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**Biogenesis**

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 **EKSTRASOL**



**Biogenesis**

**Biocontrols Biopesticides Biostimulants**  
**Biocontroles Bioplaguicidas Bioestimulantes**





**" We did not inherit land from our ancestors, but we borrow it from our descendants"**

This is our sentence which leads us throughout our complete work.

It is a great burden, but at the same time it teaches us to appreciate achievements of technology development and give us an obligation to give our contribution to further development. Our focus in researching area is the future of pesticides, plant protection and rationalization.

Rationalization in every sphere is essential: pesticides use, fertilizers, soil, mechanization, money. Even optimisation of our dreams about better and safe future is requested from us. We, in Biogenesis, inspite the fact that we are focused on biostimulators and biopesticides development and manufacturing , highly appreciate pesticides based on chemicals . We consider them as *Conditio sine qua non* (condition which is necessarily needed) in modern agriculture.

Pesticides, in our opinion, are one of the most important achievement of civilization. Due to their invention and their wide range application, people on the Earth have been fed. They are considered as world's treasure, therefore we have to keep and take care of them.

For that reason pesticides usage rationalization is of high importance , to preserve active substances from resistance for a long period, for food production above all. Health safety and environment protection is equally importantant.

There are two crucial points concerning this approach: development of plant protection products which are safe for use, which could be applied in a simple way and education of people who handle them-farmers.

We firmly support the idea that pesticides should sell exclusively by prescription prescribed by the professionals, a principle similar to human medicine and veterinary practice. It will enable complete traceability of pesticide use and application and it also increase food safety for people, animals and environmental protection.

Taking into account the fact that active substances and their purity are at the maximum level due to involving computers in synthesis process. We should search innovations in improved and new formulations, with substances used as coformulants of the latest generation.

Integral concept of plant protection is the closest to our attitude.

Biogenesis produces few groups of products which are compatible within a group and enables results achievement concerning crop yield and food quality at farmer's fields.

We are the owners of microorganisms collection and permission for industrial reproduction. We have developed a microbiological group of products - biopesticides and biostimulators-one biofungicide, several bioinsecticides, one biorodenticide. We have a complete products range.

Second group of compatible products fr integral plant protection are biostimulants, biostimulants humin and fulva acids based, but in superconcentrate (the base raw material is lignine, not leonardite), biostimulators seaweed based-in the form of superconcentrate( special technology of dual fermentation process), homeopathic complex biostimulators with polysaccharides.

**Microbiological safety and stability and contamination control are our priorities**

We are the manufacturers of products for mosquito control; we have developed different formulations based on natural oils combined with chemically active substances.

The most famous experts for mosquito control live and work in Serbia, therefore their experience is valuable for our company.

The other concept we are working at is the synergy of the product and a plant, plant defense mechanism inducing, artificial induction of plant defense system, and chitinase activating. This may sound complicated, but we have made it to be easy, cheap and to fit in the rationalization concept.

We are of opinion, that if we reduce only the one fifth of applied chemically based pesticides and with proper and combined use of pesticides and biostimulators, shelf life would extended, without a danger of resistance at more than 50% of chemically active substances in a future 30-year period.

It is not a low percent taking into account that wide usage of pesticides started after World war II, and consciousness concerning cautious pesticide use after book publishing "Silent spring " by Rachel Carson at the end of 70-ies.

The third area we are focused on is the rationalization in synthesized mineral fertilizers use and fertility regeneration of soil which had been degraded and sterilized, by using combination of biostimulators. It is very important direction in agro-technology.

Only few people know the fact that the quantity of one of the basic nutrients for plants nutrition the phosphorus-show loses in the whole world, it is inaccessible, and hardly renewable, and therefore it is more expensive in next year than in previous.

**Phosphorus deposits are more expensive than oil deposits**

That the area we are searching for rationalization. For that reason, we have formulated and produce few products for soil recultivation and in combination with microbiological biostimulators we achieve optimization in plant nutrition and mineral fertilizers use. We are especially successful in harvest remains management and we are proud of achieving good results in this area.

Concerning our research we are focused on soils degraded by herbicides use, heavy metals, fats, salts, area near polluted rivers-for all these mentioned we have cheap, and optimal technical solutions.

Farmers use biostimulator Ekstrasol for hygiene maintenance of farms and for faster preparing and improving quality of manure.

The principle is very simple. One of our farmers Mr Miroslav Vujović used to say they get rid of stink on the farm.

As a conclusion I have to tell you that you have to love your job much, because in bio-technology nothing goes fast, the " knock down" effect does not exist!!!

Direct benefit from bio-pesticides use is selectivity, which means balance establishment and completed feed chain. But, something has to be left for natural predators !!! it is the basic principle of biological protection, which is supposed to be necessity in the future , and not trends following due to spin information related to safe organic food.

Every kind of food is considered safe under condition pesticides residue are in limits issued by FAO.

" Residue at 0 level" is unacceptable from our side, it is a kind of luxury and unnecessary spending of natural resources.

It sounds great, but it is unreasonable!

Quantities of produced food will be smaller and smaller throughout next years due to number of people increase on our planet and converting agriculture fields into land for buildings of urban areas.

For all above mentioned reason, we –professionals whose area is a phyto-medicine and plants' health have to raise our own standards and re-unite upon preservation the basic tool in our branch -pesticides!!!

**"We did not inherit land from our ancestors, but we borrow it from our descendants"**

Everyone has to bear in mind this!

Trully,

*Violeta Josifova*

President of CEO

**Biogenesis**



## What is Ekstrasol™?

**Ekstrasol™** is a product containing multifunctional live bacteria created in a Russian Institute.

BioGenesis have continued to improve the base formulation, has developed and do additional technology improvements. We give a name to the technology **LEM TECHNOLOGY (Live Effective Microorganisms)**. We also on a permission for industrial reproduction of bacteria. The forerunner of this technology was EM technology, which was one of the most prosperous directions in agriculture development in the 20-th century. The founder and inventor of this technology was Japanese professor Mr Terio Higa. In 1988. It was created multiplex good bacteria complex, and in 1998. Russian scientist Mr Pjotr Ajdušević Šabljin created using similar principle the product based on anabytic microorganisms of Baical ecosystem and exceeded Terio Higa.

However, these products were very complicated to be commercially wide applied. It was essential to be mixed before application with molasses, as in a process for making bread with yeast.

It caused many problems and failure, so this process was not applied. Instead of popularization of microbiological products use, it caused the opposite effect! Farmers who cultivated large fields, especially in vegetable growing, did not have nor time neither conditions for long-time preparations before application.

Other products were photo degradable, some products caused problems related to nutrition, has short shelf life, could not control contamination etc.

