

Garden mounted sprayers are designed for chemical protection in gardens and vineyards. Fan power adjustment is carried out by changing the angle of the blades (five positions).

#### **ADVANTAGES:**

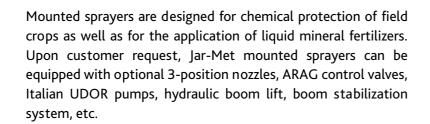
- > Sprayers are completed with UDOR and Lecler components.
- > Powerful fan and professional equipment allow spraying even in old gardens where high pressure and spraying distance are important.

Technical characteristics			
Spray tank capacity, l	300-1000		
Type of fan box	Round, 825 mm diameter/ vertical, 1,4 m		
Fan productivity, m3/h	16.000-48.000		
Pump productivity, l/min	65		
Range of action, m	Up to 5		

# JAR MET mounted boom sprayers







#### **ADVANTAGES:**

- > Triple filtration system.
- > Tank for washing hands.
- > Device for mixing chemicals.
- > Spray system with shut-off valve.
- > Smooth adjustment of sprayer booms: manual or hydraulic.



Technical characteristics				
Capacity of the main sprayer tank, l 300-1000				
Covering width, m	10-18			
Pump productivity, l/min	100-130			
Maximum height of lifting rods, m	0,5-1,7			
Working pressure, MPa	0,25-1			

## JAR MET trailed boom sprayers



JAR MET boom sprayers are designed for chemical plant protection when treating field crops, as well as for applying liquid mineral

#### **ADVANTAGES:**

- > Triple filtration system.
- > Tank for washing hands.
- > Device for mixing chemicals.
- > Spray system with shut-off valve.
- > Smooth adjustment of sprayer booms: manual or hydraulic.
- > It is possible to order additional equipment by sprayer boom stabilization system, multi-position spray nozzles, tank for flushing the system.

Technical characteristics			
Covering width, m 12,15,18,21			
Tank volume, l	1200,1600,2000		
Pump productivity, l/min	100,140,170		

# Tractor mounted sprayer with herbicide boom "ZYBR" NSH G/DS-2





Mounted sprayers «ZYBR» NSH G/DS-2 are designed for herbicide treatment of the territories close to bodies of the trees in commercial gardens. They allow to mechanize the process, reduce the costs, shorten the processing time and keep soil surrounding the tree on proper agrotechnical level.

#### **ADVANTAGES:**

- > Fine adjustment rate.
- > Contact of the mixture with body of tree is excluded.
- > Due to original transporter deflection mechanism there is no skip zone when touch the body of the tree, as well as its damage.
- > Productivity 1.5–3 ha/h, which is crucial due to weather conditions requirements and the growing season of the
- > Possibility of processing in windy weather.

Technical characteristics	NSH0.4.11G/ DS-2	NSH0.4.11G/ DS-2	NSH0.4.11G/DS-2	NSH0.4.11G/ DS-2
Main tank capacity, l	400	600	800	1000
Treatment width (from 1 side), m	0.25-1			
Pump	H-90 (Poland), optional – VR-75 (Comet, Italy)			
Pressure regulator	ZSF MOBI			
Mixer	hydraulic, ejector			
Range of working mixture output, I / ha	60-500			
Interrow width, m	3,5-5			
Processing width, m	2x0,25-1			
Number of sprayers, pcs	6			

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# PLANT PRO

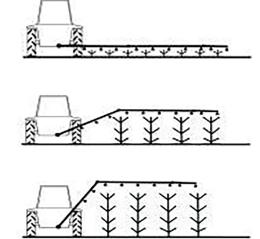
## Mounted boom sprayers "ZYBR" NSH 04.11.M2 (NSh06.11.M2)





«ZYBR» NSH 04.11.M2 is a series of tractor sprayers developed by "SelAgro" LLC in 2003 to fight with shrub vegetation on the banks of melioration channels. In April 2004, field trials were conducted; positive evaluations from managers and leading specialists were received.

**Purpose:** herbicide treatment of melioration channels, power lines, gas and oil pipelines, roadsides, airfields and other industrial areas.



