



SCIENCE
FOR AGRICULTURE

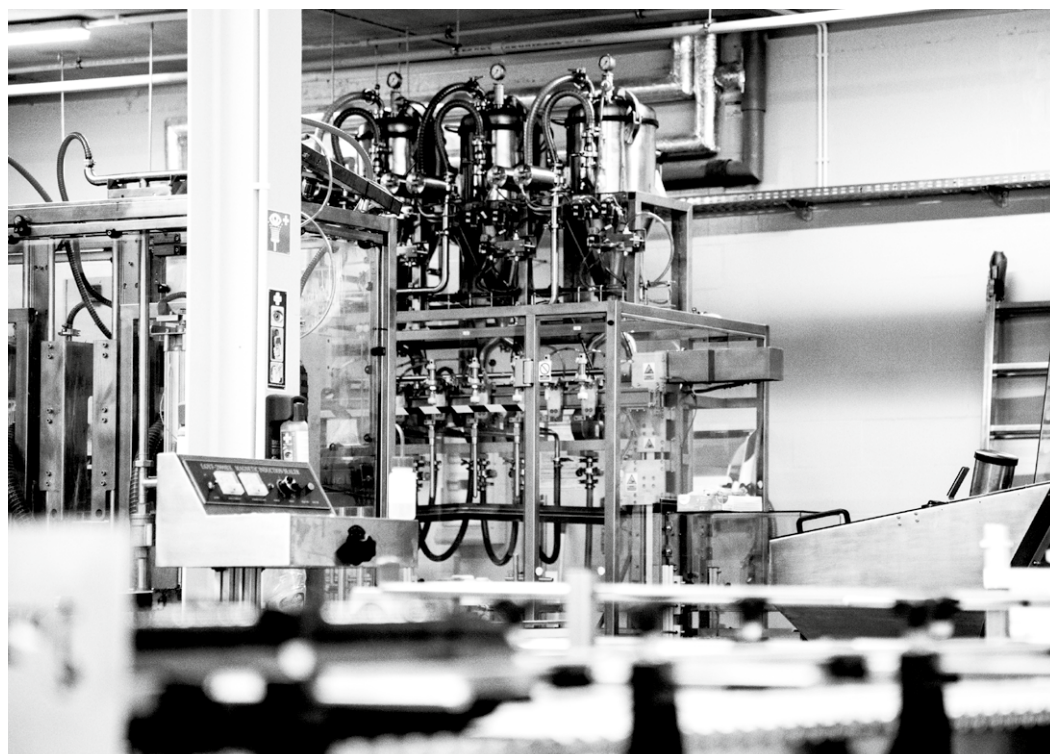
Product catalogue



SCIENCE
FOR AGRICULTURE

We are a producer of agricultural aids. Our activities are guided by the motto „Science for agriculture” - it is thanks to our knowledge and cooperation with scientists from Poland and abroad that we provide our clients with innovative products supported by many years of scientific research. Our experience in the field of optimization of plant protection treatments allows us to create products expected by farmers in the era of integrated pest management and the implementation of the assumptions of the European Green Deal. The ability to provide our clients with individual solutions and flexibility in cooperation are our priorities, which have allowed us to successfully support the agricultural industry for years.





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Styk®

Universal adjuvant (surfactant) intended for use with plant protection products and foliar fertilizers.

Main benefits:

- Increases the activity of systemic and contact products
- Increases the effectiveness of used plant protection products
- It reduces the washability of plant protection products (PPP) and foliar fertilizers by rain and dew
- Lowers the surface tension and contact angle of the spray liquid
- It prevents drift of the spray liquid during spraying operations
- The addition of Styk agent allows the reduction of the spraying liquid output (less water per hectare)



 **Dosage: 0,1% v/v (100 ml for every 100 l of water)**

The product is especially recommended for use:

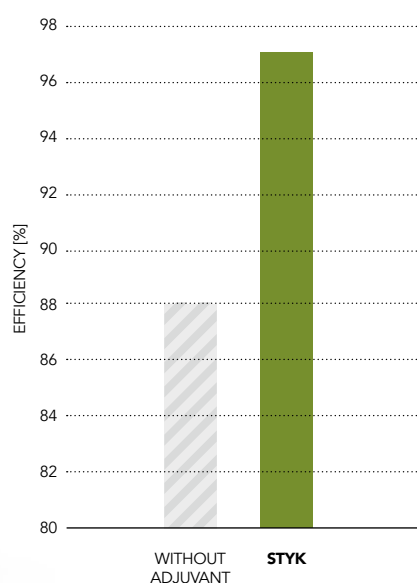
- with foliar herbicides that control both monocotyledonous and dicotyledonous weeds
- in all fungicide treatments in order to increase overall effectiveness
- in cereal cultivation (control of stem root diseases and powdery mildew) and T3 (protection of the crop)
- in the cultivation of rapeseed during the "petal fall" treatment
- in all treatments with the use of powder, dust, granules

Styk significantly improves the performance of plant protection products in case of unfavorable weather conditions such as low humidity and low air temperature



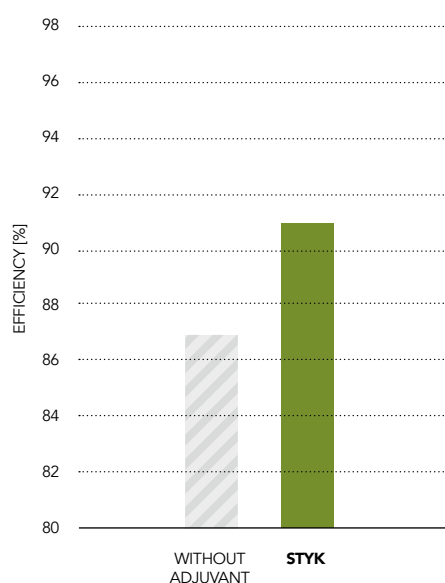
EFFICIENCY OF NICOSULFURON ECHINOCHLOA CRUS-GALLI CONTROL

(water volume 150l / ha)



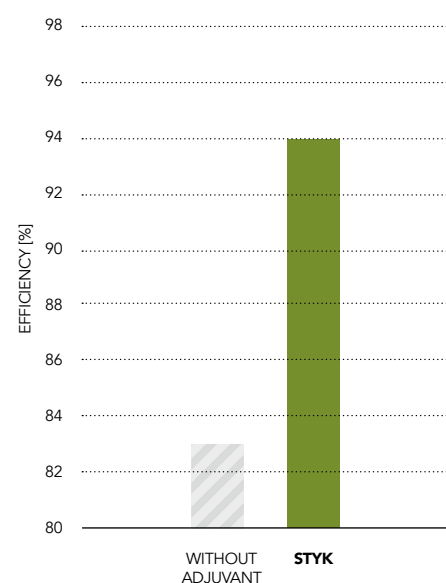
EFFICIENCY OF TEBUCONAZOLE OF FUSARIUM CONTROL

(treatment T3 "for ear", water volume 100l / ha)



EFFICIENCY OF TRIBENURON OF VOLUNTEERS OF OIL SEED RAPE

(water volume 150l / ha)



Styk applied in a dose 200ml / ha reduces surface tension and angle of liquid spray adhesion, enhances absorption through wax barrier (cuticle), thanks to which in many cases it allows to reduce the water volume to 100-150l / ha.

When the amount of water applied for hectare is reduced under the level of 200l / ha, to obtain the correct covering of plants Styk should be applied in dose that is not smaller than 200 ml for hectare.

Increase of weed control efficiency of herbicide with addition of Styk

– on the example of volunteers of oil seed rape



1. control (without treatment)
2. 2.4 D + dicamba
3. 2.4 D + dicamba + **Styk**



2. 2.4 D + dicamba
3. 2.4 D + dicamba + **Styk**
4. 2.4 D + dicamba + comparative agent

Limitation of growth of winter wheat through application of the regulators of growth (retardants) with addition of Styk

LP.	Combination	Treatment	Leaning Index
1	Control (without treatment)	–	23
2	CCC	BBCH 29	12
3	CCC + Styk	BBCH 29	7
4	Trinexapac-ethyl	BBCH 29	6
5	Trinexapac-ethyl + Styk	BBCH 29	2

Water volume 150l / ha

Lodging index:

[angle of lean of plants on an acre]
x [leaning acre surface]

CCC

Chlormequat chloride

Gleber®

The new generation adjuvant for use with soil herbicides.

