



Stability of crop production

made possible



The plant resistance improver

- effectively prevents crop production losses,
- promotes regeneration of damaged plants,
- improves the yield performance through reactivation of dormant genetic potential of cultivated crops,
- promotes and preserves harvest and post-harvest quality, reduces storage weight losses,
- improves the qualitative parameters of produced seeds (germination percentage, germination energy, etc.),
- suitable for Tank-Mix combinations with POST-emergent herbicides, pesticides and fertilizers; improves the efficacy of fungicides,
- effectively eliminates chemical stress,
- takes effect during 1 hour and acts for the period of 14-21 days

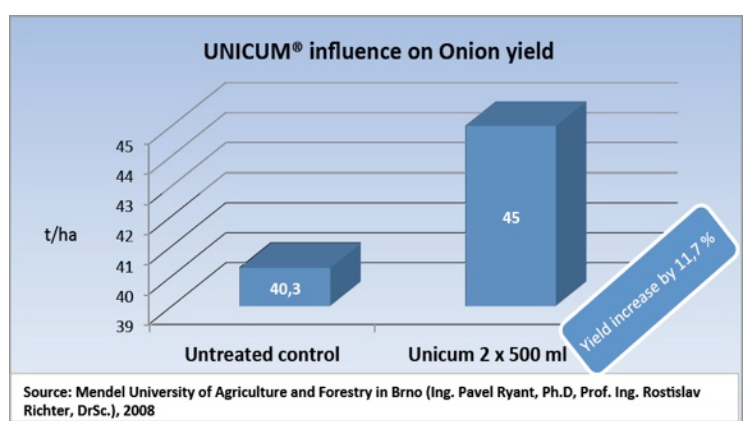
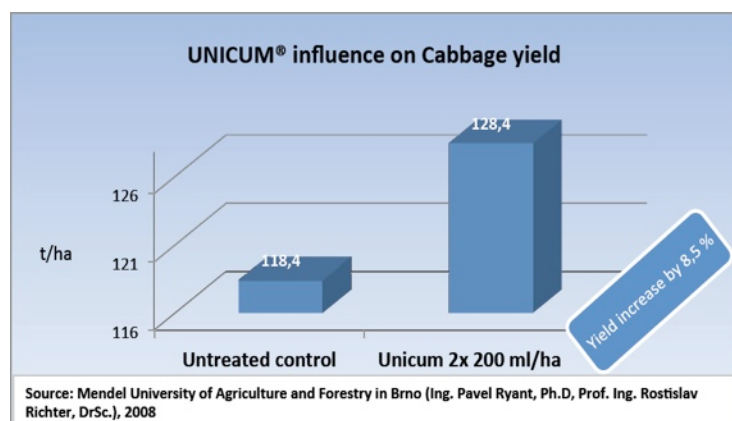
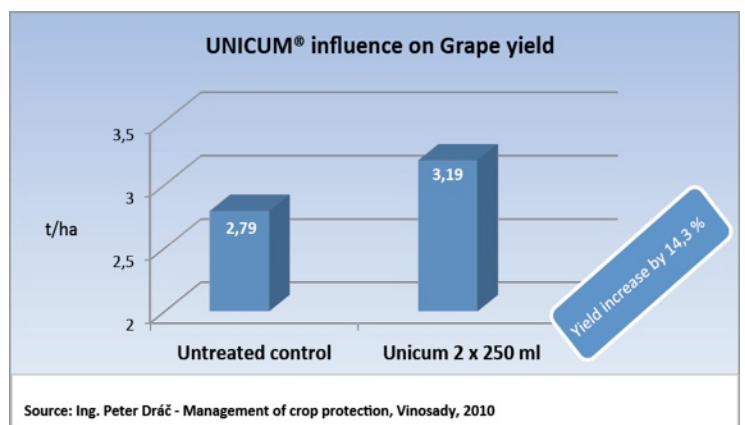
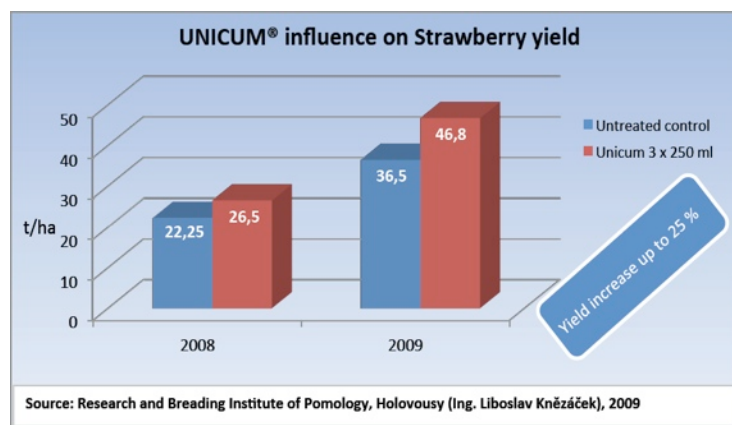
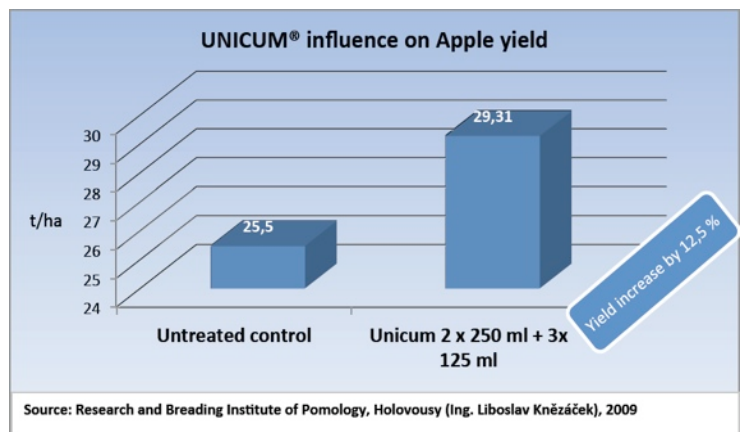
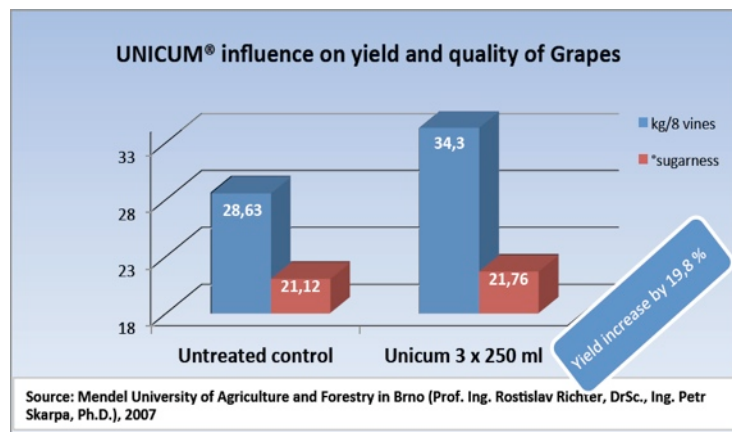
UNICUM® is a liquid plant resistance inducer/improver intended for activation of specific and nonspecific plant defenses in orchards, vineyards, field crops and vegetables. **UNICUM®** foliar applications increase plant resistance against fungal, bacterial, viral diseases agents and abiotic stress factors such as drought or flooding, low or high temperatures, sudden weather changes, chemical stress, and more.

