

#### CONTENT

About company	4
Comprehensive crop protection systems	7
Pesticides	
Seed treatments	31
Benefis, ME	33
Benefis Supreme, ME	33
Bombarda, SC	33
Deposit, ME	34
Depozit Supreme, ME	34
Harita, SC	34
Heraklion, SC	35
Imidor Pro, SC	35
Messer, ME	35
Polaris Quatro, SME	35
Polaris, ME	38
Puaro, SC	38
Protego Max, ME	38
Scarlet, ME	39
Tebu 60, ME	39
Tuareg, SME	39
Herbicides and desiccants	41
Acetal PRO, EC	42
Action, SC	42
Argo Prime, ME	42
Argo, ME	42
Ballista, OD NEW	44
Benito, CSC	44
Betaren 22, OEC	44
Betaren 320, OD NEW	44
Betaren Max, OD NEW	45
Betaren Express AM, EC	45
Betaren Super MD, OEC	45
Bravura, SC NEW	45
Brig, SC	46
Censor Max, OEC	46
Censor, EC	46
Concept, OD	46
Cornegi, SE	47
Cornegi Plus, OD NEW	47
Damba, SL	47

Drotik, CSC	47
Estamp, EC	49
Femida, OD	49
Fenizan, SL	49
Fortissimo, OD	49
Forward, OEC	50
Gals, EC	50
Geizer, CSC	50
Glok, WG NEW	50
Granat, WG	52
Healer, OEC	52
Hermes, OD	52
Hermes Forte, OD NEW	52
Ilion, OD	53
Kassius, SP	53
Kondor, WG	53
Kondor Forte, OD	53
Kupazh, WG	54
Lintaplant, SL	54
Lornet, SL	54
Mitron, SC	54
Octava, OD	55
Ovsugen Express, EC	55
Ovsugen Super, EC	55
Pinta, OD	55
Pixel, OD	57
Primadonna Super, CSC	57
Primadonna, SE	57
Reper Trio, OD	58
Reper, CSC	58
Restyle, OD	58
Rizotto, OD NEW	58
Sanflo, WG	59
Shkval, SL	59
Sprut Extra, SL	59
Tanto, CSC	61
Uniko, CSC	61
Versia, OD	61
Zinger, WP	62
Zontran, CSC	62
Tongara, SL	63
Insecticides and acaricides	65
Akardo, CSC	66
Apex, OEC	66
Beretta, OD	66

Dakfosal, TB	67
Diflomite, SC	67
Espero, SC	67
Espero Euro, OD	68
Faskord, EC	68
Imidor, SL	68
Imidor Extra, SC NEW	69
Karachar, EC	69
Kinfos, EC	69
Kinfos Neo, EC	70
Lokustin, SC	70
Meadows, OD	70
Mekar, ME	71
Pirelli, EC	71
Porfir, SC NEW	71
Sparring, OD NEW	72
Tagor, EC	72
Theja, SC	72
Twingo, SC	73
Twingo Euro, OD	73
Yunona, ME	73
Pheromone traps	75
Fungicides	79
Ace, CSC	<b>79</b>
Ace, CSC	
Ace, CSC	80
Ace, CSC	80
Ace, CSC	80 80 80
Ace, CSC	80 80 80
Ace, CSC	80 80 80 80
Ace, CSC	80 80 80 80 81
Ace, CSC	80 80 80 80 81 81
Ace, CSC	80 80 80 80 81 81 81
Ace, CSC	80 80 80 81 81 81 81
Ace, CSC	80 80 80 80 81 81 81 81 82
Ace, CSC	80 80 80 80 81 81 81 82 82
Ace, CSC	80 80 80 81 81 81 82 82 82 82
Ace, CSC	80 80 80 81 81 81 82 82 82 82 82
Ace, CSC	80 80 80 81 81 81 82 82 82 82 84 84
Ace, CSC	80 80 80 81 81 81 82 82 82 82 84 84
Ace, CSC	80 80 80 81 81 81 82 82 82 82 84 84 84
Ace, CSC	80 80 80 81 81 81 82 82 82 84 84 84 84
Ace, CSC	80 80 80 81 81 81 82 82 82 84 84 84 86 86
Ace, CSC	80 80 80 81 81 81 82 82 82 84 84 84 86 86

Titul Trio, CSC	87
Triada, CSC	88
Vintage, ME	88
ZIM 500, SC	88
Rodenticides	91
Izocin BFK, EO	91
Molluscocides	91
Denitsa, G NEW	91
■ Plant growth regulator	93
Costando, EC	94
Gibbera, SL	94
Hefk, SL	94
Korennik, WP	94
Saldo, SL	95
Special-purpose products	97
Assistant	98
Furshet	98
Higer	98
Lacmus	98
Laminar	99
Mikado, EC	99
Selfi	99
Agrochemicals	
■ Microbiological products	102
Azafok NEW	102
Biocomposite Correct	102
Biocomposite Destruct	102
Mikoryze	103
Rizoform Peas	103
Rizoform Soybean	103
Foliar fertilisers	104
Ultramag Combi	104
Ultramag	104
Ultramix NEW	106
SK2020 <b>NEW</b>	106
Organomineral fertilizer	106
Potassium Humate Sufler	106
Amino acid biostimulants	107





The company focuses on improving the research and production capacity of Russian agrochemistry and agriculture through advancements in crop and livestock breeding, the revival of domestic breeding and seed production, and the promotion of innovations.

#### Our History

#### Over 145 years of history and tradition

The history of Schelkovo Agrohim dates back to 1876, when one of the leading Russian manufacturers, Ludwig Rabenek, head of the Partnership of Manufactories, established a small plant to produce simple chemicals for local textile factories. This plant laid the groundwork for the multi-profile city-forming chemical plant Schelkovo Agrohim Enterprise. which produced products for a variety of industries and agriculture.

The Schelkovo branch of the All-Russian Research Institute of Chemical Means of Plant Protection (VNIIHSZR) was established in 1963 on the basis of the plant. It was recognised as one of the industry's leading institutes in the development of effective and safe plant protection products, with a high scientific potential. It included an experimental workshop for testing new pesticide production technologies.

The company Schelkovo Agrohim was founded in 1998 on the basis of the chemical plant Schelkovo Agrohim Enterprise and the Schelkovo branch of the VNIIHSZR. It took control of several major pesticide production workshops as well as a number of warehouses. However, the main asset was brainpower and people with extensive practical experience, which formed the foundation of the new company's team.

Starting with a few preparations with a total volume of 1.000 litres. Schelkovo Agrohim has achieved high performance and has become a leader in the production of plant protection

#### The Company Today

#### 25 years of experience in the agricultural market

Schelkovo Agrohim's strong scientific potential. production capacity, and research capabilities enable it to bring innovative plant protection solutions to the pesticide market. Today, the company produces about 80 thousand tonnes of goods worth approximately 40 billion roubles. Schelkovo Agrohim sells its products in all agricultural regions of Russia and the CIS countries, and it is actively expanding into non-CIS markets. Sales are handled by regional offices and exclusive distributors. Official representative offices in 78 cities throughout Russia and abroad provide prompt supply of plant protection products and consulting

#### Strong production capabilities

The company's primary activity is the production of plant protection chemicals. The company's portfolio includes over 170 products that provide comprehensive crop protection and nutrition. These are modern highly effective preparations from the following groups: herbicides, insecticides, fungicides, seed treatments, fumigants, rodenticides, desiccants, pheromones, microbiological products, amino acid biostimulants, microfertilisers for foliar dressings, plant growth regulators, etc.

The company has production facilities in Russia, Kazakhstan, and Uzbekistan. The main production is housed in 6 powerful independent workshops on an area of more than 40,000 square metres in the city of Schelkovo, Moscow Region. This is a cutting-edge production with stateof-the-art technology that is constantly being updated, expanded, and modernised. Robotic complexes, production reactor units.

multifunctional installations, and automation systems for various processes are used in the production, which is fully automated. There is also a polymer container workshop, which houses lines for the production of polyethylene canisters, including multilayer COEX containers with a protective barrier layer for packaging aggressive pesticides. The total capacity is 9 million units per year. Raw materials and finished goods are stored in warehouse complexes covering more than 12 thousand square metres and outfitted with high-level storage racks and modern specialised equipment from leading European manufacturers. Products are then delivered to each region via a vast warehouse network of representative offices.

Schelkovo Agrohim products are consistently of high quality, which the consumer can rely on. The company has implemented a quality management system in accordance with the requirements of ISO 9001:2015. Hightech production and a multi-stage analytical control system ensure the release of highquality products and the absence of defects at all stages of manufacture, from product development to commercial production and finished product acceptance. The state-of-theart DataMatrix code marking system protects goods from counterfeiting, contains more product information, and ensures data saving and reading, even from a damaged label.

Schelkovo Agrohim's products are all stateregistered and have official permission to be used in Russia, the CIS countries, and all over the world. This is preceded by many years of extensive research and testing, which includes determining pesticide biological effectiveness, environmental impact safety, and toxicological, hygienic, and other characteristics.

#### **Research Centre**

Schelkovo Agrohim ranks first among Russian manufacturers in terms of research capabilities. The VNIIHSZR team stood at the origins of the company's research. The team grew over time and was replenished with new and promising members. The company's research centre is now on par with the largest research institutes in Russia. The centre, which is led by a Russian Academy of Sciences academician, employs over 130 researchers. A Corresponding Member of the Russian Academy of Sciences. Doctors of Science, and Candidates of Chemical, Biological, and Technical Sciences are among them.

Agriculture today would be impossible to imagine without innovations and modern technologies that provide maximum and sustainable crop yields while having the least possible environmental impact. Because of the centre's highest scientific potential and most modern equipment. Schelkovo Agrohim has the opportunity to bring innovative solutions to the pesticide market that meet global trends and are ahead of standards.

Researchers at the company have developed and commercialised novel preparations, such as NANOformulations and oil formulations. as well as original formulations, synthesis methods, and active substance production technologies. Many of these innovations have never been seen before. Schelkovo Agrohim holds over 120 patents for inventions. The company has received worldwide recognition on numerous occasions, including the world's most prestigious independent crop production awards, the Agrow Awards and Crop Science Awards, in the categories of Best Innovative Formulation, Best Product, etc.

Chemical research in the centre entails the development of production technologies for active substances, pheromones, and pharmaceutical ingredients, the creation of new formulations, the discovery of effective combinations of active substances and their formulations, and the execution of chemical analytical tests. A Biological Laboratory was established at the Schelkovo Agrohim Research Centre to conduct comparative tests of various formulations and determine the most promising of them, as well as for operational off-season biological research of the efficacy and biological activity of products. The Laboratory performs pipeline product screening tests as well as PCR and ELISA analyses. The Laboratory's capabilities include artificial climate and lighting control.

#### Seed breeding and production

In terms of seed breeding and production, Schelkovo Agrohim focuses on creating an integrated commercial production cycle for seeds of major crops. Seed breeding and production centres, as well as centres for mass seed reproduction, were established as part of the project; seed plants were built and put into operation for the industrial preparation of seeds for sowing. As a result, Schelkovo Agrohim offers agricultural producers the opportunity to purchase high-quality seeds of highly productive Russian varieties and hybrids of crops such as winter and spring wheat, soybeans, peas, buckwheat, sugar beet, sunflower, and corn.

#### Business areas



Production of plant protection chemicals. agrochemicals, and seeds for large-scale agricultural production, farms, and personal subsidiary plots



DUBOVITSKOE EXPERIMENTAL FARM

Experimental farm and seed production centre



BETAGRAN

Breeding and non-traumatic seed production facility for winter wheat, soybeans, and sunflower



SOYUZ SEMSVEKLA

Selection and genetic centre for new generation sugar beet hybrids



Production of pelleted sugar beet seeds, preparation of sunflower seeds and other crops



BETAGRAN LIPETSK

Cattle breeding facility for the production of sperm and embryos



BETANET

Production of nets for protecting intensivetype gardens from hail and birds



BETAGRAN KUBAN

Intensive-type gardens

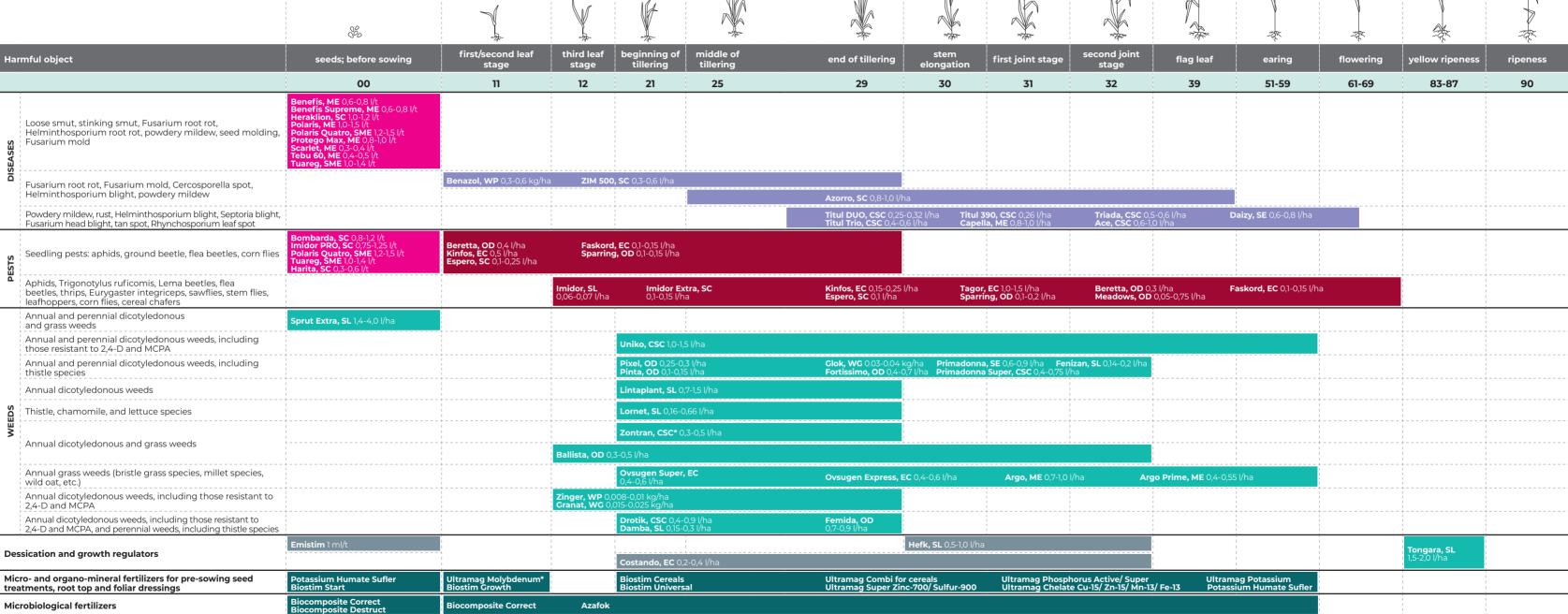


Official dealer of Italian agricultural machinery (Projet and Mascar)

#### Comprehensive crop protection systems

- Comprehensive protection of cereal crops
- Comprehensive protection of sugar beet
- Comprehensive protection of soybean
- Comprehensive protection of peas
- Comprehensive protection of sunflower
- Comprehensive protection of maize
- Comprehensive protection of fibre flax and oil flax
- Comprehensive protection of rapeseed
- Comprehensive protection of potato
- Comprehensive protection of apple trees
- Comprehensive protection of grapes

## Comprehensive protection of cereal crops



\* Only used on winter crops in autumn

# Comprehensive protection of sugar beet

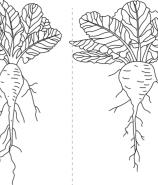














Harmful object	before sowing, before sprouting	sowing – seedlings	cotyledons	two true leaves	four true leaves	six true leaves	eight true leaves	50% closing of the rows	30-60 days before harvesting	treatment of root crops before piling for storage
	00	01-07	10	12	14	16	18	35		
Annual grass and dicotyledonous weeds	Sprut Extra, SL 1,4-2,5 l/ha Acetal PRO, EC 2,0-3,0 l/ha Gals, EC 0,2 l/ha				<b>Acetal PRO, EC</b> 2,5-3,0 l/ha					
Perennial grass and dicotyledonous weeds	Sprut Extra, SL 2,5-4,0 I/ha		i !	i 					 	 
Annual dicotyledonous weeds, including amaranth, and some grass weeds		Betaren Super MD, OEC Betaren Express AM, EC			<b>Betaren 22, OEC</b> 1,0-3,0 l/ha <b>Betaren 320, OD</b> 1,0-1,5 l/ha	Action, SC 1,0-2,0 l/ha Betaren Max, OD 1,0-1	,5 l/ha		 	
Annual dicotyledonous weeds, including goosefoot and prostrate amaranth		<b>Mitron, SC</b> 1,5-2,0 l/ha			<b>Kondor Forte, OD</b> 0,125 l/ha	Kondor, WG 30 г/га + 9	Satellite 0,2 l/ha		  -  -  -	
Thistle, chamomile, knotweed, and lettuce species			<b>Lornet, SL</b> 0,3-0,5 l/ha		<b>Lornet, SL</b> 0,1 + 0,2 l/ha (twice, 0	Lornet, SL 0,1 + 0,2 I/ha (twice, during the first and second waves of weeds)				
Annual grass weeds	i !	Healer, OEC 0,75-1,0 I/ha Forward, OEC 0,9-1,2 I/ha			<b>Censor Max, OEC</b> 0,6-0,7 l/ha	Censor Max, OEC 0,6-0,7 I/ha			! !	 
Perennial grass weeds	1	<b>Healer, OEC</b> 1,0-1,5 l/ha	Forward, OEC 1,2-2,0	O I/ha	<b>Censor Max, OEC</b> 1,4-1,6 l/ha	Censor Max, OEC 1,4-1,6  /ha			1	1
Powdery mildew, Cercospora spot, Phoma rot		Benazol, WP 0,6-0,8 kg/h ZIM 500, SC 0,6-0,8 kg/ha Azorro, SC 0,6-1,0 l/ha			<b>Titul 390, CSC</b> 0,26 l/ha <b>Titul DUO, CSC</b> 0,3-0,4 l/ha <b>Vintage, ME</b> 0,6-0,8 l/ha		IE 1,0-1,25 l/ha ISC 0,4-0,6 l/ha 6-0,8 l/ha			
Root and grey rots			 	 				!	Kagatnik, SL 2,0 l/ha	Kagatnik, SL 0,06 l/t
Beet flea beetles, weevils, aphids, sod webworms, Pegomya betae, sugar beet weevil, cutworms			Imidor, SL 0,1-0,4 I/ha Pirelli, EC 0,5-1,0 I/ha		Faskord, EC 0,1 l/ha Espero Euro, OD 0,2-0,5 l/ha Imidor Extra, SC 0,1-0,4 l/ha	Beretta, O		Mekar, ME 0,4-0,6  /ha Espero, SC 0,1-0,2  /ha		
Micro- and organo-mineral fertilizers for foliar dressings					Ultramag Combi for beet Ultramag Boron Potassium Humate Sufler	Ultramag Potassi Ultramag Calciun Ultramag Phosph Ultramag Phosph Ultramag Super S	n norus Active I norus Super	Biostim Beet Biostim Universal Biostim Growth		
Microbiological fertilizers	Biocomposite Destruct Biocomposite Correct				Biocomposite Correct	Azafok				