Products sporogenic bacteria based in powder form, which are sold by big companies, besides terrible stink, were no efficient and unreliable, because outside conditions were not always favourable for inducing fast bacteria to make them alive and active. Longer time was needed to make spore alive and to start doing the dedicated function.

All these problems mentioned above were complicated to be solved by farmers, and there were no guarantees the performance would be successful and the crops would be protected, and the invested money to be repaid. It was a lot of job in the middle of season and efficacy at low level.

On the other side, chemically based products were inexpensive, and you have the possibility to repeat the treatment few times, until you obtain the satisfying effect.

**But repeated treatments gave only bad effects**, in addition of lot of money was invested, as well.

Due to excessive use, we destroy active substances, pathogenic organisms became resistant, and we have the problem to stay without technical solution for repressing a large number of pests and pathogenic organisms which cause large losses in the economy.

Therefore, we found a solution to this in area where it is difficult -in microbiology.

**At the very beginning we changed approach to this problem. Instead of putting together 30 different bacteria strains for fertility of oil improving, we created a product containing only one bacterium strain, without an odour, photo stabile, and with shelf life up to 30 months or three vegetative periods, with the same quality and efficacy during this period, simple for application and storage.**

# Biogenesis



## We found out the way to keep bacteria alive and effective, without any storage problems.

The storing conditions are the same as for chemically based products.

The activity mode is based on biological balance establishment.

The bacteria use as a inducer of activity, leads to extraordinary results. On the base of these results, unique product was formulated, with a trademark **Ekstrasol™**.

Biogenesis under trademark Ekstrasol has few products with different purpose:

Ekstrasol F- biofungicide, registrated in a class of botricide and bactericide

**Ekstrasol F is registrated in the class of plant protection products with its own toxicological documents and it is classified into products which does not belong to toxicants.**

**Ekstrasol** - registrated in a class of microbiological biostimulators with live microorganisms producing substances of growth

**Ekstrasol Special Strawberry and Raspberry**-contains two different strains of *Bacillus subtilis* and its purpose is to be applied in berries through irrigation dripping systems.

It is a special product.

**Ekstrasol™** is based on rhizosphere bacteriae from *Bacillus subtilis* CH-13 strain, isolated from the most fertile soil in Moldavia, after thorough research and selectivity. This bacteriae has wide range of convenience, and above all the possibility of syntetising substances which repress the fyto pathogenic and bacteria growth.

Fast activity on the plant root, this good bacteriae helps the root hairs development and increase their absorbent coefficient. Rhizosphere bacteria are fed by root escudates, such as: sugars, organic acids, amino acids and vitamins. It means that there is a great competitive process in rhizosphere zone. Bacteriae *Bacillus subtilis* CH-13 and **Ekstrasol™** make colonies at the plant root, protecting plant from pathogenic organisms, secreting metabolic products which improve immune system and plant resistance to abiotic stress, and it also stimulates plant growth.

The advantage of this product is it can be applied in irrigation dripping system, and it helps pathogenic organisms repression in soil, which cause very aggressive and easily borne diseases.

**REDUCING INFECTIVE PRESSURE IS THE BASIC FUNCTION OF EKSTRASOL USE**

# Biogenesis





# Ekstrasol F

biofungicide, product of the latest generation against *Botrytis*  
highly effective bactericide to be applied without any restrictions

**Ekstrasol-F™** is a biofungicide.

The storage and the use of the product is simple. It is stable, standardized, with a shelf life of 24 months, it does not belong to the group of poisons, and there is no waiting period.

**Ekstrasol F** is registered as a botryticide and it belongs to the latest generation of products for the control of decay.

**Ekstrasol F** is the only fungicide suppressing pathogenic organisms growth in the soil and it is applied through irrigation dripping system. It is a good solution to problems such as root decay.

**Ekstrasol F** at the same time suppresses pathogenic organisms and it affects the plant in numerous positive ways, and also improve the plant defense system.

**Ekstrasol F** has been registered as a product against bacteria and it is the product of the latest generation.

**Ekstrasol F** is recommended to be used several times, with no possibility resistance to be occurred.

**Ekstrasol F** does not phyto-toxic effects.

**Ekstrasol F** helps fruits to stay fresh after picking.

**Ekstrasol F** is a land conditioner and a land recultivator.

**Ekstrasol F** is used in small doses, only 2 liters per hectare.

**Ekstrasol F** is inexpensive and is a replacement for several different products intended for solving different problems.

The effectiveness of **Ekstrasol F** as a fungicide is equal to the effects obtained from chemically based products and several repeated treatments provide complete crops protection.

**Ekstrasol F** is recommended to be applied in cereals, fruits and vegetable growing.

**Ekstrasol F** by suppressing the pathogenic organisms growth increases yields by 20%, the effects of the application are highly profitable.

**Ekstrasol F** is compatible with most nutrition and plant protection products, and in combination with biostimulators it is highly profitable and effective.

**Ekstrasol F** helps the plant revitalization, as a result herbs due to herbicidal phytotoxia, bacteria give synergistic effect to pesticides or improve their effectiveness, treats damages caused by mechanical action such as hail, secondary metabolic products exuded by bacteria making a film and protect the surface leaf layer in cases of low temperatures, and in cases of extremely high temperatures, bacteria help the stoma closing, preventing excessive transpiration process.

**Ekstrasol F** is considered as a responding substance for abiotic stress.



## BIOFUNGICID ZA SUZBIJANJE BAKTERIOZA I MIKOZA

Aktivna materija: **Bacillus subtilis** Č -13, min 0,4<10<sup>8</sup>  
Čista kultura bakterije ANTAGONISTE, koje proizvode prirodne antibiotike u obliku koncentrovane suspenzije SC.

# Ekstrasol F

## LEM® technology

Life effective microorganisms technology Tehnologija živih efektivnih mikroorganizama Life effective microorganisms technology

without karencas without karencas without karencas without karencas without karencas without karencas without karencas without karencas

# BiGenesis

**BOTRITICID** NAJNOVIJE GENERACIJE  
MOZE DA SE KORISTI I NIZ SISTEM KAP PO KAP  
ZA SUZBIJANJE ZEMLJISNIH PATOGENA  
REGISTROVAN ZA **ERWINIJU I XANTHOMNAS**



Plant Health Care in  
**Organic Farming**

**without karencas  
bez karence**





# EKSTRASOL

**Ekstrasol™** improves nutrition of the plant, increasing energy of seed germination, reducing contamination caused by phyto pathogenic microorganisms, and in that way it effects the yield increase. **Ekstrasol™** is compatible with herbicides, fungicides, insecticides and mineral fertilizers in a tank - mixu.

**Ekstrasol™** was used for seed treatment and in vegetative period, before storing, for acceleration of organic remains degradation, for biologic modification of mineral fertilizers in pellet form and for soil detoxication.

