

## OrgaNIKA BIO

### Recommendations for use

The preparation is intended for pre-sowing seed treatment, as well as for root and extra-root (spraying) treatment of plants.

Spraying plants with a diluted water preparation prevents various plant diseases. The most effective use of this preparation is in closed ground conditions when growing vegetable and green crops. The incidence of plant root rot, ascochitosis and powdery mildew is sharply reduced.

The preparation is compatible with all fungicides, insecticides and herbicides with the exception of copper sulfate, which allows it to be applied together with them without disrupting technological processes.

### Note:

1. Before using the preparation, the contents must be shaken.
2. The solution of the preparation should be used immediately after its preparation.
3. When applying the preparation together with pesticides and/or mineral fertilizers, an aqueous solution of the preparation is first prepared, then the remaining ingredients are added to it.
4. When the sun is scorching, strong wind spraying can not be done.

Its use has a positive effect on the processes of growth, metabolism and photosynthesis, which contributes to an increase in the yield of a wide variety of crops.

To increase the germination of seeds of agricultural crops, it is recommended to carry out pre-sowing soaking of seeds in a preparation diluted with water. This is especially important when germinating small seeds with low germination energy. The pre-sowing treatment of seeds with the preparation enhances and synchronizes the earlier picking of seedlings and germination of seeds, which contributes to a decrease in the seeding rate and an increase in the quality and quantity of the crop.

The seeds are soaked until they swell completely in a solution of the preparation at room temperature. The solution is prepared by mixing the preparation with water 1:40. The seeds are placed in a solution in a bag or gauze. It can be soaked by pouring the seeds on a tarpaulin or polyethylene. At the same time, it is necessary to pour them well and mix them, then reliably hide them from evaporation.

### Duration of seed soaking:

- peas and beans - 6 hours;
- tomatoes – 8 hours;
- radish, lettuce, lettuce chicory, beet - 12 hours;

- carrots, peppers, cucumbers, melons, onions, dill - 24 hours.

The consumption of the preparation is 0.3 - 0.4 liters per 1 kg of seeds.

Tubers and bulbs are soaked in a solution of 1:40 0.5 hours before planting.

**Picking of seedlings.** It is recommended to use a solution of 1:100 - 1:200. The soil prepared for transplanting plants should be watered abundantly beforehand.

When planting in the ground, water the plants under the root of 100-200 ml with a solution of the preparation 1: 100 - 1:200.

**Foliar treatment.** Prepare a solution of 1:300-1:400. The leaf surface of plants is sprayed with a fine spray gun.

**Indoor plants.** For root treatment, a solution of 1:200 is used. Water 2-3 times a month.

**Garden and vegetable crops.** For root treatment, a solution of 1:200 is used. Water 1 time a week.

**Spring and autumn tillage of soil and perennial crops.** It is recommended to use a solution of 1:100-1:200. The consumption of the diluted preparation is 10-20 liters per 10 sq.m.

#### Grape

Plant cultures	Processing periods	Doses and method of application	Recommended concentration of the solution
Grape	Cuttings	Soaking in solution for 1.5-24 hours	1:50-1:100
	Transplanting seedlings	Watering, 5-6 l/ha	1:150-1:200
	Sap flow phase	Spraying at the beginning of the phase, 3L	1:300-1:400
		Drip irrigation after 12-15 days, 5-6 liters (*)	1:150-1:200
	The growth phase of shoots and inflorescences	Spraying, 3 l	1:300-1:400
		Spraying at the very end of the phase (but not earlier than after 12-15 days), 3 liters (*)	1:300-1:400
	Flowering phase	Drip irrigation, 5- 6L (*)	1:150-1:200
	Berry growth phase	Spraying at the beginning of the phase, 3 l	1:300-1:400
		After 14-18 days, spraying 3 liters or watering, 5-6 liters (*)	1:300-1:400 (Spraying) 1:150-1:200 (полив)
		After 14-18 days, spraying	1:300-1:400

		3 liters	
	The ripening phase of berries	Spraying at the beginning of the phase, 3 l	1:300-1:400
		After 14-18 days, spraying 3 liters or watering, 5-6 liters (*)	1:300-1:400 (Spraying) 1:150-1:200 (watering)
	Leaf fall phase	Spraying immediately after harvesting, 3 l (*)	1:300-1:400

(\*) - processing is carried out at the discretion of the agronomist.