# Comprehensive protection of soybean

















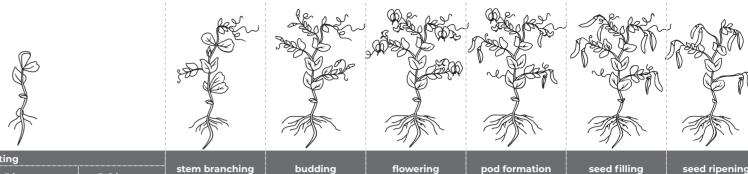




Harmful object	seeds	before sowing	sowing-before sprouting	frondescence	development of shoots	branching	budding	flowering	pod and seed development	seed filling	ripening
	00	00	08	10	12-13	21-49	51-59	60-70	71-	77	82-85
Annual and perennial grass and dicotyledonous weeds	1	Sprut Extra, SL 1,4-4,0 I/ha								1 1 1 1	
Annual grass and dicotyledonous weeds		<b>Versia, OD</b> 3,0-4,0 l/ha	Brig, SC 2,5-3,5 l/ha Zontran, CSC 0,6-1,2 l/ha Gals, EC 0,7-1,0 l/ha		 						1
Annual grass weeds and some dicotyledonous weeds	- +	 	Acetal PRO, EC 2,0-3,0 I/ha	·	<b>Галс, КЭ</b> 0,7-1,0 l/ha			+	-+	+	
Annual and some perennial dicotyledonous and grass		     		Hermes, OD	0,7-1,0 l/ha			*	 	†	
Annual and some perennial dicotyledonous weeds,				Concept, OD	0,6-1,0 l/ha			+	· · · · · · · · · · · · · · · · · · ·	+	
Annual dicotyledonous weeds, including those resistant to 2,4-D and triazines		     	 	Kupazh, WG	0,006-0,008 kg/ha			+	· · · · · · · · · · · · · · · · · · ·	+	
Annual dicotyledonous weeds		 	 	Tanto, CSC	0,75-1,0 l/ha			+	- +	+	
Annual dicotyledonous weeds, including common cocklebur	-+	     	     	Benito, CSC	2,0-3,0 l/ha			*		+	
Annual dicotyledonous weeds, annual and perennial grass weeds		     		Geizer, CSC	2,0-3,0 l/ha			+		+	
Annual and perennial grass weeds	- +	 		Forward, OEC	0,9-2,0 l/ha <b>Heal</b> e	e <b>r, OEC</b> 0,75-1,5 l/ha	Censor M Censor, E	<b>ax, OEC</b> 0,6-1,6 l/ha <b>C</b> 0,2-1,0 l/ha + <b>Mikado</b>		+	
Fusarium root rot, Ascochyta blight, Fusarium blight, seed mold	Benefis Supreme, ME/ Benefis, ME 0,6-0,8 l/t Scarlet, ME 0,4 l/t Depozit Supreme, ME/ Depozit, ME 1,0-1,2 l/t Heraklion, SC 1,0-1,2 l/t Puaro, SC 1,0-1,25 l/t										
Ascochyta blight, canker, Septoria blight, Fusarium blight, Cercospora spot, downy mildew	 	1		<b>Vintage, ME</b> 0,6-0,8 l/ha	<b>Daizy, SE</b> 0,6-0,8 l/ha	<b>Mysteria, ME</b> 1,0-1,2 l,	/ha <b>Azorro, S</b>	C 0,6-1,0 l/ha		; ; ; ;	
Seedling pests	<b>Imidor PRO, SC</b> 2,0-2,5 l/t										
Sod webworms, soybean pod borer, spider mite, cotton budworm, lima bean pod borer		 		<b>Akardo, CSC</b> 0,4-0,5 l/ha <b>Mekar, ME</b> 0,4-0,6 l/ha	Kinfos, EC 0,3-0,5 l/ha Diflomite, SC 0,3 l/ha	<b>Pirelli, EC</b> 0,8-1,0 l/ha <b>Espero, SC</b> 0,15-0,2 l/		. <b>EC</b> 0,4 l/ha <b>ME</b> 0,2-0,4 l/ha			
Dessication and prevention of pod shatter											Tongara, SL 1,5-2,0 l/ha Selfi 1,0 l/ha
Micro- and organo-mineral fertilizers for pre-sowing seed treatments, root top and foliar dressings	Potassium Humate Sufler Biostim Start			Biostim Oilseed Biostim Growth Biostim Universal	Ultramag Combi for legur Ultramag Boron, Ultrama Ultramag Super Sulfur-90	g Phosphorus Active/ Su			Ultramag	Potassium	
Microbiological fertilizers	Biocomposite Correct Azafok	Biocomposite Correct Biocomposite Destruct Azafok		Biocomposite Correct	Azafok						
Inoculant	Rizoform Soybean										

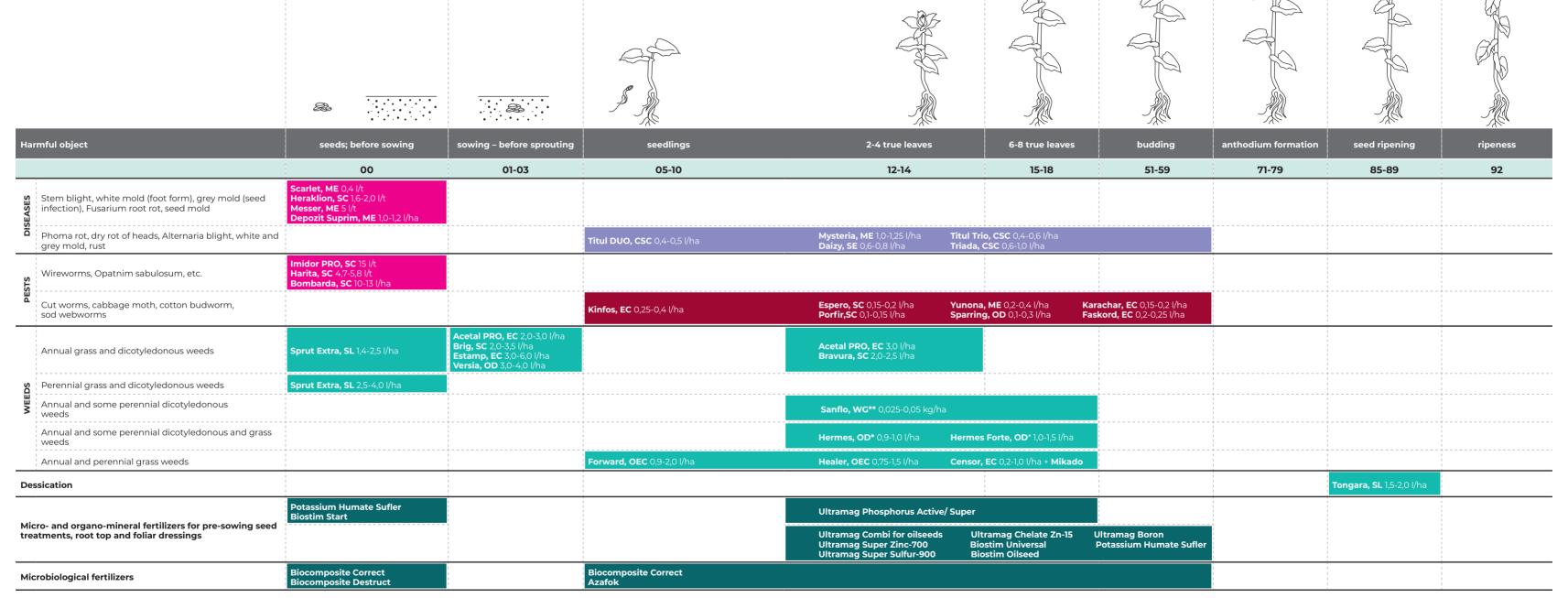
# Comprehensive protection of peas

0



		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	y		/		")		17)	17)		7)
larmful object	seeds	before sowing	sowing – before sprouting	seedlings	1-3 leaves	shooting 3-5 leaves	5-6 leaves	stem branching	budding	flowering	pod formation	seed filling	seed ripenin
	00	00	01-05	07-09	10-12	13-15	16	31-39	51-55	61-67	71-	·79	81
Annual grass and dicotyledonous weeds		Sprut Extra, SL 1,4	4-2,5 l/ha				i 			1		 	
Perennial grass and dicotyledonous weeds	1	Sprut Extra, SL 2,	5 - 4,0 l/ha		 					 		 	 
Annual and some perennial dicotyledonous and grass weeds		 	: : : : :		<b>Hermes, OD</b> 0,7-0,9 I/ha		<b>Geizer, CSC</b> 2,0-3,0 l/ha			i 		 	
Annual dicotyledonous weeds, including those resistant to MCPA		 	: : : : :				Benito, CSC 1,5-3,0 l/ha			i i i i		 	 
Annual dicotyledonous weeds		 	! ! ! !			<b>Lintaplant, SL</b> 0,5-0,8 l/ha				 		 	 
Annual grass weeds	<u> </u>	<u> </u>	i ! !	<u> </u>	Forward, OEC	0,9-1,2 l/ha				<u> </u>			<u> </u>
Perennial grass weeds	1		 	 	Forward, OEC	1,2-2,0 l/ha				1		 	
Fusarium root rot, Ascochyta blight, Fusarium blight, seed mold	Scarlet, ME 0,3-0,4 l/t Depozit, ME 1,0-1,2 l/t Depozit Supreme, ME 1,0-1,2 l/t Heraklion, SC 1,0-1,2 l/t Puaro, SC 1,0-1,25 l/t												
Ascochyta blight, canker, rust, powdery mildew			 	Vintage, ME 0,8	-1,0 l/ha	Titul DUO, CSC 0,32-0,	4 l/ha	<b>Daizy, SE</b> 0,6-0,8 l/ha				1	
Sod webworms, pea moth, spider mite, pea weevil, pea aphid	1	 	, 	<b>Kinfos, EC</b> 0,25-0	0,4 l/ha	Faskord, EC 0,1 I/ha		<b>Espero, SC</b> 0,1-0,2 l/ha				 	 
Seedling pests	<b>Imidor PRO, SC</b> 0,75- 1,25 l/t		1 1 1 1 1 1							1 1 1 1 1 1			
Plant growth regulator	Imidor PRO, SC 0,75- 1,25 l/t	1	1							1 1 1 1		 	1
Dessication	1	1	1 1 1 1							 		 	Tongara, SL 1,5-2,0 l/ha
Prevention of pod shatter	1	1	1 1 1				1			1		, 	Selfi 1,0 l/ha
Micro- and organo-mineral fertilizers for pre-sowing seed treatments, root top and foliar dressings	Potassium Humate Sufler, Biostim Start, Ultramag Molybdenum	1	1 1 1 1 1		Ultramag Combi for legumes Ultramag Boron	Ultramag Molybdenus Ultramag Phosphorus	m Ultramag s Active/ Super		stim Universal stim Oilseed	1 1 1 1 1		Ultramag Potassium	
Microbiological fertilizers	Biocomposite Correct	Biocomposite Destruct	1		Biocomposite Correct Azafok					1		1	1
inoculant	Rizoform Peas	1 1 1	1 1 1 1							7 1 1 1		 	1 1 1

## Comprehensive protection of sunflower

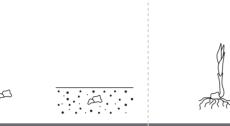


<sup>\*</sup> Hermes, OD, Hermes Forte, OD: for imidazolinone-resistant sunflower varieties and hybrids

16 \_\_\_\_\_\_\_ 17

<sup>\*\*</sup> Sanflo, WG: for tribenuron-methyl resistant sunflower varieties and hybrids

## Comprehensive protection of maize













Harmful object	seeds; before sprouting	seedlings	3-5 leaves	5-7 leaves	stem elongation	tasselling - flowering	harvest formation - ripening
	00	10	13-15	17	31-39	51-65	85-89
Boil smut, head smut, Fusarium root and foot rots, Fusarium blight, seed and ear mold	Scarlet, ME 0,4 l/t Depozit Suprim, ME 1,0-1,2 l/ha			<b>Titul Trio, CSC</b> 0,4-0,6 l/ha	<b>Daizy, SE</b> 0,6-0,8 l/ha <b>Misteria, ME</b> 1,0-	-1,25 I/ha	
Wireworms, cut worms	Imidor PRO, SC 12,5-15 l/t Bombarda, SC 10-13 l/ha						
European corn borer, sod webworms, cotton budworm, polyphagous pests, aphids, leafhoppers, etc.		<b>Kinfos, EC</b> 0,25-0,4 l/ha	Faskord, EC 0,15-0,25 l/ha	Espero, SC 0,15-0,2 l/ha Porfir, SC	C 0,1-0,15 l/ha Yunona, ME 0,2-0,4 l/ha		
Annual and perennial dicotyledonous and grass weeds	Sprut Extra, SL 1,4-4,0 l/ha		Octava, OD 0,8-1,0 l/ha Kassius, SP 0,03+ 0,02 kg/ha (twice) 0,05 kg/ha (once)				
Annual grass and dicotyledonous weeds	Acetal PRO, EC 2,0-3,0 l/ha Versia, OD 3,0-4,0 l/ha Brig, SC 2,0-3,5 l/ha		Kassius, SP 0,04 kg/ha + Satellite, L 0,2 l/ha				
Annual dicotyledonous weeds, including those resistant to 2,4-D and triazines		1	Kupazh, WG 0,015 kg/ha			1	
Annual dicotyledonous, annual and perennial grass weeds			Cornegi, SE 1,75-2,0 l/ha Cornegi Plus, OD 1,5-2,0 l/ha			1	
Annual and perennial dicotyledonous weeds			<b>Drotik, CSC</b> 0,75-1,2 l/ha <b>Damba, SL</b> 0,4-0,8 l/ha				
Annual dicotyledonous weeds, including those resistant to 2,4-D and MCPA, some perennial dicotyledonous weeds		1	Primadonna, SE 0,6-0,9 I/ha Primadonna Super, CSC 0,4-0,75 I/ha			1	
Thistle, chamomile, and lettuce species	 		Lornet, SL 1,0 I/ha				
	Biostim Start		Ultramag Chelate Zn-15	Ultramag Super Zinc-700 Ultramag Potassium			
Micro- and organo-mineral fertilizers for pre-sowing seed			Ultramag Combi for corn	Ultramag Phosphorus Active/ Super	Ultramag Supe	r Sulfur-900	
treatments, root top and foliar dressings	 	Potassium Humate Sufler			Ultramag Boron		
			Biostim Growth		Biostim Universal Biostim Maize	e	
Microbiological fertilizers	Biocomposite Destruct Biocomposite Correct		Biocomposite Correct Azafok				

## Comprehensive protection of fibre flax and oil flax













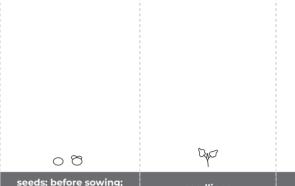




Microbiological fertilizers	Biocomposite Correct Azafok	Biocomposite Destruct Biocomposite Correct Azafok	Biocomposite Correct Azafok					
Micro- and organo-mineral fertilizers for pre-sowing seed treatments, root top and foliar dressings	Biostim Start			Biostim Oilseed Biostim Universal Ultramag Phosphorus Active	Ultramag Super Sulfur-900 Ultramag Combi for oilseeds Ultramag Phosphorus Super	Ultramag Potassium Potassium Humate Sufler Ultramag Boron		
Annual dicotyledonous weeds					Lintaplant, SL 0,8-1,0 I/ha			1 1 1
Annual dicotyledonous weeds, including those resistant to 2,4-D and MCPA, and some perennial dicotyledonous weeds					Zinger, WP 0,007-0,01 kg/ha Zinger, WP 0,005-0,007 kg/ha+ Lintaplant, SL 0,3 l/ha Lornet, SL* 0,1-0,3 l/ha Fenizan, SL* 0,14-0,2 l/ha			
Perennial grass weeds (couch grass)	 		Forward, OEC* 1,2-2,0 I/ha	<b>Healer, OEC</b> 1,0-1,5 l/ha	Censor Max, OE	C* 1,4-1,6 I/ha		i 
Annual grass weeds	 	 	Forward, OEC* 0,9-1,2 I/ha	<b>Healer, OEC</b> 0,75-1,0 I/ha	Censor Max, OE	<b>C*</b> 0,6-0,7 l/ha		
Perennial grass and dicotyledonous weeds		<b>Sprut Extra, SL*</b> 2,5-4,0 l/ha						1
Annual grass and dicotyledonous weeds		Sprut Extra, SL* 1,4-2,5 I/ha						1
Flea beetles, Laspeyresia, thrips, silver moth			<b>Karachar, EC</b> 0,1-0,15 l/ha	Faskord, EC* 0,1-0,15 I/ha				1
Large flax flea beetles: Aphthona euphorbiae, Aphthona	<b>Imidor PRO, SC</b> 2,0-2,5 l/t							
Canker, mottle disease	<b>Tebu 60, ME</b> 0,4-0,5 l/t			<b>Vintage, ME</b> 0,6-1,0 I/ha				
	00		00	10	14-16	55	65	83-85
Harmful object	seeds	before sowing	sowing - seedlings	sprouting	'herringbone' phase	budding	flowering	ripening
			000	<b>4</b>	***	**		

