



ORGANO-MINERAL "BLAGO" FERTILIZER APPLICATION TECHNOLOGY RECOMMENDATIONS

PREPARATION OF THE WORK SOLUTION

Mandatory requirement – mixtures shall be made immediately prior to the application.

Thoroughly shake the "BLAGO" OMF canister before you begin.

The more homogeneous the mixture will be, the faster it will dissolve in water.

Then, the necessary measure of "BLAGO" OMF should be mixed with a small amount of water until it becomes a homogeneous suspension.

The suspension should be poured into an empty sprayer or other mechanized device, where a half of the required volume of water should be added, after which the mixing operation should be repeated.

Preparation of a working solution for foliar treatment of plants: fertilizers should be diluted in settled non-mineral water in the ratio of 1:1000.

Preparation of working solution for root treatment of plants: fertilizers should be diluted in settled non-mineral water in the ratio of 1:500. They are also used for local soil cultivation, soil formation and composting.

Do not store in a diluted form.

"BLAGO" OMF WORKING SOLUTION CONSUMPTION

Fertilizer consumption for root treatment of plants – 1.0 l/ha.

Working solution applying standards: 500 l. per hectare.

Fertilizer consumption for foliar treatment of plants – 0.5 l/ha.

Working solution applying standards: 500 l. per hectare.

"BLAGO" OMF TANK MIXTURE PREPARATION

"BLAGO" OMF combines well with plant protection products, micronutrients, carbamide, LCF (Liquid Complex Fertilizers) and CAM (carbamide-ammonium mixtures).

During the preparation of a tank mixture containing several solutions, the working solution shall be prepared according to the recommendations for the chemical or bacterial solutions included.

Add the remaining components of the tank mixture to the prepared mixture. First add fertilizers, then protectors.

It is necessary to stir after adding any component.

In the end, add the rest of the water to get the required volume.

NOZZLES AND FILTERING ELEMENTS FOR APPLYING "BLAGO" OMF

Due to the particle size in the end product of no more than 50 μm , it is possible to vary the distribution of the "ZHIVA" OMF solution for irrigation (spraying): from a straight jet to a finely dispersed fog.

"BLAGO" OMF does not precipitate, it is easily soluble in water, does not clog nozzles, feed pumps, does not have corrosive effect on units and aggregates of equipment for solution application.

It is recommended to use sprayers for application of liquid complex fertilizers, with a bore diameter of not less than 100 μm , when applying "BLAGO" OMF. It is recommended to remove the filter element, if possible. If this is not possible due to the design of the sprayer, it is not recommended to use filters with cell size less than 50-100 μm , because of periodic clogging of those. The task gets facilitated if the linear filter is self-cleaning, that is, its design makes it possible to quickly and easily remove and rinse the mesh, which is recommended to be done daily, especially in the case of applying suspensions.

To avoid clogging filter elements, it is recommended to use at least 500 liters of working solution per 1 hectare, so that the microparticles of organic matter of the "BLAGO" OMF would be distributed evenly in the working solution, which will prevent the collision and coalescence of the particles between each other.

WATER PH FOR PREPARATION OF A WORKING SOLUTION OF "BLAGO" OMF, OR TANK MIXTURES

For the preparation of the working solution, we recommend to use clean and soft water, without suspensions, dissolved substances and foreign impurities, with a neutral or weak acid reaction.

The majority of natural water types have a pH value of 6.5-8.0.

It is necessary to measure the pH of the water.

In high-alkali water (pH > 8), many chemicals undergo an alkaline hydrolysis process. Such a process causes the disintegration of active ingredients, which reduces the effectiveness of pesticides.

If it is known that the water is alkaline, spraying should be started immediately after mixing.

Highly acidic water can affect the stability and physical properties of the suspensions applied, causing the gluing of organic particles between each other. Humates serve as an indicators of water hardness – coagulating with ions of Ca, Fe, Mg and passing into a jelly-like state.

Hard water reduces the effectiveness of many pesticides.

If the water is acidic, buffer solutions which would level the pH to 6.5-7.5 should be used. In this case, it is advisable to use water softeners – "Control DMP", "Spartan", carbamide, ammonium nitrate, "Trilon-B", sodium triphosphate and others for the preparation of working solution and tank mixtures.

To soften the water in sprayers, you can use those solutions according to the instructions, as well as carbamide or ammonium nitrate with the norm of 1-2 kg/100 liters of water. These additives improve the stability of the working solution and the efficiency of pesticides and "BLAGO" OMF in hard water.

We recommend using warm water, the optimum temperature is 20-25° C. Using water with a temperature below 10° C, the solubility and assimilation of the solutions decrease, and as a result the effectiveness of the activities is reduced by 20-30%.

The high content of various impurities and suspended particles in the water used to prepare a working solution can lead to a disbalance in the composition of the tank mixture.

"BLAGO" OMF SAFETY

"BLAGO" OMF is harmless for humans, endothermic animals, insects, and the environment. It is not phytotoxic.







ORGANO-MINERAL "BLAGO" BRAND FERTILIZERS APPLICATION RECOMMENDATIONS

The recommended interval for applying the "BLAGO" OMF is 10-15 days.

Such a period is designed to fully assimilate the nutrient elements of the composition.


It is preferable to conduct the treatment in dry and windless weather.

