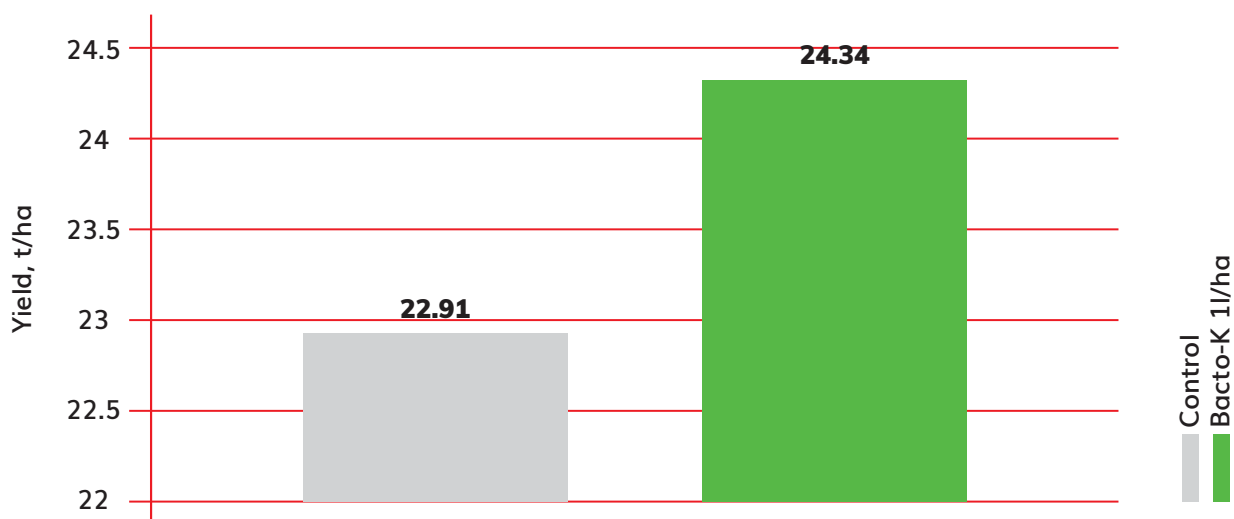
Benefits and Results

- Improves better potassium assimilation, up to 40 kg/ha;
- Increases resistance to droughts and frost;
- Accelerates photosynthesis;
- Improves better potassium balance in the soil;
- Enhances higher yield and quality.

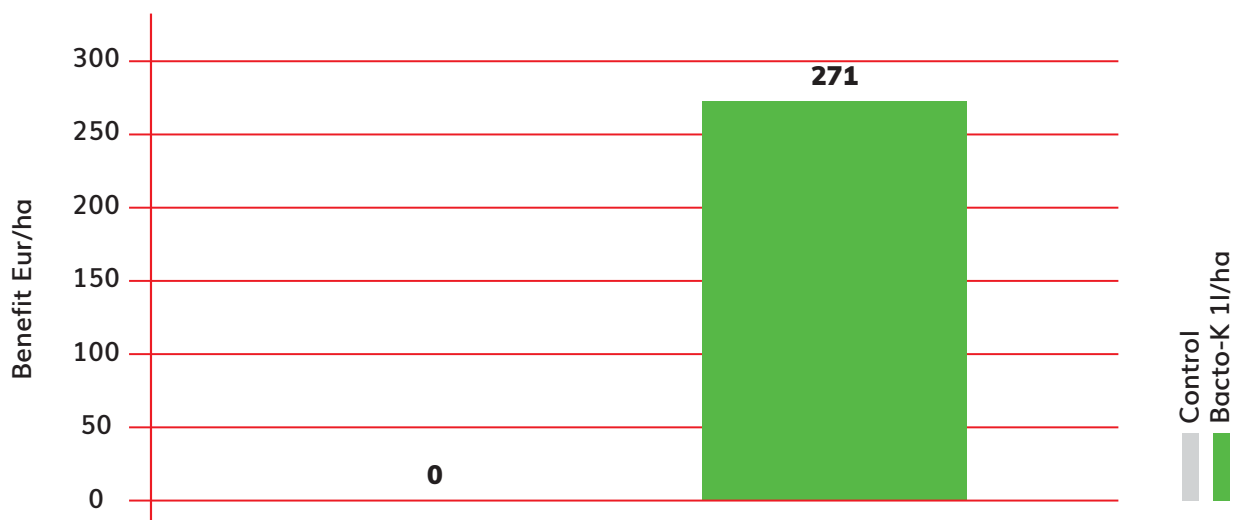




October 2018. Sugarbeet price, 26 Eur/t



LAFSC, Vezaiciai Experiment Station, Potatoes, 2019



September 2019, Potatoes Price 200 Eur/t

Application rate, technology

Application rate: cereals: 1-3 l/ha – BBCH 01-30; rapeseed: 1-3 l/ha – BBCH 01-30; corn, sunflower: 1-5 l/ha – BBCH 01-16; sugarbeet: 1-3 l/ha – BBCH 01-16; vegetables: 1-5 l/ha – BBCH 01-40; fruit trees, fruit bushes: 1-4 l/ha – BBCH 01-59, on the soil before planting or until flowering; berries: 1-3 l/ha – BBCH 01-59, on the soil before planting or until flowering.

Application time: spray on to the soil before sowing or until the plants do not cover the whole soil surface. In other cases it is recommended to consult with a sales representative.

Application requirements: the sprayer pressure must be 1-10 bar or 15-145 psi; nozzle size is at least 50 µm.

Safety and storage: product can be mixed with all kinds of fertilizers and pesticides unless the manufacturer of fertilizer or pesticide states otherwise. May contain natural sediments. Storage at high temperature above +30 °C must be avoided. Use Bacto-K as soon as possible after opening or store in the refrigerator (+4 °C) once it is opened and use it within 72 h. Contamination of the product may occur at any time after opening and the manufacturer takes no responsibility for opened and unused product.

Product is non-toxic and has no irritating compounds. There is no risk to humans, animals and the environment. After contact with the skin or eyes, wash with running water. Microorganisms may have the potential to provoke sensitising reactions.

Specifications

Composition: *Bacillus megaterium* MVY-011 (1.2×10¹² CFU/l); Na-4623 mg/l; S-2808 mg/l; K-1729 mg/l; P-723 mg/l; Mg-137 mg/l; Ca-134 mg/l.

Packaging: 20 l; 10 l; 5 l; 1 l.

- **Biological activity:** product is intended for potassium solubilisation to forms, available for plants; free living microorganisms;
- **Physical state:** liquid biological product;
- **Viability, shelf life:**
up to 12 months at +4 to +8 °C;
The manufacturer does not recommend storing the product above +25 °C.
- **Optimal working conditions:** from +5 °C soil temperature; 6.5 to 7.5 pH;
- **Chemical parameters:** dry matter, 7.3%; pH, 6.4; organic matter, 80.5%;
- **Physical parameters:** colour from dark brown to black; dynamic viscosity 0.7 mPa s; density 1.07 g/cm³.

Manufacturer: "Bioenergy LT", Staniunu g. 83/1, LT 36151 Panevezys, Lithuania.

Contacts: +370 674 46174; info@bioenergy.lt; www.bioenergy.lt