Main benefits:

- prevents spraying liquid from drifting during spraying operations
- lowers the surface tension and contact angle of the spray liquid
- increases the concentration of herbicide in the top layer of soil, hindering the penetration of active substances into the soil profile; as a result it improves the herbicidal effectiveness of herbicides
- the addition of Gleber enables the reduction of the spraying liquid output (less water per hectare)



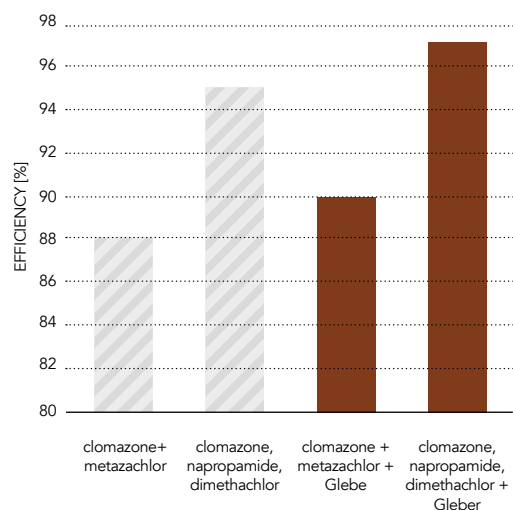
The product contains 913 g/l of the mixture of ethoxylated fatty acids and refined rapeseed oil. The Gleber adjuvant reduces the drift of the spray liquid and causes the uniform soil coverage. As a result of this, it enables the reduction in the spray liquid rate (lower amount of water per hectare).

 **Dosage: 0,5 l/ha**

GLEBER IN RAPESEED CULTIVATION

Overall herbicidal efficiency

(spray rate: 150 l/ha)



T0 - soil-applied treatment



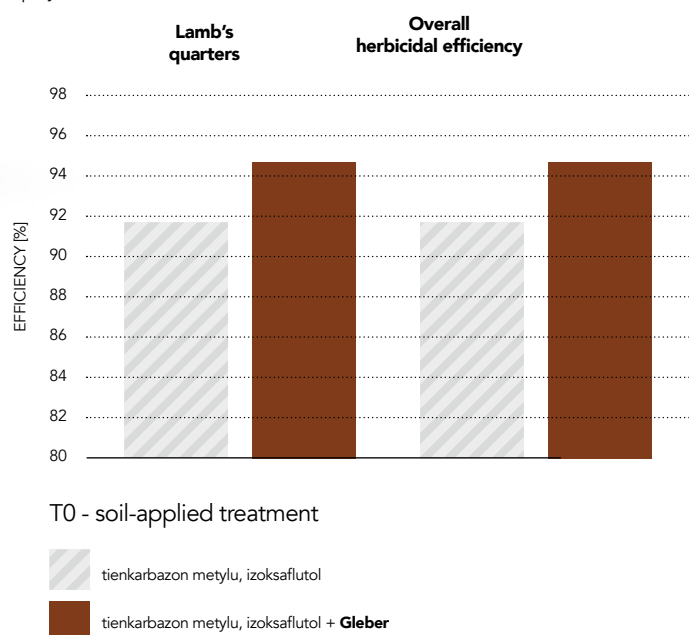
Gleber in maize cultivation (spray rate: 150 l/ha)

LP.	Combination	Treatment	Overall herbicidal efficiency	Growth rate
1	Inspection	T0	0	14
2	Thiencarbazon-methyl, isoxaflutol + Gleber + starter fertiliser	T0	92	12
3	Dimethenamid-P, pendimethalin + Gleber + starter fertiliser	T0	90	12
4	S-metolachlor, mesotrione, terbuthylazine + Gleber + starter fertiliser	T0	99	12

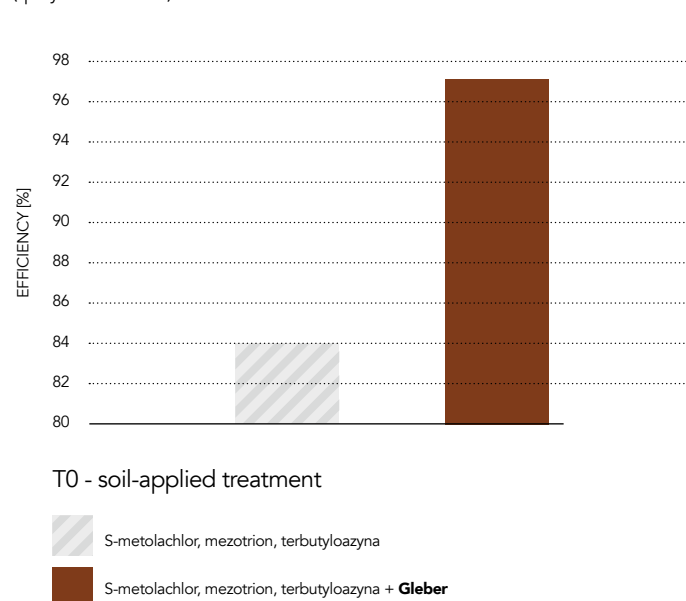
Dynamics of emergence – the number of days to obtain the full emergence

GLEBER IN MAIZE CULTIVATION

(spray rate: 150 l/ha)

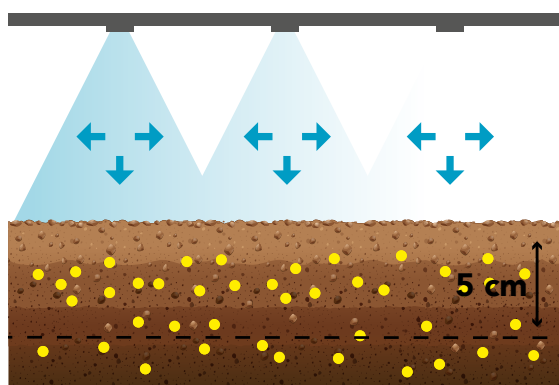
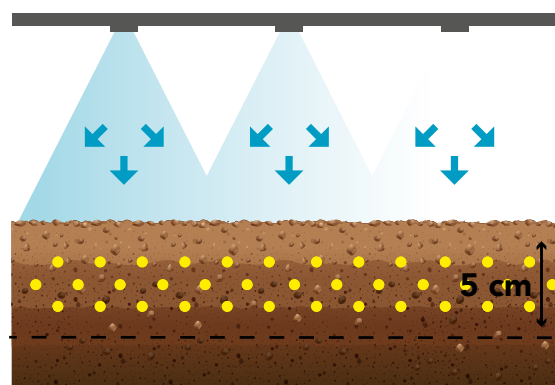
**GLEBER IN MAIZE CULTIVATION****Overall herbicidal efficiency**

(spray rate: 150 l/ha)



The most important criterion in the application of soil-applied herbicides is the uniform coverage of the soil surface. During the performance of soil-applied treatments, the soil is not covered by plants. This creates a high risk of air movement, which can cause the spray liquid drift, resulting in uneven distribution across the field and poorer herbicidal efficiency of the herbicide.

An addition of the **Gleber** adjuvant causes a reduction in the drift of the spray liquid droplets. Furthermore this adjuvant increases the concentration of the herbicide in the top soil layer and reduces its penetration deep into the soil profile. Weeds sprout mainly in the top soil layer (approx. 5 cm), therefore, an increase in the herbicide concentration in this layer improves its herbicidal efficiency.

HERBICIDE WITHOUT A SOIL-APPLIED ADJUVANT**HERBICID WITH THE GLEBER SOIL-APPLIED ADJUVANT**

Spinner®

Product reduces breaking of pods and legumes and limits spilling and overgrowing of grains and caryopses before a harvest

The product is intended for use in the cultivation of rapeseed, wheat and legumes.