<sup>\*</sup> The product is registered for fibre flax and oil flax

# Comprehensive protection of rapeseed

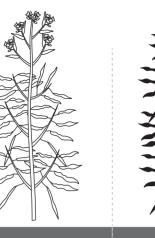














		1	, v1	į l	l l	Ц	L i	U	U V
mful object	seeds; before sowing; before sprouting	seedlings	frondescence	rosette formation	stem formation	budding	flowering	pod formation	seed ripening
	00	07-10	11-19	21-29	31-39	50	61-65	71	81
Root rots, downy mildew, seed molding, Alternaria blight	Scarlet, ME 0,4 l/t								
Alternaria blight, Phoma rot, powdery mildew			<b>Titul 390, CSC</b> 0,26-0,3 <b>Daizy, SE</b> 0,6-0,8 l/ha	2 l/ha	<b>Misteria, ME</b> 1,0-1,25 I/ha	<b>Titul DUO, CSC</b> 0,4-0,5 l/ha	<b>Titul Trio, CSC</b> 0,4-0,6 l/ha		
Crucifer flea beetles	Imidor PRO, SC 15-20 l/t Harita, SC 4,7-5,8 l/t Bombarda, SC 10-15 l/ha	Imidor, SL 0,15 l/ha Beretta, OD 0,3-0,4 l/ha Sparring, OD 0,1-0,2 l/ha Meadows, OD 0,075-0,15 l/ha Pirelli, EC 0,5 l/ha Lokustin, SC 0,2 l/ha							
Common pollen beetle, crucifer flea beetles, diamond-back moth, etc.			Kinfos Neo, EC 0,2-0,4  /t Lokustin, SC 0,2-0,4  /t Pirelli, EC 0,5-1,0  /ha Sparring, OD 0,1-0,3  /t	าล	Apex, OEC 0,2-0,5 l/ha Espero, SC 0,15-0,2 l/ha Imidor, SL 0,15-0,25 l/ha Imidor Extra, SC 0,15-0,25 l/ha	Karachar, EC 0,1-0,15 l/ha Faskord, EC 0,1-0,15 l/ha Beretta, OD 0,3-0,4 l/ha Meadows, OD 0,075-0,25 l/ha			
Annual and perennial dicotyledonous and grass weeds	Sprut Extra, SL 1,4-4,0 l/ha								
Annual grass and dicotyledonous weeds	Gals, EC 0,2 l/ha			 					i 
Annual and perennial dicotyledonous weeds	1		<b>Reper, CSC</b> 0,8-1,0 l/ha		<b>Reper Trio, OD</b> 0,2-0,3 l/ha	 			
Annual grass weeds, annual and perennial dicotyledon- ous weeds (for imidazolinone-resistant rapeseed varieties and hybrids)			<b>Ilion, OD*</b> 0,8-1,2 I/ha						
Thistle, chamomile, knotweed, and lettuce species			<b>Lornet, SL</b> 0,3-0,4 l/ha			; ; ;			
Annual grass weeds	!	 	Forward, OEC 0,9-1,2 l/	ha	<b>Healer, OEC</b> 0,75-1,0 l/ha				
Perennial grass weeds			Forward, OEC 1,2-2,0 l/	ha	<b>Healer, OEC</b> 1,0-1,5 I/ha				
sication						1			<b>Tongara, SL</b> 1,5-2,0 l/ha
vention of pod shatter									Selfi 1,0 l/ha
	Potassium Humate Sufler Biostim Start		Ultramag Molybdenu	m Biostim Growth					
cro- and organo-mineral fertilizers for pre-sowing seed atments, root top and foliar dressings					Ultramag Phosphorus Active	e/ Super	Ultramag Super Sulfur-900		
			Ultramag Combi for o	ilseeds	Ultramag Boron	Biostim Oilseed	Biostim Universal		
crobiological fertilizers	Biocomposite Correct Biocomposite Destruct		Biocomposite Correct Azafok	:					

<sup>\*</sup> Ilion, OD: for imidazolinone-resistant spring rapeseed

# Comprehensive protection of potato



















placement in stora	

Harmful object	tubers; before planting	before sprouting	sprouting	frondescence (height <5 cm)	frondescence (height <15 cm)	budding	flowering and tuber formation	tuber ripening	top wilting	placement in storage
	00	03	09	11	19	51	61	69-89	91	
Rhizoctonia blight, Fusarium blight	Kagatnik, SL 0,5-0,8 l/t Depozit, ME 0,25-0,4 l/t Depozit Supreme, ME 0,25-0,4 l/t Puaro, SC 0,25-0,4 l/t									
Late blight and Alternaria blight	1		Metamil MC, WG 2,0-	2,5 kg/ha	<b>Shirma, SC</b> 0,3-0,4 l/ha	Indigo, SC 4,0-5	5,0 l/ha			
Various tuber rots										<b>Kagatnik, SL</b> 0,25-0,4 l/t <b>Stakkato, L</b> 1,0-3,0 l/ha
Wireworms, Colorado beetle, aphids	Imidor PRO, SC 0,2-0,25 l/t Bombarda, SC 0,5-0,7 l/t		 							
Colorado beetle, potato tuber moth, ladybirds, aphids			Imidor, SL 0,1 I/ha Imidor Extra, SC 0,1 I/l	Faskord, EC 0,07-0,1 l/ha ha		Seretta, OD 0,4 l/ha Sparring, OD 0,1-0,3 l/ha				
Annual and perennial dicotyledonous and grass weeds	1	Sprut Extra, SL 1,4-4,0 l/ha				 				
Annual grass and dicotyledonous weeds		<b>Brig, SC</b> 2,0-3,5 l/ha <b>Versia, OD</b> 2,5-3,0 l/ha	 	<b>Versia, OD</b> 2,5-3,0 l/ha						
v.	 	<b>Zontran, CSC</b> 1,1-1,4 l/ha (	once)	<u>v</u>			 			 
Annual dicotyledonous and grass weeds	1 1 1 1	Zontran, CSC 1 I/ha (first treatment)	 	<b>Zontran, CSC</b> 0,4-0,6 l/ha (second treatment)		1	 			
Perennial grass weeds (couch grass), annual grass weeds, and some dicotyledonous weeds			Kassius, SP 0,05 kg/ha Satellite, L 0,2 l/ha	a +						
Annual dicotyledonous weeds	i 	Lintaplant, SL 1,2 I/ha		i !	<b>Lintaplant, SL</b> 1,2 l/ha		i 			i 
Annual and perennial grass weeds	1 1 1		Forward, OEC 0,9-2,0	l/ha						
Micro- and organo-mineral fertilizers for pre-sowing seed treatments, root top and foliar dressings	Potassium Humate Sufler Biostim Start			Ultramag Potassium Ultramag Calcium	Ultramag Combi for potato Ultramag Chelate Zn-15/ Mn-13/	Fe-13/ Cu-15 Ultram		Phosphorus Active/ Super Super Sulfur-900		
Microbiological fertilizers	Biocomposite Correct Biocomposite Destruct Azafok				Biocomposite Correct Azafok					

# Comprehensive protection of gardens (apple trees)













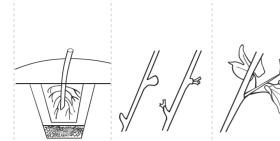
Scab, blossom wilt		Indigo, SC 3,0-5,0 I/ha Katrex, SC 4,0-6,0 I/ha			,   	<b>Katrex, SC</b> 4,0-6	,0 l/ha					
Harmful object	during orchard set-up	'green cone'	budding	advancing - detachment of buds	ʻpink bud'	flowering	end of flowering	start of fruit setting	'hazel' fruit	'walnut' fruit	fruit growth	fruit ripening
(apple trees)												

Scab, blossom wilt		Indigo, SC 3,0-5,0 l	/ha <b>Katrex, SC</b> 4,0-6,0 I/ha		Katrex, SC 4,0	<b>Katrex, SC</b> 4,0-6,0 I/ha				
Alternaria blight, fruit rot, powdery mildew			Kantor, SCS 0,65-0,75 l/ha (2-times)							
Scab		Kaperang, SC 2,5-3,0 l/ha	<b>Granny, SC</b> 1,0-1,4 <b> </b> /ha	<b>Shirma, SC</b> 0,5-0,75 l/ha	<b>Shirma, SC</b> 0,	5-0,75 I/ha (3-times) <b>Granny, SC</b> 1,0-1,4	<b>Granny, SC</b> 1,0-1,4 I/ha (5-times) <b>Kaperang, SC</b> 2,5-3,0 I/ha			
Scab, powdery mildew, Phyllosticta leaf spot, fruit rot, fruit rot during storage		<b>Sulphur 400, SC</b> 6-16 l/ha	<b>Medeya, ME</b> 0,8-1,2 l/ha <b>Riviera, ME</b> 0,8-1,0 l/ha	<b>Kapella, ME</b> 0,8-1,0 l/ha	Medeya, ME	Medeya, ME 0,8-1,2 l/ha (3-4-times) Biocomposite PRO, L 1,0-3,0 l/ha (4-times) Insignia, OD 0,8-1,0 l/ha				
Blossom wilt				Kaperang, SC 2,5-3,0 l/ha	Kaperang, SC	<b>Kaperang, SC</b> 2,5-3,0 I/ha				
Apple blossom weevil			<b>Theja, SC</b> 0,18-0,3 l/ha <b>Karachar, EC</b> 0,1-0,15 l/ha	Twingo Euro, OD 0,75-1,2 l/ha Twingo, SC 0,75-1,2 l/ha Meadows, OD 0,06-0,36 l/ha						
Apple sucker, mites, armoured scales		<b>Mekar, ME</b> 0,75-1,0 l/ha	<b>Akardo, CSC</b> 0,4-0,6 l/ha <b>Mekar, ME</b> 0,75-1,0 l/ha <b>Diflomite, SC</b> 0,24-0,45 l/ha			Akardo, CSC 0,4-0,6 l/ha Meka Diflomite, SC 0,24-0,45 l/ha	ı <b>r, ME</b> 0,75-1,0 l/ha			
Leafroller moths		Theja, SC 0,3-0,45   Kinfos, EC 0,4-0,5	l/ha <b>Twingo, SC</b> 0,75-1,2 l/ha <b>Porfir, SC</b> 0,15-0,3 l/ha <b>Karachar, EC</b> 0,4 l/ha			Theja, SC 0,3-0,45 l/ha Twin Karachar, EC 0,4 l/ha Kinfo	go, SC 0,75-1,2 l/ha Porfir, SC 0.15-0.3 l/ha s, EC 0,4-0,5 l/ha			
Apple worm						Karachar, EC 0,4 l/ha Twing Kinfos, EC 0,4-0,5 l/ha Yuno	go, SC 0,75-1,2 l/ha go Euro, OD 0,75-1,2 l/ha na, ME 0,5 l/ha Porfir, SC 0,15-0,3 l/ha lows, OD 0,06-0,36 l/ha			
Improved survival of nursery plants, root development	Mikoryze Korennik									
Growth regulator to stimulate fruit formation					Gibbera, SL					
Fruit thinning						Saldo, SL				
Protection from sunburns	1						Furshet			
Increased productivity and resistance to stress	; ;		Biostim Universal (up to 5 times)	Ultramag Phosphorus Active/ Super		Ultramag Super Sulfur-90	0			
Improved balance of Fe, Cu, Mn, and Zn		 	Ultramag Chelate Fe-13	Ultramag Chelate Cu-15	Ultramag Chelate Mn-13	Ultramag Chelate Zn-15	Ultramag Super Zinc-700			
Improved fruit setting and growth			Ultramag Boron			Ultramag Boron				
Improved quality and sugar content of fruit	 	 	Ultramix Growth/ Development				Ultramag Potassium			
Improved quality of fruit and resistance to physiological spot during storage						Ultramag Calcium Ultra	mag Calcium Active SK2020			

To protect gardens from hail and birds, Schelkovo Agrohim suggests using the net produced by Betanet LLC

The frequency of use per season is indicated

# Comprehensive protection of grapes











	1	!	!	420		Ein		<u> </u>	1		
armful object	establishing a vineyard	gemmation	7.5.100.000	formation	of inflorescences	flowering	formation and	growth of berries	prior to berry	beginning of berry nes colouring	ripeness
		and budding	3-5 leaves	advancing of inflorescences	loosening of inflorescences	nowering	'rice' berry	'pea' berry	bounding in bunches		
Mildew, black spot			Shirma, SC 0,5-0,75 Kaperang, SC 2,5-3,0 Metamil MC, WG 2.5	l/ha (3-times)			<b>Shirma, SC</b> 0,5-0,75 J <b>Kaperang, SC</b> 2,5-3,0	/ha D l/ha	Granny, SC 1,0-1,4 l/ha Metamil MC, WG 2.5 kg/ha		
Mildew, black spot, grey mold		<b>Indigo, SC</b> 4,0-6,0 l,	/ha (2-times)					 	<b>Indigo, SC</b> 4,0-6,0 l/ha		
Powdery mildew, grey mold		<b>Sulphur 400, SC</b> 10-16 l/ha			<b>Titul 390, CSC</b> 0,15-0,25 l/ha		<b>Titul 390, CSC</b> 0,15-0	,25 l/ha (3-times)			
Powdery mildew, grey mold, black rot, black spot			<b>Medeya, ME</b> 0,8-1,2	/ha (2-times)	<b>Riviera, ME</b> 0,6-0,7 l/ha		<b>Kapella, ME</b> 0,8-1,0 l/h	าล			
Grey mold, black rot, berry rots							<b>Kantor, SCS</b> 1,7-2,6 l/l	ha (3-times), last tre	eatment: at least 10 days before	e harvesting	
Mildew, powdery mildew, grey mold			Biocomposite PRO,	<b>L</b> 1,0-3,0 l/ha							
Spider mite, grape erineum mite		Akardo, CSC 0,4 l/h Diflomite, SC 0,2-0,	a (2-times) <b>Mekar,</b> l 4 l/ha (once)	<b>ME</b> 0,75-1,0 I/ha			<b>Akardo, CSC</b> 0,4 l/ha <b>Mekar, ME</b> 0,75-1,0 l/l	(2-times) <b>Diflomit</b> ha	<b>e, SC</b> 0,2-0,4 l/ha		
	TV			<b>wingo, SC</b> 0,75-1,2 l/ha				Twingo, SC 1,2 I/ha (2-times)			
European grapevine moth				Tagor, EC 1,2-3,0 l/ha         Kinfos, EC 0,4-0,5 l/ha           Karachar, EC 0,32-0,48 l/ha         Porfir, SC 0,15-0,25 l/ha			<b>Tagor, EC</b> 1,2-3,0 l/ha <b>Kinfos, EC</b> 0,4-0,5 l/h	Fagor, EC 1,2-3,0 l/ha         Karachar, EC 0,32-0,48 l/ha           Kinfos, EC 0,4-0,5 l/ha         Porfir, SC 0,15-0,25 l/ha		Yunona, ME 0,3-0,4 I/ha (once)	
Citrus flatid planthopper, leafhoppers	!						Akardo, CSC 0,4 l/ha	Meadov	<b>/s, OD</b> 0,06-0,36 l/ha		
Brown marmorated stinkbug										Twingo, SC 1,2 I/ha Kinfos, EC 0,3-0,5 I/ha Karachar, EC 0,32-0,48 I/ha	
proved survival during planting, growth, and nutrition	Mikoryze Korennik										
ection from sunburns								Furshet (1-3-time:	s)		
Increased productivity and resistance to stress		Biostim	Universal (5-times)		Ultramag Phosphorus Active	/ Super			Ultramag Super Sulfur-900		
Prevention and management of mineral deficiency	 	Ultrama	g Super Zinc-700	Ultramix Growth/ Development	Ultramag Chelate Cu-15	Ultramag Chelate M	1n-13 Ultramag C	helate Zn-15	Ultramag Chelate Fe-13		
Management of potassium and boron deficiency, improved blossoming and setting, enhanced accumulation of sugars in crops	 		 		Ultramag Boron		Ultramag Boron	Ultramag Potassi	i <b>um</b> (1-2-times)		
Improved quality of berries and resistance to rots	1				SC2020		Ultramag Calcium /	Calcium Active	SK2020		
robiological product to prevent ry rots	1	 	1		_					Biocomposite Correct (1-2	times)

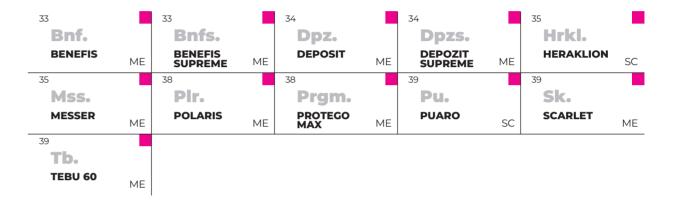
To protect gardens from hail and birds, Schelkovo Agrohim suggests using the net produced by Betanet LLC

The frequency of use per season is indicated



#### Fungicidal seed treatments

.....



#### Insecticidal seed treatments

.....



#### Insecto-fungicidal seed treatments

.....



#### 0

## Innovative seed treatment formulation: MICROEMULSION

NANOformulation (microemulsion) ensures the most advanced seed protection

- The fastest and deepest possible penetration of active substances into the seed through microcapillaries, reaching all infection sites, including latent ones
- High-quality seed treatment without the product getting detached and its mechanical losses during storage, transportation, and seeding

# Penetrates through macro- and microcapillaries Evenly covers the entire surface

#### NANOprotection of seeds from both inside and outside

Protego Max, ME

Polaris, ME

Benefis, ME

Benefis Supreme, ME

Depozit, ME

Depozit Supreme, ME

Scarlet, ME

Tebu 60, ME

Polaris Quatro, SME

Tuareg, SME

Messer, ME



#### imazalil 50 g/l + metalaxyl 40 g/l + tebuconazole 30 g/l

Fungicides intended for presowing treatment seeds of cereal and soybean to control a wide range of diseases.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation as microemulsion

More wide spectrum of action than that of most seed treatments due to combination of three active ingredients

Formulation as microemulsion ensures maximum penetration of active ingredients into the seed, and powerful and prolonged protection during vegetation period

Unique effect to control root rots

High level of fungicidal activity against a complex of diseases

Bio-activator contained in the formulation has a growth-stimulating action: promotes coleoptiles development and formation of a robust root system

Higher resistance to drought and frost



#### imazalil 50 g/l + tebuconazole 30 g/l + mefenoxam 20 g/l

Fungicidal seed treatment for cereal and soybean seeds in the NANOformulation.