### **Treatment of seedlings before planting**

#### **Planting cuttings in the nursery**

Processing of planting material with an aqueous solution of the preparation is carried out before planting cuttings in the nursery. Processing together with etching is possible. Cuttings are completely soaked from 1.5 to 24 hours in an aqueous solution of the preparation with a concentration of 1:50 - 1:100. This treatment is necessary to reduce the fall of cuttings when they are planted. It also helps to neutralize the most stressful situation when the stalk remains without root nutrition of the mother plant and without a leaf apparatus capable of providing respiration and synthesizing nutrients for the growth of roots and leaves. Under these conditions, the preparation stimulates root formation and accelerated development of leaf buds.

#### **Transplanting seedlings from the nursery**

When transplanting seedlings with a closed root system from a nursery into the ground, a lump of earth in which the stalk sits, after planting, is spilled with an aqueous solution of the preparation with a concentration of 1:150 - 1:200 at the rate of 5-6 liters of the preparation per 1 ha. This treatment promotes rapid and stress-free rooting of plants during transplantation. Agronomically useful microflora settles on the root system and protects plants from infections and root rot. At the same time, nitrogen-fixing microorganisms provide young plants with nitrogen nutrition, which is extremely important in the initial period of their development. The practice of using the preparation for pre-planting treatment of seedlings has shown that the fallout of cuttings due to this is reduced from 50-30% to 10 and even 8-5%.

#### **Sap flow phase**

The first spring foliar spraying of the vine is carried out with an aqueous solution of the preparation at the beginning of the juice flow phase at the rate of 3 liters of the drug per 1 ha.

### **The growth phase of shoots and inflorescences**

Foliar treatment of the vine is carried out with an aqueous solution of the preparation on the budding buds and the first foliage at the rate of 3 liters of the preparation per 1 ha.

### **Flowering phase**

The treatment of the vine with an aqueous solution of the preparation in the flowering phase is usually not used both by irrigation with sprinkler systems and by spraying. In case of an urgent need to intensify enzymatic processes or strengthen plants affected by stress, it is possible to treat the vine during this period by drip irrigation with a preparation. The preparation is added to the tank mixture at the rate of 5-6 liters of the preparation per 1 ha.

### **Berry growth phase**

Immediately after the flowering phase, at the very beginning of the berry growth phase, spraying the vine with an aqueous solution of the drug at the rate of 5-6 liters per 1 ha is recommended. The second spraying with an aqueous solution of the preparation in the berry growth phase is also recommended at the rate of 3 liters of the preparation per 1 ha 14-18 days after the previous spraying. The second spraying can be replaced by drip irrigation with an aqueous solution of the preparation. In this case, the preparation is added to the tank mixture at the rate of 5-6 liters of the preparation per 1 ha. If, 14-18 days after the second treatment, the vine has not yet reached the next phase of development and the growth of berries continues, it is recommended to carry out another spraying with an aqueous solution of the preparation at the rate of 3 liters of the preparation per 1 ha.

### **The ripening phase of berries**

It is recommended to combine the fertilizing of the vine at the beginning of this phase or measures to protect against pests and diseases with the treatment of plants with an aqueous solution of the preparation at the rate of 3 liters of the preparation per 1 ha. If the duration of the berry ripening phase is more than 40 days, it is recommended to spray twice with a frequency of 14-18 days. The second spraying in the ripening phase of berries at the discretion of the agronomist can be replaced by the introduction of the preparation by drip irrigation. In this case, the preparations are added to the tank mixture at the rate of 5-6 liters of the preparation per 1 ha.