Dosage:
Rapeseed: 0.5-1.0 l / ha
Cereals: 0.3-0.5 l / ha
Legumes: 0.8-1.0 l / ha
Liquid output: 250-400 l / ha

Use in the cultivation of legumes:

- The preparation should be used when most of the pods have lost their green color and begin to turn yellow.
- **Recommended dose: 0.8-1.0 l / ha**



Spinner w zbożach

LP.	Combination	Treatment	Number of falling
1	Control	–	221
2	Spinner 0,3 l/ha	BBCH 70	273
3	Spinner 0,5 l/ha	BBCH 70	318

Number of falling

it shows the level of amylolytic enzymes implicit in wheat grains. Low number of falling denotes the lack of usefulness of grain to the flour production. **The most beneficial number of falling fits is located in 250-350.**



The photo of the ear after Spiner application



The photo of the ear without Spiner application

Experiment showing a positive effect of Spiner on the yield of winter rape

LP.	Combination	Treatment	Dose on hectare [l]	Yield [t/ha]	Cast seed number [it/m ²]	TSW* [g]	Hectoliter mass [kg/hl]
1	Control (without treatment)	–	–	3,02	3530	4,8	67
2	Spiner	T1	1,0	3,54	114	5,2	69
3	Comparative product	T1	1,0	3,43	158	5,1	69
4	Glifosat 360 SL	T2	2,0	3,36	1320	5,0	12
5	Glifosat 360 SL + Spiner	T2	2,0 + 0,8	3,50	169	5,2	68
6	Glifosat 360 SL + Comparative product	T2	2,0 + 0,8	3,48	190	5,2	69
NIR (0,05)				0,47	r.n.	0,12	1,2

Treatment:

T1 - 4 weeks before harvest

T2 - 3 weeks before harvest

***TSW** - thousand seed weights

Application in cultivation of summer and winter oil seed rape:

- The agent should be applied single-handedly 3-4 weeks before a oil seed rape harvest at a time when pods are flexible and they can be folded without bursting and spilling grains out or with desiccation, when pods are still flexible and they break into the shape of V letter while they are folded.
- Recommended dose: 0,5-1,0l / ha**

Application in cultivation of cereal:

- The agent should be applied single-handedly 3-4 weeks before the harvest or in total when the last fungicide treatment is executed (late treatment for ear), or with a desiccation of cereal.
- Recommended dose: 0,3-0,5l / ha**

Pianox[®]

Neutral antifoam product.

Main benefits:

- Pianox as a modifying adjuvant shows a very high efficiency in reducing the foam formed when filling the tank.
- removes foam in agrochemical working liquids
- the dose should be selected depending on the foaming intensity of the working liquid

Dosage: 3-10 ml / 100 l of working liquid (recommended dose 5 ml)

A dose should be chosen depending on an intensiveness of foaming of a working fluids



Neutral[®]

Product for washing and neutralizing residues of plant protection products in sprayers.

Especially recommended for:

- sulfonylurea herbicides
- glyphosate
- each time you wash the sprayer tank

The preparation contains:

- surfactants
- compounds that neutralize and dissolve active substances of plant protection agents



 **Dosage: 5 l / 1000 l of water**

Test of washing quality of sprayer.

Neutral has been tested in the Plant Protection Institute, Sośnicowice Department in the Laboratory of Tests of Pesticides Quality. The slops have been examined. The dose was 20g / ha of sylphphonylurea herbicide containing the active substance of tribenuron-methyl in WG formulation dissolved in 200l of water.

1

WASHING WITH WATER

Sprayer has been washed in the sample that contained 0,6% active substance of tribenuron-methyl. In case of spray execution on the plantation of oil seed rape it can result with plant damages which can be seen in the picture.

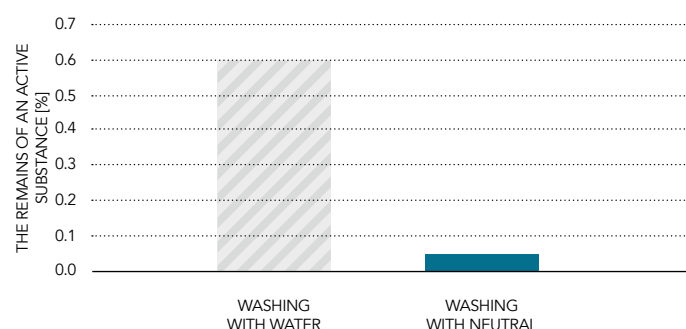


2

WASHING WITH NEUTRAL

After a sprayer has been washed by Neutral it caused the very precise removal of the active substance below the level of detection (below 0,04%). Analytical test result 889/2013/RŽ.

THE REMAINS OF AN ACTIVE SUBSTANCE AFTER SPRAYER WASHING



Fungido®

Adjuvant intended for use with fungicides

Main benefits:

- lowers the surface tension and contact angle of the spray liquid
- prevents spray liquid from drifting during spraying operations
- increases the activity of systemic and contact fungicides
- increases the uptake of fungicides into plant cells
- reduces the washability of fungicides by rain and dew
- the addition of Fungido enables the reduction of the spraying liquid output (less water per hectare)



The agent contains the mixture of ethoxylated fatty acids, methyl esters of superior fatty acids and ethoxylated fatty alcohols.

 **Recommended dose: 0.2-0.4 l / ha**



The agent recommended to apply with majority of fungicides on all cultivations

Fungido enhances the formulations of fungicides and increases the activity of older active substances.

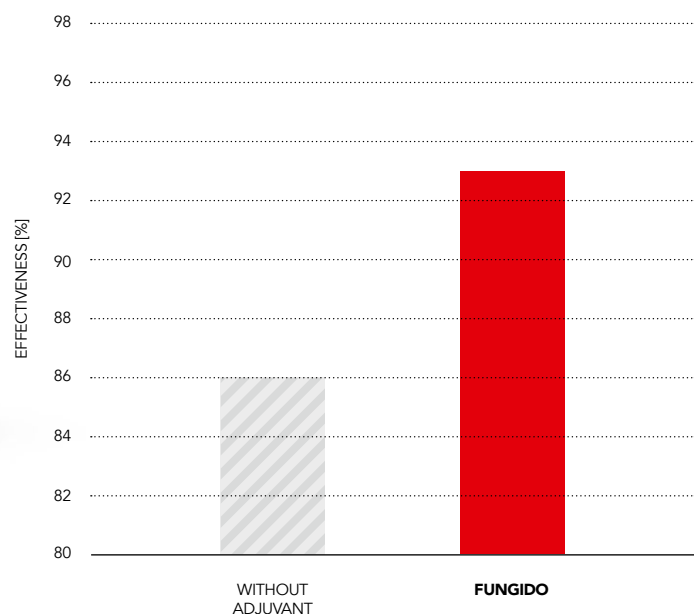
The optimally selected number of hlb increases the activity of triazoles particularly.

Fungido enhances the action of fungicides to the greatest extent in case of negative weather conditions, such as low humidity and low temperature.

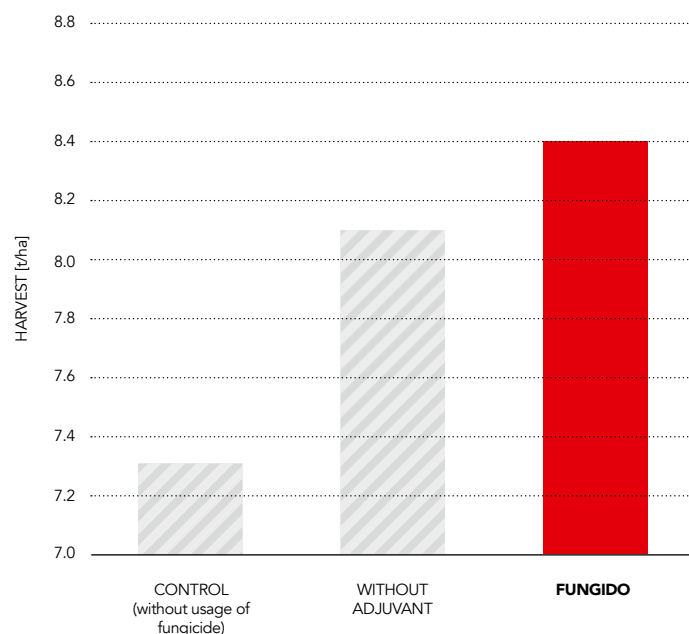
Yield increase and effectiveness of fungicide (prothioconazole and fluoxastrobin) **with an addition of Fungido** (0,4 l/ha) – on the example of eliminating striped septoria of winter wheat.

[Application: A)BBCH 32 i BBCH 51, Słupia Jędrzejowska 2014].