Unique effect against root rots of various aetiologies with a lower active substance concentration

Wide spectrum of action and high efficacy under conditions of high infection load

The best protection of seeds from both inside and outside ensured by the NANOformulation

Extended protection of seedlings

Promotion of growth and formation of a well-developed root system resistant to stress factors

Reduced toxic load on the agrocenosis



#### thiamethoxam 130 g/l + imidacloprid 90 g/l + fipronil 60 g/l

The first on the market three-component insecticidal seed protectant for cereal crops and other crops for the best protection of seedlings from soil-inhabiting surface pests and long-term protection of crops during vegetation without additional spraying.

#### **Advantages**

A new level of insecticidal protection of seeds and seedlings: a strong knockdown effect combined with long-term protection of the rhizosphere and the aerial part of plants

Effective impact on larvae of all ages and imagos of soil-inhabiting and surface pests

Triple toxic effect for the elimination of resistant populations and in case of high pest population numbers

Growth-regulating effect

Improved crop protection method by cancelling or reducing the number of insecticidal treatments in the growing period

Highest efficacy irrespective of soil and climatic conditions

 $\frac{32}{2}$ 





#### fludioxonil 40 a/l + imazalil 40 a/l + metalaxvl 30 a/l

Fungicides intended for presowing treatment seeds of soya, pea, chick pea seeds, and potato tubers during or before planting.

#### Advantages

Has a potent fungicidal effect against a complex of diseases due to a combination of three active ingredients that belong to different chemical classes and have different mechanisms of action

An ingredient of fludioxonil belongs to the chemical class of phenylpyrroles with a special, fundamentally different mechanism of action against pathogens, which enhances the product efficacy

The microemulsion formulation provides the maximum penetration of active ingredients into the seed

Due to the systemic action, the product is effective against superficial and internal seed infections, as well as a number of pathogens that damage plants in a later period of vegetation

The fungicidal effect occurs immediately after treatment

Promotes an active start and stimulates the formation of a thick root svstem

Has no retardant effect



#### fludioxonil 40 g/l + imazalil 40 g/l + mefenoxam 15 g/l

A special-purpose fungicidal seed treatment for grain legume, industrial crop, etc.

#### **Advantages**

The best protection of seeds from both inside and outside ensured by the NANOformulation

Control of the broadest range of seed-borne and soil infections with a lower active substance concentration

The best efficacy against Fusarium pathogens

Reliable control of root rots, including Pythium root rots

Complete absence of retardant effect

Protection and formation of strong roots

Active promotion of green matter formation, starting from the early development phases of the crop

Reduced toxic load on the agrocenosis



#### thiamethoxam 600 a/l

Systemic insecticidal for the presowing treatments seeds of cereal seeds, sugar beet and other crops against a complex of soil and surface seedling pests.

#### Advantages

Reliable protection of seedlings against a complex of soil and surface

High systemic activity of the product and rapid action

Long-term protective effect

Stable protective effect regardless of external conditions



#### thiram 400 a/l + tebuconazole 25 a/l + azoxystrobin 15 a/l

A unique contact systemic fungicidal protectant with a bactericide effect for treatment of seeds of cereal crops, soybeans, peas, and sunflower.



The most effective seed protectant in its class due to the emergence of 3 components: an antibacterial effect in combination with fungicidal protection

A wider spectrum of effect on pathogens, including Oomycetes

Soil disinfection around the seed bed

Active impact on biological and physiological processes in plants: strong stimulating effect

Cost-effectiveness and highly effective protection



#### imidacloprid 200 g/l

Insecticides of systemic action intended for pre sowing treatment seeds of cereal and other crops.



#### Advantages

Crop protection at most vulnerable sprouting stage

Control of pests in soil and on sprouts

Prolonged protective period

Systemic action

Savings due to omission of several insecticidal treatments during

Extermination of pests populations resistant to carbofuran formulations Efficient regardless of ambient conditions



#### mefenoxam 210 g/l + fludioxonil 25 g/l

A special-purpose fungicidal seed treatment for sunflower seeds in the NANOformulation.



#### Advantages

A perfect combination of active substances with the maximum spectrum of action

Full control of soil and seed-borne infections

The best efficacy against downy mildew, Fusarium blight and other diseases of sunflower

The most efficient formulation (microemulsion)

Is intended for both industrial use at seed production companies and agricultural use



#### acetamiprid 150 g/l + prochloraz 100 g/l + tebuconazole 20 g/l + pyraclostrobin 15 g/l

A combination insectofungicidal seed treatment for cereal crop seeds in the innovative formulation.



#### Advantages

Three-in-one: a complex-action product (protection from diseases + protection from pests + physiological effect for the crop)

Is effective against the pathogens of snow mould, root rot of various aetiologies, Fusarium blight, Septoria blight

Provides effective control of surface and soil-dwelling pests

Promotes growth and development of strong and healthy roots

Enhances productive tillering and green leaf effect

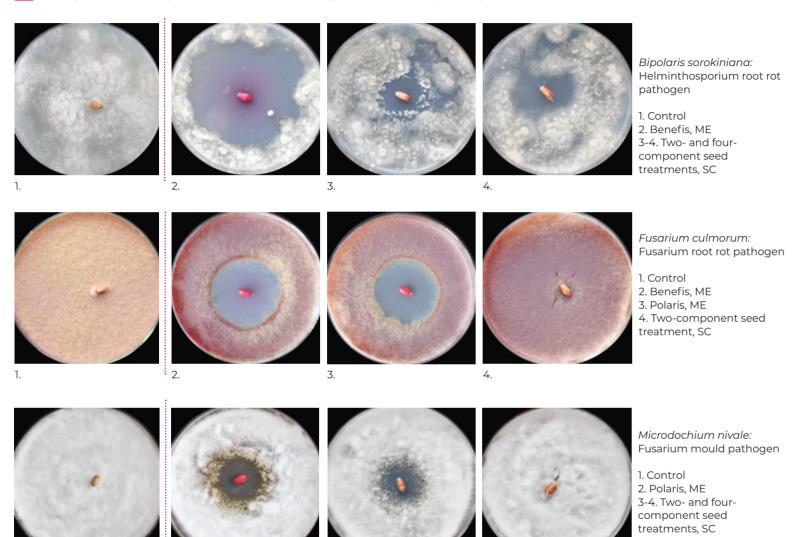
Increases resistance to adverse soil and climatic conditions, including drought

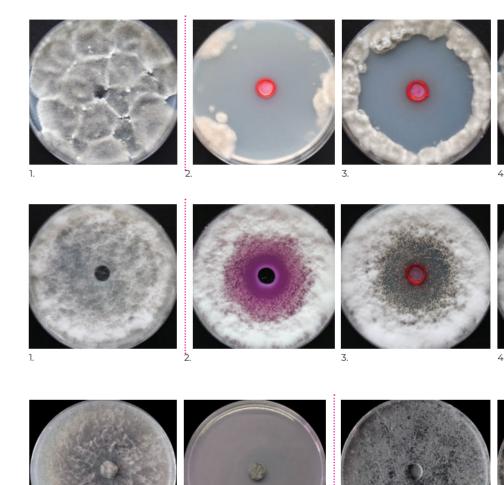
Is suitable for all sowing times, including late sowing

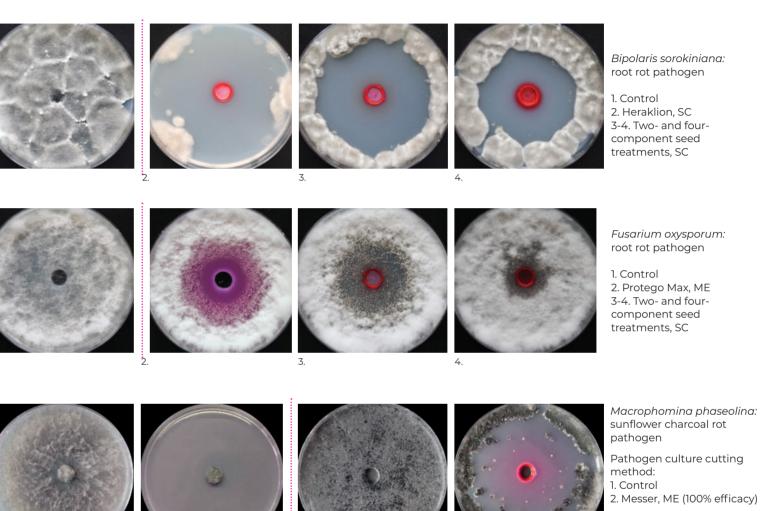
Perforation method:

3. Control 4. Messer, ME

#### Fungicidal activity of seed treatments against root rot pathogens











prochloraz 100 g/l + imazalil 25 g/l + tebuconazole 15 g/l

Fungicidal seed treatment intended for pre-planting treatment of cereal seeds.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation

Formulation as microemulsion ensures maximum penetration of active ingredients into the seed, and powerful and prolonged protection during vegetation period

Wider spectrum of action than that of most seed disinfectants due to combination of three active ingredients

Highly efficient for pre-planting treatment of seeds and local soil disinfection

Stronger effect against snow mold

Bio-activator contained in the formulation has a growth-stimulating action: promotes coleoptiles development and formation of a robust root system

Higher resistance to drought and frost



prothioconazole 75 g/l + pyraclostrobin 25 g/l + tebuconazole 25 g/l

A fungicidal seed protectant in an innovative formulation for protection of cereal crops and obtaining high yields under conditions of increased risk of diseases.

#### Advantages

Premium class protection ensured by the new, most effective combination of the 3 most active ingredients and innovative formulation

Maximum efficacy under conditions of high infection load and longterm protection from seed to flag leaf stage

Improved action against pathogens causing Fusarium blight, Septoria spot, and diseases of rhizosphere

Immunostimulatory effect

A pronounced physiological effect: strong sprouts and root system, high tillering index, improved photosynthetic activity

High cold hardiness and resistance to drought and temperature extremes

Maximum yield and high-quality grain



pyraclostrobin 40 g/l + fludioxonil 40 g/l

Two-component fungicidal protectant for seeds of grain legume crops and potato tubers.

#### Advantages

Effective control of fusarium and other diseases

Compatible with inoculants and has no negative effect on rhizobia bacteria

Growth-stimulating effect and protection against stress at early stages of vegetation



#### imazalil 100 g/l + tebuconazole 60 g/l

Fungicides intended for presowing treatment seeds of cereal, maize, rape, soybean, peas and sunflower to control a wide range of diseases.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation as microemulsion

More wide spectrum of action than that of most seed treatments due to combination of two active ingredients

High level of fungicidal activity, including to control Helminthosporium and Fusgrium root rots, Oidium, seed molding, Septoria blight, etc.

Prolonged protective period from seed sprouting to tubing stage and flag stage

Promotes coleoptiles development and formation of a robust root system

Higher resistance to drought and frost

No losses of the formulation during transport and sowing

Mix stability maintained for an unlimited time

Imazalil reducing the risk of resistance



#### tebuconazole 60 g/l

Fungicides intended for presowing treatment seeds of cereal and common flax to control a wide range of diseases.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation as microemulsion

Microemulsion penetrates inside a seed via microcapillaries, and protects the entire macro- and microstructure to control a wide range of seed and soil infections

Fungicide of curative and preventive action

High selectivity with regard to crops treated and no adverse effect on seed germination

Bio-efficient from seed sprouting until crop tillering

Easy to use: does not form dust, easily diluted in water to form a stable colloid solution



#### imidacloprid 280 g/l + imazalil 34 g/l + tebuconazole 20 g/l

Insecticides-fungicides intended for presowing treatment seeds for cereal. Efficient control over the distribution of seed and soil infection and protection of sprouts to control pests.

#### Advantages

A combination of three active ingredients ensuring a high level of protection against diseases and pests

Seed protection from inside and from outside

The fungicide in the form of microemulsion ensures maximum penetration of its active ingredients inside the seed, and gives it a powerful and prolonged protection throughout the vegetation period

The insecticide in the form of suspension concentrate remains on the seed protecting it thoroughly at the beginning of the vegetation period

Contributes to the emergence of amicable shoots and reliably protects the crops under conditions of drought and excess moisture

Saves labor costs for preparing the working solution



#### **Herbicides**

42	42	42	42	44	44
Azt.	Act.	Arg.	Argp.	Bnt.	Blls.
ACETAL PRO	ACTION	ARGO	ARGO PRIME	BENITO	BALLISTA
EC	SC		ME ME	E C	SC OD
44	44	45	45	45	45
Btr.	Btr.	Btrm.	Btre.	Btrs.	Brv.
BETAREN 22 OEC	BETAREN 320	BETAREN	OD EXPRESS AM EG	BETAREN	BRAVURA SC
46	46 46	MAX 46	OD EXPRESS AM EG	SUPER MD O	47
Br.	Czm.	Cns.	Cnz.	Corn.	Cpl.
BRIG	CENSOR MAX	CENSOR	CONCEPT	CORNEGI	CORNEGI
SC	OEC		EC OI		SE PLUS OD
47	47	49	49	49	49
Dmb.	Drt.	Est.	Fmd.	Fn.	Frts.
DAMBA	DROTIK	ESTAMP	FEMIDA	FENIZAN	FORTISSIMO
SL	CSC		EC OI		SL OD
50	50	50	50	52	52
Frw.	Gls.	Gz.	Glk.	Gra.	Hir.
<b>FORWARD</b> OEC	GALS EC	GEIZER	GLOK CSC WO	GRANAT	HEALER VG OEC
52	52	53	53	53	53
Hrm.	Grmf.	IIn.	Kss.	Knd.	Kndf.
HERMES	HERMES	ILION	KASSIUS	KONDOR	KONDOR
OD	FORTE OF		OD SF	V	VG FORTE OD
54	54	54	54	55	55
Kpzh.	Lin.	Lor.	Mitr.	Oct.	Ove.
KUPAZH	LINTAPLANT	LORNET	MITRON	OCTAVA	OVSUGEN
55	SI 55	57	SL SG	57	DD <b>EXPRESS</b> EC
OVS.	Pin.	Pix.	Prs.	Pri.	
OVSUGEN	PINTA	PIXEL	PRIMADONNA	PRIMADONNA	Rpr.
SUPER EC	OE		OD SUPER CSC		SE CSC
58	58	58	59	59	59
Rprt.	Rst.	Riz.	Snf.	Shk.	Spr.
REPER TRIO	RESTYLE	RIZOTTO	SANFLO	SHKVAL	SPRUT EXTRA
CSC	OD		OD WO		SL SL
61	61	61	62	62	
Tnt.	Uni.	Vrs.	Zng.	Zon.	
<b>TANTO</b> CSC	UNIKO	VERSIA	ZINGER OD WE	ZONTRAN	SC
CSC	CSC	·	OD		~   <u> </u>

Desiccant

Tng. TONGARA







#### propisochlor 720 g/l

Herbicide to control annual grass and dicotyledonous weeds in sunflower, soybean, sugar beet and maize crops.

#### Advantages

It is used both as a soil herbicide and post-emergence herbicide with a long protective period  $\,$ 

It ensures the purity of seedlings at the early stages of crop growth and development, thus controlling a wide range of weeds

High selectivity excludes the risk of phytotoxic effect even under conditions of abundant rainfall and low temperature

It ensures the purity of seedlings throughout the growing period It has no restrictions for crop rotation



#### ethofumesate 500 g/l

Herbicide for controlling annual dicotyledonous and grass weeds on sugar beet and white lupine plantings.

#### Advantages

High biological effect to control weeds having a strong wax protective layer (for example, *Chenopodium album*)

Reliable control of annual dicotyledonous weeds, including green amaranth and some grass weeds

Weed penetration both through leaves and roots



#### fenoxaprop-P-ethyl 80 g/l + mefenpyr-diethyl 30 g/l + clodinafop-propargyl 24 g/l

System herbicide to control annual grass weeds in spring and winter wheat crops.

#### Advantages

Maximum herbicide effect attained by the combination of two active synergetic ingredients

High rate of weed penetration due to its innovative formulation Good compatibility with anti-dicotyledon formulations

Higher stress resistance of crops due to the antidote

## Argp. ARGO PRIME ME

#### fenoxaprop-P-ethyl 90 g/l + clodinafop-propargyl 45 g/l + cloquintocet-mexyl (antidote) 40 g/l

Graminicide in the NANOformulation to protect wheat crops against a wide range of annual grass weeds.

#### Advantages

Good effect against a wide range of grass weeds with an optimal concentration of active substances

The most efficient NANOformulation, compared to conventional analogues

High rate of penetration and resistance to precipitation washout No phytotoxic effect on the crops

A wide application window regardless of the crop development phase Good compatibility in tank mixtures with anti-dicotyledon preparations

#### The efficacy of herbicides





Elimination of grass weeds of spring wheat 1. **Argo, ME**, 1.0 L/ha 2-3. **Argo Prime, ME**, 0.5 L/ha







Soybean
1. Treated with **Benito, CSC**, 2.0 L/ha
2-3. Untreated control







Sugar beet
1-2. Two treatments with **Betaren Super MD**, OEC, 1.2 L/ha, in
combination with anti-dicotyledon
herbicides

42 \_\_\_\_\_\_ 4





mesosulfuron methyl 30 g/l + flumetsulam 17 g/l + florasulam 12 g/l + mefenpyr-diethyl (antidote) 90 g/l

Cross-spectrum herbicide for cereal crops protection.



#### bentazone 300 g/l

Postemergence herbicide to control annual dicotyledonous weeds in soybean and pea crops.

#### Advantages

A unique product in terms of combination of active ingredients and formulation

Control of mixed weed infestation without the need for preparing tank mixtures

Control of tough weeds: cheat grass, jointed goat grass, etc.

A wide application window in spring and autumn

No phytotoxicity

Without restrictions for crop rotation

#### Advantages

Innovative formulation and enhanced formulation of bentazone provide for:

- Increased herbicidal activity compared with conventional preparations based on bentazone salt
- High penetration rate and rapidity of action
- Reduction in the amount of active ingredient per hectare without loss of efficiency

Flexible application times allowing for integration into any soybean protection schemes

It has no restrictions for crop rotation



#### phenmedipham 110 g/l + desmedipham 110 g/l

Postemergence herbicide to control annual dicotyledonous weeds, including *Amaranthus*, on sugar beet plantings.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation OEC

Highly efficient to control annual dicotyledonous weeds, including Chenopodium album, on beet plantings

Highly compatible as part of prepared mixtures with other herbicides to enhance the spectrum of action



#### desmedipham 160 g/l + phenmedipham 160 g/l

A highly effective postemergent herbicide to control annual dicotyledonous weeds in sugar beet crops.