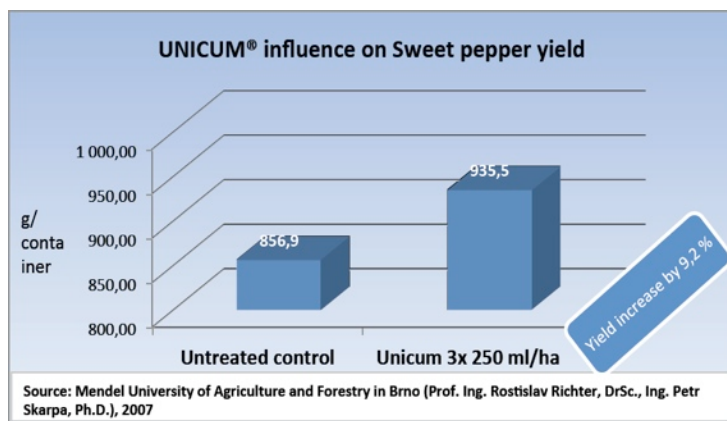
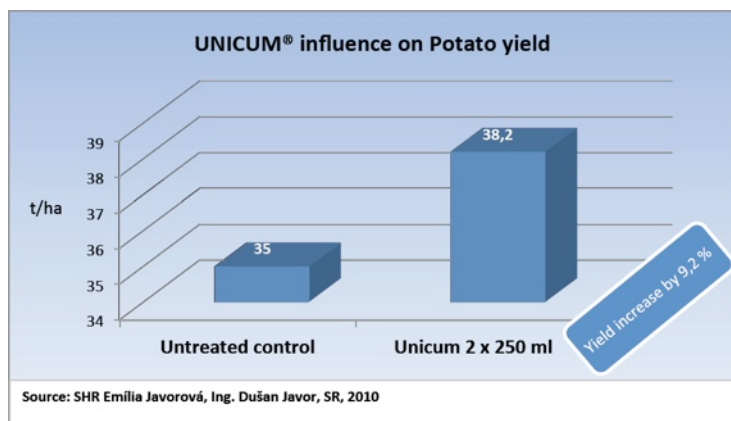
UNICUM® represents the selected complex of biologically active organic substances originating from highly resistant near-polar plants and excelling in their ability to sharply increase the expression activity of inactive/dormant genes of plant resistance (deactivated in the process of plant selective breeding) for the period 2-3 weeks. This temporary reactivation of plant resistance essentially translates into higher productivity of crop production in the naturally non-optimal and, in particular, extreme field conditions.