EFFECTIVENESS



HARVEST

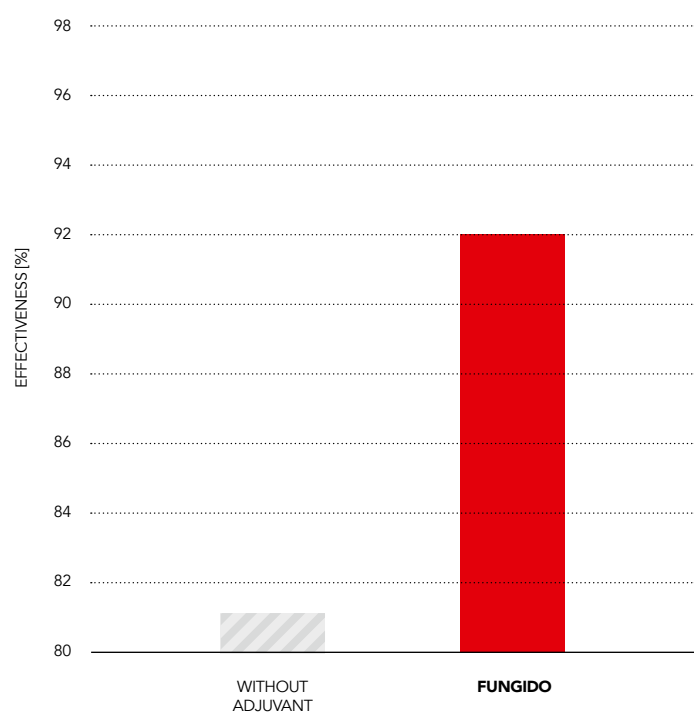


In an experiment with the usage of Fungido the doses of prothioconazole and fluoxastrobin have been reduced in relation to the combination without adjuvant (both from 150 g/ha to 120 g/ha).

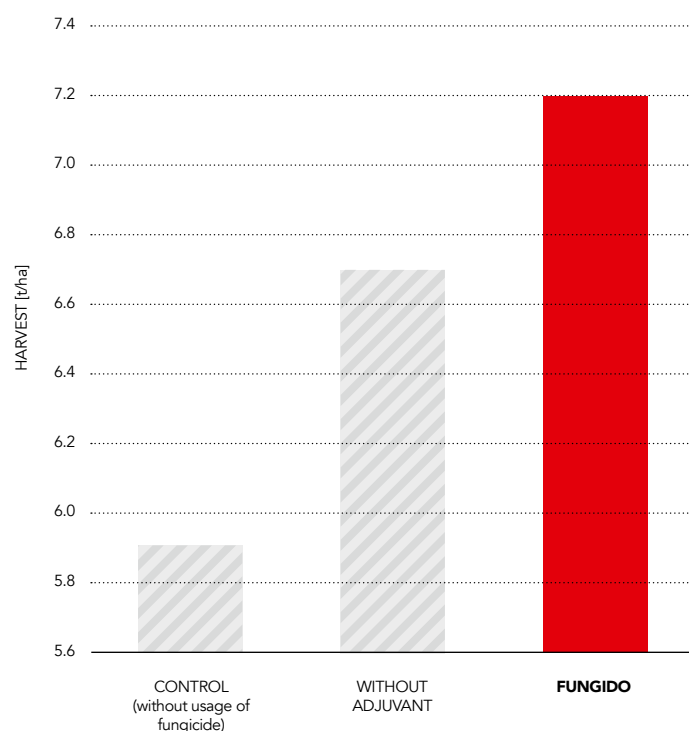
Yield increase and fungicide effectiveness (azoxystrobin 100 g/ha + izopirazam 50 g/ha + epoxiconazole 36 g/ha) **with an addition of Fungido** (0,4 l / ha) – on the example of eliminating brown rust from winter wheat.

[Application: BBCH39, Przybroda2014]

EFFECTIVENESS



HARVEST



Support-pH[®]

The conditioner- adjuvant changing the quality parameters of the spray liquid

Main benefits:

- Support-pH lowers the pH of the spray liquid
- It improves water quality – it sequesters calcium and magnesium ions contained in hard water
- Contains a non-ionic surfactant to increase plant adhesion and uptake
- Facilitates the mixability and stability of multi-component tank mixtures

Dosage: 0,05-0,1% v/v
(50-100 ml / 100 l spray liquid)
(recommended dose 100 ml)



QUALITY PARAMETERS:

1. Water pH:

Laboratory researches show the instability of many active substances at the high pH of the working liquid. Substances particularly sensitive to pH are captan, cymoxanil, cypermethrin, deltamethrin, desmedipham, dithianon, iprodione, phenmedipham, tau-fluvalinate, acetamipryd.

2. Water hardness:

The usage of hard water reduces the effectiveness of many active substances by binding them in hard water with calcium and magnesium ions. Substances particularly sensitive to hard water are aminopyralid, 2,4-D, amidosulfuron, bentazone, clopyralid, florasulam, fluaziflam, glyphosate, iodosulfuron, MCPA, mesosulfuron, mesotrion, metsulfuron, nicosulfuron, prosulfuron, rimsulfuron, sulcotrione, sulfosulfuron, terbutylazine, thifensulfuron, triasulfuron, tribenuron, tritosulfuron.

OPTIMAL PH RANGES FOR PREPARATIONS GROUPS:

Insecticides:	Growth retardants:	Fungicides:	Herbicides*:
4,5-5,5	5,0- 6,0	5,5- 6,5	6,0- 6,5

*except for the group of sulfonylureas



The color scheme referring to the different pH levels below:



Features:

CONTAINS
SURFACTANT

LOWERS PH

REDUCES
WATER
HARDNESS

CONTAINS
COLOR
INDICATOR

WATER
HARDNESS
LOWERING

INCREASE
MIXING AND
STABILITY OF
SPRAYING
LIQUIDS

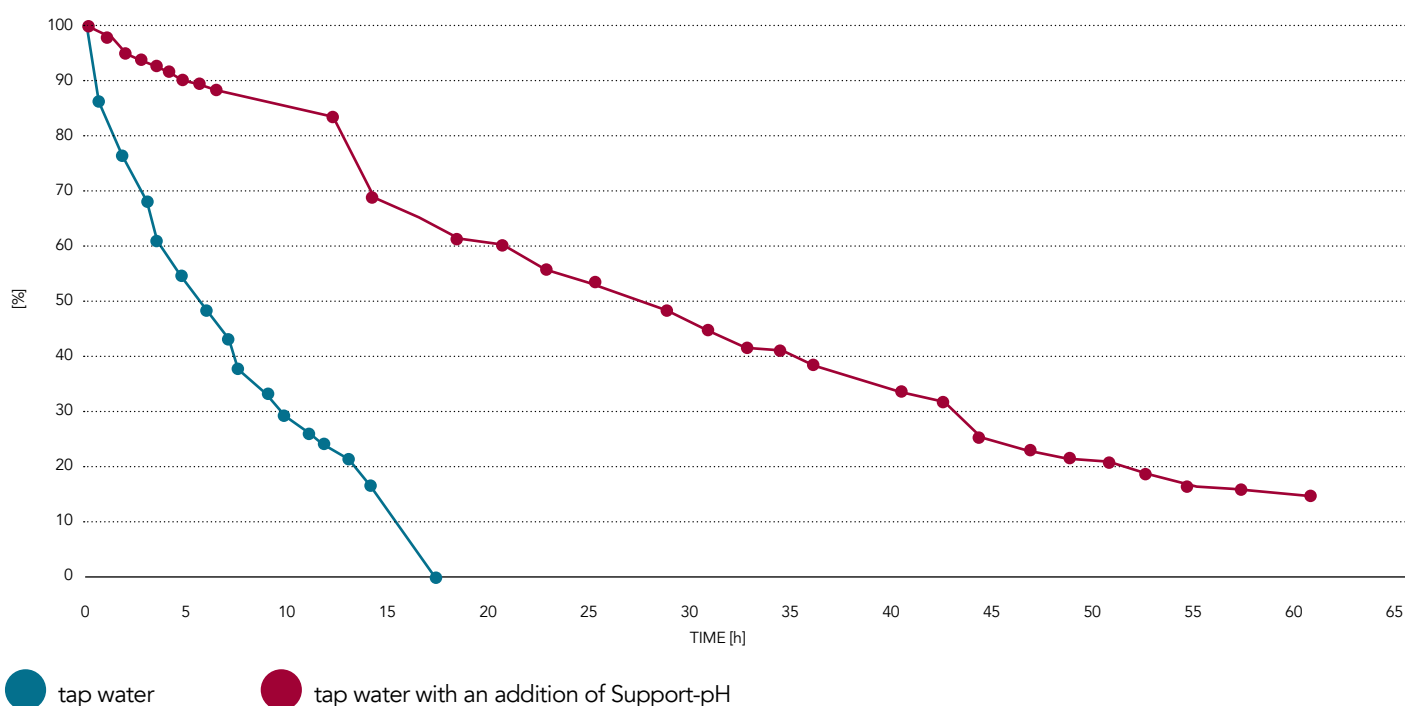
Test:

INPUT DATA:

tap water	pH 8,3 hardness 400 ppm
water + support-pH in a dose of 100 ml/100 l	pH 6,7 hardness 308 ppm
water + support-pH in a dose of 150 ml/100 l	pH 5,8 hardness 286 ppm
water + support-pH in a dose of 200 ml/100 l	pH 5,4 hardness 284 ppm

water + comparative product in a dose of 100 ml/100 l	pH 6,8 hardness 385 ppm
water + comparative product in a dose of 150 ml/100 l	pH 6,2 hardness 383 ppm
water + comparative product in a dose of 200 ml/100 l	pH 4,7 hardness 380 ppm

Half-life of the captan active substance in standard water and with the addition of Support pH



Glifo Plus®

Adjuvant intended for use with herbicides particularly sensitive to water hardness, including glyphosate.