#### **Advantages**

Highly effective in control of annual dicotyledonous weeds, including goosefoot, amaranth species, and others

Rapid destruction of weeds because of high penetration power due to oil formulation

Excellently compatible with other herbicides in tank mixtures to expand the action spectrum



#### etofumesate 126 g/l + desmedipham 80 g/l + fenmedipham 64 q/l

Post-emergence herbicide in oil formulation against a wide range of weeds with enhanced action on dicotyledonous species.

#### Advantages

Highly effective oil formulation significantly accelerates the product penetration and enhances herbicidal action

Higher etofumesate content postpones the emergence of the second wave of weeds

Improved formulation for enhanced action against dicotyledonous weeds

Excellently compatible with other herbicides in tank mixtures to expand the action spectrum



#### phenmedipham 60 g/l + desmedipham 60 g/l + ethofumesate 60 g/l

Postemergence herbicide to control annual dicotyledonous weeds as well as some annual grass on sugar and fodder beet plantings.

#### Advantages

Highly effective to control annual dicotyledonous and some grass weeds at their early stages of development

Highly compatible as part of prepared mixtures with other herbicides to enhance the spectrum of action

Fast herbicide action

## Btrs. BETAREN SUPER MD OEC

#### ethofumesate 126 g/l + phenmedipham 63 g/l + desmedipham 21 g/l

Postemergence herbicide to control annual dicotyledonous weeds, as well as some annual grass on sugar beet crops.

#### **Advantages**

Highly effective at reduced concentration of the active ingredient due to innovative formulation OEC

Does not have phytotoxic action on the crop

Highly effective to control annual dicotyledonous and some grass weeds at their early stages of development

Highly compatible as part of prepared mixtures with other herbicides to enhance the spectrum of action

Presence of ethofumesate penetrating through leaves and roots ensures a long-term beet protection from weeds



#### aclonifene 600 g/l

Herbicide for sunflower protection during the growing season.

#### Advantages

New mechanism of action against resistant weeds

Safe protection of classical sunflower during the growing season without after-effects

Features a soil screen

Effectively controls major dicotyledonous weeds

44 \_\_\_\_\_\_ 45





#### prometryn 500 g/l

Soil-applied herbicide for major crop protection programs.

#### Advantages

Strategic approach: weed control at all stages of competition with the crop, starting from the earliest ones

The destruction of a wide range of annual weeds, including a number of tough species

Long protective period

No residual effect on subsequent crops in the crop rotation

Viable option: one herbicide for use on many crops cultivated on farm

## CZM. CENSOR MAX OEC

#### clethodim 120 g/l

A highly efficient grass-active herbicide intended to control all types of grass weeds on plantings of sugar beet, lupine, soybean, and other crops.

#### Advantages

A more effective oil formulation of the product compared with conventional emulsion analogs

Better parameters of wetting and penetration into weed plants

Effective at high air temperatures due to long-term preservation of active ingredients in a liquid state

The use of the stabilizer adhesive is not required since it contains a sufficient amount of adjuvants

Rapid manifestation of the herbicidal effect

Cost-effective under the conditions of high weediness with annual grass weeds

#### Cns. Censor EC

#### clethodim 240 a/l

Highly efficient postemergence herbicide intended to control annual and perennial grass weeds on plantings of sugar beet, onion, and soybeans.

#### Advantages

Exterminates nearly all annual and perennial grass weeds, including malicious ones (*Elytrigia repens* and other)

No usage limitations with regard to crop development phase

High efficiency at reduced doses regardless of soil and climatic conditions

## Cnz. concept od

#### imazamox 38 g/l + chlorimuron-ethyl 12 g/l

Postemergence selective herbicide of systemic effect intended to control annual grass and dicotyledonous weeds on soybean plantings.

#### **Advantages**

Highly effective at reduced concentration of the active ingredient due to innovative formulation  $\ensuremath{\mathsf{OD}}$ 

Ideal combination of active ingredients

Most extended spectrum of action on weeds at soybean plantings

Prolonged protective period

Exposure on weeds through leaves and roots

Soil herbicidal activity



terbutilazine 250 g/l + 2,4-D acid /2-ethylhexyl ether/ 80 g/l + nicosulfuron 30 g/l

New option for long-term control of a wide range of weeds in maize.

#### Advantages

Innovative, unparalleled herbicide for maize protection

An effective combination of three active ingredients of different classes in an advanced formulation for the best result

Increased herbicidal activity against a wide range of grass and dicotyledonous weeds, including tough ones and species with late germination terms

Reinforced soil screen

A longer period of culture protection

No residual effect on rotation crops



terbuthylazine 250 g/l + 2,4-D acid /2-ethylhexyl ether/ 80 g/l + clopyralid /2-ethylhexyl ether/ 40 g/l + nicosulfuron 30 g/l

Cross-spectrum herbicide for maize protection

#### Advantages

Extended spectrum of action and increased efficacy on dicotyledonous weeds

Soil screen

No residual effect on rotation crops

A unique oil formulation for maximum efficacy

## **Dmb. DAMBA** SL

#### dicamba acid /dimethylamine salt/ 480 g/l

Systemic postemergence herbicide to control a wide range of dicotyledonous weeds in cereal crops and maize.

#### Advantages

It shows high biological efficiency against a wide range of dicotyledonous weeds, including the toughest ones

It suppresses weeds resistant to 2,4-D, MCPA and triazines

It has a strong synergism with the product containing 2,4-D, MCPA, sulfonylureas, triazines, glyphosates

It is a highly effective component of tank mixtures for enhancing herbicidal action

It has no restrictions for crop rotation

It has a milder effect on the crop compared with 2,4-D-based preparations



#### 2,4-D acid /2-ethylhexyl ether/ 400 g/l

Selective postemergence herbicide of systemic effect intended to control annual and perennial dicotyledonous weeds on cereal and maize plantings.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation  $\ensuremath{\mathsf{CSC}}$ 

Highly efficient to control perennial difficult-to-eradicate weeds (Sonchus, Cirsium, Lactuca tatarica, Convolvulus arvensis, Euphorbia)

Rain-resistant: is not washed off by rain in one hour after treatment Remains efficient in drought conditions

Herbicidal activity starts to appear at +5 °C

No crop rotation limitations

Excellent component for prepared mixes with sulfonylurea herbicides

46  $\underline{\hspace{1cm}}$  47

#### 0

#### The efficacy of herbicides

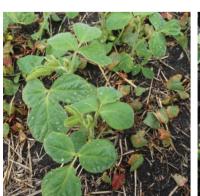


Maize
1. Treated with **Cornegi, SE**, 2.0 L/ha
2-3. Untreated control





Sugar beet
1-2. The effect of **Censor Max, OEC**, on grass weeds







Soybean 1-3. **Geizer, CSC**, effect on weeds



#### pendimethalin 330 g/l

Pre-emergence herbicide intended to control annual grass and dicotyledonous weeds on agricultural crop plantings.



Excellent efficiency in controlling a wide range of annual grass and dicotyledonous weeds

Used for soil treatment before crop emergence, thus eliminating competition with weeds at earlier stages of crop growth

Prolonged protective period

High and steady efficiency in various soil and climatic conditions



2,4-D acid /2-ethylhexyl ether/ 320 g/l + chlorsulfuron acid 4.2 g/l

Postemergence herbicide in the oil formulation against a wide range of dicotyledonous weeds in cereal crops.

#### Advantages

A unique combination of active substances from two widely used chemical classes

A broader spectrum of action against dicotyledonous weeds, compared to 2,4-D-based herbicides

High efficacy against annual and offset weeds, including those resistant to 2.4-D

The most efficient oil formulation

Long-term retention of herbicidal properties regardless of weather conditions

Soil screen formation



#### dicamba acid 360 g/l + chlorsulfuron acid 22.2 g/l

Postemergence herbicide intended to control dicotyledonous weeds on cereal crops and common flax plantings.

#### Advantages

Proprietary formulation of a widely known combination of two active ingredients with a bioactivator

Wide spectrum of action

Maximum efficiency with minimum cost of treatment per 1 ha

Prolonged application timing - until cereal evolving into tube Recommended for autumn treatment of winter crops

All owed for aerial treatment



#### 2,4-D acid /2-ethylhexyl ether/ 200 g/l + aminopyralid 10 g/l + florasulam 5 g/l

Herbicide for protecting cereal crops against a wide range of dicotyledonous weeds.

#### Advantages

Maximum efficacy against dicotyledonous weeds, including perennial ones

Unparalleled efficacy against bedstraw and other annual wintering and spring weeds

Effective control of goosefoot as well as sunflower and rapeseed drop Effect on the root system of offset weeds, including thistle

Consistent performance in adverse weather conditions due to innovative oil formulation

48 \_\_\_\_\_\_ 49





#### quizalofop-P-ethyl 60 g/l

Postemergence herbicide intended to control annual and perennial grass weeds on plantings of sugar beet, soybeans, rape, sunflower, common flax, oilseed flax, pea chickpea and other crops.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation OEC

Efficient to control most malicious grass weeds - Elytrigia repens, Avena fatua, Echinochloa crus-galli, etc.

Exterminates weeds together with their root system

Compatibility with other formulations in mixes

Treatment regardless of crop growth phase

No crop rotation limitations



#### clomazone 480 g/l

A pre-emergence herbicide with long-term effect in the soil against annual grass weeds and dicotyledonous weeds in rapeseed, sugar beet and soybean crops.

#### Advantages

Controls a wide range of mixed-type annual weeds

A perfect solution against goosefoot, bedstraw, buttonweed and sunflower drop

Is efficient in all soil types

Requires no mechanical working-in

Can be used on soybean seedlings



#### bentazone 300 g/l + quizalofop-P-ethyl 45 g/l

Selective systemic contact postemergence herbicide to control annual dicotyledonous and annual and perennial grass weeds in soybean and pea crops.

#### Δ

#### **Advantages**

The ingredient of bentazone as an acid enhances the herbicidal effect versus the traditional bentazone salt-based products

Has a high penetration rate and speed of response due to the innovative formulation

Exhibits high biological efficiency with a reduced amount of active ingredients

Has a wide application window regardless of the crop development

A tank mixture with anti-cereal herbicides is not required



#### florasulam 150 g/kg +lodosulfuron-methyl-sodium 60 g/kg + mefenpyr-diethyl antidote 60 g/kg

Systemic herbicide to combat a wide range of dicotyle donous weeds in cereal crops.

#### A

#### **Advantages**

Elimination of cleaver and other problematic weeds

Low application rates: economical treatment of 1 ha and optimized logistics costs

High efficiency at low temperatures of +5°C and higher

#### The efficacy of herbicides







1-2. **Fortissimo, OD**, 0.7 L/ha, winter wheat after treatment 3. Untreated control







1-3. **Forward, OEC**, elimination of grass weeds of soybean







1-3. The effect of **Hermes, OD**, 1.0 L/ha on specific weeds (Day 7 after treatment)

50



#### tribenuron-methyl 750 g/kg

Postemergence herbicide of systemic effect intended to control annual dicotyledonous weeds, including those 2.4-D and MCPA resistant weeds on cereal.



Highly efficient at low consumption rates Highly selectivity with regard to cereal crops No limitations for rotating crops

Wide range of application periods in terms of crop growth phases

Efficient at min. ambient temperature of 5°C

Economical and easy to apply and store

Compatible with most pesticides, which makes is suitable for integrated protection purposes



#### quizalofop-P-tefuryl 40 g/l

Postemergence herbicide of systemic effect intended to control annual and perennial grass weeds in crop plantings.



#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation OEC

Inhibits a wide range of grass weeds even at late growth stages

Prevents regrowing of rootstock weeds

Flexible herbicide application timing regardless of crop growth phases

Efficient at any soil and climatic conditions

Resistant to rain



#### quizalofop-P-ethyl 50 g/l + imazamox 38 g/l

Postemergence selective herbicide of systemic effect intended to control annual dicotyledonous weeds, and annual and perennial grass weeds on sunflower, pea, soybean and chickpea plantings.



#### **Advantages**

Highly effective at reduced concentration of the active ingredient due to innovative formulation  $\mbox{OD}$ 

Highly efficient combination of two active ingredients from various classes

Reliable protection of annual dicotyledonous weeds, and annual and perennial grass weeds

Resistance to washing-off by precipitation

Efficient to control all agrotypes of broomrape



#### imazamox 30 g/l + quizalofop-P-ethyl 20 g/l + imazapyr 12 g/l

Postemergence herbicide for protecting imidazolinone-resistant sunflower against a wide range of weeds.



#### **Advantages**

Effective solution for weed control when growing imidazolinoneresistant sunflower

Increased activity against dicotyledonous weeds

Provides a reinforced soil screen

A unique oil formulation for maximum herbicidal effect



#### imazamox 40 g/l + clopyralid 90 g/l

Herbicide intended to control annual grass and dicotyledonous weeds on imidazolines-resistant rape.



Selective systemic herbicide adsorbed by leaves and roots

Effect in a couple of hours

Complete loss of weeds on the 3rd-15th day after treatment

Special control of Dindle, Canadian Thistle, Foalfoot, Camomile, Morgan

Maximum effect due to the preparative form (oil dispersion)



#### rimsulfuron 250 g/kg

Selective herbicide of systemic effect intended to control annual and perennial dicotyledonous and grass weeds on maize and potato plantings.

SP



#### Advantages

Ravages the broadest range of grass and dicotyledonous weeds
Kassius application fully replaces pre-emergence and postemergence
treatment with herbicides

Low conssumption rates

No crop rotation limitations

Activity does not depend on weather conditions

Low toxicity to the warm-blooded



#### triflusulfuron-methyl 500 g/kg

Postemergence herbicide of systemic effect intended to control annual dicotyledonous weeds on sugar beet plantings.



#### **Advantages**

Control of a broad range of weeds after beet emergence Termination of weed growth in 2 hours after treatment

High selectivity toward the crop

High efficiency in any weather conditions

Important element of beet protection system



#### triflusulfuron-methyl 120 g/l

A highly effective systemic herbicide in oil formulation intended to control a wide range of annual dicotyledonous weeds in sugar beet plantings.



#### Advantages

Most effective oil formulation of the product compared with "dry" analogs

Additional inclusion of surfactant is not required as the product contains a sufficient amount of adjuvants

Control of tough weeds (butterweed, red-root amaranth, etc.)

High efficiency in any weather conditions

Expanded spectrum of action and enhanced herbicidal activity of Betaren series products

Decreased consumption rates for sugar beet herbicides when used timely





#### thifensulfuron-methyl 750 g/kg

Postemergent herbicide to control annual dicotyledonous weeds in soybean and maize. An ideal component of the tank mixtures to enhance the herbicidal effect.

#### Advantages

Highly effective component of the tank mixture to enhance the herbicidal effect

The elimination of most species of annual dicotyledonous weeds, including those resistant to 2,4-D and triazines

Reliable control of tough weeds (species of the cruciferous family, amaranth, cocklebur, etc.)

Without restrictions for crop rotation



#### MCPA 500 g/l

Selective herbicide of systemic effect intended to control annual dicotyledonous weeds on cereal, potato, flax, pea and other plantings.



#### **Advantages**

Efficient protection of critical agricultural crops
Controls a wide range of annual dicotyledonous weeds
Highly selective
Has a systemic effect



#### clopyralid 300 g/l

Postemergence selective herbicide intended to control various species of *Sonchus, Matricaria*, and *Polygonum* on crops.



#### **Advantages**

Irreplaceable for controlling difficult-to-eradicate weeds, such as Sonchus, Matricaria, Polygonum and others

Ravages both the aboveground portion and root system of weeds due to its systemic effect

Protects throughout the vegetation period

Demonstrates synergy in mixtures with other herbicides recommended to control dicotyledonous and grass weeds



#### metamitron 700 g/l

Systemic herbicide intended to control multiple species of annual dicotyledonous weeds on beet plantings.



#### **Advantages**

Ensure initial planting cleanliness as a pre-emergence herbicide

Produces a powerful "screen" against subsequent weed emergence

Mild effect upon the crop

Extended protective period when used as a component of mixes with betaren series herbicides

Acts in a more wide range of temperatures than betanal group formulations

Maximum efficiency achieved as a result of effect through both soil and leaves



#### nicosulfuron 60 g/l + florasulam 3.6 g/l

Two-component herbicide to control annual and perennial grass, dicotyledonous weeds on maize plantings.



Maximum herbicidal effect is achieved due to original combination of two active ingredients from various chemical classes

Formulation as oil dispersion deeply penetrates weeds and suppress their further growth and development

Protective period lasts throughout the vegetation period; «soil screen» is produced

Applied to protect against grass and dicotyledonous weeds, including Amaranthus, Convolvulus, and Sonchus

Adjuvants contained in the formulation enhance herbicidal effect



#### fenoxaprop-P-ethyl 140 g/l + antidote 35 g/l

Postemergence selective herbicide of systemic effect intended to control annual grass weeds on spring and winter wheat crops.



#### **Advantages**

Highly efficient graminicide for wheat
High selectivity with regard to crops treated
Wide range of application periods regardless of crop growth phases
Fast and strong effect through aboveground parts of the plant



#### fenoxaprop-P-ethyl 140 g/l + antidote 47 g/l

Postemergence selective herbicide of systemic effect intended to control annual grass weeds on spring and winter barley (including malt barley) crops.



#### Advantages

Highly efficient graminicidef or barley High selectivity with regard to crops treated Wide range of application periods regardless of crop growth phases Fast and strong effect through aboveground parts of the plant



#### flumetsulam 50 g/l + florasulam 36 g/l

Postemergence herbicide in the oil formulation against a wide range of dicotyledonous weeds in cereal crops.



#### Is effective against a wide range of dicotyledonous weeds, including some weeds resistant to 2,4-D and sulphonylureas

Increased herbicidal activity and quick effect because of the innovative oil formulation

The best efficacy against Cruciferae and catchweed bedstraw Mild effect without herbicidal stress

Has a wide application window: from tillering till the second internode formation

No restrictions on crop rotation

54 \_\_\_\_\_\_\_ 55

#### $\Diamond$

#### The efficacy of herbicides







Maize after treatment with Octava, OD, 1.0 L/ha
1. One month later
2. Before harvesting
3. Untreated control







1-3. **Pixel, OD**, 0.3 L/ha, winter wheat after treatment







1-2. **Primadonna, SE**, 0.6 L/ha + Kassius, SP, 0.05 kg/ha, elimination of weeds of maize after treatment 3. Primadonna, SE, 0.8 L/ha, wheat after treatment



typhensulfuron-methyl 90 g/l + flumetsulam 24 g/l + florasulam 18 g/l

Premium-class herbicide for controlling a wide range of dicotyledonous weeds in the late stages of the development of cereal crops.



