



# PRESENTATION ON EXCLUSIVE PRODUCTS



# STIMULANTS CLASSIC



COMPLEX NATURAL AND SYNTHETIC FORMULATION WITH SYSTEMIC AND CONTACT PROPERTIES FOR TREATMENT OF SEEDS AND PLANTS IN THE VEGETATIVE STAGE



## COMPOSITION

Polyethylene glycol  
– 770 g/l



Washed salts of humic acids  
– up to 30 g/l



### GROWTH STIMULANT

Plants grow faster



### ADJUVANT (FILMING AGENT)

Preparations are reliably attached to leaves



### ADAPTOGEN

Poor conditions do not affect plant growth



### CRYOPROTECTANT

Plants tolerate low temperatures better



### THERMOPROTECTANT

Plants tolerate heat and drought better



### ANTI-STRESS AGENT

Relieves pesticide stress



### DISEASE INHIBITOR

Plants get sick less often, strengthens immunity



### SOIL ACTIVATOR

Improves soil condition



### ANTIOXIDANT

Preserves seeds in the soil from poor conditions



### PHOTOSYNTHESIZER

Maximum efficient photosynthesis

# STIMULANTS CLASSIC



**Purpose:**  
complex natural and synthetic formulation with systemic and contact properties for treatment of seeds and plants in the vegetative stage.

 **COMPLEX NATURAL AND SYNTHETIC FORMULATION WITH SYSTEMIC AND CONTACT PROPERTIES FOR TREATMENT OF SEEDS AND PLANTS IN THE VEGETATIVE STAGE**

## MAIN FUNCTIONS:

- ✓ increases crop yields by 20 to 30% or more;
- ✓ improves the quality of agricultural products;
- ✓ increases the efficiency of pesticides, macro- and microfertilizers by 20-30%;
- ✓ increases drought resistance, frost resistance, winter hardiness and immunity of plants;
- ✓ enhances the development and activity of soil microorganisms;
- ✓ accelerates the accumulation of sugars and increases their content;
- ✓ does not require additional processing costs – is used in tank mixtures.

CROP	APPLICATION TIMES	RATE
Cereals, sunflower, corn, legumes, rapeseed, sugar beet, vegetables, potatoes, millet, buckwheat, rice	Pre-sowing seed treatment	0.5-1.0 l/t
Potatoes	Pre-planting tuber treatment	2-4% solution
Fruits, berries, grapes	Soaking seedlings	2-4% solution
Cereals, sunflower, corn, legumes, rapeseed, sugar beet, vegetables, potatoes, millet, buckwheat, rice	Leaf spraying	0.5 l/ha
Fruits, berries, grapes	Leaf spraying	1.0-1.5 l/ha

**PACKAGING**

	10 l	5 l	1 l
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# STIMULANTS CLASSIC



## MAIN FUNCTIONS:

- ✓ increases yield;
- ✓ increases plant growth and germination of seeds (uniform shoots are formed);
- ✓ creates a protective film around seeds in case of their prolonged stay under unfavorable weather conditions (up to 2 months);
- ✓ provides active development of root system;
- ✓ increases the efficiency of using biological preparations, seed dressings, macro- and microfertilizers;
- ✓ multiplies the activity of microorganisms in the soil.

COMPOSITION
Polyethylene glycol – 770 g/l
Amber-humate complex – up to 30 g/l

**Purpose:**  
a highly effective formulation for treatment of seeds, tubers, cuttings, seedlings

CROP	APPLICATION TIMES	APPLICATION RATE
Cereals, sunflower, corn, sugar beet, legumes	Pre-sowing treatment of seeds	0.5-1.0 rg/t
Vegetables and other crops	Soaking of seeds and seedlings for 1.5-2 hours	2-3% sol.
Potatoes	Pre-planting treatment of tubers	2-3% sol.
Fruit, berries, grapes	Soaking of seedlings and cuttings	2-3% sol.

PACKAGING
5 kg
1 kg

# STIMULANTS CLASSIC



## MAIN FUNCTIONS:

- ✓ increases crop yields;
- ✓ enhances cellular respiration, promotes oxygen uptake by cells;
- ✓ improves protein metabolism;
- ✓ relieves pesticide stress;
- ✓ stabilizes the vital activity of natural soil microflora around seeds.