Main advantages:

- enables a 30% reduction in glyphosate doses
- increases the activity and effect of herbicides
- reduces water hardness and foaming of the working liquid
- prevents spray liquid drift during spraying procedures
- reduces the surface tension and angle of adhesion of the spray liquid
- reduces the washability of herbicides by rain and dew
- shortens the time needed for herbicides to penetrate the plant
- increases the effectiveness of the treatment in drought conditions and in the case of weeds with a thick cuticle layer
- enables a reduction in the flow of spray liquid (less water per hectare)

Recommended dose: 250 ml/ha

(Liquid flow: 100-200 l/ha)

Recommended mixture: selected dose of glyphosate + 250 ml of adjuvant - liquid consumption 100l. The preparation can be used with most plant protection products and foliar fertilizers, especially recommended for treatments with: Glyphosate, MCPA, 2,4-D, Dicamba.



Herbido™

A versatile adjuvant designed for use with foliar herbicides.

Main benefits:

- Increases the effectiveness and efficiency of herbicides used (including graminicides)
- Very strongly retains the droplet on the applied surface, reduces the risk of washing off by rain
- Ideally covers the surface of the controlled weeds, allowing for a reduction in the herbicide dose
- Prevents crystallization of the spray on the plant surface
- Improves the speed of movement of the active substance in the plant

The preparation contains a methyl ester of higher fatty acids of vegetable oil, surface-active substances.

Recommended dose: 0.7-1.0 l/ha

The product can be used with herbicides in all crops. Herbido improves herbicide formulations and increases their effectiveness in combating troublesome weeds.



Amino PRO[®] INSTANT

**Special fertilizer with high nutritional value
and a high concentration of amino acids**

Main benefits:

- Product based on natural amino acids, supporting metabolism and plant condition
- Especially indicated in the phases of growth, flowering as well in stressful situations caused by unfavorable weather conditions in all crops
- Thanks to subjecting to enzymatic hydrolysis and technology INSTANT, the product is immediate and water-soluble
- Due to the high content of amino acids, nitrogen, potassium and iron Amino PRO INSTANT is used as a biostimulant and an excellent source of nutritional ingredients.



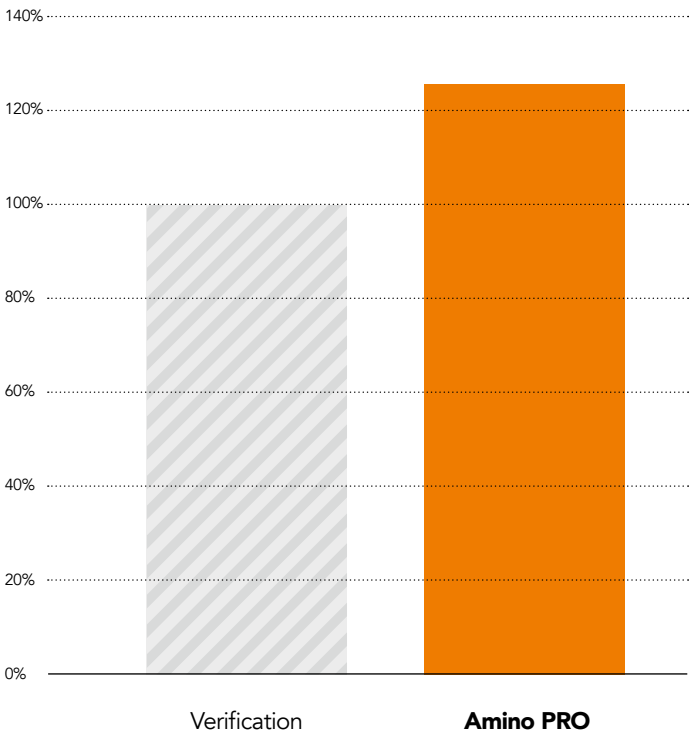
 **Dosage: 300 – 500 g/ha**



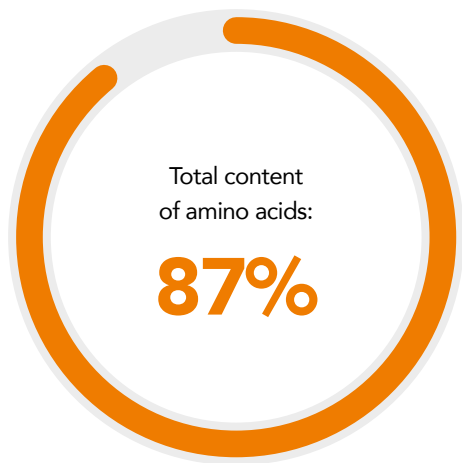
Application dates:

- Resuming spring vegetation- stimulate intensive growth, reconstruction of biomass, damage regeneration
- After abiotic stress from herbicidal treatments or mechanical damage - e.g. hailstorm
- In reaction to an unfavorable weather conditions e.g. too much rainfall or after a period of drought.

BIOMASS



Aminograph:



Alanine	7,37%
Arginine	3,42%
Aspartic acid	11,03%
Cysteine	<0,1 %
Glutamic acid	7,55%
Glycine	4,55%
Histidine	5,94%
Isoleucine	0,35%
Leucine	12,49%
Lysine	7,45%
Methionine	0,72%
Phenylalanine	5,88%
Serine	3,33%
Threonine	2,73%
Tryptophan	1,25%
Tyrosine	1,69%
Valine	8,12%
Proline	3,17%

Intro PRO[®]

Special fertilizer supporting rooting and plant growth.

Intro PRO is a quickly digestible fertilizer containing the necessary macronutrients and microelements, along with the *Ascophyllum Nodosum* brown algae extract and physiologically active and functional L- α -amino acids.




Intro PRO is especially recommended as:

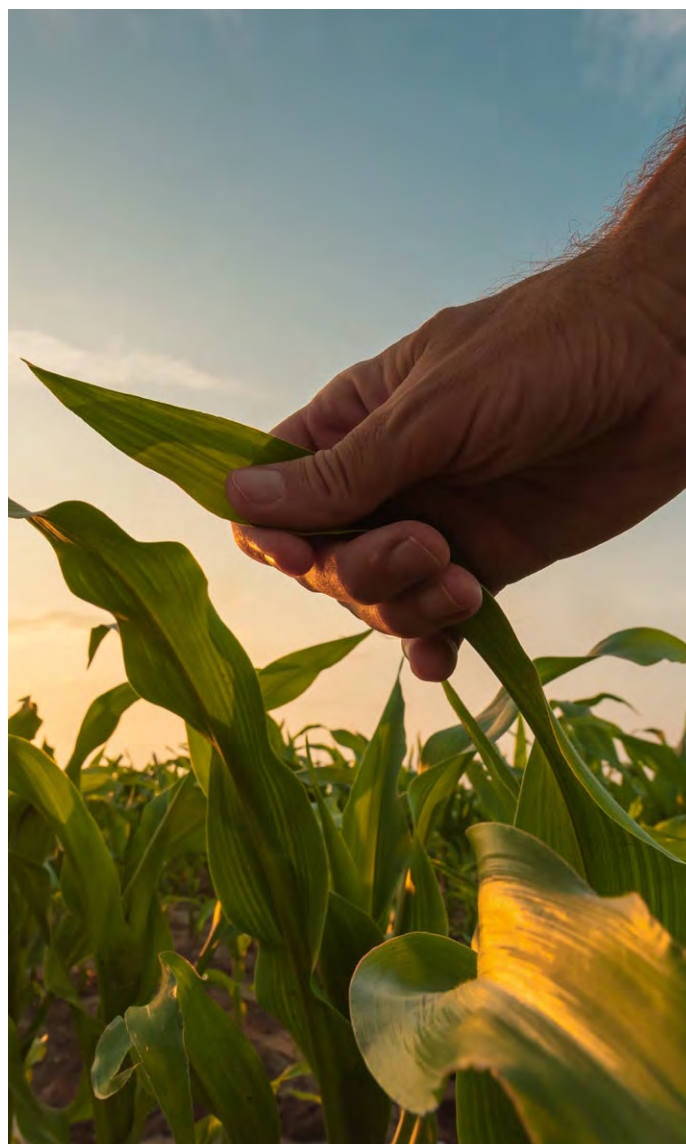
1. Intensive seed treatment fertilizer, applied together with fungicide mortar
2. Leaf/ soil starter fertilizer supporting rooting, stimulating growth of all types of crops in the early stages of development.