### **Leaf fall phase**

Spraying of the vine in this phase of development is carried out with an aqueous solution of the preparation at the rate of 5-6 liters per 1 ha is possible by the decision of a leading agronomist if the plants are weak and they need fertilizing for better preparation for winter. Spraying with the preparation is carried out at the very beginning of the leaf fall phase, immediately after harvesting. Such treatment contributes to the accumulation of spare and protective substances, which is extremely important for normal overwintering of plants. In

some cases, at the discretion of the agronomist, it is possible to abandon the use of preparation and wait for natural leaf fall, since this gives additional time for the direction of nutrients and assimilants from the leaves for the ripening of shoots and accumulation in the plant.

### Pumpkin

**(watermelon, melon, pumpkin, cucumber, courgette, courgette, patisson) grown in the outdoor soil.**

Plant cultures	Processing periods	Doses and method of application	Recommended concentration of the solution
Outdoor pumpkin crops, (watermelon, melon, pumpkin, cucumber, courgette, patissons )	Seeds unfertilised (by dressing, soaking, bubbling)	2 l per 1 t seed (pumpkin, watermelon, courgette, patissons) 3 liters per 1 ton of seeds (cucumber, melon)	1:10-1:50
	Phase 1-3 of real leaves	Spraying - 3 l/ha	1:300-1:400
	The beginning of the budding phase	Spraying - 3 l/ha	1:300-1:400
Optional - every 12-15 days	Watering - 5 l/ha	1:150-1:200	

When planting drained seeds, their pre-sowing treatment with the preparation is not recommended. When planting undrafted seeds, their processing is carried out together with soaking-etching or bubbling at the rate of:

- pumpkin, watermelon, courgette, patissons - 2 liters of preparation per 1 ton of seeds;
- cucumber and melon 3 liters of preparation per 1 ton of seeds.

When processing seeds, any protectants can be used. Usually etching is carried out with an aqueous solution with a concentration of 1:10 - 1:50. This treatment promotes rapid swelling and germination of seeds. After that, biochemical and physiological processes take place faster in the seeds, under the influence of enzymes, complex chemical compounds (starches, proteins, fats, etc.) pass into forms available for feeding the embryo. Agronomically useful microflora, not symbiotic to phytopathogens, settles on the surface of seeds. Seed treatment with an aqueous solution of the preparation also contributes to an increase in the mass, length and mocciness of the root system.

#### **The first spraying**

It is carried out in the phase of the first-third real leaves, at the rate of 3 liters of the preparation per 1 ha of plants. In this phase, generative organs are laid at the cellular level, so this treatment contributes to an increase in the number of inflorescences and, consequently, fruits. The first spraying also contributes to an increase in the number of leaves and the area of leaf plates, the intensification of photosynthesis, the formation of a powerful root system, which, in particular, allows plants to safely tolerate drought.

### **The second spraying**

It is carried out at the beginning of the budding phase at the rate of 3 liters of the preparation per 1 ha of plants. This treatment contributes to the intensification of photosynthesis and the accumulation of nutrients in the plant, which leads to an increase in yield.

### **Subsequent processing**

Subsequent treatments with the drug are carried out optionally with a frequency of 12-15 days. When spraying plants, 3 liters of the preparation are used per 1 ha of plants, when watering, respectively, 5-6 liters. These treatments contribute to the accumulation of vitamins and biologically active substances in the fruits, and also give the products a marketable appearance.