Crops	Soaking time	The timing of foliar treatment (spraying)
Potato	1-3 hours	the first time – upon full germination; the second time – during the bud stage - the beginning of flowering.
Root vegetables: carrot, radish, beet, etc.	beet – 24 hours; carrot – 48 hours; others – 12 hours.	the first time – when 3-5 leaves appear; the second time – 15-20 days after the first.
Cabbage groups and oil crops: rapeseed, sunflower 	12 hours	Cabbage: the first time – 14-17 days after the seedlings have been planted or 15-20 days after the seedlings emerge, the second time – at the beginning of the head blossom. Oil crops: the first time – during the stage of 2-4 leaves; the second time – during the bud stage, The sunflower – at the beginning of head formation.
Cucurbitaceae: cucumber, squash, pumpkin, melon, watermelon, etc.	12 hours	the first time – during the stage when 3-5 leaves are present or, with the seedling cultivation type – one week after planting; the second time – 15-20 days after the first.
Solanaceae: tomato, pepper, aubergine, etc.	24 hours	the first time – during the stage when 3-4 leaves are present or, with the seedling cultivation type – 3-7 days after planting; the second time – during the bud stage,
Legume: soybean, bean, pea, etc.	12 hours	the first time – during the stage of 3-5 leaves; the second time – during the bud stage,
Maize	12 hours	the first time – during the stage of 3-5 leaves; the second time – before heading of panicles.
Herbs: onion, garlic, lettuce, dill, parsley	salad, bulbs – 24 hours; the rest – 48 hours.	the first time – when 3-4 leaves appear; the second time – 15-20 days after.
Fragaria	plant roots soaking before planting.	the first time – during the bud stage; the second time – during the green inception.
Fruit trees and berry shrubs	plant roots soaking before planting.	the first time – before bud pushing (before the green cone stage); the second time – before blossoming.
Grapes	soaking a cutting inside a solution during 24 hours.	the first time – before blooming; the second time – during inception.
 Grain crops, annual and perennial plant grasses	12 hours	Spring grain crops: the first time – during the tillering stage; the second time – during the stage of stem elongation. Winter cereal: the first time – during the stage of stem elongation; the second time – during earing. Cereal grasses: the first time – at the beginning of the growing (perennial) or the tillering (annual) stage; the second time – during the stage of stem elongation.
Industrial crops: gossypium, linum	12 hours	the first time – during the stage of 2-4 leaves; the second time – during the bud stage.
Cereal crops: buckwheat, rice, millet, sorghum, etc.	12 hours	Buckwheat: the first time – during the stage of 3-4 leaves; the second time – during the bud stage - the beginning of flowering. Other crops: the first time – during the tillering stage; the second time – during the stage of stem elongation.





METHODS OF APPLICATION OF ORGANO-MINERAL "BLAGO" BRAND FERTILIZERS

 CROPS	SOAKING (treatment) of seeds and planting material in a working solution, ratio in ml. DURATION $\frac{\text{FERTILIZER}}{\text{WATER}} = \frac{1}{1000}$	FOLIAR fertilizing with a working solution, ratio in ml. $\frac{\text{FERTILIZER}}{\text{WATER}} = \frac{1}{1000}$	ROOT fertilizing with a working solution, ratio in ml. $\frac{\text{FERTILIZER}}{\text{WATER}} = \frac{1}{500}$
Fruits and berries: citreae other fruits berry shrubs	Seedlings roots – 24 hours; Cuttings – 10-12 hours.	1st – during the stage of bud separation; 2nd – at the beginning of fruit formation; 3rd – the beginning of ripening	3-4 times during the growing season
Grapes	Seedlings roots – 24 hours; Cuttings – 10-12 hours.	1st – before blooming; 2nd – during the period of active berry growth 3d – at the beginning of berry ripening;	3-4 times during the growing season
Grain crops	Along with solutions for seed dressing according to the semi-dry method, the working solution consumption – 10-15 l/t	1st – during the 4 leaves stage – at the beginning of tillering; 2nd – during the earing (heading) stage;	_____
Tobacco	Seedlings – 24 hours.	1st – during the stage of established seedlings; 2nd – before budding;	With irrigation water upon seedling planting
Sunflower	Along with solutions for seed dressing according to the semi-dry method, the working solution consumption – 10-15 l/t	1st – during the stage of 2-5 pairs of leaves; 2nd – during the stage of inflorescence (head) formation	_____

STANDARDS OF APPLICATION OF ORGANO-MINERAL "BLAGO" BRAND FERTILIZERS

For foliar fertilizing (one treatment):

- grain crops – from 0.3 to 0.5 l/ha;
- tobacco – from 0.4 to 0.5 l/ha;
- citreae – 0.5 l/ha;
- other fruits – 0.5 l/ha;
- grapes – 0.5 l/ha.

Working solution consumption – foliar fertilizing at plantations:

- tobacco 0.5-1.0 m of height – from 0.5 to 1.0 l per plant;
- shrubs 0.5-1.0 m of height – from 0.5 to 1.0 l per shrub;
- young trees and shrubs 1.5-2.5 m of height – from 1.5 to 3.0 l per shrub;
- fruit trees under 15 years of age – up to 7.5 l per tree;
- fruit trees older than 15 years of age – up to 12.5 l per tree;

Approximate consumption of working solution while root feeding, for:

- young fruit and shrub plantings – from 5 to 10 l per plant;
- young trees under 15 years of age – from 15 to 20 l per tree;
- trees older than 15 years of age – from 30 to 35 l per tree;
- adult trees (40-50 years and older) – from 40 to 45 l per tree.