Treatment of soil by solution of **Ekstrasol™** (watering of soil by a solution) reduces bad microflora, and good bacteria make colonies. This method is specially effective in greenhouses, where the same soil is used in a long period of time.

Seed treatment with **Ekstrasol™** resulted in good bacteria colonies forming on the seed surface. When we do sowing the treated seeds, bacteria start to multiply rapidly and to make colonies on the rhizosphere of the plant. They synthesize substances which inhibits the pathogenic microorganisms and induce the growth of good bacteria. This treatment is inexpensive. We use to say that it costs only a bit time. It is applied 1 liter per 1 ton of seed.

If you weigh the sunflower or corn for sowing which is from 5 up to 7 kilos per hectare, the calculated price of Ekstrasol applied is USD 15 per one litre in retail shop. It is cheaper than a bottle of Coke!!!

Effects of **Ekstrasol™** to plants in vegetative period are based on the fact that a suspension of microorganisms and their products affect regulation of vital functions and protective and adaptable reactions of plants.

**Ekstrasol™** protects plants from most of diseases, such as rust, molds, helminthosporiosis and bacteriosis.

## Direct mechanisms from Ekstrasol™ application as metabolic products

Auxins  
ACC deaminase  
Cytokinin  
Giberelines  
Nitrogen-fixators  
Phosphorus dissolving  
Siderofore  
Organic remains

## Indirect mechanisms

ACC deaminase  
Antibiotici  
Enzymes for cell membrane degradation  
Competitiveness  
Cyanide gas  
Induced immune system  
Siderofore

**BiGenesis**



**LEM® technology**

Life effective microorganisms technology

Tehnologija živih efektivnih mikroorganizama

**without karenca  
bez karence**

*Plant Health Care in  
Organic Farming*



# EKSTRASOL



## EKSTRASOL SPECIAL, STRAWBERRY & RASPBERRY

LEM® technology (Life effective microorganisms technology)

### COMPOSITION:

The pure culture of *Bacillus subtilis* CH 13, min  $10^7$  CFU/cm<sup>3</sup>,  
The pure culture of *Bacillus subtilis* HC8, min  $10^7$  CFU/cm<sup>3</sup>.

### ON THE PRODUCT AND FORMULATION:

**Ekstrasol Special - Strawberry & Raspeberry** is especially formulated for berry fruits, aimed to solve problems on daily basis in these sensitive crops growing.

Active substances are microorganisms from *Bacillus subtilis*, but two different strains: *Bacillus subtilis* CH 13 and *Bacillus subtilis* HC8. Both strains are the parts of our own microorganisms collection.

*Bacillus subtilis* CH13 is widely known active substance in other our products -as a brand name-**Ekstrasol**, biofungicide and biostimulator.

In the meantime, new strain of HC8 was isolated, *Bacillus subtilis* from the plant called pig root near St. Petersburg. This bacteria is endophytic and it is very important in our new formulations, because it is able to move through the system of the host plant.

By combining two strains, we created a new product intended for treatment of strawberry, raspberry, currants and blueberry. Our aim is to apply it through irrigation dripping system in time interval of 7 days, starting from the flowering stage up to the end of this process and fruit forming, provide natural protection from pathogenic microorganisms in soil and induce plant defense system.

Watering and foliar spraying in weather conditions with increased humidity in the atmosphere and high temperatures, we can guarantee healthy fruits and increased yield up to 80 % by applying reduced antifungal protection.

We succeed to provide protection against fungi with reduced application of fungicides based on chemical substances, and to respect waiting period before fruits picking.

This method is economical, it is not expensive and with 3 or 4 treatments applied through irrigation dripping system 4 with combination with foliar treatments, we provide minimum losses caused by decay in strawberry growing.

Concerning raspberries growing, 2 to 3 treatments through irrigation dripping system and 3 foliar spraying with **Ekstrasol** are sufficient.

Concerning blueberry growing watering through irrigation dripping system, it keeps Ph at optimal level in the root system and it also help obtaining of good fruits, equal in size and ripeness.

Blackberry growing is very economical and it shows the best results compared to invested amount of money. Only 3 treatments are sufficient to achieve healthy fruits and yield more than 50%.



### PURPOSE OF THE PRODUCT:

The product is intended to be applied in crops such as: strawberries, raspberries and blackberries, by foliar application and through irrigation dripping system.

It is also intended for soil revitalization, being applied by spraying and plowing into the surface soil layer.

### USE:

**-Strawberry, raspberry and blackberry seedlings** soaking into 2% solution of **EKSTRASOL SPECIAL**.

-During vegetative period, foliar application, in a dose of 2 l/ha, in a period before flowering, after flowering and during crop picking- few times.

-Through irrigation dripping system, in a dose of 2 l/ha.

-By treating surface soil layer in a dose of 2 l/ha and by adding 500 ml of Regenesi, and incorporation at the 10cm deep, as for recultivation and enhancing of the soil quality.

This treatment is very important after crop picking finished, aimed to maintain crop condition up to the next vegetative period.



# Ekstrasol Special Strawberry & Raspberry







# Azadiraktin NEEM

**Name:** OZONEEM TRISHUL 1% EC - Bioinsecticide

**Composition:** Active substance Azadirachtin A+B 1%  
CAS number: 11141-17-6 as Azadirachtin A  
CAS number: 95507-03-2 as Azadirachtin B

**Activity mode:** Bioinsekticide for foliar application with a contact, digestive and repellent effects.

As for insects it has antifeeding effect "insect's feeding decreases", it regulates insect growth, insect's converting from imago to pupa, inhibits reproduction and reduces fertility.

This is important at pet insects, because they have few generations, and are able to cause the calamity and surprisingly increased gradation in number with harmful effects in economy. The product has postponed activity and the real effect can be observed after 3-4 days.

## Application:

- **In corn crop**, for repression of caterpillars (*Ostrinia nubilalis*) and (*Helicoverpa armigera*) in concentration of 0,4-0,5%, treatment 10 days after high pressure of butterflies flight or after caterpillars appearing, and before drilling into the stalk or cob. Treatment is performed foliarly-by a tractor with high, water consumption up to 200-400 l/ha.
  - **In apple plant** for repression of green apple aphid (*Aphis pomi*) in a concentration of 0,2% by treatment at the beginning of colonies forming;
  - **In cabbage plants** for thrips repression (*Thrips spp.*) at the beginning of movable forms in a concentration of 0,3%;
  - **In peppers plants** for leaf aphids repression (*M. persicae*) at the beginning of colonies forming in a concentration 0,3%.
  - **In raspberry plants**-acaridies repression- Tetranychidae
- Product is applied foliarly with water consumption - in corn crops 200-300 l/ha; in apple plant 800-1000 l/ha and in cabbage and peppers plants 200-400 l/ha.