The preparation is recommended to be used, including preventatively, to relieve stress on plants due to drought, other adverse events, as well as simultaneously with the introduction of chemical plant protection products, mineral fertilizers. In this case, 5-6 liters of the preparation per 1 ha of plants are used, treatments are carried out no more than once every 10-12 days. The preparation is compatible with any pesticides and mineral fertilizers, **with the exception of copper sulfate**. Restorative (resuscitation) measures with the use of the preparation are carried out under the supervision of an agronomist for plant protection. At the discretion of the agronomist- agrochemist, depending on the condition of plants and climatic conditions, in the case of the use of the preparation, it is possible to reduce the use of mineral fertilizers by 30-50% of the usual application rate. For spraying vegetative plants, the concentration of an aqueous solution of the preparation is used from 1:300 to 1:400, when watering from 1:150 to 1:200, depending on the agricultural equipment used. The specific doses and timing of application, the number of treatments within the above parameters are determined by a local agronomist-agrochemist, based on the agrophone, the culture of the predecessor, climatic conditions and phenological observations of individual plants.

### **WINTER CROPS (wheat, rye, barley, triticale)**

<b>Plant cultures</b>	<b>Processing periods</b>	<b>Doses and method of application</b>	<b>Recommended concentration of the solution</b>

<b>Winter cereals (wheat, rye, barley, triticale)</b>	<b>Seeds (when etching)</b>	1 liters per 1 ton of seeds	1:20-1:40
	<b>Foliar treatment in the tillering phase (3-5 leaves)</b>	Spraying 3 l/ha	1:300-400
	<b>Foliar treatment at the beginning of the tube exit phase</b>	Spraying 3 l/ha	1:300-400

### **Pre-sowing seed treatment**

It is carried out at the rate of 1 liter of the preparation per 1 ton of seeds. Seed treatment can be carried out in conjunction with any protectants. The solution is prepared based on the amount of water used when etching 1 ton of seeds. Usually etching is carried out with an aqueous solution with a concentration of 1:20-1:40. Such treatment promotes rapid swelling and germination of seeds, which is largely due to the receipt of microelement nutrition by plants introduced together with microhumates. In seeds, after treatment with the preparation, biochemical and physiological processes occur faster. Under the influence of enzymes, complex chemical compounds (starch, proteins, fats, etc.) turn into simple soluble compounds and become available for feeding the embryo. The treatment of seed material is also directed against infection (helminthosporiosis, fusarium, etc.). Agronomically useful microflora, not symbiotic to phytopathogens, settles on the surface of seeds. Also, the treatment of seeds with an aqueous solution of the preparation contributes to an increase in the number of tillering nodes, an increase in the mass, length and mocciness of the root system.

### **The first spraying**

It is carried out in spring by seedlings during the beginning of tillering at the rate of 3 liters of the preparation per 1 ha. The treatment is combined with the first spring treatment with herbicides. This treatment contributes to the increase of the leaf plate, the intensification of photosynthesis and an increase grain formation in spikes. This treatment also makes it possible to significantly reduce or eliminate the effects of stress (including due to drought), which allows young plants to fully show their genetic potential.

### **The second spraying**

It is carried out optionally (if necessary) in the spring at the beginning of the exit phase into the tube at the rate of 3 liters of the drug per 1 ha. The treatment is combined with herbicide treatment. Such processing contributes to the accumulation of nutrients that

affect yield, increases the protein and gluten content in the grain, contributes to an increase in grain weight. The preparation is recommended to be used, including preventatively, to relieve stress on plants due to drought, other adverse events, as well as simultaneously with the introduction of chemical plant protection products, mineral fertilizers. With additional treatments, 2 liters of the drug per 1 hectare are used. Treatments are carried out no more than once every 10-12 days.

Restorative (resuscitation) measures with the use are carried out under the supervision of an agronomist for plant protection. At the discretion of the agronomist, depending on the condition of the plants and climatic conditions, in the case of using the drug, it is possible to reduce the use of mineral fertilizers by 30-50% of the usual application rate. For spraying vegetative plants, the concentration of an aqueous solution of the preparation is used from 1:400 to 1:500, depending on the agricultural equipment used. The specific doses and timing of application, the number of treatments within the above parameters are determined by a local agronomist-agrochemist, based on the agrophone, the culture of the predecessor, climatic conditions and phenological observations of individual plants.