High efficiency and rapid action due to innovative oil formulation and synergistic effect of three active ingredients

Maximum extended spectrum of action for dicotyledonous weeds, including those that are difficult to control

Effectiveness in overgrown weeds

Wide window in application phases, from tillering to flag leaf

Exceptionally mild effects on crops, no loss in the yield due to herbicidal stress

No restrictions for crop rotation



#### 2,4-D acid /2-ethylhexyl ether/ 200 g/l + florasulam 5.0 g/l

Selective postemergence herbicide of systemic effect intended to control annual and perennial dicotyledonous weeds on cereal crop and maize plantings.

#### Advantages

Unique formulation contributing to rapid penetration into plants and arrival at growth points

Highly efficient two-component herbicide for a wide range of bilobate weeds, including difficult-to-eradicate (sow thistle, catch weed, thistle, etc.)

Ideal combination of active ingredients ensuring powerful herbicidal actions

Wide range of application

No crop rotation limitations

Excellent compatibility in mixes with other herbicides



#### 2,4-D acid /2-ethylhexyl ether/ 200 g/l + florasulam 3.7 g/l

Selective postemergence herbicide of systemic effect intended to control annual and perennial dicotyledonous weeds in cereals.

#### Advantages

Powerful herbicidal effect ensured by synergy of two active ingredients with various mechanisms of action

Exterminates malicious, difficult-to-eradicate weeds, such as Galium aparine, Matricaria perforata, Cirsium Arvense, Sonchus Arvensis, and others

Has a wide range of application timing: from cereal crop tillering stage to evolving into tube

Excellent systemic activity of the formulation allows easy and fast (within an hour) penetration into and spread within a weed, while blocking weed growing processes

High rain resistance: precipitation does not affect its efficiency as early as an hour after treatment

56  $\overline{\phantom{a}}$  57





#### clopyralid /2-ethylhexyl ether/ 100 g/l + fluroxypyr 15 g/l

Postemergence herbicide of systemic effect intended to control annual and perennial dicotyledonous weeds on rape plantings.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation CSC

Efficient control of Galium aparine and Convolvulus arvensis

Fast penetration and high bio-efficiency due to unique formulation

Wide range of application timing

Elaborate combination of two active ingredients complementing each other prevents the occurrence of weed resistance



#### clopyralid /2-ethylhexyl ether/ 267 g/l + picloram 80 g/l + aminopyralid 17 g/l

A highly effective three-component postemergence herbicide in oil formulation intended to control dicotyledonous weeds on rape plantings.

#### Advantages

A wide spectrum of action due to three systemic herbicide components

High herbicidal activity due to the highly effective oil formulation and synergism of active ingredients

The fastest penetration into tissues of treated weeds and long-term retention of herbicidal properties regardless of weather conditions

Highly effective against such hard-to-control weeds as cleavers, chamomile species, knotweed, amaranth, goosefoot, and other tough species

Eradication of perennial weeds along with their root system Long-term protective period due to soil activity Wide range of application timing



#### cyhalofop-butyl 190 g/l + bispyribac sodium 50 g/l

A highly selective two-component herbicide in oil formulation for rice protection against the most harmful weeds.

#### Advantages

A unique unparalleled combination of active ingredients in oil formulation

Highly efficient against weeds of different families (such as dicotyledonous marsh and grass weeds, including resistant populations of barnyard grass)

Destruction of growing points and elimination of new sprout growth

A prolonged protective effect up to 2 months

Safe for all rice species and varieties



#### cyhalofop-butyl 300 g/l + bispyribac sodium 18 g/l

A highly selective two-component herbicide in oil formulation for rice protection against the most harmful weeds.

#### Advantages

A unique unparalleled combination of active ingredients in oil formulation

Highly efficient against weeds of different families (such as dicotyledonous and grass weeds, including resistant populations of barnyard grass)

Selective for all rice species and varieties



#### tribenuron methyl 750 g/kg

Highly effective postemergence herbicide for the cultivation of tribenuron-methyl resistant sunflower.

#### Advantages

Control of a wide range of dicotyledonous weeds over a long period High selectivity to tribenuron-methyl resistant sunflower hybrids Safety for any subsequent crop rotation



#### imazapyr 250 g/l

Systemic herbicide of continuous action intended to control annual and perennial grass and broad-leaved (including tree species) plants at non-agricultural facilities.

#### Advantages

Much more efficient than glyphosate herbicides

Excellent soil activity - 100% control of unwanted vegetation for 2 years

Reliable exterminates herbs, shrubs and trees, including difficult-toeradicate and quarantine weeds

May be applied both before weed emergence and over emerged weeds

Unlimited timing of protective measures

No adverse effect from precipitation in an hour after treatment

Quickly penetrates and exterminates plants under a layer of dust and

An innovative method for creating protective mineralized strips



#### glyphosate acid /potassium salt/ 540 g/l

Non-selective systemic herbicide of continuous action intended to exterminate annual and perennial grass and dicotyledonous weeds, grassland, trees and shrubs.

#### Advantages

Most efficient among various glyphosate forms

Glyphosate as potassium salt promotes fast absorption and spread of the active ingredient along the entire weed, including root system

Elevated content of the active ingredient allows formulation application in reduced doses

Optimal content of highly efficient adjuvant in the formulation maximizes bio-efficiency

No soil activity, no aftereffects for the crop

Allows application of energy-saving soil protection technologies

Used at any above-zero ambient temperatures until persistent frost

3 \_\_\_\_\_\_ 59

#### $\Diamond$

#### The efficacy of herbicides



Spring barley
1-2. Treated with **Uniko, CSC**,
1.5 L/ha
3. Untreated control



#### acifluorfen 320 g/l

Postemergent herbicide to control annual dicotyledonous weeds in soybean crops.



Highly effective component of the tank mixture to enhance the herbicidal effect

Increased herbicidal activity due to innovative formulation

Pronounced synergism with herbicides on soybean

The effective control of accumulated weeds that are weakly sensitive to other herbicides in soybean crops

An ideal option for controlling broadleaf weeds

Without restrictions for crop rotation



#### fluroxypyr 100 g/l + florasulam 2.5 g/l

Postemergence selective herbicide with systemic effect for the control of annual and perennial dicotyledonous weeds in cereal crops.

#### Advantages

100% control of severe, hard-to-control weeds, such as cleavers, black bindweed, field bindweed

A potent herbicidal effect and an expanded spectrum of susceptible weeds due to the synergism of the two active ingredients with different mechanisms of action

High efficiency and rapid effect due to the unique formulation Wide range of application timing

High rain tolerance: precipitation does not affect efficacy as early as one hour after treatment

No restrictions for subsequent crops in crop rotation



#### propisochlor 370 g/l + terbuthylazine 185 g/l

Pre-emergence herbicide for protecting broad-leaved crops against perennial grass and dicotyledonous weeds.

#### Advantages

A one-of-a-kind soil herbicide
A unique oil formulation for maximum efficacy
Protects the seedlings from a wide range of weeds
Ensures long-term purity of crops

High selectivity reduces the possibility of phytotoxic effects on crops

60  $\underline{\hspace{1cm}}$   $\underline{\hspace{1cm}}$ 





#### metsulfuron-methyl 600 g/kg

Selective herbicide of systemic effect intended for postemergence treatment of cereal crops and common flax to control annual dicotyledonous weeds, including 2,4-D and 2M-4X resistant weeds and some perennial dicotyledonous weed sand undesired weeds and Sosnovsky cow-parsnip on non-agricultural lands.

#### Advantages

Wide range of action - inhibition of nearly all annual dicotyledonous weeds and some perennial dicotyledonous weeds

Low consumption rate

Low cost of treatment rate per hectare

High flexibility in terms of application timing

Convenient packing is water-soluble bags

Moderate toxicity to mammals, virtually harmless to bees

Bio-efficiency of the formulation virtually does not depend on weather conditions



#### metribuzin 250 g/l

Selective pre-emergence and post emergence herbicide intended to control annual dicotyledonous weeds and grass weeds on potato, tomato and soybean plantings.

#### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation CSC

Most efficient herbicide based on metribuzin for potato and tomato protection

High bio-activity at consumption rates of the active ingredient reduced by 1.4 to 1.7 times per ha compared to similar dry metribuzin based formulations

"Screening effect" to prevent emergence of weeds

Better penetration into the plant

Reduced pesticide load and cost of treatment

Mix stability

The formulation contains bioactivator

Timely ravage of weeds with Zontran reduces the risk of buck eye rot on potato plantings

#### The efficacy of herbicides







1. Before herbicide treatment
2. After treatment with
Zontran, CSC
3. Untreated control

3.



#### diquat 150 g/l

Non-selective contact desiccant for pre-cropping desiccation of sunflower, rape, cereal crops, soybean, and other.

#### Advantages

Fast drying of crops, thus facilitating cropping
Fast and uniform ripening
Reduced losses of seeds during cropping
Facilitates cropping
Reduced moisture content in seeds

62 \_\_\_\_\_\_ 6



#### Insecticides and acaricides

66		66		66		67		67	
Akr.		Арх.		Brtt.		Df.		Dphl.	
AKARDO	CSC	APEX	OEC	BERETTA	OD	DAKFOSAL	ТВ	DIFLOMITE	SC
67		68		68		68		69	
Esp.		Espe.		Fsk.		lmi.		lmix.	
ESPERO	SC	ESPERO EURO	OD	FASKORD	EC	IMIDOR	SL	IMIDOR EXTRA	SC
69		69		70		70		70	
Krch.		Knf.		Knfn.		Lok.		Mds.	
KARACHAR	EC	KINFOS	EC	KINFOS NEO	EC	LOKUSTIN	SC	MEADOWS	OD
71		71		71		72		72	
Mek.		Pir.		Prf.		Spr.		Tgr.	
MEKAR	ME	PIRELLI	EC	PORFIR	SC	SPARRING	OD	TAGOR	EC
72		73		73		73			
Tj.		Tw.		Twe.		Yun.			
THEJA	SC	TWINGO	SC	TWINGO EURO	OD	YUNONA	ME		







#### spirodiclofen 250 g/l

Contact-action product of insecticide acaricidal chemical class to control mites and other pests on apple, grapes, and soybean crops.



A very powerful acaricidal effect due to the active substance of the new chemical class in the innovative formulation

Special mechanism of action against all stages of mite development

An active effect on populations resistant to conventional acaricides

Additional action against armored scales, slow worms, and planthoppers

Translaminar activity

Rapid action and high efficiency in all weather conditions



#### pyriproxyfen 100 g/l

Hormonal insecticide with an innovative oil formulation for the protection of rapeseed, fruit crops and vegetable crops.

#### Advantages

A unique mechanism of action that disrupts the hormonal balance in pests

The most efficient oil formulation, compared to conventional emulsion
concentrates

Has an impact on all stages of pest development

Rapid toxic effect

Long-term protection because of high residual activity

Low-toxic for bees and warm-blooded animals

A necessary component of complex anti-resistance crop protection programs



#### bifenthrin 60 g/l + thiamethoxam 40 g/l + alpha-cypermethrin 30 g/l

Highly effective three-component insecticide, oil formulation, for control of especially harmful pests of cereal crops, potato, rapeseed, and sugar beet.

#### Advantages

A new combination of three active ingredients in a highly effective oil formulation

Strong synergism of active components: toxic effect on various stages of nerve impulse transmission of an insect

Several mechanisms of action: systemic, contact enteric, translaminar, and repellent

Strong knockdown effect and long-term protection (up to 35 days) even during mass reproduction periods

Control of the widest spectrum of the most harmful pests, including diamondback moth, snout beetle, rapeseed beetle, etc

Effective impact on hiding pests and pests living on the back of the leaf Triple toxic effect for the elimination of resistant populations



#### aluminum phosphide 570 g/kg

Fumigant insecticide for desinsection in various empty storages, and food, seed and fodder grain stocks in storages and elevator bins that are stored in bulk or bags under a film cover.



High fumigant activity
Exterminates storage pests in hard-to-reach places

Exterminates insect pests of any age

No effect of product quality

Easy touse



#### diflovidazin 200 a/l

A powerful contact acaricide of a new chemical class for control of mites on apple trees, grapes, soybeans, and greenhouse crops.

#### Advantages

An unparalleled acaricide

A unique mechanism of action at all stages of a life cycle of various mite species

Elimination of mites at the back of the leaf by means of translaminar activity

Effective impact on winter and summer ovipositioning

Additional sterilizing effect on female mites

High selectivity to useful entomofauna

A perfect tool for anti-resistance crop protection programs



#### imidacloprid 200 g/l + alpha-cypermethrin 120 g/l

Two-component insecticide having an acute contact-intestinal and systemic effect to control a wide spectrum of pests.

#### Advantages

Systemic activity and acute contact enteric effect to achieve results quickly

Reliable control of hiding, sucking, and leaf-eating insects throughout the period of harmfulness

Elimination of highly hazardous pests, including brown marmorated stink bug, ground beetle, sod webworm, polyphagous cutworms, moth, and others

Highly effective during mass reproduction periods of harmful insects A double toxic effect for the elimination of resistant populations Aerial application to treat large areas in a short time

66 \_\_\_\_\_\_ 67







#### acetamiprid 100 g/l + alpha-cypermethrin 60 g/l

A highly effective insecticide in oil formulation for long-term protection of sugar beet against weevils.



A new combination of active ingredients with different mechanisms of action to eliminate resistant populations of pests

A highly effective oil formulation provides a more active effect and long protective period

Reliable control of the most harmful and hiding sugar beet pests

Highly effective during hot weather

Rapid action at all motile stages of pests and prolonged action at active development stages inside the stem



#### imidacloprid 200 g/l

Systemic insecticide from the neonicotinoid class for a wide range of crops.



New formulation with improved physicochemical properties and high adjuvant content

Rapid action and long-lasting protection against resistant pest populations

Additional effect: enhancement of growth processes under stress conditions

Aerial spraying is allowed



#### alpha-cypermethrin 100 g/l

Intestinal contact insecticide of synthetic pyrethroid group to control a wide range of pests of cereal crops, potato, sugar beet, maize, and other agricultural crops.

#### A

#### **Advantages**

Wide spectrum of action

High speed of toxic action - immediate death of insects

High efficiency due to elevated contents of active isomers in the active ingredient

Prolonged protective period

One of the most efficient and cost effective insecticides



#### lambda-cyhalothrin 50 g/l

Insecticide to control a wide range of pests on agricultural crops.



#### Advantages

Powerful pyrethroid insecticide to control a wide range of pest on various crops

Fast and prolonged effect

Acaricide effect

Low consumption rates and low cost of treatment per 1 hectare



#### imidacloprid 200 g/l

Insecticide of systemic effect to control a wide range of pests on potato, cucumbers, tomato, sugar beet, cereal crops, pastures.



#### **Advantages**

Neonicotinoid insecticide

Prolonged protection against most malicious insects

Efficient use in green houses

High efficiency in any weather conditions

No phytotoxic effect



#### dimethoate 300 g/l + beta-cypermethrin 40 g/l

Intestinal contact insecticide to control pests on plantings of cereal crops, sugar beet, potato and other crops.

EC



#### Advantages

Two components with different mechanisms of action Synergy of two active ingredients enhance toxic effect of the

Prolonged protective period

formulation

Highly efficient to control resistant kinds of insects

68  $\underline{\hspace{1cm}}$   $\underline{\hspace{1cm}}$ 







#### dimethoate 300 g/l + alfa-cypermethrin 40 g/l

Insecticide with acute contact enteric effect for rape protection against pests complex.

#### Advantages

Enhanced toxic effect due to the synergism of two active ingredients with different mechanisms of action

Effective elimination of larvae and imago of the pests even in places that are hard to reach

Minimum risk of resistant population emergence

Potent insecticidal effect

Prolonged protection due to systemic activity



#### diflubenzuron 125 g/l + imidacloprid 110 g/l

Powerful double-action insecticide to combat locusts, needle- and leaf-eating insects, pests of rapeseed crops.

#### Advantages

Total eradication of locusts and other pests

Pronounced knockdown effect in controlling imago

Potent effect on egg raft and larvae of all ages due to a combination of two active ingredients different mechanisms of action

Shortest possible periods of effect and a long period of protection

Three applications methods: ground application, aerial application, and aerosol spraying using an aerosol generator



#### acetamiprid 200 a/l

A systemic contact enteric insecticide against cereal, orchard, and oil crop pests.

#### Advantages

High efficiency against the widest range of Homoptera, Coleoptera, Hemiptera, and Lepidoptera pests

Rapid toxic effect and long-term protection

A unique oil formulation for maximum efficacy

High biological efficiency at elevated temperatures

The only neonicotinoid not toxic to pollinators (bees and bumblebees)

An essential component of anti-resistance programmes for orchards and vineyards



#### abamectin 18 g/l

Enteric contact insecto-acaricide for the protection of apple trees, grapes and other crops from mites.

#### Advantages

Increased efficacy, faster and longer effect due to the innovative formulation

Translaminar activity which makes it possible to kill pests even at untreated sites

High efficiency against the mites resistant to the acaricides of other chemical classes

An important component of anti-resistant garden protection programs



#### chlorpyrifos 400 g/l + bifenthrin 20 g/l

A unique insecto-acaricide combination with a strong toxic effect on sugar beet, soybean and rape pests.

#### Advantages

Ensures strong knockdown effect and long-term protection

Has fumigant action and repellent properties and is able to penetrate into plant tissues

Ensures elimination of pests in hard-to-reach places, as well as pests resistant to other insecticides

Has perfect acaricidal properties

Eliminates pests at all stages of their development

Is highly effective during mass reproduction periods

Is especially effective against owl moths and weevils

Retains toxicity at both low and high air temperatures



#### chlorantraniliprole 200 a/l

Highly effective insecticide with a unique mechanism of action against scale pests on apple, grape, vegetable and industrial crops.

#### Advantages

A new and unique mechanism of action

Acts at all stages of pest development

High efficacy against pest populations resistant to other classes of insecticides

Fast initial action and long protective period of up to 3 weeks







### thiamethoxam 150 g/l + fipronil 90 g/l

A systemic contact enteric insecticide for a wide range of



A combination mechanism of action due to active substances from different chemical classes

Control of the widest range of pests: elimination of adult insects and larvae of all ages

High toxicity and long-term protection

A unique oil formulation for maximum efficacy

Effective impact on hiding pests and pests living on the back of the leaf



### dimethoate 400 a/l

Insecto-acaricide to control a wide range of pests on cereal crops and grapes.