## Maximum number of treatment during the year:

Few times depending on the need, and based on manufacturer's recommendation three or four times during the year at the same area.

## Advantages of the product:

Ozoneem trishul 1% EC is a product based on Neem plant containing Azadirachtin as an active substance. It is considered very efficient against more than 400 types of insects, mites and nematodes.

Neem insecticide is the best among insecticides due the following properties :

1. Natural product, absolutely non-toxic
2. 100% bio degrada
3. Completely safe for people and good insects, such as bees
4. It can be combined with other synthetic pesticides, increasing their efficacy
5. It is considered very efficient against more than 400 types of insects, mites and nematodes.
6. Wide range efficient instecticide



**EKSTRAKT MARGOSE**  
(AZADIRACHTA INDICA)



WITHOUT KARENCA WITHOUT KARENCA WITHOUT KARENCA WITHOUT KARENCA WITHOUT KARENCA WITHOUT KARENCA WITHOUT KARENCA WITHOUT KARENCA



# AZADIROKO Neem Cake Fertilizer

**Neem cake** fertilizer is an organic fertilizer for farms, gardens and lawns. **Neem cake** is the main product of core neem seed and contains natural nutrients.

## WHY USE NEEM CAKE FERTILIZER?

1. Very profitable
2. Better yield compared to conventional fertilizer and urea
3. Rich source of NPK and other micro nutrients
4. Compared with the urea (nutrient collector), neem cake contains nutrients for plants and maintains the power of the soil.

## OTHER BENEFITS

1. Control of nematodes and other soil vermin
2. Improves the organic content of the land
3. Can be used together with other fertilizers / with urea together
4. Safe for worms



## USAGE of NEEM CAKE

Although, **Neem Cake** defined as fertilizer, it acts like pesticides

## NEEM CAKE like Fertilizer

Neem is a complete plant product that contains NPK macronutrients in organic form and other micronutrients.

## BETTER YIELD

It gives 15-25% better yield than any other fertilizer. Conventional fertilizer lacks the uniformity of nutrients that inhibit the release of constant growth of fruits / crops. And more than that, neem cake controls nematodes and other soil pests that help root to absorb nutrients in a regular and optimal way. This is the main reason why more farmers are starting to use Neem Cake in their production.

## NEEM CAKE AS A PESTICID

Control of insects and pests.

This product is also controlled grain moth, lessor grain moth and red flour beetle.

It leads to an increase in the rainforest worms population. The places where neem cake was used increased the population of worms.

## METHOD OF APPLICATION

By mixing the Neem Cake with soil and deep plowing, better results are obtained than in the case of surface treatment of soil in the fight against root-knot nematodes. This way is suitable for a longer duration, because it decomposes quite slowly and gradually releases nematotoxic substances for a longer duration.

## USAGE

It is ideal for crops such as wheat, rice, cotton, sugar cane, fruits, vegetables, spices, coconut, tea plants, flower plants, golf fields, etc.

## PACKAGING

NEEM fertilizer is available in packages of 25 kg, 50 kg packed in HDPE (plastic) bags. We can provide Neem Cake in any order packaging.

Recommended to use in the following crops

Tomatoes, eggplant, chili, black gram, green gram, French beans, papaya, betelvine, tobacco, cabbage, carfiol, rice, bananas, potatoes, spinach, reddish, wheat, sugarcane and much more.

## ADVANTAGES LIKE FERTILIZER

**Improves the organic content of the soil.**

Neem cake seed cake also reduces soil alkalinity by producing organic acids when decomposed. As a completely natural product, it is compatibility with soil microbes, improves the rhizosphere and microflora and therefore ensures fertility of the soil. Ozoneem cake improves the organic composition of the soil, helping to improve the texture of the soil, has the capacity of retaining water, provides aeration of the soil for better root development.

## CAN BE USED WITH OTHER FERTILIZERS

Farmers who want to get across from conventional fertilizers to the ozoneem cake should use them at the same time initially, gradually reducing liquid and chemical fertilizers. This compatibility leads to no additional costs. When used together with nitrogen fertilizers, it gives a synergistic result by slowing down the process of converting nitrogen compounds into ammonia, nitrites and nitrates and improving efficiency.

## INDUCE NITRIFICATION

Induces the nitrification process and increases the chlorophyll content. Ozoneem cake provides more nitrates for plants that in turn stimulate nitrogen metabolism.

It releases acids, aldehydes, etc.

This also releases fatty acids, aldehydes, ketones, amino acids, carbohydrates, and free sulfur, which forms the precursor material for growth and metabolism.

## BENEFITS AS A PESTICIDE

Control of nematodes

Ozoneem cake has a wide range of activities against a broad category of nematodes, land pests and insects such as *Haplolaimus indicus*, *Helicotylenchus Sp*, *Meloidogyne incognita*, *M. Javanica* (root-knot nematodes) *Tylenchorhynchus Sp* and *Rodopholus similis*. This wide range of defense helps root absorbs adequate nutrients and leads to better yield.





# BALTAZAR™

## FERMENTED SEAWEED BIOSTIMULANTS SERIES

**Preface:** Our company, **Biogenesis**, has offered to the market a special, complex brown seaweed biostimulant extracts formulated by using unique technology. The technology of the two-stage fermentation process is used to produce a harmless extract rich in nutrients, and which does not contain absolutely any chemical additives.

The active substance or **Concetrade** is 100% natural fermented seaweed extract. Compared with concentrates in other seaweed biostimulants, produced by other manufacturers, "concentrate" has many benefits, including:

### 1. Natural quality by using unique biotechnology

Methods of manufacturing seaweed based biostimulants can usually be divided into:

**The method of chemical hydrolysis** (i.e., hydrolysis of the potassium hydroxide),

**Physical extraction method** (i.e., the process of high-pressure and cold process),

**Method of biological fermentation** (i.e. The methods of degradation of the enzyme).

Extraction made a great impact on active ingredients and nutrients of the product.

- Presently, most companies in the world are using chemical hydrolysis to produce seaweed biostimulants, which biggest disadvantage is that the strong alkali and high temperature will destroy the activity of endogenous substances and nutrients in seaweed.

- Physical extraction is crushing seaweed cell wall by using high pressure and subcooling process; it is better than chemical extraction. But few companies have mastered the physical extraction techniques at present, such as Kelpak of South Africa.

- The principle of biological fermentation method is using various kinds of enzymes produced by microorganisms in the metabolic process which use seaweeds as nutrients. It degrades macromolecule materials in seaweeds into micromolecule and water-soluble materials. Without strong alkali and high temperature of chemical method and high pressure and low temperature of physical method, it maximizes the retention of bioactive and nutritious substances in seaweed.