#### Maize

<b>Plant cultures</b>	<b>Processing periods</b>	<b>Doses and method of application</b>	<b>Recommended concentration of the solution</b>
<b>Maize</b>	<b>Seeds (when etching)</b>	2 liters per 1 ton of seeds	1:10-1:50
	<b>Phase 2-3 of real leaves</b>	Spraying 3 l/ha	1:300-1:400
	<b>The beginning of the exit phase into the tube (8-9 real leaves)</b>	Spraying 3 l/ha	1:300-1:400
	<b>End of the tube exit phase, before the panicle ejection phase (recommended)</b>	Spraying 3 l/ha	1:300-1:400



### **Pre-sowing seed treatment**

Before planting, the seed material is processed together with etching at the rate of 2 liters of preparation per 1 ton of seeds. Usually etching is carried out with an aqueous solution with a concentration from 1:10 to 1:50. Such treatment is necessary for better seed germination, plant development, protein accumulation and increased resistance to diseases and pests.

### **The first spraying**

The first spraying is carried out on seedlings in the phase 2-3 of this leaf at the rate of 3 l/ha. This treatment can be combined with pesticide treatment. Such treatment contributes to the formation of healthy, strong plants, an increase in the number of leaves and the area of the leaf plate, the intensification of photosynthesis, the formation of a powerful root system.

### **The second spraying**

The second spraying is carried out at the beginning of the exit phase into the tube at the rate of 3 l/ha. This treatment can be combined with pesticide treatment and foliar treatment. This treatment contributes to an increase in the area of the leaf plate, the intensification of photosynthesis. During the same period, generative organs are formed at the cellular level, the number of segments and the length of the corncob are formed. Processing plants in this phase allows you to minimize the negative impact of stress, which in turn allows you to form corncob with an increased number of grains at the cellular level.

### **The third spraying**

The third spraying is carried out optionally, at the discretion of the agronomist, at the end of the exit phase into the tube and before the phase of throwing out the panicles at the rate of 2 l/ha. This treatment allows you to increase the mass of grains in the cob and helps plants to deal with stressful situations.

The preparation is recommended to be used, including preventatively, to relieve stress on plants due to drought, other adverse events, as well as simultaneously with the introduction of chemical plant protection products, mineral fertilizers. At the discretion of the agronomist, depending on the condition of the plants and climatic conditions, in the case of

using the preparation, it is possible to reduce the use of mineral fertilizers by 30-50% of the usual application rate.

With additional treatments, 2-3 liters of the preparation per hectare are used. Treatments are carried out no more than once every 10-12 days. Restorative (resuscitation) measures with the use are carried out under the supervision of an agronomist for plant protection.

### Sunflower

Plant cultures	Processing periods	Doses and method of application	Recommended concentration of the solution
<b>Sunflower</b>	<b>Seeds (when etching)</b>	2 liters per 1 ton of seeds	1:10-1:50
	<b>Phase 2-4 pairs of real leaves</b>	Spraying 3 l/ha	1:300-1:400
	<b>From the beginning of budding to flowering</b>	Spraying 3 l/ha	1:300-1:400

#### **Pre-sowing seed treatment**

Before planting, the seed material is processed together with etching at the rate of 2 liters of the preparation per 1 ton of seeds. Usually etching is carried out with an aqueous solution with a concentration from 1:10 to 1:50. Such treatment is necessary for better seed germination, plant development, accumulation of oil content and resistance to diseases and pests. The treatment can be carried out in conjunction with protectants.

#### **The first spraying**

The first spraying of the preparation is applied in the phase of the second-fourth pair of real leaves, at the time of completion of the formation of the rudiments of all stem leaves, flower beds, baskets of flower tubercles, at the rate of 3 l/ha. This treatment contributes to the formation of a large number of seeds - generative organs of sunflower.

#### **The second spraying**

The second spraying of the preparation is carried out from budding to flowering, at the time of the growth of the flower basket, the formation of pollen and germ sac, at the rate of 3 l/ha. Such spraying contributes to an increase in the mass and oiliness of the seeds.