Main benefits:

- It accelerates the growth of the root system, increasing the number of lateral roots and the efficiency of nutrient uptake from the soil
- It enables faster development and rooting of vegetative parts, e.g. potato tubers or other vegetables and fruits
- It increases the vigor and dynamics of plant development in the initial period of growth
- Increases the absorption of macro- and microelements present in the soil

Seed application:

- **Cereals: wheat, barley, oats, triticale, rye, millet:**
 Recommended dose 150 - 200 ml / 100 kg of seed.
- **Rapeseed, maize, peas, soybeans:**
 Recommended dose 150-200 ml / 100 kg of seed.
- **Sunflower:**
 The recommended dose is 400 ml / 100 kg of seed.



Application:

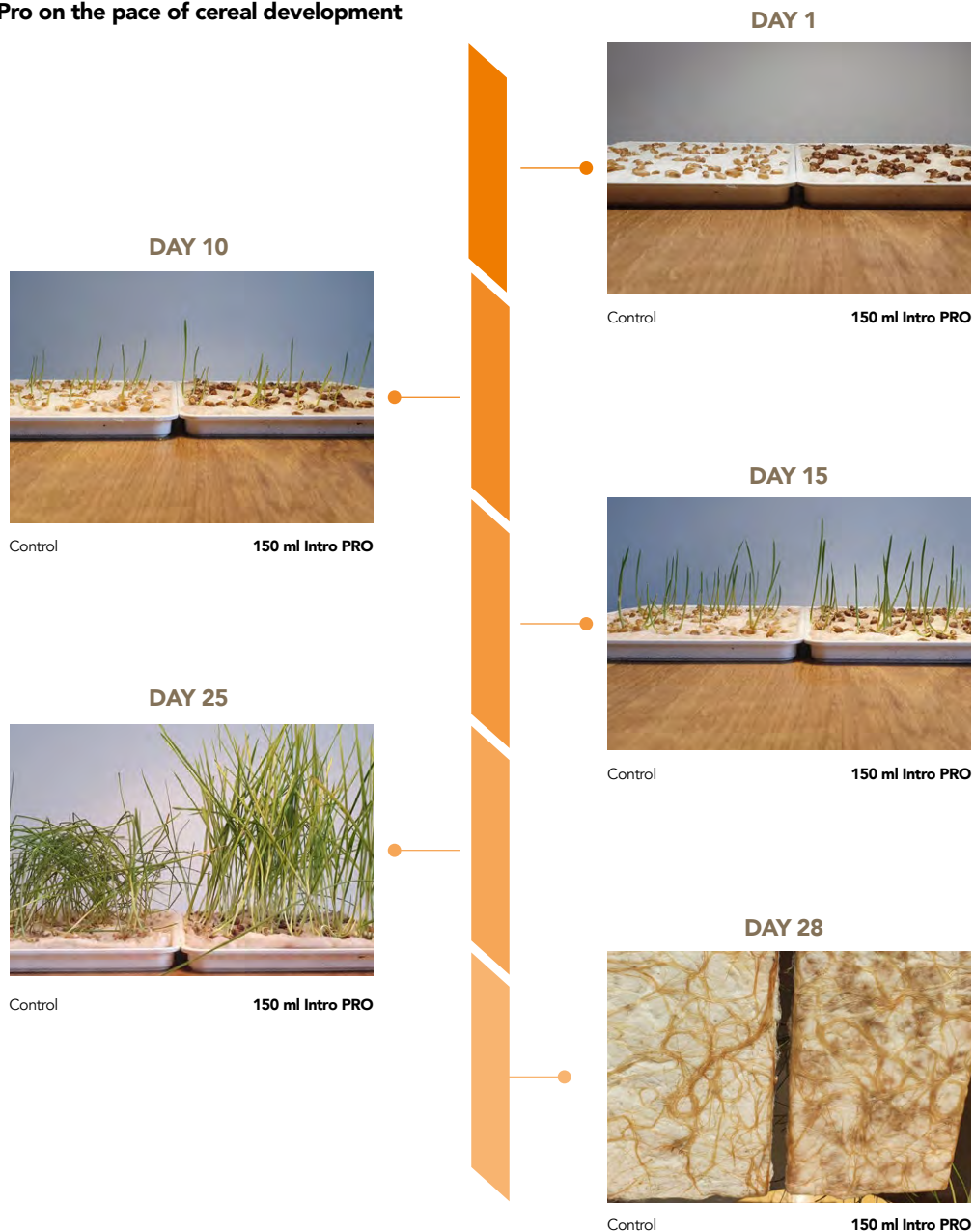
- Seed treatment - in combination with fungicide mortars during seed treatment process
- To soil with herbicides, 0.5-1 l / ha
- In the early stages of vegetation (up to the 6 leaf stage) 0.5-1 l / ha

Other uses:

- Standard irrigation: 2 liters / ha of the preparation in each application, every 10-15 days
- Local irrigation: 1 l / ha every 10-15 days
- Hydroponics 1-2 liters in 100 m³



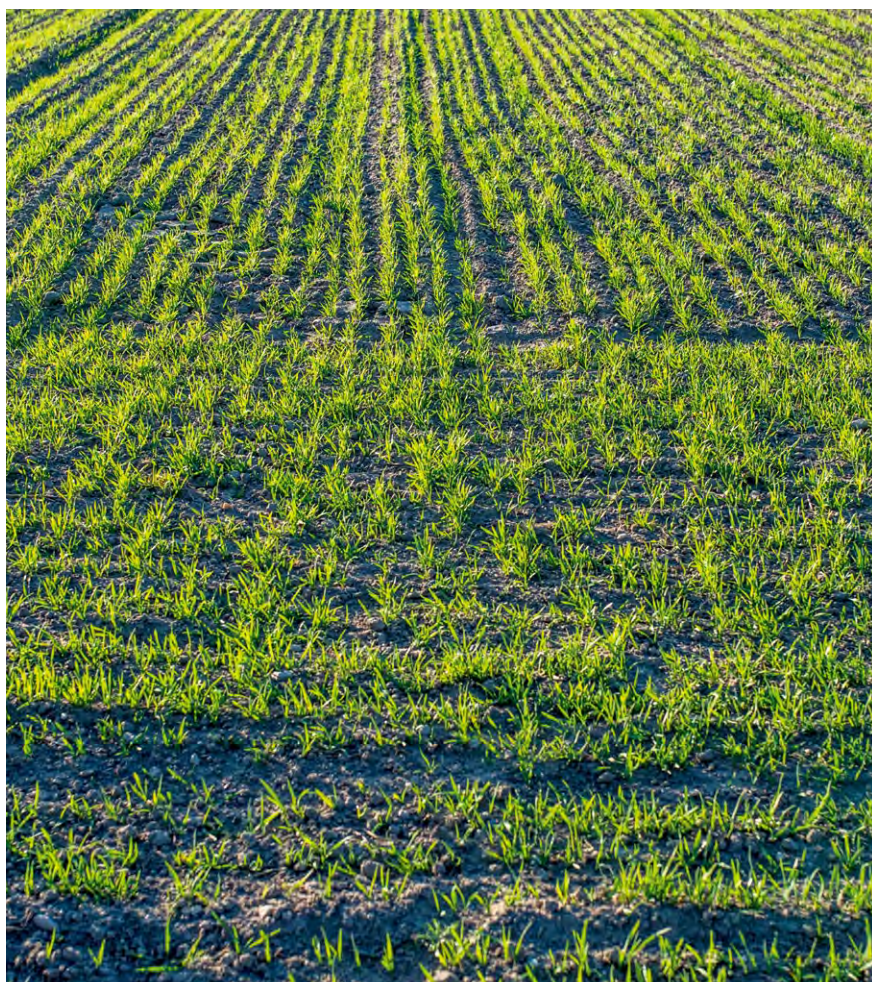
Influence of Intro Pro on the pace of cereal development



Humer PRO[®]

Special fertilizer with a high content of humic extract.

