

Ympact[®]

GROWTH NUTRITION SEED TREATMENT

Developed in orbit. Sown in your earth.



OVERVIEW

Ympact is a growth nutrition seed treatment for cereal crops, naturally derived and tested in zero gravity to optimize metabolic energy and abiotic stress tolerance, for root and shoot growth that's out of this world.



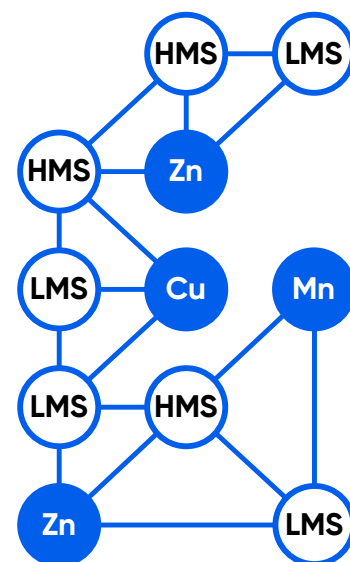
YMPACT AT A GLANCE

Ympact seed treatment helps growers to give a great start to cereals early development.

During the decades of growth in cool Nordic conditions, conifer trees accumulate valuable substances from nature. These organic substances are used as a raw material for Ympact production. One of the main components (lignin) is, after purifying and processing, turned into molecular complex, which contains high and low weight supramolecules, bonded with selected micronutrients essential for cereals.

For optimal plant functioning, the bioavailability of nutrients is highly important. In the beginning, nutrients in the endosperm are neither immediately or sufficiently available to support germination properly. Seed needs to spend energy to release the nutrients and start using them for development.

Thanks to Ympact's unique molecular complex, both external nutrients and energy are delivered to the seeds to support various metabolic activities during germination process.



LMS: Low Molecular weight Supramolecules
HMS: High Molecular weight Supramolecules

Micro-nutrients	Main role on cereals
Zinc (Zn)	<ul style="list-style-type: none">• Auxin co-factor• Activates cell division and elongation• Improves crop germination, emergence, seedling growth, plant stand and yield
Manganese (Mn)	<ul style="list-style-type: none">• Empowers enzyme activity• Accelerates cell elongation and cell division
Copper (Cu)	<ul style="list-style-type: none">• Major function in photosynthesis and indirect role in chlorophyll production

Ympact seed treatment provides:

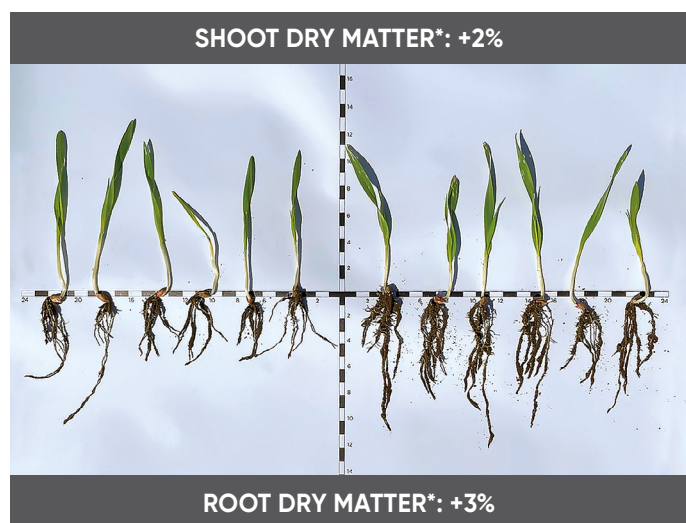
- Strong seed emergence.
- Homogeneous crop establishment and vigorous early growth.
- Well developed and healthy root system.



Ympact contains complexed micronutrients readily available for seeds. The uniqueness of the complex ensures the bioavailability of nutrients in early stage of growth and supports plant development in various conditions.

Key advantages of Ympact for the seeds

- Beneficial for microorganism activity around the seed.



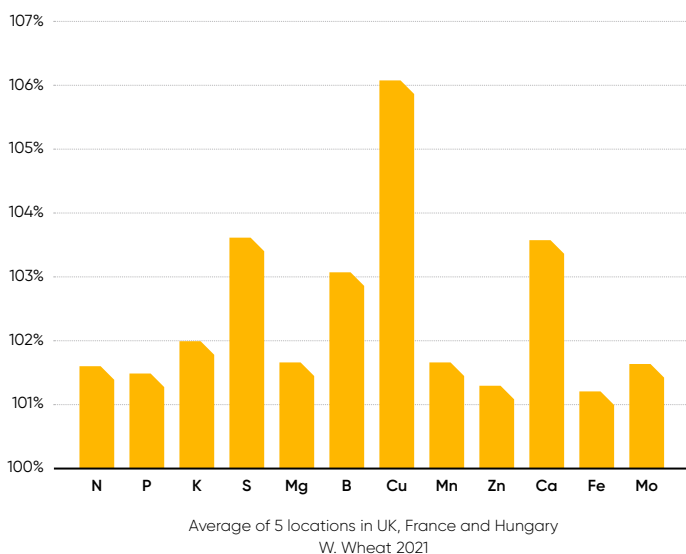
* Average cereal yield increase from 11 locations in Germany, France, Hungary, Romania, Lithuania, UK, Estonia
w.wheat, w.barley, s.barley, durum wheat, 2019 to 2021

Key advantages of Ympact for the plants

- Optimizes nutrient bioavailability for metabolic and physiological processes for early stage of growth.
- Increases root system development:
 - Supports root hair formation, improving access to soil water and nutrients
 - Enhances root division and elongation from early establishment
- Assists the re-growth in spring for winter crops:
 - Enables faster formation of storable carbohydrates before winter
 - Improves overwintering
 - Supports vegetative re-growth in spring
- Improve the conditions for plant resistance to abiotic stress factors such as drought, heavy rainfall, and frost. Cereals treated with Ympact are more resilient to adverse conditions.
- Enhances plant health and development by supporting photosynthetic processes.