The preparation is recommended to be used, including preventatively, to relieve stress on plants due to drought, other adverse events, as well as simultaneously with the introduction of chemical plant protection products, mineral fertilizers.

At the discretion of the agronomist, depending on the condition of the plants and climatic conditions, in the case of using the preparation, it is possible to reduce the use of mineral fertilizers by 30-40% of the usual application rate. With additional treatments, 2-3 liters of the preparation per hectare are used. Treatments are carried out no more than once every 15 days. Restorative (resuscitation) measures with the use are carried out under the supervision of an agronomist for plant protection. For spraying vegetative plants, the concentration of an aqueous solution of the preparation is used from 1:300 to 1:400, depending on the agricultural equipment used. The specific doses and timing of application, the number of treatments within the above parameters are determined by a local agronomist-agrochemist, based on the agrophone, the culture of the predecessor, climatic conditions and phenological observations of individual plants.

### **Cucumbers**

To increase the germination of seeds, it is recommended to carry out pre-sowing soaking of cucumber seeds in a diluted preparation. This is especially important when germinating small seeds with low germination energy. The seeds are soaked until they swell completely in a solution of the preparation at room temperature. The solution is prepared by mixing the preparation with water in a ratio of 1:40. The seeds are placed in a solution in a bag or gauze. It can be soaked by pouring the seeds on a tarpaulin or polyethylene. At the same time, it is necessary to pour them well and mix them, then reliably hide them from evaporation. Soaking of seeds can be combined with their etching. The duration of soaking cucumber seeds is 24 hours.

**When preparing soil mixtures for growing cucumbers**, it is recommended to add vermicompost from 20% to 40% to the soil (1 part of vermicompost is mixed with 2-4 parts of the soil).

**Picking seedlings.** It is recommended to use the solution by mixing the preparation with water in a ratio of 1:60 - 1:100. The soil prepared for transplanting plants should be watered abundantly beforehand.

**When planting seedlings in the open ground**, vermicompost should be put in each well in the amount of 100-200 g, mixed with the ground, carefully watered and planted the seedling. Water the plants under the root with 100-200 ml of solution, mixing the preparation with water in a ratio of 1:60 - 1:100. After planting cucumber seedlings, the ground near the plant should be mulched with the addition of vermicompost in a layer of 1-2 cm.

**Foliar treatment.** A solution is prepared by mixing the preparation with water in a ratio of 1:300, the leaf surface of plants is sprayed. It is recommended to double foliar treatment with the preparation. Such treatments are carried out during the period of intensive plant growth and at the beginning of fruit formation. They can be combined with other technological operations: fertilizing with mineral fertilizers and treatment with pesticides. Foliar treatment is carried out at the beginning of budding and during fruiting with a solution, mixing the preparation with water in a ratio of 1:300.

**During the fruiting period,** additional foliar or root treatments can be carried out with the preparation. Fertilizing is carried out at intervals of 10-14 days. With root treatment, a solution is prepared by mixing the preparation with water in a ratio of 1:150 - 1:200.

### **Tomatoes**

To increase the germination of seeds, it is recommended to carry out pre-sowing soaking of tomato seeds. This is especially important when germinating small seeds with low germination energy. The seeds are soaked until completely swollen at room temperature. The optimal temperature for germination of tomato seeds is 22-25° C. When soaking seeds, it is recommended to use a solution by mixing the preparation with water in a ratio of 1:20 or 1:200. The seeds are placed in a solution in a bag or gauze. It can be soaked by pouring the seeds on a tarpaulin or polyethylene. At the same time, it is necessary to pour them well and mix them, then reliably hide them from evaporation. Soaking of seeds can be combined with their etching. The duration of soaking tomato seeds is no more than 10 hours.