### Advantages

High initial activity - pests die within the first hours after treatment Systemic effect, resistant to rain as early as in 1 hour after treatment Efficient to control many insect pests, feasible to use during maximum density of pests in the field



### thiacloprid 480 g/l

Contact enteric and systemic insecticide used to protect apple trees from gnawing and sucking insects.



### **Advantages**

Systemic, translaminar active insecticide

Rapid effect and guaranteed result

Long-term protection of gardens from pests complex

Short waiting period

Destruction of pest populations that have developed resistance to the insecticides of other chemical classes



### diflubenzuron 180 g/l + imidacloprid 45 g/l

Contact enteric and systemic insecticide used to protect apple trees, pear trees, and grapes from gnawing and sucking insects.



# Advantages

Unparalleled insecticide

Has a potent insecticidal effect due to a combination of two active ingredients that belong to different chemical classes and have different mechanisms of action

Pest control at all stages of their development: from egg to imago Long-term protective effect

Guaranteed control of pest populations that have developed resistance to the insecticides of other chemical classes

An excellent component of anti-resistant garden protection programs



### diflubenzuron 180 g/l + acetamiprid 45 g/l

A combined insecticide with ovicidal effect to protect gardens and vineyards against various pests.



### Advantages

A unique combination of active ingredients with different mechanisms of action

It contains neonicotinoid that has a rapid toxic effect and at the same time is low-toxic for bees

A highly effective oil formulation provides a more active effect and long protective period

Rapid action at all motile stages of pests

It has an ovicidal effect



### emamectin benzoate 50 g/l

Contact enteric insecticide used for control of codling moth. a pest of apple trees and other crops.



# Advantages

Due to the innovative formulation, provides increased efficacy, rapid action, and prolonged protection

Has a high biological activity against the codling moth caterpillar

The product is an insecticide of natural origin, safe for beneficial insects Has a short waiting period

It is highly effective against insect populations that are resistant to the insecticides of other chemical classes



# Pheromone traps

.....





Schelkovo Agrohim is one of the few companies that synthesises insect pheromones and manufactures traps for over 50 different types of agricultural and forest crop pests.

Pheromones are natural, biologically active substances which have a highly specific effect on one or several allied species of pests. Pheromones have extremely low consumption rates (nanogram quantities), comparable to the natural scent background produced by insects, and their natural origin ensures high ecological safety.

Pheromone traps are an essential component of integrated plant protection. They make it possible to determine the start of flying, changes in insect population development and distribution throughout the season, and the need for and optimal timing of protective measures.

Pheromone production has some specific features. The synthesis of active substances necessitates technological expertise, costly equipment, and high production standards, all of which are in place at Schelkovo Agrohim's production facilities.

# Pheromone traps





- 1-2. Delta type trap with rubber dispenser
- 3. Delta type trap with foil-foam dispenser
- 4. Barrier trap for Halyomorpha halys





4.

# Pheromone traps for the following types of insect pests

Fruit and berry crop pests	Vegetable and technical crop pests	Forest and ornamental crop pests	Storage pests
Archips crataegana	Etiella zinckenella	Tomicus piniperda	Ephestia kuehniella
Theresimima ampellophaga	Agrotis exclamation	Tortrix viridana	Ephestia elutella
Grapholita molesta	Mythimna separata	Halyomorpha halys	Cadra cautella
Archips podana	Cydia nigricana	lps typographus	Plodia interpunctella
Lobesia botrana	Plutella xylostella	Tomicus minor	Pyralidae
Eupoecilia ambiguella	Mamestra brassica	Lymantria dispar	
Zeuzera pyrina	Phthorimaea operculella	Diprion pini	
Pandemis heparana	Halyomorpha halys	Neodiprion sertifer	
Halyomorpha halys	Ostrinia nubilalis	Cydalima perspectalis	
Pennisetia hylaeiformis	Loxostege sticticalis	Dendrolimus sibiricus	
Lithocolletis pyrifoliella	Mamestra oleracea	Panolis flammea	
Hedya nubiferana	Agrotis segetum	Dendrolimus pini	
Rhyacionia buoliana	Mamestra suasa	Monochamus	
Rhyacionia duplana	Scrobipalpa ocellatella	Lymantria monacha	
Evetria turionana	Xestia C-nigrum		
Spilonota ocellana	Autographa gamma		
Arhips rosana	Tuta absoluta		
Adoxophyes orana	Helicoverpa armigera		
Grapholita funebrana			
Synanthedon tipuliformis			
Yponomeuta malinellus			
Cydia pomonella			
Synanthedon myopaeformis			



# **Fungicides**

80 Ace. Bnz. Cpl. Dz. Azr. ACE **AZORRO** BENAZOL CAPELLA DAIZY CSC SC SE 81 82 82 Gr. insg. Kgt. Knt. ing. **GRANNY** INDIGO INSIGNIA KAGATNIK **KANTOR** OD CSC SC 82 Kpr. Ktrx. Med. Mtm. Myst. METAMIL MC WG KATREX MYSTERIA **KAPERANG MEDEYA** SC ME 86 87 Riv. TI. Tld. Sh. Sul. SULPHUR 400 SC **TITUL 390** TITUL DUO **RIVIERA SHIRMA** SC 87 Tlt. Trd. Vnzh. Zim. TITUL TRIO TRIADA VINTAGE **ZIM 500** CSC CSC SC

# Microbiological fungicides







tebuconazole 160 g/l + pyraclostrobin 80 g/l + prothioconazole 40 g/l

A three-component fungicide in the NANOformulation, with preventive, curative and eradicating properties, for the protection against leaf and ear diseases of cereal crops.

# Advantages

Control of the most economically important cereal crop diseases, including Gibellina cerealis

Effective against Fusarium blight and black spot

Quick action with a pronounced stop effect and subsequent long-term protection for up to 4 weeks

Immunostimulatory effect

A wide application window, both for the prevention and symptomatically

Double greening effect

High resistance to stress factors

Perfect adaptability to weather conditions

Ensures maximum yields of cereal crops



### carbendazim 300 g/l + azoxystrobin 100 g/l

Combined fungicide for the protection of cereal crops, soybeans and sugar beet from a complex of diseases.

# Advantages

Exhibits enhanced fungicidal effect due to the combination of two active ingredients that possess complementary biological properties

Provides highly effective protection of winter cereals after wintering and of spring crops against root rot and powdery mildew at the early phases of the crop development

Preventative treatment prevents the development of leaf diseases in a later period of crop development

Has a preventive, curative, and eradicating effects



### benomyl 500 g/kg

Fungicide of systemic action intended to protect cereal crops and sugar beet to control a wide range of diseases.

# Advantages

Most efficient formulation to control snow mold on cereal crops

Efficient suppression of a pack of diseases

Preventive and curative action

Extends vegetation period

Treatment of winter crops improves crop overwintering capability

Treatment of vegetating beet plants reduces losses of root crops from storage decay during storage



### based on Pseudomonas strain

A microbiological fungicide for an integrated fruit and vegetable crop protection system.

# Ad

# **Advantages**

Completely safe for the environment (an EcoPlus product)

Unique composition: a highly effective proprietary Pseudomonas strain Inhibits a wide range of phytopathogens and promotes endogenous immunity

Increases the resistance to adverse weather conditions

Has a growth-promoting effect

Has both preventive and curative properties

Requires no waiting time after treatment



propiconazole 120 g/l + flutriafol 60 g/l + difenoconazole 30 g/l

Cpl.

**CAPELLA** 

Three-component fungicide intended to protect cereal and other crops.

MF



Long-term protective effect

Increased photosynthesis in flag leaves

Suppressed sporification and mycelium growth

High effect to control powdery mildew, rust, spotting



### propiconazole 70 g/l + tebuconazole 70 g/l + pyraclostrobin 60 g/l

Universal three-component fungicide with powerful protective and curative effect for cereals and broad-leaved crops.

# Advantages

A combination protective mechanism: powerful prophylactic effect + «stop effect» + elimination

Prevents secondary infection

A pronounced curative effect at all stages of the disease

Prolonged period of protection

Prominent physiological effect



### dithianon 350 a/l

A special-purpose contact fungicide for control of apple scab.

# Advantages

High fungicidal activity against scab

A perfect product for preventive protection from the earliest stages of apple tree development

Good adherence to the treated surface and resistance to washout by precipitation

Long-term protective screen period

A necessary component of an anti-resistance garden protection system ensuring high quality of fruits

A convenient liquid formulation



### tribasic copper sulfate 345 g/l

Contact fungicide of preventive action for the professional protection of gardens, vineyards and other crops against a range of diseases.

# Advantages

An essential element in modern systems of protection of gardens and vineyards

An effective method to prevent a range of diseases

A broad application window starting from early spring treatments

Preservation of fungicidal efficacy at low air temperatures and heat

High resistance to flushing from the surface of the plant

81





### cyprodinil 150 g/l + fludioxonil 140 g/l

A highly effective fungicide to protect apple fruits from a wide range of rot pathogens.

# Advantages

Eliminates a wide range of rot pathogens, including grey mould

A unique oil formulation provides high resistance to rainwash and high efficacy in a wide temperature range

Improves the yield quality

Provides excellent fruit preservation and transportability



### benzoic acid 300 g/l

Fungicide with an exceptional physiological effect that prevents mass losses of sugar beetroot crops and potato tubers from decay at the storage facilities and in the field.

# Advantages

Prevents the spread and development of fungal and bacterial infections in crops and on the roots sugar beet

Increases the sugar accumulation in root crops by activating the outflow of assimilates from leaves

Helps to obtain healthy root crops with excellent stability in piles

Effective and environmentally safe way to protect sugarbeet root crops and potato tubers from storage decay

Long-term protective period of 90-120 days

Reduction of losses in root crops and tubers during storage



### cyprodinil 200 g/l

System fungicide for the protection of gardens (apple trees, pear trees) and vineyards against a complex of diseases.

# Advantages

Increased fungicidal activity against a complex of diseases due to an innovative formulation (nanolevel of active ingredient)

Deep penetration, rapid initial effect, and high eradicating ability Effective protection for any infectious load

Reliable protection of grapes against rot in the period of harvest formation

Short waiting time when used for grapes

High fungicidal activity even at a low air temperature (from +3 °C)

Resistance to washout by rain as early as 2 hours after treatment

Easy-to-use liquid formulation in contrast to similar products



### captan 500 g/l

Fungicide with a protective effect against apple tree and grape pathogens.

# Advantages

 $\label{thm:eq:high-function} \mbox{High fungicidal activity against scab} \ \mbox{and mildew}$ 

Effective disease prevention with long-term protection

Multifaceted mechanism of action on fungi metabolism, preventing resistance

An essential element in a garden protection system, in combination with systemic fungicides

A high-quality liquid formulation provides excellent adhesion and resistance to rainwash

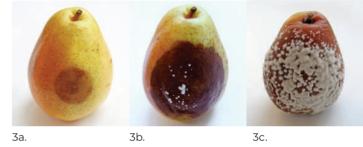
# The efficacy of fungicides

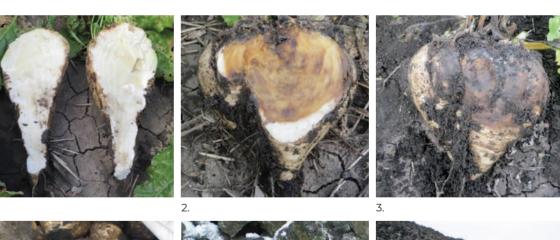


Fungicidal activity of **Kantor, CSC**, in a model experiment with *Monilinia fructigena*, a fruit rot pathogen

1. Kantor, CSC 2. Analog, WG 3. Untreated control a: Day 4; b: Day 6; c: Day 11







Sugar beet roots in the field
1. Sugar beet treated with **Kagatnik, SL**2-3. Sugar beet without treatment



Sugar beet roots in piles during storage

1. Roots treated with **Kagatnik, SL**, before placement in storage

2-3. Without treatment before placement in storage: up to 70% of rotting roots





### thiram 400 g/L

A special-purpose contact fungicide for protecting fruit crops.



### difenoconazole 50 g/l + flutriafol 30 g/l

Systemic fungicide intended to protect gardens and vineyard to control a wide range of diseases.

# Advantages

A basic contact fungicide with high protective potency

Reliable control of scab and moniliosis

Non-specific mechanism of action on pathogens, preventing resistance Suitable for integrated fruit crop protection

Has no effect on beneficial insects and is not harmful to pollinators

# Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation as microemulsion

Bio-efficiency against a number of most harmful diseases due to optimal combination of two active ingredients

Reliable protection against aerogenic diseases at initial vegetation stages

High rate of penetration to the infection point and quickest curative effect due to innovative formulation

Ability to restrain sporogenesis of pathogens and to mitigate secondary contamination, if optimal treatment timing is missed, and symptoms of diseases have already appeared



### mancozeb 640 g/kg + metalaxyl 80 g/kg

Contact fungicide of systemic action against potato diseases.

# Advantages

Systemic action ensuring protection of the entire plant, including new shoots

Dual reliability due to contact and systemic properties

Preventive and curative action

Implementation of full crop potential

Unrivaled protection of potato tubers in the field and storage

Protection up to 14 days

# Myst. MYSTERIA ME

### pyraclostrobin 80 g/l + tebuconazole 80 g/l + difenoconazole 40 g/l

A microemulsion fungicide with a strong protective and curative effect against leaf diseases of various etiologies, as well as a pronounced physiological effect.

# Advantages

A new combination of 3 active ingredients of different chemical classes in an innovative formulation

A combination protective mechanism: powerful prophylactic effect + «stop effect» + elimination

Prevention of secondary contamination

A pronounced curative effect at all stages of the disease

Improved control of pathogens causing downy mildew, Cercospora spot, Phoma rot

Prolonged period of protection

A pronounced physiological effect: longer life of a green leaf, prolonged period of photosynthetic activity, maximum accumulation of sugars and transfer of nutrients to the developing crop

# The efficacy of fungicides







Winter wheat
1-2. Treated with **Capella, ME**3. Untreated control







1-2. Apple tree treated with **Medeya, ME**3. Untreated control







1. Potato treated with **Metamil MC, WG,** 2.5 kg/ha, two times 2-3. Untreated control

84 \_\_\_\_\_\_ 85





pyraclostrobin 80 g/l + tebuconazole 80 g/l + difenoconazole 40 g/l

Combined fungicide for the protection of fruit crops and grapes from a complex of diseases.



Highly effective combination of triazole and strobilurin components for powerful protective action

Effective against the most damaging diseases, including mildew, oidium, Alternaria blight, scab, and others

Rapid therapeuticaction due to microemulsion formulation



### fluazinam 500 a/l

Highly effective contact fungicide for controlling potato late blight, apple scab, mildew and black spot of grapevine.



Protects potato sprouts, destroying the primary infection in the soil and significantly reducing the risk of infection

Prevents the spread of infection to the healthy tops and excellently protects the tubers from infection

Effectively protects the apple tree from scab, grapes from mildew and black spotting

Has a high resistance to rainfall washing, ensuring a stable protection in conditions of watering and precipitation

Does not have phytotoxicity to culture

Can be used throughout the growing season, without fear of the emergence of resistant strains of pathogens



Bacillus amyloliquefaciens 133 (VKPM V-11986), minimum 1x10° CFU/mL

Biological fungicide for the treatment of vegetable products before storage against rot.

# Advantages

Environmentally safe way to protect root crops, potato tubers, and cabbage from rot during the storage period

Control of a wide range of fungal and bacterial pathogens during product storage

Completely safe for humans



### sulphur 400 g/l

A contact fungicide with acaricidal activity for the protection of grapes and fruit crops.

# Advantages

Fungicidal protection + acaricidal effect

An important component for the prevention of Erysiphaceae infection High biological efficacy and reliable protection

The most efficient liquid formulation of sulphur with a smaller active substance particle size

Excellent contact action and uniform distribution on the treated surface



### propiconazole 390 g/l

Systemic fungicide to control a wide range of diseases on plantings of cereal crops, sugar beet rapeseed and grape.

# Advantages

Basic protection in conditions of a moderate infectious background High penetration rate to the source of infection and a powerful therapeutic effect

Long-term protective activity up to 40 days

The drug from the Eco Plus series with increased biological effectiveness against a complex of diseases

Profitability of the hectare application rate

A practical solution for a farm with a wide range of crops

Aerial treatment allowed



### propiconazole 200 g/l + tebuconazole 200 g/l

Systemic fungicide to control a wide range of diseases on cereal crops.

### Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation CSC

A wide range of effects and reliable protection during vegetation Protective period up to 40 days

Fast penetration into the plant and prolonged formulation activity

Reduced dependence on adverse weather conditions

No case of resistance

Growth stimulating activity ('green leaf' effect)

Extended vegetation period and life of flag

Quality grain



### tebuconazole 160 g/l + propiconazole 80 g/l + cyproconazole 80 g/l

A three-component fungicide in an innovative formulation with improved fungicidal activity against a complex of diseases in a broad range of crops.

### Advantages

A new combination of 3 active ingredients provides powerful elimination and preventive action against the widest range of pathogens

An innovative colloid formulation ensures maximum manifestation of the target properties of active ingredients

Immediate arresting of disease and long-term protection, up to 40 days

Reliable protection of crops under conditions of high infection load High efficacy both in case of drought and high humidity

Stimulating effect on the development of crops and improved photosynthetic activity

Long-term impact on yield quality

86 \_\_\_\_\_\_ 87





propiconazole 140 g/l + tebuconazole 140 g/l + epoxiconazole 72 g/l

Systemic fungicide intended to protect cereal and other crops to control a wide range of diseases.

# Advantages

Highly effective at reduced concentration of the active ingredient due to innovative formulation CSC

Three highly efficient active ingredients in optimal proportion

Indispensable for controlling leaf and stem diseases of cereal crops (Septoria blight, powdery mildew, rust, etc.)

Fast penetration into the plant and arrest of disease development Optimal combination of active ingredients prevents resistance Quality grain



difenoconazole 65 g/l + flutriafol 25 g/l

Systemic fungicide to control a wide range of diseases in sugar beet, soya, pea, rise and flax.