Technical characteristics	NSH 04.11.M2	NSH 06.11.M2		
Main tank capacity, l	400	600		
Boom, m	6 (one side)			
Number of sprayers, pcs	9			
Type of sprayers	8 pcs – slot, 1 pcs- asymmetrica			
Treatment width (horizontal), m	Up to 9			
Pump type	diaphragm piston pump			
Pump brand	P 90 (90l/min/20 atm.) Poland			
Pressure regulator	ZSF MOBI			
Number of filtration stages	3			

## **OPSH Sprayers**





OPSH sprayers are designed for surface application of working solutions and liquid mineral fertilizers with or without addition of microelements when processing field crops. Sprayers are aggregated with tractors of MTZ-80/82 types and other classes like 0.6-0.9 with 6-9 kN traction force. Sprayers are made of imported components.

Technical characteristics	OPSH-18-2500	OPSH-22-2500	OPSH-24K-3000
Productivity per 1 hour of base time, ha/h	10.8-21.5	13.2-26.3	14-28
Working speed, km/h	6	6	6-12
Covering width, m	18	22	24
Tank capacity, l	2500	2500	3000
Productivity of membrane pump, not less than, I/min	132	160	185
Base weight of the machine, kg	1350+20	1500+20	1800+20
Overall dimensions in working position, mm:			
length	5250+50	5250+50	5350+50
width	18000+50	22000+50	24000+50
height	2620+50	2620+50	2650+50
Overall dimensions in transport position, mm:			
length	5250+50	5250+50	5350+50
width	2270+50	2550+50	2800+50
height	2620+50	2650	2650+50

## Field mounted boom sprayers "FERMER"





Technical characteristics		
Boom control	Hydraulic, from driver's cabin	
Tractor class	Not less than 0.9	
Pump, l/min	85-100	
Tank volume, l	400;600;800;1000	

ZYBR NSH «FERMER» is a sprayer that is mounted directly on the three-point hitch of the tractor, as a rule, it has a small volume (300-1000 liters) and a small working coverage (from 10 to 12 m, in rare cases 15 or 18 m).

This series of tractor sprayers is designed for small and medium agricultural enterprises. The sprayer meets all the requirements of international standards for uniform pesticide application, adherence to a given dose and environmental safety requirements.

#### **ADVANTAGES:**

- > ability to work with domestic tractors;
- > maneuverability, ease of operation;
- > normal average speed, reasonable price.

# Field trailed boom sprayers MASTER 2000





Technical characteristics			
Main tank capacity, l	2000		
Flush tank capacity, l	90		
Tank for fresh water, l	15		
Boom	18-24 m (lifting up and unfolding- with the help of hydraulics)		
Boom structure	open frame		
Regulator-pressure distributor	manual five-section proportionally stabilized		
Solution mixing	hydraulic ejector mixer		

Master 2000 field sprayers take into account all shortcomings of other domestic manufacturers and learn from the experience of best foreign companies, even in smallest details. Optimal kitting and functionality are ideal for a small farm, as well as for a large agricultural enterprise. Different variants of sprayers as for width of coverage from 18 to 24 m with stepless changeable width of the track from 1250 mm to 1800 mm allow working equally effectively both on solid planting and tiller crops.

#### **ADVANTAGES:**

- > 700 mm clearance allows working on crops in various growth phases without damaging them.
- > Sprayer frame is coated with 2-component anti-corrosion primer with zinc phosphate, painted with 2-component polyurethane paint, which retains its color and gloss for a long time when exposed to UV radiation and has high protective characteristics: stability to influence of aggressive media, mechanical loads.
- > Trailed field sprayer boom is the part of the machine that is subjected to maximum loads, mainly due to the unevenness of the field relief. It goes without saying that experienced machine operators understand that there is nothing more important than the solid construction of this element, the breakdown of which is able stop field work and even damage other parts of the machine.
- > Boom stabilization and amortization.
- > Simple and high-performance pumps.
- > Fourfold section filtering.
- > Computer control, automatic disconnection of sections.



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## Field trailed boom sprayers GRAND MASTER 3000







Technical characteristics			
Main tank capacity, l	3000		
Flush tank capacity, l	270		
Tank for fresh water, l	15		
Boom, m	18/24		
Boom structure	open frame		
Regulator-pressure distributor	ARAG computer, TeeJet		
Solution mixing	hydraulic ejector mixer		
Solvent of chemical agents, l	20		

New modern trailed sprayers of GRAND MASTER 3000 series is the result of painstaking and long-term work of leading design and quality specialists who were tasked with creating a machine that is equal with well-known European counterparts in respect of technical characteristics, reliability and functionality.