COMPOSITION			
 triphosphoric ester of adenine derivatives with ribose - 3 g/l	 polyhydric alcohols - 300 g/l	 humic acids - 60 g/l	 carboxylic acids of natural origin - 6 g/l

**Purpose:**  
a new exclusive formulation created specifically for sunflower and corn.

PACKAGING
5 l
1 l

CROP	APPLICATION TIMES	APPLICATION RATE
Cereals, sunflower, corn, sugar beet, legumes	Pre-sowing treatment of seeds	0.5-l/t
Vegetables and other crops	Soaking of seeds and seedlings for 1.5-2 hours	2-3% sol.
Potatoes	Pre-planting treatment of tubers	2-3% sol.
Fruit, berries, grapes	Soaking of seedlings and cuttings	2-3% sol.

# STIMULANTS CLASSIC



## MAIN FUNCTIONS:

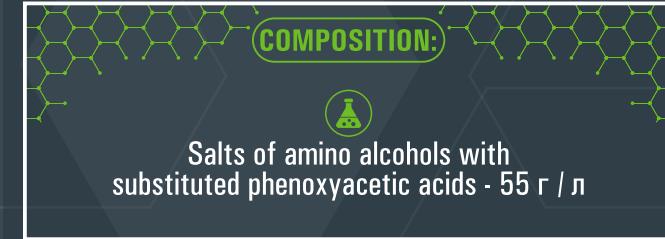
- ✓ increases the yield of nightshade crops from 45 to 95% and more;
- ✓ increases the content of dry matter, sugars, microelements, vitamins and improves the taste of fruits;
- ✓ increases number of inceptions and weight of one fruit;
- ✓ increases the early harvest by 20-40% depending on the crop variety and growing conditions;
- ✓ harvesting of ripe fruit begins 7-10 days earlier.

**Purpose:**  
a formulation for increasing fruit setting of nightshade crops.

CROP	APPLICATION TIMES	APPLICATION RATE
Tomato, pepper, eggplant (open ground and greenhouse)	Flowering of the first cluster	50-150 ml/ha (open ground) 1 ml / 10 l of water (tomatoes)
	Flowering of the second cluster	0.8 ml / 10 l of water (peppers, eggplants and salad varieties of tomatoes - pink, yellow)

**ATTENTION! Do not use the formulation in tank mixtures.  
Apply the formulation according to the instructions.  
DO NOT EXCEED THE SPECIFIED DOSAGE!**

PACKAGING
100 ml
6 ml



# STIMULANTS CLASSIC



BAK LAN® compensates for the lack of nutrients during unfavorable growth conditions and during intensive growth period, when application of the formulation is extremely effective. The supply of amino acids from the outside allows the plant to speed up metabolic processes, without spending additional energy on its own synthesis. The amino acids that make up the complex are natural "building material", and thanks to the genetically determined mechanism of distribution in plants, they go directly to the organs that need additional nutrition.

**Purpose:**  
the formulation is used  
as an additional source  
of nutrients for plants.

PACKAGING
10l
1l

COMPOSITION
amino acids - 225 g/l, including glycine, alanine, valine, leucine, isoleucine, cysteine, methionine, phenylalanine, tyrosine, tryptophan, proline, serine, threonine, asparagine, glutamine, lysine, arginine, etc.

CROP	APPLICATION TIMES	APPLICATION RATE
Cereals, industrial crops	Foliar preventive applications during vegetation period and in critical phases of development	0.2-0.8 l/ha
Vegetables		1.0-2.0 l/ha
Fruit, vineyards		1.5-2.0 l/ha
Berries		1.0-1.5 l/ha

# STIMULANTS SPECIAL



Sugar beet growth stimulant the yield and sugar content stimulant SWEETLIPS is a new product from DOLINA, which includes a set of specific growth stimulants, purpose of which is focused on increasing the efficiency of growing and industrial processing of sugar beet. SWEETLIPS is the result of rethinking the philosophy of developing plant growth stimulants by the company specialists from the standpoint of the question: who is the consumer of its products and what problems of customers these products solve.

Consumers of standard stimulants are farmers of all levels, and the effect of these products is focused on the technological cycle of growing agricultural crops from seed treatment to harvesting, and in the best case, the positive impact on storage and the biochemical composition of the products. A new look at these processes, as a result of which the SWEETLIPS stimulator was created, allows to expand the list of specific problems that it solves. Not only agricultural producers face these problems, but processing enterprises do as well, which taking into account the ownership structure of sugar beet sowing areas in Ukraine is even more relevant.