When preparing soil mixtures for growing tomatoes, it is recommended to add vermicompost from 20% to 40% to the soil (1 part of vermicompost is mixed with 2-4 parts of the soil). **Picking seedlings.** It is recommended to use the solution by mixing the preparation with water in a ratio of 1:60 - 1:100. The soil prepared for transplanting plants should be watered abundantly beforehand.

**When planting tomato seedlings,** put 100-200 grams of vermicompost in each well, mix with the ground, carefully water and plant the seedling. Water the plants under the root with 100-200 ml of solution, mixing the preparation with water in a ratio of 1:60 - 1:100. After planting tomato seedlings in the ground near the plant, mulch with the addition of vermicompost with a layer of 1-2 cm.

**During the fruiting period**, additional foliar or root treatments can be carried out with the preparation.

**Foliar treatment.** Prepare the solution by mixing the preparation with water in a ratio of 1:300 - 1:400. The leaf surface of plants is sprayed.

**Root treatment.** Prepare the solution by mixing the preparation with water in a ratio of 1:150-1:200.

Plant cultures	Processing periods	Doses and method of application	Recommended concentration of the solution
Tomatoes	Unpelleting seeds (during pickling, soaking, bubbling)	3 liters per 1 ton of seeds Soak for 24 hours at a solution temperature of 24-25 °	1:20 или 1:200
	Seedlings: root treatment	The first root treatment in 10-12 days after picking	1:150-1:200
		The second - in another 10 days	1:150-1:200
	Cultivation: root treatment	The first foliar treatment is 10-15 days after planting in the ground	1:150-1:200
		The second - at the beginning of the flowering of the flower brush	1:150-1:200
		The third - 12-15 days after the second	1:150-1:200

		The fourth - 12 days after the third	
	<b>Foliar treatment*</b>	It is recommended for plants lagging behind in growth, if necessary, spraying can be repeated.	1:300-1:400

(\*) - processing is carried out at the discretion of the agronomist.

### **Tobacco**

When preparing soil mixtures for the germination of tobacco seeds, add vermicompost to the soil: 1 part of the vermicompost is mixed with 2-4 parts of the soil.

**Picking seedlings.** Mix the preparation with water in a ratio of 1:60 - 1:100. The soil prepared for transplanting plants should be watered abundantly beforehand.

**When planting seedlings in the open ground,** put 100-200 grams of vermicompost in each hole, mix with the ground, carefully water and plant the seedling. Water the plants with a solution of the preparation at the root of 100-200 ml, mixing the drug with water in a ratio of 1:60 - 1:100.

**Foliar treatment.** Prepare a solution of the preparation by mixing the drug with water in a ratio of 1:300. The leaf surface of plants is sprayed. Three-fold foliar treatment with the preparation is recommended:

1 time –10 days after planting seedlings in the ground;

2 times - 15-20 days after the first treatment (plant height 20-30 cm);

3 times - approximately 30 days after the second treatment. Foliar treatments can be combined with other technological operations: fertilizing with mineral fertilizers and treatment with pesticides. The use of the preparation allows you to reduce the use of mineral fertilizers and pesticides by 30-50% without the risk of reducing the quality and volume of the crop or even abandon their use.

### **Fruit crops (apple, pear, peach, apricot, cherry, plum, cherry, cherry plum)**

It is intended for pre-sowing processing of planting material and fertilizing during the growing season of fruit crops in order to accelerate the growth and development of plants, increase yields, improve product quality, protect plants under unfavorable growing conditions.

## **Recommended application regulations:**

### **1. Timing and frequency of treatments:**

Treatment of plants by vegetation

Apple, pear, peach, apricot, cherry, plum, cherry, cherry plum.

Soaking in solution for 24 hours before planting.

### **4-fold treatment of trees with solution during the growing season:**

1<sup>st</sup> 5-7 days after flowering;

2<sup>nd</sup> at the beginning of the physiological fall of the ovaries;

3<sup>rd</sup> 10-15 days after the second;

4<sup>th</sup> 10-15 days before the fruit harvest.