Thanks to robust and reliable chassis consisting of reinforced joints, an improved boom suspension and its "open frame" type with a trapezium cross section, as well as convenient central control station, the sprayer will surprise you with its strength, capabilities and modern equipment, and most importantly you will be surprised with price/quality ratio.

#### **ADVANTAGES:**

- > Reliable sprayer frame is coated with 2-component anti-corrosion primer with zinc phosphate, painted with 2-component polyurethane paint, which retains its color and gloss for a long time when exposed to UV radiation and has high protective characteristics: stability to influence of aggressive media, mechanical loads. Robust and durable chassis is a reliable support for the tank of large volume. The clearance is not less than 640 mm; it allows working with crops in different phases of growth without damaging them. Due to low center of gravity, the machine is stable when driving on the field and on the road. To reduce traction resistance, most of the sprayer mass rests on the hitch of the tractor.
- Reliable boom with a width of 18 m, having hydraulic folding.
- > Double bar protection system against shock loads.
- > Additional pneumatic amortization of parallelogram type, equipped with gas shock absorbers, ensures the smoothness of the boom working and damping vibrations when driving on the road and during work on fields with difficult terrain.
- > Maximum usability saves time and forces: 30-liter mixer is easily extended outward for easy access.
- > Tanks are made of shockproof, frost-resistant and lightstabilized high-pressure polyethylene. On the one hand, it is a durable material that provides a long service life, and on the other hand, if it is damaged, it can be easily repaired by soldering (which cannot be done with a fiberglass tank.
- > High-performance pump of Comet company, Italy is installed on the sprayer(it is possible to install the pump from 170 to 280 l/min); fittings with large bore sections, which allows working with consumption rates up to 1000 l/ ha at speeds of up to 18 km / h.

# Field sprayers OP



Sprayer «Selagro» OP is designed for treatment of field crops with pesticides, as well as for applying liquid complex and other mineral fertilizers by surface spraying. The sprayer can work with all pesticides approved for use in agriculture, in the form of solutions, emulsions and suspensions.

#### **ADVANTAGES:**

- > The sprayer is equipped with an integrated flushing system including additional tank for clean water with a capacity of at least 120 l, system of valves and additional sleeves. This allows saving up to 1 hour of shift time for flushing the pump, hydrocommunications and sprayers when changing the pesticide used or maintenance.
- > Sprayer boom is equipped with the original balancing system, which includes hydraulic shock absorbers, providing damping when the sprayer moves in a poorly aligned field.
- > The sprayer is equipped with original system of draining residual working fluid, controlled from the working area, preventing pollution the environment and contact of the stuff with pesticide.
- > The sprayer has a built-in system of self-refueling with water and pesticide self-filling system (mixer).
- > High precision of dosing and distribution of pesticides.
- > Automatic maintenance of constant rate of working fluid application when changing the speed of the sprayer using Bravo-180 (Arag, Italy) or TeeJet-844E computers.
- > Diaphragm piston pump of D-163 type (Imovilli Pompe, Italy).

Technical characteristics	OP-2500-18	OP-2500-18K	OP-2500-24K	OP-3000-24K
Туре	Semi-trailed	Semi-trailed	Semi-trailed	Semi-trailed
Productivity per 1 hour of base time, ha/h	14.421.6	14.421.6	19.228.8	19.228.8
Working speed, km/h	812	812	812	812
Covering width, m	18	18	24	24
Tank capacity, l	2500	2500	2500	3000
Productivity of pump, l/min	165	165	209	209
Transport speed, km/h, not more than	16	16	16	16
Height of boom installation relatively to the field surface, mm	6002100	6002100	7002100	7002100
Track width, mm	15001800	15001800	15001800	15002100
Weight, not more than, kg	1600	1600	1850	1950
Overall dimensions in transport position, mm				
Length	5900	5900	5300	5460
Width	2440	2440	2440	2440
Height	2320	2320	2520	2770

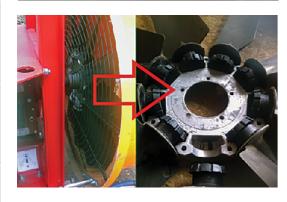


# Semi-trailed garden sprayer «ZYBR» PV









«ZYBR» PV is a series of garden sprayers designed for protection of gardens, small fruit acreages, vineyards, gardens and forest nurseries in medium and large horticultural enterprises. The sprayer is made in two versions: «Pyramid», «Column».