# Advantages

High biological effect to control a complex of most harmful diseases due to the optimum combination of two active ingredients

Reliable protection from air-borne diseases at the initial vegetation

High rate of penetration to the place of infection localization and the fastest curative effect due to the innovative formulation

The ability to restrain pathogen sporification and to mitigate secondary infection if the optimum spraying time was missed and disease symptoms appeared



### carbendazim 500 a/l

Systemic fungicide intended to protect cereal crops, sugar beet and other agricultural crops to control a wide range of diseases, and to treat seeds of cereal crops.

# Advantages

Readily producible formulation

Efficient to control root rots

Systemic action - protects all organs of a plant

Preventive, curative and eradicative action

Efficient suppression of diseases even after their symptoms are manifested

Prevents drowning of cereal crops

# The efficacy of fungicides







1-3. Winter wheat treated with **Triada, CSC**, 0.6 L/ha

4-6. Untreated control















- 1. Rust of peas crops in untreated control
- 2. Peas treated with **Vintage, ME**
- 3. Rice treated with Vintage, ME

88 \_\_\_\_\_

# Rodenticides





### brodifacoum 2 g/l

Rodenticide intended for the preparation of poisoned food bait used to combat various types of rodents.

# Advantages

A coumarin anticoagulant

Pestilent for rodents, even with a single bait ingestion

It destroys all types of rodents, including populations that are resistant to other anticoagulant rodenticides

It has pronounced cumulative properties and skin resorptive effect Convenient for making bait

Due to the oil-based formulation, an even distribution of the active substance in the bait base is achieved

# Molluscocides





### metaldehyde 60 g/kg

Contact-entheric molluscicide against slugs and snails on winter wheat crops.

# Advantages

High efficiency and long-lasting protection up to 3 weeks Ready-to-use granules, no additional bait preparation required Helps to preserve the harvest



# Plant growth regulator

94		94		94		94		95	
Cst.		Gb.		Hfk.		Krk.		SI.	
COSTANDO	EC	GIBBERA	SL	HEFK	SL	KORENNIK	WP	SALDO	SL





### trinexapac-ethyl 250 g/l

Plant growth regulator for prevention of lodging of cereal crops and better productivity and grain quality.

# Advantages

Decreases the risk of lodging by decreasing the internodes length and thickening of straw walls

Improves wintering of plants by strengthening the roots and increasing the sugar content in autumn

A wide application window, from tillering to flag development

A possibility of double application on winter wheat, in autumn and in spring

No fitotoxicity



### gibberellic Acids A, A, 10 g/l

Hormonal-type growth regulator to promote fruit formation, accelerate the growth and ripen apple fruits in intensive gardening systems.



### Advantages

It promotes fruit formation

It enhances growth and morphogenetic processes

It accelerates ripening time

It increases the fruitage

It prevents cracking and discoloration of fruits

It improves saleable condition and increases product quality



### ethephon 480 g/l

The product is intended for use as a plant growth regulator and retardant on plantings of cereal and other agricultural crops.



# **Advantages**

Prevents drowning of cereal crops

Stimulates growth and expansion of the root system, strengthens the stem by reducing the length of internode and increasing stem diameter

Increases the number of productive stems

Has a positive effect of yield volume and quality

Creates favorable conditions for cropping



### 4-(indole-3-yl) butyric acid 5 g/kg

Growth regulator to promote the root formation of cuttings and seedlings of fruit, soft fruit, citrus, flower, and ornamental plants.



## Advantages

It stimulates lateral and adventitious root formation

It promotes the development of an extensive root system, better survival ability and encourages the further growth of the cutting or seedling

It increases survival ability during transplantation, enhances growth processes

It improves the quality of planting material





### 6-benzyladenine 20 g/l

Growth regulator of fruit plants (apples, pears) for thinning the ovaries at the early stages of fruit development in intensive gardening systems.

# Advantages

Enhancing growth and morphogenetic processes Increased yields and improved presentation Formation of higher quality fruit Setting of flower buds for the next year Avoiding alternation of fruitful and barren years

94 \_\_\_\_\_\_95



# Special-purpose products

98	98	98	98	99
Ast.	Frsh.	Hig.	Lcm.	Lm.
ASSISTANT	FURSHET	HIGER	LACMUS	LAMINAR
99	99			
Mkd.	SIf.			
MIKADO EC	SELFI			
EC				



organic silicone (modified heptamethyltrisiloxane) - above 80%, auxiliary substances

Superwetting agent reducing the surface tension of working solutions.



Reduces the surface tension of working solutions

Improves adhesion of working solutions to the leaf surface

Improves resistance of the applied solution to washout by precipitation

Promotes penetration of the product through the stomata

Improves the efficacy of products against pests

Reduces the risk of working liquid crystallisation on the treated surface



### product of mineral origin in the form of suspension

The product is intended to protect plants from solar radiation in the farming industry



Dissolves UV rays reducing burns in plants

Maintains the plant temperature lower than the ambient temperature reflecting IR radiation

Enhances the moisture utilization efficiency

Helps to increase the harvest quality and to optimize the use of water

Enhances the vegetative growth and development of plants, the yield and the quality of products



### cellulose derivative, auxiliary substances and water

A natural sticky agent; an adjuvant improving the quality of plant treatment with working liquid and enhancing the effect of insecticides and fungicides.



# **Advantages**

A natural sticky agent

Upon drying, forms a flexible water-resistant film on plants

Keeps active substances on the surface of plants

Enhances the effect of insecticides and fungicides



### orthophosphoric acid, acidity indicator, buffer reagents, adjuvant, water.

The product is intended to regulate acidity and to improve the quality of water used to prepare working liquids of plant protection products and agrochemicals.



### **Advantages**

Improves water quality

Reduces water hardness and alkalinity

Improves stability and homogeneity of the working solution

Reduces the surface tension of the liquid due to the presence of an

Increases the overall efficiency of chemical treatment



### silicone emulsion

A highly efficient silicone emulsion defoamer.



### Advantages

Prevents foaming in the working liquid tank

Reduces the stability of foam formed during the working liquid preparation for pesticides and agrochemicals

Ensures high-performance plant treatment

Compatible with all pesticides and agrochemicals



EC

### mixture of fatty acid methyl esters 842 g/L, excipients

Non-ionogenic adjuvant based on vegetable oil derivatives to improve the biological efficiency of treatment



### Advantages

Promotes uniform wetting of the leaf surface

Reduces the evaporation rate of drops, prolonging the contact of the product with a harmful object

Keeps the active substance semi-liquid, preventing crystallisation on

Improves absorption of the product by leaves with a thick waxy layer Improves the stability of working liquids



### cellulose derivative, auxiliary substances and water

The tool is designed for use as a glue that prevents cracking of pods of rapeseed, soybean, peas by creating pods on the surface of the polymer membrane.



### **Advantages**

Creates a permeable plastic film that does not interfere with natural maturation of the seeds

Has a long efficiency, resistant to adverse weather conditions (heat, wind, rain, sunlight)

Contributes to the preservation of the full potential of the crop

Reduces losses during harvesting and reduces the cost of post-harvest

Biodegradable, has low toxicity to humans and the environment

Convenient in application, easily soluble in water

Is not phytotoxic

Significantly reduces the problems associated with previous rape

# **Microbiological products** 103 Rizp. **NPK** Bcc. Bcd. Miz. BIOCOMPOSITE CORRECT BIOCOMPOSITE DESTRUCT RIZOFORM PEAS **AZAFOK** MIKORYZE 103 Rizs. RIZOFORM SOYBEAN Foliar fertilisers containing micronutrients, mesonutrients, and macronutrients Ulc. Ulmx. SK ULTRAMAG COMBI ULTRAMAG ULTRAMIX SK2020 Organomineral fertilizer based on humic acids Suf. POTASSIUM HUMATE SUFLER **Amino acid biostimulants** 107 Bs. **BIOSTIM**





Consortium of various bacterial strains, total titer not less than  $1\!\times\!10^{9}$  CFU/mL

A liquid microbiological fertilizer to improve nitrogen, phosphorus, and potassium nutrition.



Improves the supply of key nutrients: nitrogen, phosphorus, and potassium.

Wide range of application: soil treatment before seeding, seed and planting material treatment, foliar dressing during the growing period.

Compatible with chemicals, including seed treatments and other plant protection products, without loss of activity.

Growth-stimulating effect.

Fungicidal and bactericidal properties.

Retains all properties during long-term storage.

Can be used for outdoor and indoor growing, in all soil types.



Consortium of various bacterial strains, total titer not less than 1×10° CFU/mL

Microbiological product for any farming systems and all crop rotation links.



### Advantages

Accelerates straw decomposition and mineralization of stubble remains

Suppresses disease excitants remaining on plant residues in soil

Assimilates atmospheric nitrogen enriching the soil with 150 kg/ha per season

Mobilizes the soil-bound phosphorus transforming it into a highly digestible form

Efficiently protects farming crops against root system and foliage diseases

Stimulates the growth and development of plants



Consortium of various bacterial strains, total titer not less than  $1\!\times\!10^{9}$  CFU/mL

A microbiological degrader for accelerated decomposition of stubble remains after harvesting.



### **Advantages**

Provides quick decomposition of stubble and organic remains in soil Efficient both when applied before sowing (planting) and after harvesting crops

Retains activity in case of drought



# Advantages

Formation of favorable soil microflora
Stimulation of meristem activity (growth of new tissues)
Improving nutrient absorption
More powerful and balanced plant development

Increasing resistance to abiotic stresses (heat, frost)

Rise in yield, quality, and taste of fruits

Better storage and shipping quality of fruits



Miz.

**MIKORYZE** 

composition based on a consortium of microorganisms

the growth of nursery plants, seedlings, cuttings.

Microbiological fertilizer to improve survival and promote

### Rhizobium leguminosarum D70

Liquid inoculant based on special nitrogen fixing bacteria strain for seed treatment of peas, vetch, beans, lentils.



### Advantages

Unlike similar products, inoculant Rizoform Peas used together with stabilizing/sticky agent Static allows seed inoculation to be performed in advance, 5 to 15 days before sowing

Symbiotic nitrogen fixation provides up to 70% of nitrogen demanded

Nitrogen is introduced into the plant as necessary, and maximum consumption is ensured during critical phases of crop development

Biological nitrogen initiates increase of fertility and activation of soil microflora

Yield in creases by 10-30%

Favorable effect from treatment with Rizoform Peas may be seen in the 3-5 crop rotation cycle with cereal yield growth by 10-15%



### Bradyrhizobium japonicum 109-1010 CFU/ml

Highly effective liquid inoculant for soybean seed treatment and application to the soil during sowing.



# Advantages

A pure culture of the most effective strain of a specialised soybean bacterium

High bacterial titre: 10 bln per 1 ml

Wide range of sowing time: up to 90 days after inoculation

Long shelf life

Providing soybean with nitrogen in the most critical phases of development

Increased yield and protein content

Increased soil fertility and activation of soil microflora

Positive impact on the crops in crop rotation

102 \_\_\_\_\_\_\_ 103





New-generation multicomponent microfertilisers with a good balance of micro- and macronutrients, chosen for crop specificity.

Ultramag Combi for cereals Ultramag Combi for beet Ultramag Combi for corn Ultramag Combi for oilseeds Ultramag Combi for legumes Ultramag Combi for potato

# Features and advantages

The products contain a special complex of adjuvants, including substances with surface active properties, which provides improved spreading and the maximum degree of working solutions on the leaves

Maximum penetration and assimilation of nutrients.

High content of essential microelements

The composition and ratio of microelements of each brand are tailored to the individual needs of a particular crop

Contain titanium (Ti), a plant growth activator, which allows a qualitative increase in the assimilation of nutrients from the leaves and soil

Effective maintenance of microelement balance during the critical periods of crop development

Stable improvement of qualitative and quantitative yield parameters

Compatible with Schelkovo Agrohim pesticides

Practically feasible liquid form

Stable working solutions, do not clog nozzles



Foliar fertilisers containing micronutrients, mesonutrients, and macronutrients to prevent nutrient deficiencies.

Ultramag Phosphorus Active
Ultramag Phosphorus Super
Ultramag Potassium
Ultramag Calcium
Ultramag Super Sulfur-900
Ultramag Super Zinc-700
Ultramag Boron
Ultramag Molybdenum
Ultramag Chelate Fe-13
Ultramag Chelate Zn-15
Ultramag Chelate Mn-13
Ultramag Chelate Cu-15



### **Features**

The formulations are conceived to replenish the balance and to prevent shortages in key microelements during various vegetation periods of agricultural crops.



# Foliar fertilisers ULTRAMAG COMBI (content in %wt)

Туре	N total	Р	K <sub>2</sub> O	CaO	SO <sub>3</sub>	MgO	Zn	В	Cu	Fe	Mn	Мо	Na <sub>2</sub> O	Ti	Co
ULTRAMAG COMBI															
for cereals	15.0			,   	4.5	2.0	1.0	!	0.9	0.8	1.1	0.005	 	0.02	1
for oilseeds	15.0				2.5	2.5	0.5	0.5	0.1	0.5	0.5	0.005		0.03	
for beet	15.0			! !	1.8	2.0	0.5	0.5	0.2	0.2	0.65	0.005	3.0	0.02	
for potato	15.0	i !			2.5	2.5	0.65	0.4	0.2	0.3	0.6	0.005		0.03	
for corn	15.0				4.2	2.0	1.1	0.4	0.6	0.7	0.7	0.005		0.02	-
for legumes	15.0				1.0	2.0	0.3	0.5	0.2	0.3	0.4	0.003	1	0.02	0.002

# Foliar fertilisers ULTRAMAG (content in %wt)

Туре	Amino acids	N	Р	K <sub>2</sub> O	CaO	SO <sub>3</sub>	MgO	Zn	В	Cu	Fe	Mn	Мо	Na <sub>2</sub> O	Ti	Co
ULTRAMAG			1	i	1	1		,   	1				) 	1	l I	1
Phosphorus Active		5.2	35.0		i I	I I		I I		i i			I I		 	 
Phosphorus Super		6.4	35.0				4.0	2.5					i i			
Potassium		2.6		22.0		1							 			
Calcium		10.0			17.0		0.8	0.02	0.05	0.02			0.001			
Calcium Active	3.7	2.0			9.0			1.4	1.2							
Super Sulfur-900		5.0				70.0							i i			
Super Zinc-700		1.5						40.0					i i			
Boron		4.7							11.0				i i			
Molybdenum		4.5				!		·	!				3.0			
Chelate Fe-13											13.0					
Chelate Zn-15						!		15.0					i i			
Chelate Mn-13												13.0				
Chelate Cu-15						*		* · · · · · · · · · · · · ·		15.0			*		*	

104





### **ULTRAMIX**; GROWTH, DEVELOPMENT brand

Mineral fertilizer with microelements for foliar fertilization of fruit, fruit and berry, vegetable crops, and vineyards.



Effective maintenance of microelement balance during the critical periods of crop development.

High content of essential micronutrients.

Maximum nutrient uptake through the leaf.

Practically feasible liquid form.



### Calcium (CaO) 10%

Liquid mineral fertilizer for pre-sowing seed treatment and foliar application in crops.

Improves flower and bud survival, reduces the risk of abortion (especially in soybean), including in hot and dry conditions.

Contains an activator that improves calcium absorption by tissues with low transpiration level (flowers and buds); improves protection from stress.

Nitrate- and chloride-free; thus, can be used repeatedly without the risk of phytotoxicity and green matter overgrowth.

Improves the shelf life of apples.



Organomineral fertilizer based on humic acids.

# Advantages

The highest concentration of humic acids

Improves plant immunity to fungus and bacterial diseases

Intensifies germinating force and germinating power of seeds Mobilizes and strengthens immune system of the plant

Stimulates growth and development of a robust root system of the

Provides microelemental nutrients

Extends fruiting season

Increases yield



Biostim series organomineral fertilizers are a new generation of agrochemicals, also known as biostimulants. Biostimulants activate germinating capacity, seed sprouting, vegetative growth, has a strong anti-stress action, and are powerful promoters if metabolic process in plants.

Biostim series fertilizers contain macro- (NPK), meso- (Mg, S), micro- (Fe, Mn, Zn, Cu, B, Mo) elements, and bioactive organic substances. Basic organic components are amino acids, extractives, poly-/ oligosaccharides, and other active organic molecules. Chelating agents (amino acids) present in formulations determine the highest efficiency level – degree of microelement accessibility.



The **Biostim** series includes two types of products:

General purpose fertilizers (intended for all or most crops):

- · Biostim Start liquid fertilizer for seed treatment
- Biostim Growth preparation for foliar dressing of cereal, industrial and fodder crops at their earlier stages of development.
- · Biostim Universal biostimulant anti-stress agent.

Special purpose fertilizers (for specific crops):

- Biostim Cereals
- · Biostim Maize
- · Biostim Oilseeds
- · Biostim Beet

# Amino acid biostimulants (content in %wt.)

STIM											
	START	GROWTH	UNIVERSAL	CEREALS	BEET	OILSEEDS	MAIZE				
e amino acids of plant origin, %											
	5,5	4,0	10,0	7,0	6,0	6,0	6,0				
lysaccharides, %											
	7,0										
mplex of basic m	ineral nutrients, %										
N	4,5	4,0	6,0	5,5	2,5	1,9	7,0				
P <sub>2</sub> O <sub>5</sub>	5,0	10,0		4,0		1					
K <sub>2</sub> O	2,5		1,3	4,0							
MgO	1,0	2,0		2,0	1,5	3,0	2,0				
SO <sub>3</sub>		1,0	5,0	2,5	2,5	8,0	6,0				
Fe		0,4		0,3	0,03	0,01	0,3				
Mn	0,2	0,2		0,7	1,0	1,0	0,2				
Zn	0,2	0,2		0,6	0,3	0,2	0,9				
Cu	0,1		i 	0,4	0,03	0,01	0,2				
В	0,1	0,1		0,2	0,3	0,7	0,3				
Мо	0,01			0,02	0,02	0,04	0,02				
Со				0,01		0,02	0,02				

# **Codes for formulations**

**WG** – water dispersible granules

**SL** – soluble concentrate, soluble liquid

**SP** – water-soluble powder

EW - emulsion, oil in water

**CSC** – colloid solution concentrate

**SC** – suspension concentrate

EC - emulsifiable concentrate

**OD** – oil dispersion

**EO** – emulsion, water in oil

**OEC** – oil emulsion concentrate

**ME** – microemulsion

**SME** – suspension microemulsion

**WP** – wettable powder

**SE** – suspo-emulsion

**TB** – tablets

The catalog contains products registered in the Russian Federation. More information about products that are also registered in other countries can be found on the website http://www.betaren.ru/