- ***This technology is unique. This extract have three times more active ingredient, particularly cytokinins and gibberellins, Compared with Kelpak's product. Because of this, the dosage of use our products is very low.***

So Fermented Seaweed extract **Concetrade** has played an important role in plant growth, which provides plant with very comprehensive nutrients and the endogenous plant growth regulators such as auxin, cytokine and gibberellins, which have a significant effect on plant growth to stimulate plants to generate specific biological factors, and 18 kinds of amino acids, arachidonic acid, peptides, nucleotides, algae polyphenols, flavonoids, terpenoids, various vitamins, alginic acid and humic acid etc., which can be absorbed easily by the roots and leaves of plants as nutrients directly and enhance the plant's resistance to drought, cold, pests and diseases. All these substances are extracted completely from natural algae in a balanced ratio by using the fermentation process, but not from chemical additives. These substances are environment-friendly, non-toxic to humans and animals.

**Concetrade** is different from chemical hormones. It can be used in any stage from seed treatment to harvest, and because of its specific stability of biological products, **Concetrade** absolutely can be used as the raw materials of organic biostimulant as additives, can be mixed with organic biostimulants, bio-biostimulant and compound biostimulants in order to enhance biological activity and biostimulant efficiency. In addition, **Concetrade** can be used in livestock feed as nutrient additives.



### 2. The unique character and effect

Our seaweed extract has no seaweed fishy smell and pungent chemical odor and no residue at harvest time. But the products from other manufactures have the seaweed fishy smell and pungent chemical odor, which may drive bees away resulting in reducing of the fruit setting, and have residue odor on the surface of the plant, especially on tea-leaves and fruits, which will lead to lower quality of the organic tea and fruit etc.

Furthermore, our fermented seaweed extract is long-acting, has long effectiveness for plant balanced growth, while the chemical one is transitory.

### 3. Best seaweed source

Our raw material seaweed is a kind of brown alga (not common kelp) specially taken from clean sea area which is not polluted. So the heavy metal content in **Concetrade** is particularly in a very low level and in line with standards of the European Union.

### 4. High concentration

Extremely low dose of **Concetrade** could reach much higher effects than other biostimulants.

According to the various nutrients needs of plants at each growth stage, we have launched the functional seaweed biostimulant product series ---- **Baltazar™** which meets the demands of more customers at home and abroad. If some of the formulas we offered are different from what you require actually, kindly inform us in detail, and we will be pleased to customize according to your request.

## BALTAZAR POWER CONCENTRATE

- the active ingredient used in the formulation of biostimulants **Baltazar™** - recommended for organic agriculture growing

100% pure seaweed extract for any stage of plant growth and as organic biostimulant additives

**Properties:** **Concetrade** is a pure natural seaweed extract produced by two-phase fermentation. It contains natural nutrients of protein amino acids, auxins, cytokinin, gibberellins, arachidonic acid, alginic acids, humic acids, nucleotides, vitamins and counter-stresses genes as well as macro elements and microelements, which can be easily absorbed by plant and promote balanced growth of plant.

**Concetrade** can be used at any stage from seed treatment to harvest, and for the specific stability of biological products, **Concetrade** absolutely can be used as the raw materials of organic biostimulant or additives, can be mixed with organic biostimulants, bio-biostimulant and compound biostimulants in order to enhance biological activity and biostimulant efficiency



## Baltazar BIO-V - For stimulating vegetative growth

**Trade name:** Biological seaweed biostimulant **Baltazar BIO-V**

**Common name:** Natural fermented seaweed extract with potassium and phosphor for stimulating vegetative growth.

**Properties:** **Baltazar BIO-V** is a natural fermented seaweed extract mixed with potassium and phosphor for stimulating vegetative growth. Fermented seaweed extract contains natural plant hormones, protein amino acids, alginic acid, mannitol, betaine, arachidonic acid, carbohydrates, which can be easily absorbed by plants and bioactive substances which stimulate plant growth.

**Composition:** Fermented Seaweed extract , P<sub>2</sub>O<sub>5</sub> 12%, K<sub>2</sub>O 16%, Mo 0.26%

**Agronomical action:** Promote cell division and chlorophyll synthesis, and enhance photosynthesis; Improve the development of roots, and enhance the ability of roots to absorb nutrients and water in soil; Boost natural defense against pathogenic diseases; Reduce stress symptoms, and promote balanced growth of plant.

**Target Crops:** It is widely used in tea, potato, fruits, vegetables, melons, cotton, bean, tobacco, grain crops, flower, lawn and medical plant etc.

**Mode of application:** Foliar application.

- Solanaceae: apply after transplanting up to flowering, spray with a solution of 1: 1200 (every two weeks).
- Cucurbitaceous: apply from 3-4 leaves up to flowering, spray with a solution of 1: 1200 to 2000 (every 8-10 days).
- Lettuce, spinach, and celery: apply from 3-4 leaves onwards, the ratio of the solution is 1: 1000 (every 8-10 days).
- Strawberry: apply from green buttons up to fructification, the ratio of the solution is 1: 1000-1200..
- Potato, onion, artichoke: the ratio of the solution is 1: 800-1000..
- Beet: Concentration: solution ratio is 1: 600-800 (every 2-3 weeks)- - Citrus & fruit trees: apply at beginning of sprouting, just before fruit setting and during fruit growth. The ratio of the solution is 1: 800-1200. The rate of application: 680ml/ha.
- Rice, wheat: solution ratio of 1: 800-1000 (every two weeks).
- Olive: Apply at beginning of sprouting and during flowering, the ratio of the solution is 1: 600-800.
- Vineyard: apply from extended leaves to fruit setting, the ratio of the solution is 1:1200 (3-4 application)

**Precautions:** 1.Shake the container thoroughly before use.

2.This product is compatible with neutral or acidic pesticides.

3.Store under shady and cool place, and avoid direct sunlight.



## Baltazar BIO-P- For improving flowering

**Trade name:** Biological seaweed biostimulant **Baltazar BIO-P**

**Common name:** Natural fermented seaweed extract with phosphate and polysaccharides for improving flowering

**Properties:** **Baltazar BIO-P** is a natural fermented seaweed extract mixed with phosphor and polysaccharides stimulating crucial metabolic processes of plant growth such as flowering stage. Fermented seaweed extract contains natural plant hormones, protein amino acids, alginic acid, mannitol, betaine, arachidonic acid, carbohydrates that stimulate plant growth. Phosphor, boron and molybdenum present in **Baltazar BIO-P** are essential nutrients which contribute to the induction of flowers and their development.

**Composition:** Fermented Seaweed extract, N 7%, P<sub>2</sub>O<sub>5</sub> 18%, B 0.02%, Mo 0.3%

**Agronomical action:** Promote flower bud division, improve flower formation thus increased flower fertility; regulate proportion of male and female flowers, improve pollination, promote elongation of flower stem, prevent fall of flowers and fruits, increase yield.