«Pyramid» attachment is a universal one and is suitable for both shrubs and mixed gardens up to 5-6 meters high, while «Column» attachment is widely applicable in intensive gardens with trees up to 3-3.5 meters tall and thanks to its design, it provides savings for plant protection products (PPP) up to 30%.

#### **ADVANTAGES:**

- > Fan attachment with reverse drive allows preventing PPP loss due to exclusion of the possibility of repeated drops inflow, getting into air suction zone.
- Compact and convenient tank is made of modern high-quality materials: it is light stabilized, UV protected, shockproof, frost resistant
- > Usage of modern polyethylene tanks significantly reduces the weight of this equipment, which entails lower fuel costs, the load on the soil.
- » «Column» attachment is of 2.7 m and 3 m height being the highest and effective attachment in the market.
- > Adjustable angle of impeller fan blades.
- > Spraying control from the tractor cab.
- > Articulated coupling provides high maneuverability and movement of the sprayer in the tractor track.

Technical characteristics	PV10.47.K1	PV15.47.K1	PV20.47.K1		
Main tank capacity, l	1000	1500	2000		
Flush tank capacity, l		90			
Tank for washing hands, l		15			
Type of fan accessory	column				
Pump	UDOR (100-125 l / min / 40-50 atm.)				
Reducer	2-N (Italy)				
Pressure regulator	UHP ARAG, Italy				
Filtration	4 stages				
Range of working mixture output, l/ha	60-1000				
Processing width	2 half-rows				
Track, mm	1300				
Filter	Self-cleaning				
Speed, km/h					
-working	4-9				
-transport	15				
Productivity (at interrow width of 5m)	36 ha/shift				

## Mounted garden sprayer «ZYBR» NV









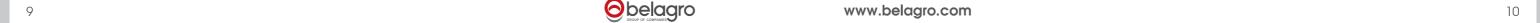
«ZYBR» NV is a series of garden sprayers designed for protection of gardens, small fruit acreages in small and medium-sized farms, as well as for combatting local lesion in large horticultural enterprises. The sprayer is manufactured in «Pyramid» version specially for gardens and small fruit acreages, vineyards and hopyards.

The main purpose of this series lies in provision of a professional, relatively inexpensive machine to gardeners, that unlike other similar machines is going to perform its functions in a wider range.

#### **ADVANTAGES:**

- > Reliability: simple, tested over the years by various manufacturers, inexpensive implement.
- > Compactness: possibility of easy processing of small spacing garden of 3-3.5 m and narrow reversal lanes; convenient storage.
- Convenient service: low location of all injectors.
- > Versatility: possibility of processing both high (old type) and low gardens (clones), as well as berries, nurseries.
- Mobility: possibility of emergency local treatment of lesions in large gardens, as well as processing of individual quarters with varieties that are different in susceptibility to a particular disease and the pest (sprinkling during frost).
- > High workability: MULTI-WING (Denmark) fan design allows changing the angle of the blades, adjusting the sprayer to tractor power and work in reverse thrust, eliminating the loss of expensive chemicals due to re-suction of the mixture into the deflector of the fan attachment.
- > Security: ZYBR sprayers meet all standards and requirements for plant protection and environmental safety.

Technical characteristics	NV04.32.P1	NV06.32.P1	NV08.32.P1	NV10.32.P1
Main tank capacity, l	100	600	800	1000
Type of fan attachment	pyramid			
Pump	KAPA UDOR (75-125 l / min / 40 atm.)			
Reducer	2-N (Italy)			
Pressure regulator	UHP ARAG, Italy			
Filtration	3 stages			
Mixer	Hydraulic, ejector			
Range of working mixture output, l/ha	60-1000			
Productivity (at interrow width of 5m)	24 ha/shift			



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# Fan garden sprayers OVS







The sprayers are intended for chemical protection of tall perennial plantings in gardens, as well as for treatment of palmett gardens, vineyards and small fruit acreages against pests and diseases by means of surface spraying using directional air flow.