- **The most concentrated product on the market thanks to the instant formula.**
- 100% water-soluble, special fertilizer in the form of a powder, containing 85% humic extract
- Humer PRO is a powder humic acid derived from the best, the richest and purest source of humic acid
- It is suitable for direct application or you can use it also as a mix with other fertilizers, as well as with plant protection products (PPP)



Main benefits:

- The use of Humer PRO is recommended for physicochemical maintenance of soil properties (structure, pH, humus)
- Humer PRO improves water retention and soil storage capacity
- Improves the unlocking of some factions elements, it favors the development of the root system
- Increases microbial activity
- It facilitates the transport of nutrients to the plant through the roots
- Humic substances increase the content and the distribution of sugars in plants

**TOTAL HUMUS
EXTRACT
85% W / W**

**HUMIC ACIDS
70% W / W**

**FULVIC ACIDS
15% W / W**

**POTASSIUM (K₂O)
9% W / W**

APPLICATION:	DOSE:
Cereal	1 - 3 kg/ha*
Rapeseed	1 - 3 kg/ha*
Maize	1 - 3 kg/ha*
Potato	1 - 3 kg/ha*
Beetroot	1 - 3 kg/ha*
Leguminous vegetables	1 - 3 kg/ha*
Fruit trees	1 - 3 kg/ha*

Application dates:

- Stubble with glyphosate
- Stubble with plant protection products
- In soil with herbicides
- Foliar application:
 - Rapeseed:** 4-6 leaves, resumption of spring vegetation
 - Cereals:** 3-4 leaves (beginning of tillering)
 - Maize:** 4-6 leaves
- The remaining plants in the early stages of development
- Watering - vegetable seedlings before planting 0.5 kg / 100 l of water

*recommended: **1 kg/ha**



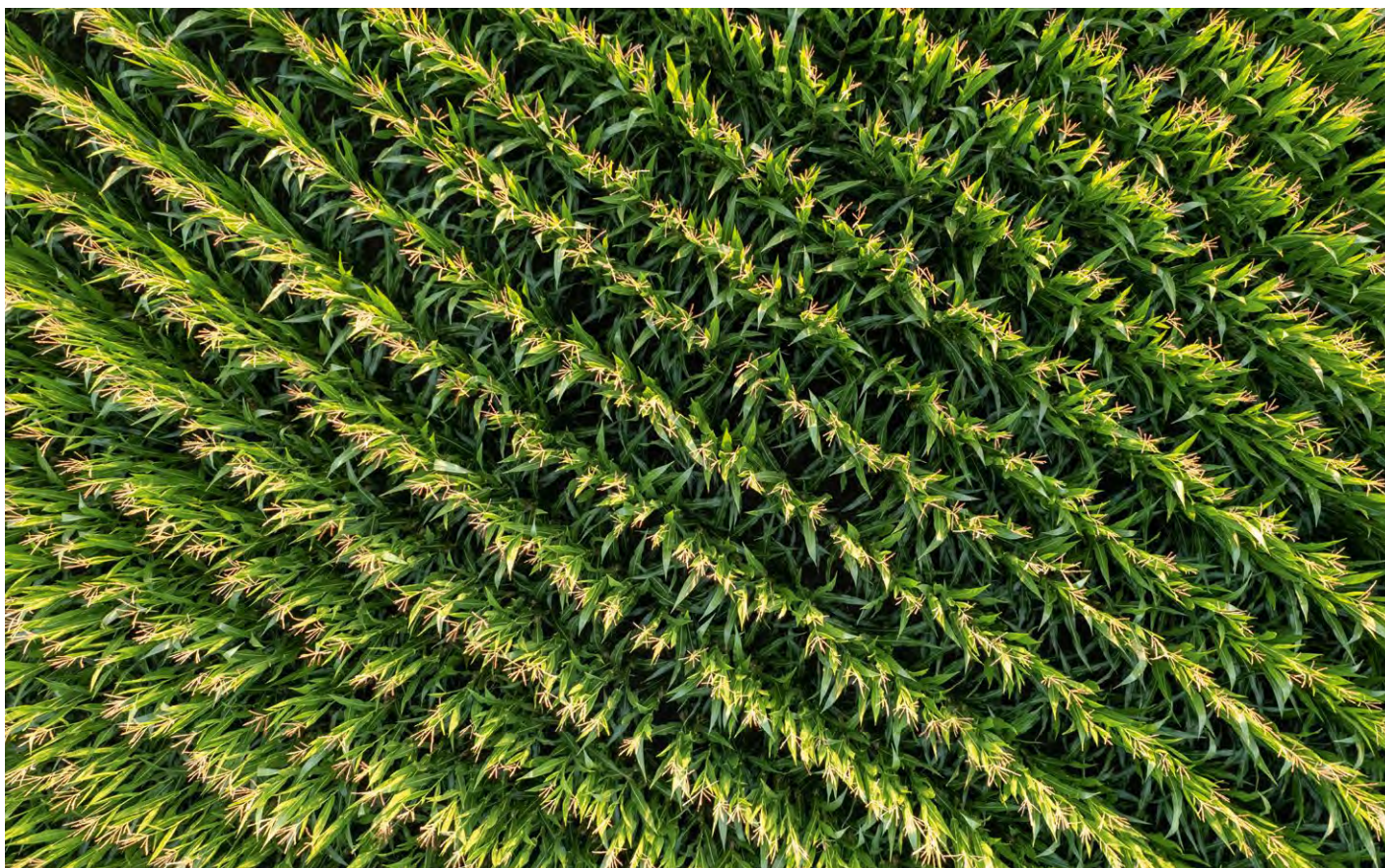
Karboksylan K[®]

Special fertilizer with a high, complex content of highly absorbable potassium.

Main benefits:

- provides carboxylic compounds that affect:
 - better transport of nutrients in the plant
 - effective nutrient uptake from the substrate
 - better efficiency of photosynthesis / respiration
- generates more available energy for plant development
- intensively regenerates plants after stress and strongly limits its impact on the functioning of plants
- facilitates the accumulation of spare materials (carbohydrates and amino acids) in winter
- increases frost tolerance through the compaction of cell juices
- makes it easier to obtain the optimal rapeseed shape before winter
- strengthens the tillering of cereals in the fall





DOSAGE



1-3l/ha

AGRICULTURAL CROPS



2-4l/ha

FRUIT AND VEGETABLE CROPS

Composition:

Potassium (K_2O) 20%

Complexing agent: Carboxylic acid

Application and dose:

Application in key phases of potassium requirement 2-4 l / ha

SPECIAL APPLICATIONS

Strengthening plants in the period of:

- high energy demand (intensive growth or high potential yield);
- limited functioning of the root system;
- osmotic stress (drought, frost);
- low photosynthesis efficiency;
- phytotoxic stress;

All crops: Foliar application from the stage of sufficiently developed foliage: 2-3x 0.5 l / ha every 7-10 days.

Water volume:

200l/ha agricultural crops

400-500l/ha fruit and vegetable crops

Maxired BTHTM

Biotech Horti

Special fertilizer – increases yields and improves fruit quality

The product is especially indicated for use in the fruits and vegetables ripening phase to improve their color, increase the weight and content of sugars, and to equalization of the harvest. The main components of the fertilizer are polysaccharides and amino acids, which, together with the remaining compounds present in the product, stimulate the processes related to fruit weight gain, sugar accumulation (Brix), and activate and strengthen the processes of formation of pigments responsible for dyeing red, purple and orange.



Main benefits:

- Higher commercial yield
- Better fruit coloring and their firmness
- Higher sugar content (Brix)
- No degradation of storage facilities
- Harvest uniformity (more colored fruits at the same time)
- Compatible with most fertilizers and PPC's used within the recommended period of use of Maxired BTH

COMPOSITION:

Polysaccharides 14.85% w/w
 Free Amino Acids 5% w/w
 N 1.98% w/w
 K₂O 7.93% w/w
 CaO 1.98% w/w
 MgO 1.98% w/w
 Zn 0.10% w/w
 B 0.10% w/w

APPLICATION AND DOSE:**VEGETABLES**

Tomato, pepper:
use foliar 0.5-1.0 l / ha /
application or
5 l / ha during fertigation

Recommended 2-3
applications at intervals
of 5-7 days, the last
application should be
made 5-7 days before
grain harvest.