**Target Crops:** It is widely used in tea, potato, fruits, vegetables, melons, cotton, bean, tobacco, grain crops, flower, lawn and medical plants etc.

**Mode of application:** Fruit trees and vegetables: the ratio of the solution is 1: 500-1000, foliar spray before flowering (apply 1-2 times during setting)

## Baltazar BIO-K- For improving fruit setting

**Trade name:** Biological seaweed biostimulant **Baltazar BIO-K**

**Common name:** Natural fermented seaweed extract with potassium and polysaccharides for improving fruit setting

**Properties:** **Baltazar BIO-K** is a natural fermented seaweed extract mixed with potassium and polysaccharides stimulating crucial metabolic processes of plant growth such as during fruit setting. Fermented seaweed extract contains natural plant hormones, protein amino acids, alginic acid, mannitol, betaine, arachidonic acid, carbohydrates that stimulate plant growth. Phosphor, potassium, boron and molybdenum present in **Baltazar BIO-K** are essential nutrients which contribute to a better fruit setting, fruit size and quality.

**Composition:** Fermented Seaweed extract , P<sub>2</sub>O<sub>5</sub> 15%, K<sub>2</sub>O 20%, B 0.2%, Mo 0.2%

**Agronomical action:** Promote fruit expanding to increase fruit size, fresh coloring, better fruit firmity and conservation; increase sugar content in fruits and melons, increase resistance against unfavorable stress factors, early ripe and increase yield.

**Target Crops:** It is widely used in tea, potato, fruits, vegetables, melons, cotton, bean, tobacco, grain crops, flower, lawn and medical plant etc.



**Complex series of biostimulators, combination of organic and inorganic raw materials with well-balanced microelements in form of chelates**

These formulations are the most complex that Biogenesis has developed to induce a green up effect in plants under difficult conditions, where abiotic stress caused by extremely low and/or high temperatures.

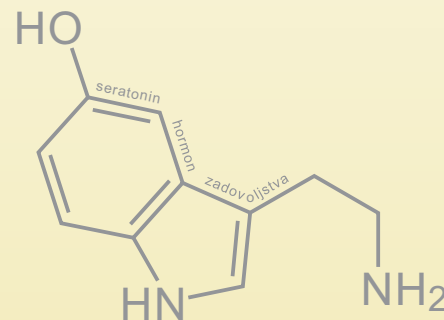
We deliberately print on the label a sentence which states that the product is intended to cause the state of euphoria at the plants. Our intention was to emphasize the speed of achieving results. Our marketing team insisted on a chemical formula of serotonin to be put on the label in order to point out the fact that it is the hormone which causes the feeling of happiness.

Numerous experiments were performed in the fields involving different crops, and the team of agronomists present us impressive results. The typical example for this is soybean production technology, where we have achieved standardization concerning the yield, providing conditions for preserving and fertilizing flowers two times more than usual (it is known that it is a self-fertilizing plant), and to reduce the period of stagnation or stagnation in the plant development period and growing in general.

**GENESIS SPECIAL** products are the inducers of plant activity. There are three products within this group: **GENESIS SPECIAL P**, **GENESIS SPECIAL N**, **GENESIS SPECIAL K**. All these products are intended for different growth stages of the plant.



**GENESIS SPECIAL P**



**GENESIS SPECIAL N**



greenUp

**GENESIS SPECIAL P** is recommended to use at the beginning of the vegetative period, when it is cold, when herbicides are used, when the root system start its development, and it affects the plant survival and the yield, as well.

At the beginning of vegetative period, plants need a day to be longer/ more sunlight to be exposed to. The microelement phosphorus is in high demand, but at the same time it is highly inaccessible, and in this growth stage microbiological activity is poor.

**GENESIS SPECIAL P** in combination with **Ekstrasol** provides phosphorus deficiency in the initial period, up to the time when the bacteria do not complete the conversion process. Inducing of microbiological activity is of high importance. Bacteria should release their peptides from herbicides, in order to allow undisturbed signal transmission. This can be attained only by providing maximal conditions for the root system development, additional energy, affluence of plant hormones, growth stimulants and sufficient quantity of amino acids for the cell division. The greatest requirements for phosphorus are at the beginning of vegetation, and the transpiration ability of the root system depends on its development. The second treatment provides undisturbed self-fertilization, seaweeds improve blooming and it also stimulates the flow of nutrients from other parts of the plant into leaves, increases the plasticity of the cell membrane and the leaf index, in order to increase the light absorption. We prevent the loss of chlorophyll and due to slow decomposition of chlorophyll, we delay the plant aging.

Most vegetables grown in the continental climate conditions, need heat for their growth, therefore they need to be exposed to sunlight at the beginning of the vegetative period due to extremely cold winters and extremely warm summers, with a period of drought which can last from 2-3 months. In such conditions, the development process and the length of the root directly influence the yield. Access to the underground surface waters is the only adequate response to extreme summer drought, where there is no irrigation system.

**GENESIS SPECIAL N**. At the period of extreme summer drought the plant throw away parts of its leaves, when the formation and filling of fruits and process of fertilization have been ceased, Biogenesis has formulated the product **GENESIS SPECIAL N** bio-stimulator, which cause is to cease plant dying - out and start with the cell-division and to interrupt the leaf mass and flowers loss due to the lack of water. Nitrogen that is affordable and other nutrients are sufficient to induce the initial cell division. Concerning legumes, this is enough to induce the assimilation of nitrogen from the air with bacteria help, only with presence of morning dew.

The soybean and sugar beet yields were more than half or twice comparing to yield where this bio-stimulator was not applied.

If air treatment would be allowed to be applied at corn fields, in the beginning of August the better results could be achieved in optimization and safety crops obtaining, as well. In most of European countries, there are small acres, so it is not profitable to purchase tractors with high clearance, but if we talk about medium-sized acres, the aircraft treatment would be profitable.

Our third product from this group is **GENESIS SPECIAL K**.

First of all, it is intended for kinds of vegetables, fruit growing and wine-growing.

This product protects the fruit, prevents the fall of the fruit from the tree before ripening and during hot summer months allowing the fruit filling to go gradually.

**GENESIS SPECIALS** contains NPK and microelements and salts of humic and fulva acids and seaweed concentrate.

Recommended use is a dose of 2l / ha in cereal growing, vegetable growing, and in fruit and wine growing in a dose of 3l / ha.

They are suitable for use in irrigation dripping systems, especially in peppers, tomatoes, cucumbers and strawberries growing.



# Organiko

Liquid concentrate of humic substances with addition of microelements  
1 litre is enough for treatment of 5 ha

**Organiko®** is a liquid formulation, **SUPER CONCENTRATE** made of humic substances with high content of fulva acid and salts of humic acids. Its unique formula is guaranteed with standardized technological process of production. **Organiko®** is enriched with basic micronutrients in form of chelates.