### **ADVANTAGES:**

- > The sprayer can work with all pesticides, permitted for use in agriculture in the form of solutions, emulsions and suspensions.
- Fan attachments of «column» or «pyramid» type can be installed.
- Notatable spray head has a sturdy brass body that can be locked with a lock nut on the header of the fan box. Cut-off valve installed on the body ensures absence of working fluid loss when disconnecting the pump drive.
- > The most effective and economical use of pesticides due to possibility of their exact direction to the processing facility.
- > Low energy consumption (diesel fuel saving) due to rational use of generated air flow.
- > The sprayer may be aggregated with a tractor of 1.4 class.
- > Additional equipment of the sprayer:
- · computerized process control;
- radar system for monitoring the availability of the processing facility;
- · hydraulic pistols of various designs.

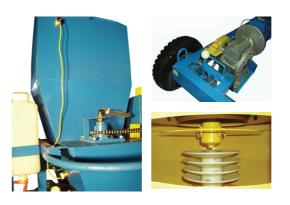
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Technical characteristics	OVS-600	OVS-600K	OVS-600C	OVS-2000	OVS-2000K	OVS-2000C	
Туре	mounted		Semi-trailed				
Productivity with a row-spacing of 4 m and the application rate of 300 l / ha							
Per 1 hour of base time, ha/h	1.68.0	1.68.0	2.4-3.4	1.6-8.0	1.6-8.0	1.6-8.0	
Working speed, km/h	410	410	410	410	410	410	
Transport speed, not more than, km/h	16	16	16	16	16	16	
Height of treated plants, not more than, m	6	6	6	6	6	6	
Width of processing zone, not more, m	14	15	6	14	15	6	
Pump productivity, no more than, l / min	70	70	73	115	115	115	
Maximum working pressure in the discharge system, MPa	4.0	4.0	4.0	4.0	4.0	4.0	
Main tank capacity, not less than, l	600	600	600	2000	2000	2000	
Fan type	axial rotary		axial		rotary		
Type of sprayers	rotary						
Sprayer body frame	Rotational, bilateral						
Weight, not more than, kg	250	360	330	690	810	840	
Overall dimensions in transport position, mm, not more than							
Length	1570	1570	1570	4100	4100	4100	
Width	1620	1710	1400	1300	1300	1400	
Height	1770	2040	2270	1400	2380	2550	

## Seed disinfectant PS-20 (self-propelled, automatic)









Seed disinfectant PS-20 is a self-propelled high-performance (up to 20 t/h on wheat) machine that operates in an automatic mode and provides loading of the treated seeds into a vehicle. The disinfectant is designed to treat crop seeds with pesticides in order to destroy external and internal infection, as well as their mixtures with micronutrient fertilizers and stimulants of growth. It can work with pesticides of all preparative forms permitted for use in agriculture.

#### **ADVANTAGES:**

- > Seed disinfectant is equipped with a patented system of liquid spraying that provides a 2-3-fold increase in the residence time of seeds in the processing zone and stable working even on highly concentrated viscous suspensions.
- > Seed disinfectant is equipped with a built-in flushing system, which includes an additional tank for clean water, a system of valves and additional sleeves.
- > Stability of work in automatic mode is provided by highly reliable sensors of capacitive type, not having moving parts in their design.
- > Screw conveyors for loading and unloading seeds are equipped with continuous spiral with a tilt angle, which prevents jamming and damage to seeds.
- > Seed pre-accumulation bunker has an increased capacity, which ensures more stable process.
- > Hydraulic system for working fluid supply is of free-flow type, which reduces the risk of operators contacting with chemical in case of piping damage.

Technical characteristics	Value	
Type of disinfectant	chamber	
Type of the drive of main working bodies	electric, 380 V, 50 Hz	
Working mode	Automatic	
Moving of the disinfectant	self-moving	
Productivity in 1 hour (on wheat), t/h:		
- main time	3.0-20.0	
- operational time	2.0-13.9	
Completeness of disinfecting,%	100 ± 20	
Irregular supply of seeds to the dressing chamber, not more than,%	± 5	
Irregular supply of working fluid to the dressing chamber, not more than%	± 5	
Reducing the seed vigor and germination capacity,%	not allowed	
Deviation of working fluid concentration from a given one, not more than,%	± 5.0	
Mechanical damage of seeds, not more than,%	0.5	
Increase in seed moisture, not more than,%	1.0	
Tank capacity, not less than, l	200	
Type of metering pump	membrane	
Variation range of dosing pump productivity, not less, l / min	0-4.2	
Power consumption, kW, not more than	5.3	

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Seed disinfectant PS-5 and PS-5 «FERMER» are automatic machines with electric drive of the main mechanisms that consist of the following assembly units: seed bunker, disinfecting chamber, working fluid tank, pump, fluid flow control unit, regulator of liquid volume and control panel. Assembly units are mounted on the frame; the frame is fixed on wheels with pneumatic tires.