CROPS	TECHNOLOGY	APPLICATION TIMES	APPLICATION RATES
Sugar beet	Standard	4-6 leaves closure of leaves in rows (10-12 leaves)	0.2 l/ha
	Intensive	closure of leaves between rows closure of leaves in rows (10-12 leaves) closure of leaves between rows	0.5 l/ha

# MICROFERTILIZERS CLASSIC



DOES NOT CONTAIN EDTA	COMPOSITION		Cu	8	CROP	RATE	ADVANTAGES OF APPLICATION:
	Nitrogen	N	100	Zinc	Zn	8	
	Phosphorus	P <sub>2</sub> O <sub>5</sub>	66	Boron	B	6	
	Potassium	K:O	44	Manganese	Mn	6	
	Sulfur	SO <sub>3</sub>	36	Cobalt	Co	0,05	
	Iron	Fe	6	Molybdenum	Mo	0,12	

\*-IN CASE OF USING THE MAXIMUM APPLICATION RATE AND COMBINING THE FORMULATION WITH THE VIMPEL 2® GROWTH STIMULANT



DOES NOT CONTAIN EDTA	COMPOSITION		Cu	5,4	CROP	RATE	ADVANTAGES OF APPLICATION:
	Nitrogen	N	20	Zinc	Zn	5,4	
	Phosphorus	P <sub>2</sub> O <sub>5</sub>	99	Boron	B	1,8	
	Potassium	K:O	65	Manganese	Mn	15	
	Sulfur	SO <sub>3</sub>	57	Cobalt	Co	0,1	
	Iron	Fe	15	Molybdenum	Mo	0,4	



DOES NOT CONTAIN EDTA	COMPOSITION		g/l	CROP	RATE	ADVANTAGES OF APPLICATION:
	Boron	B	155			
	Nitrogen	N	50	Cereals, sunflower, rapeseed, corn, legumes, fruits and berries, grapes	1.0-1.5 l/ha	enhances the development of reproductive organs and pollination of flowers;
	Colofermine		510		1.0-2.5 l/ha	
					0.5-1.0 l/ha	
						causes intensive absorption of moisture from the soil by plants;
						positively affects the accumulation of sugars in the tissues of winter crops and sugar beet roots.



DOES NOT CONTAIN EDTA	COMPOSITION		g/l	CROP	RATE	ADVANTAGES OF APPLICATION:
	Zinc	Zn	120			
	Nitrogen	N	118	Cereals, sunflower, rapeseed, vegetables	0.5-1.0 l/ha	enhances root development and regulates water exchange in plant tissues;
	Sulfur	SO <sub>3</sub>	144	Corn, sorghum	1.0-2.0 l/ha	
	Colofermine		374	Sugar beet, legumes, potatoes	1.0-1.5 l/ha	
				Fruits and berries, grapes	2.0-3.0 l/ha	stabilizes the synthesis of chlorophyll, protein and carbohydrates in cells;
						promotes the formation of the natural hormone auxin.



DOES NOT CONTAIN EDTA	COMPOSITION		g/l	CROP	RATE	ADVANTAGES OF APPLICATION:
	Copper	Cu	100			
	Nitrogen	N	89	Cereals, vegetables	1.0-2.0 l/ha	prevents lodging of crops;
	Sulfur	SO <sub>3</sub>	126	Corn, sorghum, sunflower, potatoes, legumes, rapeseed, sugar beet	0.5-1.5 l/ha	
	Colofermine		374	Fruits and berries, grapes	1.0-3.0 l/ha	
						promotes better absorption of nitrogen;
						has characteristic fungicidal properties;
						increases the content of vitamin C in fruits.

# MICROFERTILIZERS CLASSIC



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# MICROFERTILIZERS CLASSIC



DOES NOT CONTAIN EDTA

COMPOSITION	g/l
Magnesium	MgO 83
Nitrogen	N 72
Colofermine	384

CROP	RATE
Cereals, sunflower, rapeseed, vegetables	1.0-1.5 l/ha
Legumes, corn, sorghum, sugar beet, potatoes	1.5-2.0 l/ha
Fruit and berries, grapes	2.0-3.0 l/ha

## ADVANTAGES OF APPLICATION:

- ✓ strengthens the protein-synthesizing system;
- ✓ activates the process of photosynthesis;
- ✓ increases enzyme activity;
- ✓ regulates phosphorus metabolism in plants.

1l  
5l  
10l

DOES NOT CONTAIN EDTA

COMPOSITION	g/l
Phosphorus	P <sub>2</sub> O <sub>5</sub> 420
Nitrogen	N 83
Colofermine	939

CROP	RATE
Cereals, sunflower, vegetables	1.0-4.0 l/ha
Corn	1.5-5.0 l/ha
Rapeseed, sugar and fodder beet	1.5-4.0 l/ha
Legumes, potatoes	2.0-4.0 l/ha
Fruit and berries, grapes	2.0-5.0 l/ha

## ADVANTAGES OF APPLICATION:

- ✓ promotes the development of the root system;
- ✓ supports the flowering process;
- ✓ accelerates the ripening of fruits.