UNICUM® applications should be better performed preventively (e.g., in orchards 2-3 days before reported frosts, shortly before or in the beginning of the expected drought or signaled disease occurrence), as the defense mechanisms of plants must be at first created or mobilized. **UNICUM®** also minimizes the plant stress after mechanical damage (e.g. hail). Positive effects of plant stress reduction reflect in higher yield, quality and storability of harvested crops.

CHEMICAL AND PHYSICAL PROPERTIES:

1) Preparation form: water emulsion; 2) Active substances min. content: 40 g/l; 3) pH level: 7,5 – 9,5;





INSTRUCTIONS FOR USE:

1. Seed treatment

CROP	DOSAGE	APPLICATION
Cereals (all types), Maize and Sunflower	200 ml in 10 l of water/ 1 ton of seeds	As a standalone product for seed treatment or as a component for seed coating.

2. Foliar applications

CROP	DOSAGE	NUMBER OF APPL.	APPLICATION PHASES *
Grapevine	250-350 ml/200-500 l of water/ha	2-3	1) before flowering (BBCH 55-60) 2) end of flowering (BBCH68-71) 3) 12-15 days after
Strawberry	250-350 ml/200-500 l of water/ha	2-3	1) before flowering (BBCH 54-61) 2) 12-15 days after 3) 12-15 days after
Fruit trees	250-350 ml/200-500 l of water/ha	3-4	1) before flowering (BBCH 56-59) 2) end of flowering (BBCH 69-71) 3) 12-15 days after; 4) 12-15 days after
Wheat (spring and winter)	150 ml/200-300 l of water/ha	2	1) tillering phase (BBCH 21-29) 2) heading phase (BBCH 51-59)
Barley, Oat	250 ml/200-300 l of water/ha	2	1) tillering phase (BBCH 21-29) 2) heading phase (BBCH 51-59)
Maize (Corn)	150-250 ml/200-300 l of water/ha	1-2	1) 4-6 leaves (BBCH 14-16) 2) 12-15 days after
Sunflower	200 ml/200-300 l of water/ha	2	1) 4-6 leaves (BBCH 14-16) 2) beginning of flowering (BBCH 59-65)
Sugarbeet	150 ml/200-300 l of water/ha	2-3	1) 6-8 leaves (BBCH 16-18) 2) 12-15 days after 3) 12-15 days after
Onion, Garlic, Leek	500 ml/200-300 l of water/ha	2	1) 4-6 leaves (BBCH 14-16) 2) 12-15 dní after
Potato	250-350 ml/200-500 l of water/ha	2-3	1) beginning of flowering (BBCH 55-59) 2) during flowering (BBCH 60-63) 3) 12-15 days after
Cabbage	200 ml/200-300 l of water/ha	2	1) 6-8 leaves (BBCH 16-18) 2) head formation (BBCH 41-43)
Bean, Soybean, Pea	150 ml/200-300 l of water/ha	3	1) beginning of flowering (BBCH 59-61) 2) during flowering (BBCH 64-67) 3) 7-10 days after;

Tomato, Sweet pepper	250-350 ml/200-500 l of water/ha	3	1) flowering of the 1st bunch (BBCH 61) 2) flowering of the 2nd bunch (BBCH 62) 3) flowering of the 3rd bunch (BBCH 63)
Cucumber, Zucchini, Melon, Water melon	150 ml/200-500 l of water/ha	4	1) 4-6 leaves (BBCH14-16) 2) beginning of flowering (BBCH 51-54) 3) during flowering (BBCH 61-65) 4) 7-10 days after;

* - in the case of acute need to strengthen the vitality and regeneration of plants it is possible to apply the product more times per season, or in short time intervals of 7-10 days, e.g. after hail. Recommended times of applications may be, if necessary, moved for a few days, for example, due to the possibility of applying **UNICUM®** in the form of a tank-mix combinations with other products.

MISCIBILITY:

UNICUM® is miscible with plant protection products, post-emergent herbicides and liquid fertilizers (after their dilution with water in a tank sprayer). It is not recommended to apply the product together, or shortly after application of bacterial preparations. Also, tank mix combinations with calcium-containing products are not recommended due to the possible reduction of **UNICUM®** efficacy.

PACKING: 1 L, 5 L, on request.

MANUFACTURER:



EKOLAND EUROPE s.r.o.

120 00, U Zvonařky 2536/1A

Praha 2 - Vinohrady, Czech Republic

Tel.: +420 222560261, Fax: +420 222560262

E-mail: info@ekoland.org, Web: www.ekoland.org