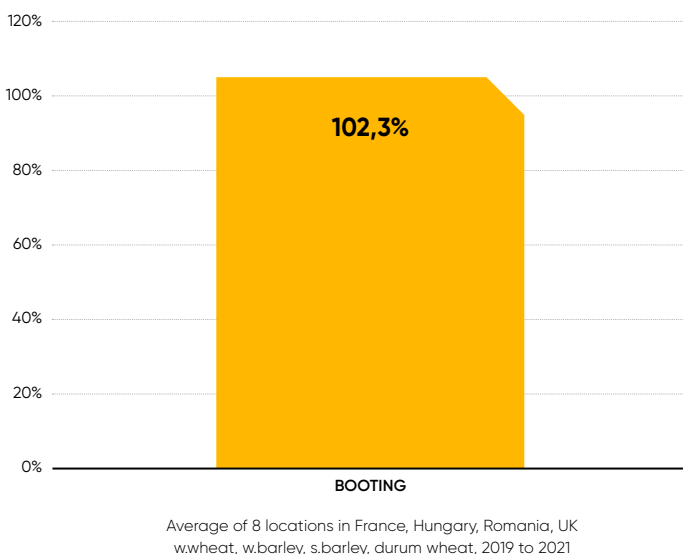
Increased nutrient content contributes to higher yields

YMPACT LEAVES NUTRIENT CONTENT
IN % OF CONTROL AT BEGINNING OF FLAG LEAVE STAGE



Higher chlorophyll content indicates healthier plants

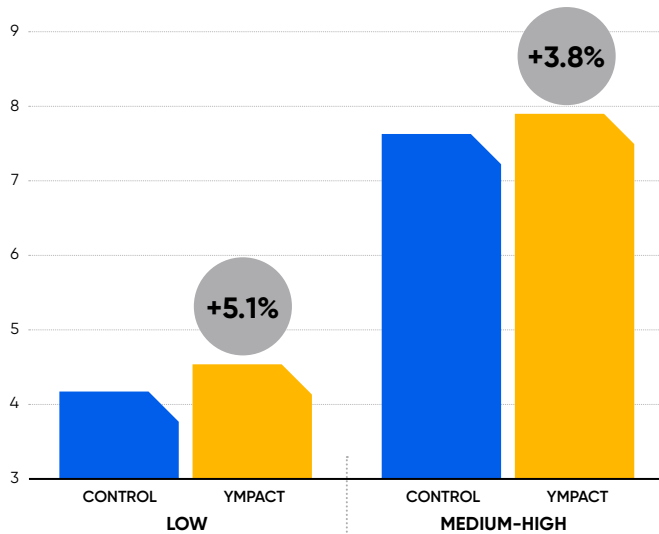
YMPACT CHLOROPHYLL CONTENT EXPRESSED
IN % OF CONTROL



YMPACT SEED TREATMENT INCREASES CEREALS YIELD AND QUALITY

**Yield improvement between
3.8 and 5.1 %**

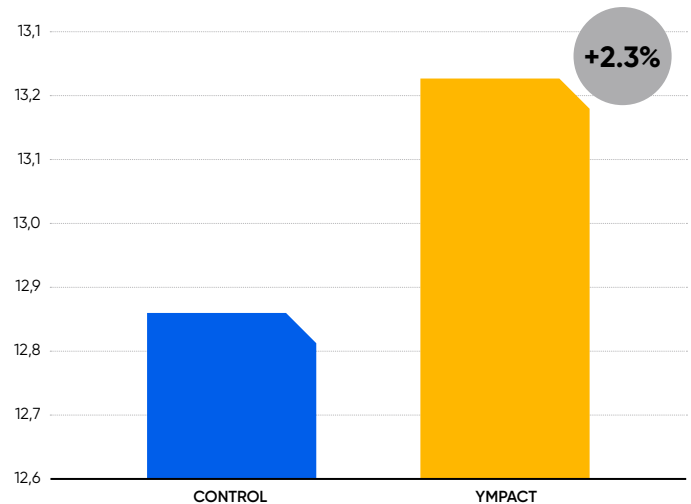
YIELD (T/HA) DEPENDING ON YIELDING ENVIRONMENT



Average from 13 locations in Spain, France, Romania, Lithuania, UK, Estonia
w.wheat, w.barley, s.barley, durum wheat.

**Better nutrient uptake leads
to grain quality improvement**

PROTEIN (%) IN GRAIN AT HARVEST



Average from 7 locations in Spain, France, Lithuania, UK, Estonia.

YMPACT IS SUITABLE FOR USING ALL CEREALS CROPS:

- Winter and Spring wheat
- Winter and Spring barley
- Winter rye
- Winter and Spring triticale
- Durum Wheat
- Spelt
- Oat
- Rice



YMPACT TECHNICAL PROFILE:

- Dose rate on all cereals: 0,7 l/t of seeds*
- Compatible with crop protection seed treatments
- Complies with "EC2003/2003" and marketed as "EC-FERTILISER"

* The recommended total slurry volume is 6 -12 l/t seeds.

Follow the label and reg. documents before applying plant protection products. Only buy authentic products from authorized sellers.