1l  
5l  
10l

DOES NOT CONTAIN EDTA

COMPOSITION	g/l
Potassium	K <sub>2</sub> O 361
Colofermine	785

CROP	RATE
Cereals, sunflower, corn, rapeseed, sugar and fodder beets, legumes, potatoes	1.5-4.0 l/ha
Fruits and berries, grapes	2.0-6.0 l/ha
Vegetables	1.5-4.0 l/ha

## ADVANTAGES OF APPLICATION:

- ✓ increases plant resistance to frost and lack of moisture;
- ✓ reduces damage to crops by root blight and rot;
- ✓ improves water supply to plant cells.

1l  
5l  
10l

DOES NOT CONTAIN EDTA

COMPOSITION	g/l
Calcium	CaO 206
Nitrogen	N 103
Colofermine	953

CROP	RATE
Vegetables, cucurbits	1.0-4.0 l/ha
Fruit and berry crops, grapes	2.0-5.0 l/ha

## ADVANTAGES OF APPLICATION:

- ✓ regulates the construction of cell membranes;
- ✓ increases plant resistance to diseases;
- ✓ improves the commercial quality of fruits.

1l  
5l  
10l



Pure concentrated compositions of NPK macroelements to provide plants with essential nutrients.

**ECONOM 3-18-18**

**ECONOM 5-20-5**

**ECONOM 8-24-0**

**ECONOM 12-20-3**

### MAIN FUNCTIONS:

- ✓ soil treatment (IN-FURROW technology);
- ✓ foliar feeding to correct plant nutrition with nitrogen, phosphorus and potassium;

**Soil treatment (IN-FURROW technology)**

Application rate 20-50 l/ha (25-70 kg/ha).

### Foliar feeding

Recommended application rate - 3-7 l/ha.  
Working solution application rate: for field, vegetable crops - 200-400 l/ha, for fruit and grapes - 500-1000 l/ha.

### ADVANTAGES:

- ✓ 100% available orthophosphate form of phosphorus;
- ✓ less dependent on drought conditions;
- ✓ efficient absorption at low soil temperatures;
- ✓ high efficiency at low application rates;
- ✓ absence of ballast salts (chlorides, etc.) and harmful impurities;
- ✓ safe for plants at optimal rates;
- ✓ neutral pH;
- ✓ low salt index (safe for sprouts and leaves);
- ✓ absence of equipment corrosion;
- ✓ low crystallization temperature;
- ✓ ideal opportunity of combined application with microelements, pesticides and biofertilizers.

### FERTIGATION

To prepare the irrigation mixture, you need to dissolve 5 L of fertilizer in at least 1000 L of water. The total fertilizer application rate averages from 50 to 100 l/ha during the growing season. The daily fertilizer application rate ranges from 1 to 10 L depending on agronomic needs.

# STIHL SUVVAV AUDITOR



## MAIN FUNCTIONS:

- eliminates the formation of sedimentary particles, as well as residue in the sprayer tank when using water with increased hardness;
- improves the technological efficiency of vegetation treatments and solves the problems of nozzle clogging that occur during the active phases of work;
- allows you to fully reveal the potential of all the components in the tank mixture;
- forms biologically active chelate natural complexes with cations of hardness salts (calcium, magnesium, iron), converting them into a form that is easily absorbed by plants;
- lowers pH to neutral values, ensuring the stability of the plant protection products, which are hydrolyzed at high pH values, losing their effectiveness.

### PURPOSE:

used to prepare a tank mixture with water that has an increased hardness level, to correct the pH level and to flush sprayer tanks and working liquid supply systems.

### COMPOSITION:

natural biogenic hydroxycarboxylic acids;  
anionic surfactants with high surface activity.

### PRODUCT APPLICATION RATE DEPENDING ON WATER HARDNESS

Water hardness, ppm ( $\text{CaCO}_3$ )	Water hardness, mg-eq./l ( $\text{Ca}^{2+}$ )	Product application rate, ml/100 l of water
200	4	25
400	8	50
500	10	60
1000	20	120
1500	30	175
2250	45	260
3250	65	380

1l

5l

# STABILIZANT ADJUVANT



## MAIN FUNCTIONS:

- REFERI® – is an effective water pH corrector and is used to prepare tank mixtures with all types of plant protection products, growth regulators, micronutrient fertilizers and bioformulations;
- the original components of REFERI® perform an acidifying function in the water for the tank mixture and reduce the pH to optimal values;
- the acidifying effect is achieved by binding excess hydroxide ions (OH<sup>-</sup>) and converting them into water;
- application of the REFERI® pH corrector helps to avoid the destruction (hydrolysis) of plant protection products, helping them to maintain their high efficiency and reliability, regardless of the initial pH level of the water.