High concentration of active and humified ingredients within the product **Organiko®** improves microbiological, physical and chemical soil properties and raise buffer capacity. Organic substances do not allow nitrogen, phosphorus, potassium and microelements to be washed away from the soil. This process is especially spectacular in soils with high content of sand.

Advantages of **Organiko®**:

- No harmless effects to the environment
- Suitable to be used for all types of crops
- Suitable in every phase of plant vegetative period
- Ideal solution in combination with fertilizers and additional nutrition
- Efficient in combination with fungicides, growth stimulators and growth control products
- Enhances photosynthesis, vitality and plant health
- Improves foliar accessibility to nutrients and nutrition through root system
- Increases plant resistance to stress

**Organiko®** is ecologically clean product based on humic substances and it is recommended for seed treatment with maceration before sowing, concerning the root system it is applied by watering, independently or in combination with mineral fertilizers-by foliar application during vegetative period, in combination with nutrients adding, growth stimulants substances, fungicides and insecticides.

**Organiko®** could be used after seed sowing or root can be soaked in it before planting.

Taking into account positive effect to plants during complete vegetative period, it is recommended to include **Organiko®** in regular treatments in order to improve plant growth and plant condition in general.

Product contains:  
20% Dry substances  
46% Humic acids  
50% Fulva acids  
3% Sulphur  
1% Microelements in form of chelates

WHAT IS **ORGANIKO®** AND WHICH ARE ITS ADVANTAGES?

**Organiko®** is a super concentrate of salts of humic and fulva acids extracted by using a unique technology from Siberian lignin. Due to high quality of Siberian lignin it is made super concentrate of fertilizer, by using the special technology with extremely low dose used for application. Different from other products in world market, **Organiko®** is protected trademark of BioGenesis and it is applied in a dose of 200 up to 400 ml/ ha, while other products with similar content are applied in a dose of 2, 3 up to 5 lit/ ha.

In most fertilizers based on humates, the basic substance as a raw material originates from **LEONARDITE**, and the raw material used in production of **ORGANIKO®** originates from **LIGNIN**, which makes a great difference in quality.

**Organiko®** applied in a dose of 200 ml in combination with 2 litres of Ektrasol gives extraordinary results in all crops.

**THIS IS OUR HIGHLY RECOMMENDED COMBINATION.**

**Organiko®** contains additional quantity of Sulphur and microelements in chelated form.

WHAT IS LIGNIN?

Lignin originates from coal. Lignin was founded firstly as a integral part of plant cell membrane, and in some seaweed. In huates, lignin binds metal ions, disables reaction with other elements and makes them insoluble. Metal ions extracted with help of humates stay soluble and accessible to plants.

If there is pesticides residues, lignin locks and keep them until the time they are dissolved into unarmful substances for underground water as a result of soil microorganisms activity.

Lignin is a very good source of energy- nutrients for good bacteria in the soil.

The ability of water binding, allow lignin to keep as much as 7 times more water compared to their own weight and in that way they enable plants to bear drought easily, and/or help plants to reduce water consumption.

WHAT HUMIC ACIDS ARE, WHAT FULVA ACIDS ARE AND WHY THEY ARE SO IMPORTANT FOR PLANT GROWTH?

Humic acids are humic fraction insoluble in water and liquids with pH value lower than 2, and it is soluble in liquids with higher pH values. Chelated form of ions is probably the most important property of humic acids, it facilitates ion absorption through good fungi and root system.

Humic acids are macro molecules with large number of peptides binding microelements.

Plants could absorb microelements needed for photosynthesis process only in that way.

Fulva acids are fraction soluble in all pH values. They behave as a biological source of nutrition, forming favourable environment for microorganisms growth and development.

As a growth stimulator, they help seed germination, plant vitality and root system development, and all this mentioned directly influences increase in quality and quantity of yield.

They also affect detoxication of substances that cause soil pollution, and absorb many toxicants-reduces soil damage.

**HUMIC ACIDS ARE ORGANIC SOIL COMPOSITION AND THEY REPRESENT ITS FERTILITY.**

AT CHEMICAL TREATMENTS, DUE TO FREQUENT APPLICATION, THERE IS A POSSIBILITY OF CREATING ACCELERATED RESISTANCE, WE RECOMMEND APPLICATION OF **Organiko®** IN A DOSE OF 200ml/ ha, AS A SYNERGIST FOR ACCELERATED ACTIVE SUBSTANCE ADOPTION.

**THIS METHOD IS WIDELY ACCEPTED DUE TO EXCELLENT RESULTS.**





# REGENESIS SISANDDD

Word **REGENESIS™** means new life.

There is a proverb from Netherland saying: „Artificial nitrogen fertilizer is good for the fathers, but bad for their sons“.

Intensive agriculture production and the use of synthetic mineral fertilizers leads to soil degradation and it also reduces the quantity of organic substances.

In order good bacteria to be attracted to be a host for the plant root, plants are sending phyto-chemical signals into the soil. Those signals are going to attach to NodD receptors within a bacteria and it activates the genes that allows path to be made through the soil up to the root of the host plant.

However, common pesticides are attached to NodD receptors within bacteria and blocked those signals.

The soil which is active is going to diminish gradually and the soil productivity is reduced. Important agro-technical activity is crop rotation, but it cannot be applied always, especially not in a protected crops growing, such as greenhouses or hothouses.

Flowers growers and vegetable growers, in hot and controlled flower beds, where two or three harvests are possible have a problem of polluted soil, problem concerning microbiological activity, and organic composition regeneration.

**Regenes is especially created product, which is used for organic composition soil improvement, soil detoxication and inducing of microbiological activity.**

This product contains ingredients which are of organic, in the superconcentrate form. It contains humic and fulva acids salts and free amino acids and well-balanced micro and macro elements and additional substance, which is a trade secret.

## INCORPORATION

A dose for application of **REGENESIS™** is 1 L/ha when it is incorporated.

For soil incorporation and regeneration, **REGENESIS™** is used together with a product **Ekstrasol**, which is used in a quantity of 5 L/ha.

**REGENESIS™** is recommended for soil revitalization in a period after floods and fertile soil taking away.

The use of **REGENESIS™** is recommended after sugar beet crops harvest because on that occasion a great part of superficial fertile soil layer has been removed, and in that part of soil there are bacteria which provide fertility.

A full dose for application is 1L/ha combined with 5 litre of Ekstrasol, although at soils which are still in a good condition, we recommend a half of dose

- 2 litre of **Ekstrasol**-it is sprayed and plowed at 10 cm and the soil leaves in order to have a rest and microbiological activity to be induced.