### **2. Preparation solutions:**

- when soaking seedlings: 100-200 ml of the preparation per 10 liters of water.

- when spraying plants: 25-30 ml of the preparation per 10 liters of water.

- when watering plants: 50-70 ml of the preparation per 10 liters of water.

### **3. Consumption of solution during vegetation treatment:**

- when spraying: 1-5 l/tree, depending on the size of the tree.

- when watering: 10 liters per 1-2 meters of plant height. (When used in automatic irrigation systems, the concentration of the working solution can be reduced by 2 times).

When treated with fungicides and insecticides, to reduce the "chemical stress" of plants, it is recommended to add the preparation to the tank mixture. The preparation is compatible with all fungicides, insecticides and herbicides **with the exception of copper sulfate**.

## **Strawberries and wild strawberries**

Biostimulator OrgaNICA BIO (hereinafter referred to as the preparation) is intended for processing planting material, as well as for fertilizing during the growth and development of strawberries. The preparation improves the survival rate when planting or transplanting plants, contributing to the rapid growth and development of both the root system and plants as a whole.

**When soaking the roots of seedlings** in the solution of the preparation, its rooting reaches 96%. Soaking the roots of seedlings should be carried out in an aqueous solution of the preparation : 0,25 l of the preparation per 10 liters of water for 12 to 24 hours before planting.

Treatment with the preparation **during the growing season** provides plants with full nutrition and allows you to improve the quality of berries and get a yield increase of up to 25%.

### **Recommended processing times:**

1st in the phase of the beginning of vegetation;


2nd before flowering;

3rd in the berry filling phase;

4th after harvest.

**For remontant varieties**, the 3rd and 4th treatments are repeated after each harvest.

Bushes should be treated **by spraying** with an aqueous solution of the preparation: 30 ml of the preparation per 10 liters of water or **watering** with an aqueous solution: 50 ml of the preparation per 10 liters of water. Consumption of aqueous solution during spraying: 3-6 l /100 m<sup>2</sup>; when watering: 10-20 l/10 m<sup>2</sup>. (When used in automatic irrigation systems, the concentration of the aqueous solution can be reduced by 2 times).

Agricultural culture	Processing period	Doses and method of application	Recommended concentration of the solution
<p data-bbox="70 752 316 857"><b>Strawberries and wild strawberries</b></p> 	Processing of planting material	Soaking the roots of seedlings in an aqueous solution for 12-24 hours before planting	1:40
	Stimulation of growth and development, increasing yields.	<p data-bbox="663 797 1158 869">Spraying with an aqueous solution of the preparation</p> <p data-bbox="663 909 1158 981">Watering with an aqueous solution of the preparation</p> <p data-bbox="663 1021 879 1048">Processing time:</p> <p data-bbox="663 1088 1123 1160">1st in the phase of the beginning of vegetation;</p> <p data-bbox="663 1200 948 1227">2nd before flowering;</p> <p data-bbox="663 1267 1043 1294">3rd in the berry filling phase;</p> <p data-bbox="663 1335 884 1361">4th after harvest.</p> <p data-bbox="663 1424 1150 1532">For remontant varieties, the 3rd and 4th treatments are repeated after each harvest.</p> <p data-bbox="663 1572 1067 1644">Consumption of working fluid depending on the age of plants:</p> <ul style="list-style-type: none"> <li data-bbox="663 1684 951 1711">- annual – 0.3 l/plant;</li> <li data-bbox="663 1751 1043 1778">- two-year-olds - 0.5 l/plant;</li> <li data-bbox="663 1818 1015 1845">- over two years – 1 l/plant</li> </ul>	<p data-bbox="1254 797 1417 824">1:300-1:400</p> <p data-bbox="1299 945 1372 972">1:200</p>

**Autumn** treatment with the preparaton dramatically increases the winter hardiness of plants, promotes the development of the root system, the accumulation of nutrients and increases the yield of the next year to 40 percent or more.