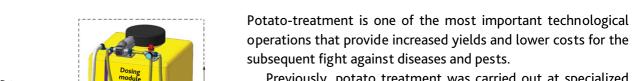
Seed disinfectants are designed to treat crop seeds with pesticides in order to destroy external and internal infection, as well as their mixture with micronutrients and growth stimulants.

#### **ADVANTAGES:**

- 1. Seed disinfectant is equipped with a spray system that provides high-quality seed coating with pesticides and works stably even on highly concentrated viscous suspensions.
- 2. Seed disinfectant is equipped with a built-in flushing system, which includes an additional tank for clean water, a system of valves and additional sleeves. It saves up to 1 hour of shift time for flushing the dosing pump, hydro-communications and sprayer when changing the used pesticide or maintaining
- 3. Stability of work in automatic mode is provided by highly reliable sensors of capacitive type, not having moving parts
- 4. Screw conveyors for loading and unloading seeds are equipped with continuous spiral with a tilt angle, which prevents jamming and damage to seeds.
- 5. Disinfectant design provides comfortable access to all joints for maintenance and repair.

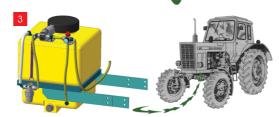
Technical characteristics	PS-5	PS-5 FERMER	
Туре	chamber		
Productivity in 1 hour (on wheat), t / h:  – main time  – operational time	5,0 3,4	1–5 0,7–3,4	
Completeness of disinfection, %	100±20	100±20	
Reducing the seed vigor and germination capacity,%	not allowed	not allowed	
Mechanical damage of seeds, not more than,%	0.5	0.5	
Increase in seed moisture, not more than,%	1.0	1.0	
Tank capacity, not less than, l	120	120	
Pump type	membrane	membrane	
Variation range of dosing pump productivity, l / min	0-1.5	0-1.5	
Working speed, not more than, m/min	1.2	1.2	
Power consumption, kW, not more than	2.0	2.0	

## Disinfectant system for potato planters SDK

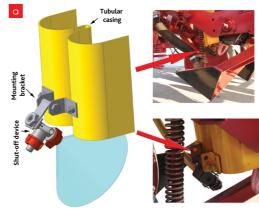


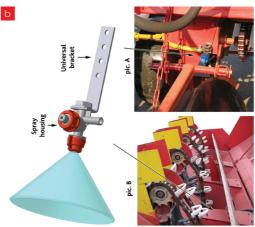
Previously, potato treatment was carried out at specialized potato sorting stations, followed by storage of seed material. This method had several drawbacks: loss of the drug because of poor retention on the tuber during transportation and loading into the vehicle and the planter, high complexity of the etching process. Currently, tubers treatment method with the help of disinfectant directly during planting has become widespread.











#### **ADVANTAGES:**

- > minimization of drug losses;
- > significant reduction of work complexity due to combination of technological operations of planting and etching;
- > insignificant investments and, as a result, their quick payback.

#### **DOSING MODULES:**

Nº2 - universal module for potato planters of any models;

Nº1 - for L-207 (Lidselmash, Belarus) potato planters;

Nº3 - universal module installed on the front frame of MTZ-80/82 tractor;

Nº4 - for L-207 (Lidselmash, Belarus) potato planters with simultaneous introduction of two (immiscible) types of pesticides.

#### **TECHNOLOGICAL KITS:**

- a) Designed for installation on L-207 (Lidselmash, Belarus) potato planters and other planters in front of the tubular casing. Kit contents:
- > mounting bracket 4 pcs .;
- > shut-off device 4 pcs .;
- > centrifugal spray type 4 pcs .;
- > sleeves, clam++ps, hardware.
- b) Installed on potato planters of any type on backside of the coulter group (fig. A) or in the bunker (Fig. B). Mounting brackets are allowed to be bent and shorten for easy installation of kit elements.

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