The sae treatment is applied in the fields where seedlings were grown, where fertile parts of soil had been taken away. It is advisable full dose to be applied.

## FOLIAR APPLICATION

Another function of **REGENESIS™** is revitalization of damaged plant parts in long-term planting areas due to hail and after low temperatures, high pressure of pests and disease.

**REGENESIS™** induces all physiologic functions giving “green up” effect in a short time period. It is applied in a dose of 500 ml/ha combined with 2L of **Ekstrasol**. It is recommended to be applied in sour cherries, after intensive leaves falling caused by Coccoomyces, with an aim to protect a trunk in hot summer days, and May buds to be preserved for the next season.

It is applied at peaches after intensive attack of Taphrina deformans and leaves falling, treat with 0,5L of **REGENESIS™** + 2L of **EKSTRASOL™**.

**REGENESIS™** is used to strengthen the tree trunk, as a preventive measure from drying up caused by Capnodis tenebrionis and combined with agro technical measures for insects repression.



## REGENESIS™ BIOSTIMULATOR

Specijalni proizvod koji sadrži huminske kiseline organskog porekla i koncentrat morskih algi sa slobodnim aminokiselinama. Ukupni ekstrat humusa 44%.

1. Super koncentrat namenjen za vraćanje plodnosti zemlje
2. Rekultivacija, detoksikacija
3. Pokretanje mikrobiološke aktivnosti deblokadom NodD receptora
4. Pokretanje svih fizioloških funkcija za kratko vreme - Green Up efekat



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OBAVEZNO PROČITATI UPUTSTVO ZA  
UPOTREBU U SENDVIČ ETIKETI.

# BIOSTIMULATOR REKULTIVATOR REGENESIS REKULTIVATOR BIOSTIMULATOR

## BiGenesis

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Dozvola za promet Ministarstva  
poljoprivrede, šumarstva i vodoprivrede  
Republike Srbije  
Br. 321-01-00683/2015-11

**ČUVATI NA SUVOM I TAMNOM MESTU,  
NA SOBNOJ TEMPERATURI VAN  
DOMAŠAJA DECE.**



# CICERON 2.0 EW

**Ciceron 2 EW** - as a formulation is an oil emulsion dissolved in water (EW). It is used diluted with water, in open urban and rural space. It contains 20 g/l of *Deltametrine*, insecticide of wide range efficacy and it is used according to recommendations of WHO (1 g/ha a.s.).

## OPEN URBAN AND RURAL SPACE:

Mosquitoes - *Culicidae* (*Aedes*; *Anopheles*; *Armigeres*; *Culex*; *Culiseta*; *Ochlerotatus* and other)

- APPLICATION TIME: In the early evening in the period of maximum mosquitoes adults activity;

- THE MODE OF APPLICATION: ULV by using cold fogging device (vmd 50-100 m) or fogging (vmd 20-50 m), by devices from the land;

- QUANTITY FOR APPLICATION: 50 g/ha in 2 l/ha of water (50 + 1950 ml/ha);

- MBT: 3-5;

- WAITING PERIOD: -

- WORKING WAITING PERIOD: -

Application of this product is very simple. It is easily dissolved in water, and the quantity of water is adaptable to the device and facility which is supposed to be treated. Quantity concerning area surface should not be changed significantly. The change in quantity depends on the type of treated area-is it with exuberant or scarce vegetation.



# CICERON 2.0 ULV

**Ciceron 2 ULV** has a formulation in liquid oil form (o-oil, l-liquid). It is used in ultra small quantity (ULV) without dilution or with addition a small quantity of oil or any other proper solvent (D2; kerosene) and in open urban or rural area. This product contains 20 g/l of *Deltametrine*, insecticide with wide range of efficacy and it is used in compliance with the recommendation WHO (1 g/ha a.s.).

## OPEN URBAN AND RURAL SPACE:

Mosquitoes - *Culicidae* (*Aedes*; *Anopheles* in the time os; *Armigeres*; *Culex*; *Culiseta*; *Ochlerotatus* and other)

- PERIOD OF THE DAY FOR APPLICATION: In the dusk in the period of maximum mosquito adults activity;

- MODE OF APPLICATION: ULV moistening by spraying (vmd 50-100 m) or cold fogging (vmd 20-50 m), using devices from the air.

- QUANTITY FOR APPLICATION: 50 g/ha in 0,5 l/ha of vegetable oil.

- MBT: 3-5;

- WAITING PERIOD: -

- WORK WAITING PERIOD: -

The application of UL-formulations requests using devices which enable ultra small quantities (ULV), especially from the air, although quantity of the product should not vary significantly. There is a possibility to adapt quantities to dense vegetation, but it is not recommendable to change recommended quantities for application. It is very important during appliance of the product, to coordinate liquid flow and speed of the movement with recommended quantities. It is important dispersed drops to be appropriate and direction and speed of wind be taken into account.



**Biogenesis** has been developing biocides intended for repression of mosquitoes in open urban and rural area. We have created formulations, which are stable and simple for application from the land and from aircrafts.

The innovation that we coformulants used in a previous period replace with plant oils and increase the efficacy due to size and weight of particles. We used experiences and knowledge concerning mosquito repression of our renowned experts.

We also have created products for ticks repression by combining chemical and bio-chemical substances.



SAMO ZA PROFESIONALNU UPOTREBU



# KONDOR

Lambda cihalotrin



www.biogenesis.rs



**Kondor** is a product formulated in the form of oily liquid (UL). It is used in ultra small quantity (ULV) without dilution or with addition of small quantities or any other proper (D2; kerozin) in open urban and rural area. It contains 8 g/l lambda-cihalotrine, insecticide with wide range of efficacy. This product is used in compliance to WHO recommendations.

## OPEN URBAN AND RURAL AREA:

Mosquitoes - *Culicidae* (*Aedes*; *Anopheles*; *Armigeres*; *Culex*; *Culiseta*; *Ochlerotatus* i drugi)

- PERIOD OF THE DAY FOR APPLICATION: In the dusk in the period of maximum mosquito adults activity;

- MODE OF APPLICATION: ULV cold moistening by spraying (vmd 50-100 m) or fogging (vmd 20-50 m), using devices from the air;

- QUANTITY FOR APPLICATION: 300 ml/ha (product) + 200 ml/ha of vegetable oil;

- MBT: 3-5;

- WAITING PERIOD: -

- WORK WAITING PERIOD: -

Product **KONDOR** is applied from the air, and it is essential to coordinate speed and flight safety. It is important that flight height and spraying performance to be coordinated with recommended quantities for appliance. It is also important speed and wind direction taken into account.

Appliance from the air depends on different weather conditions (air flow), but it is important, if possible, adapt to weather conditions and mosquitoes activity (avoiding temperatures above 28 °C, and strong insolation).