ORCHARDS

Fruit trees:
For foliar use
0.5-1.0 l / ha

3 applications: 30 days
before the beginning of
fruit coloring, 15 days
before the beginning of
fruit coloring and 10 days
before harvest.

SOFT FRUIT

For foliar use
0.5-1.0 l / ha / application
or 5 l / ha during
fertigation

Recommended 2-3
applications at intervals
of 5-7 days, the last
application should be
made 5-7 days before
harvest.

CULTIVATION UNDER COVER

Use a concentration of
0.1%

Recommended 2-3
applications at intervals
of 5-7 days, the last
application should be
made 5-7 days before
harvest.

MAXIRED BTH FIELD EXPERIENCE 2021

The effect of Maxired BTH application on the color of apple fruit, Gala variety.
Location: orchard near Sandomierz (Poland).

**3x1 l Maxired****Control****MAXIRED BTH FIELD EXPERIENCE 2021**

A tomato for a combine harvest. Purpose of ketchup. Location: The farm near Łowicz (Poland).

**Control****Maxired BTH
3x0,5 l every 7 days**

Hepta PRO[®]

Special fertilizer containing a highly absorbable copper complex.


Copper is present as a micronutrient in many enzymatic processes, especially in the production of phytoalexins and the synthesis of lignins. In copper deficient plants, damage of the xylem vessels can occur, which can block the transport of water and nutrients from the roots to the leaves. **Hepta PRO prevents infections of pathogens.**

Composition:

- Total copper (Cu), water-soluble 7% m / m
- Copper (Cu) complexed at 7% m / m
- Complexing agent: Heptagluconic acid



Dosage



FOLIAR APPLICATION

1-3 l/ha

CROPS:
AGRICULTURAL, FRUITS,
VEGETABLES



FERTIGATION

2-3 l/ha

CROPS:
FRUITS AND VEGETABLES

Use:

- The product can be used prophylactically from the appearance of the leaves to full maturation, and therapeutically at the very beginning of the infection and repeated every 15 days as long as necessary.
- Especially recommended in treatments aimed at reducing the risk of infection caused by:
 - Dry rot
 - Black crucifixes
 - A brown spot
 - A beetroot
 - Other fungal pathogens

Properties:

- It works systematically - the preparation is distributed throughout the plant
- Health activator
- It induces the plant's defense mechanisms
- It is absorbed by both leaves and roots
- It has a preventive and curative effect, and hinders paralysis by pathogens
- No phytotoxicity unlike other forms of copper
- Works in low temperatures
- New formula - highly digestible copper complex

Possibility to create "hybrid" solutions

Fully miscible with conventional plant protection products. Unlike other forms of copper, it does not cause problems in the preparation of tank mixtures.

Hepta PRO - systemic operation

Hepta PRO is absorbed by both the leaves and the roots of plants. Penetrating the cuticle, it increases the transport of copper to plant cells, it is translocated throughout the plant (up and down).



Sulter PRO[®]

The action of sulfur combined with a unique complex of terpenoids.

Sulter PRO is based on the properties of sulfur, used in combination with organic compounds in the form of terpenoids. The unique combination results in increased effectiveness of the treatment. On the surface of plants, the spray creates a terpenoid structure that prevents washing away, which remains for a long period of time regardless of rainfall, drought or wind.



DOSAGE

1-3 l/ha

CROPS: AGRICULTURAL AND VEGETABLES
AMOUNT OF WATER: 150-300L/HA

3-5 l/ha

ORCHARDS
AMOUNT OF WATER: 500-600L/HA

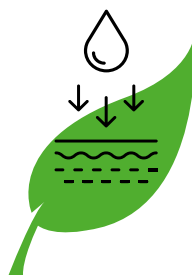
Benefits of the formula containing terpenoids:



**BETTER DISTRIBUTION
OF LIQUIDS**



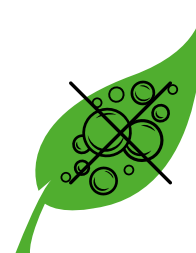
**INCREASES RESISTANCE
TO RAIN**



**BETTER PENETRATION
OF LEAF AND STEM
SURFACES**



**SLOWER DRYING
OF DROPLETS**



**NO FOAMING, BETTER
QUALITY OF THE
WORKING FLUID**

Properties of sulfur:

- Increases the natural resistance of plants to stresses caused by pathogens
- Has a preventive function and hinders infection by pathogens
- Takes part in the synthesis of lignin, which are the main component of the cell wall, so that plants are more resistant to pathogen attack
- The use of sulfur limits the development of resistance.

The properties of Sulter PRO perfectly complement the first T0/T1 protection treatments in early spring weather conditions, where changing weather and low temperatures prevent high effectiveness.

Product can be used in combination with:*

- herbicides
- fungicides
- insecticides
- foliar fertilizers

*conduct a compatibility test.



Insektor[®]

Product creating a sticky coating that immobilizes and kills plant pests.

Main benefits:

- No residues – does not contain any active pesticides substances
- No problem of pest resistance (due to physical mechanism of action)
- Wide spectrum of pest control
- In hybrid application increases the effectiveness of traditional plant protection products (suitable for use with traditional PPP)
- Can be used several times during the growing season
- There is no grace period
- Fast action over a wide temperature range



COMPOSITION:

Product based on a mixture of surfactants and polymers.

ACTION IN CROPS:

- spring and winter crops
- rapeseed
- sugar beet
- potato
- maize
- fruit plants (fruit trees, soft fruits)
- vegetables
- ornamental plants



Dosage: 0,1-0,2%

(100 – 200 ml of the preparation in 100 l of water)

The recommended dose of liquid per ha is not less than 200 l (the larger amount of liquid is indicated). It is necessary to cover the entire surface of the plant with liquid.

Mode of action:

After application, it forms a structure on the body of insects that immobilizes them and clogs the spiracles. The method of operation is a physical method (there is a physical blockage of life processes: immobilization and prevention of breathing). The mechanism of action is immediate: most of the treated pests die immediately after treatment and the remainder within 1-2 days.

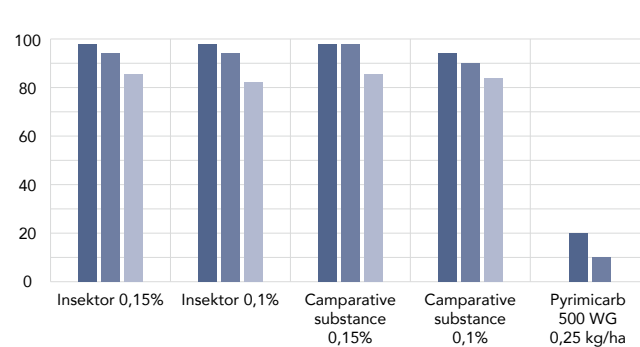
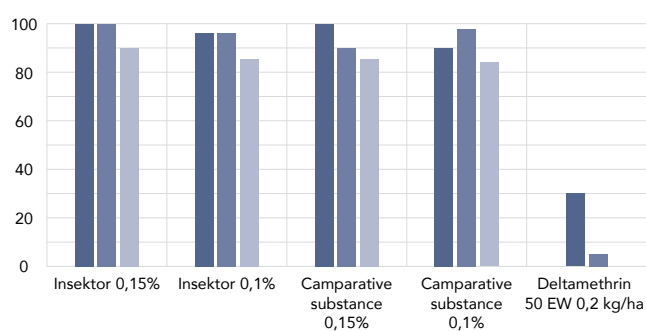
Pests controlled

Aphids, leafhoppers, thrips, horsetails, rapeseed sweetmeats, hunters, whiteflies, fleas, cabbage cream (control of flying insects), square moths, maize moth (control of flying flies), cup larvae, honey larvae and other fine body pests.

Hybrid operation

Insektor is suitable for use with most traditional plant protection products (PPP) in one mixture (e.g. insecticides or acaricides). Operating as a hybrid, two mechanisms of action are combined: physical and chemical. Thanks to this:

- the effectiveness of the treatment increases
- time spent on spraying is reduced
- multiple spraying costs are lowered
- the selection of insect pest species for the traditional plant protection product used is reduced

**The effectiveness of Insektor in combating aphids [%]***

■ 1 days after the procedure ■ 3 days after the procedure ■ 7 days after the procedure

*Peach aphid- species showing resistance to groups of pyrethroids



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