### APPLICATION RATE OF THE PRODUCT:

working solution is formed on the day of application according to the rates indicated on the label. The average application rate of the product is 20-40 ml per 100 liters, but in practice it is calculated from the initial pH level. Since the pH of water is an individual indicator, very specific for each case, determining the application rate of REFERI® requires a certain model technique. Use small quantities of imitation mixture, bring its pH values up to 6 units. After determining the required volume of REFERI® stabilizer in the imitation solution, its application rate for the entire volume of the tank mixture can be easily found.

### PURPOSE:

is applied during preparation of a tank mixture with water, which has an increased alkalinity level.

### COMPOSITION:

 composition based on mineral and organic acids

### PACKAGING UNITS

5l

1l

# S T E A W A D P A



## EFFECTS OF USING Pakt® AS A SUPERWETTING AGENT:

- weakens the bond between water molecules, ensures instant spreading of solutions over the leaf surface;
- evens out the size of the working solution droplets, increases the area of coverage of the leaf and plant surface with the working solution;
- accelerates and optimizes absorption of the working solution by leaves.

## EFFECTS OF USING Pakt® AS AN ADJUVANT:

- improves adhesion of tank mixture components, enhances the ability of the working solution to adhere to the surface of plants for a long time;
- the protective film forming on the leaf surface as a result of using the formulation ensures prolonged effect of plant protection products and increases their efficiency by 20-30%, while not interfering with gas exchange processes;
- increases the speed of response of active substances of plant protection products to a harmful object, as well as the speed of absorption of macro- and microelements, prolongs the activity of beneficial bacteria in biological products.

## SYSTEMIC PROTECTION COMPLEX INSECTO-protector, WHICH IS INCLUDED IN THE COMPOSITION OF THE PRODUCT:

- blocks the movement of some pests along the leaves, glues pupae and larvae, fixes fungal spores.

## PREPARATION AND APPLICATION RATE OF THE PRODUCT, WORKING SOLUTION:

the working solution is formed on the day of treatment according to the rate indicated on the label. The consumption rate of the product is 100 ml per 100 liters of water. Pakt® is used on all crops and in all stages of development - from seeds to fruiting, with the exception of flowering.

### PACKAGING UNITS

5l

1l

### PURPOSE:

is used as a surfactant in a tank mixture with pesticides, growth regulators, micronutrient fertilizers and biological products.

### COMPOSITION:

- anionic surfactants - 19 l/g;
- polyhydric alcohols - 55 g/l;
- INSECTO-protector complex - 750 g/l

# ADJUVANT



## PURPOSE:

- spraying plants during the growing season together with plant protection products, growth stimulants, microfertilizers and biological preparations;
- pre-sowing (pre-plant) treatment of seeds, potato tubers, bulbs, soaking the roots of seedlings together with preparations for planting material treatment.

## MAIN FUNCTIONS:

- increases the number of productive drops of the working solution on the surface of plants, thereby improving the efficiency of spraying;
- improves the adhesiveness of pesticide formulations, and thereby enhances the ability of the working solution to adhere on the leaf surface for a long time, especially on leaves with an increased wax (cuticular) layer;
- allows for the working solution to penetrate under the layer of wax coating on the leaves of plants;
- provides prolonged action of plant protection products and increases their efficiency by 20-30%;
- helps to reduce the consumption rates of the working solution;
- increases the speed of response of active substances of plant protection products to a harmful object, as well as the speed of absorption of macro- and microelements;
- reduces stress due to pesticide treatments.

## FEATURES:

- a protective film that is formed on the leaf surface protects the active ingredients of the tank mixture formulations from being washed away by rain and water during irrigation, thus prolonging their effect and increasing the effectiveness of the tank mixture components;
- the tank mixture components are fixed on the leaf surface for up to 7-8 average rains;
- the water temperature does not affect the effectiveness of the preparation, allowing for the treatment of plants in a wide temperature range;
- prolongs the action of beneficial bacteria in biological preparations;
- is used on all crops and during all phases of plant development - from seeds to fruiting, with the exception of flowering.

## PACKAGING UNITS

5l

1l





THANK YOU FOR YOUR  
TIME AND CONSIDERATION!

