

100 % NATURAL

BIOCOMPLEX PRODUCTS FORTIFY SOIL AND PLANTS AND INCREASES YIELD









EKO GEA d.o.o.

Rimska c. 98A, 3311 Šempeter v Savinjski dolini

Email: info@ekogea.com

Tel.: 03 49 10 760

Web: www.bcx.si



- What is Biocomplex 900?
- Application and results
- Content and properties
- How it works Biocomplex 900
- Instructions for use
- Regular application





What is a BIOCOMPLEX 900 additive?

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BIOCOMPLEX PRODUCTS FORTIFY SOIL AND PLANTS, AND INCREASES YIELD

BCx 900 is a bio-activator which improves soil microbiology and fertility, suitable for both conventional or organic plant cultivation. It promotes root growth, increases nutrient and water absorption and strengthens general plant health, allowing plants to achieve optimum growth.





- Increases the root system and disease resistance in plants.
- Increases crop yield and improves its quality.
- Protects plants and microorganisms.
- Restores biological balance in soil, which has been destroyed by spraying and environmental impact (pollution, acid rain, etc.).





Several years of experience and scientific research have shown that:

- the plants treated with BCx 900 develop at least 50% more hair roots;
- $\boldsymbol{\cdot}$ the plants treated achieve on average a $20\,\%$ higher yield with less fertilizer application;
- the plants treated are more resilient to drought, heavy rains, and pests;
- BCx 900 reduces the need for pesticide spraying in intensive and integrated farming.

Biocomplex 900 has long-term effects on soil by promoting consistent biological activity thus balancing soils in a natural way. This prevents soil fatigue, erosion, and concentration of toxic compounds caused by over-fertilisation, acid rain ...





Biocomplex 900 and products from the Eko Gea line are made from the brown marine algae (Ascophyllum nodosum) and should not be compared with other products of seaweed or kelp origin. Our intellectual property makes Biocomplex unique: Although all Ascophyllum nodosum is recognised for its biostimulant properties, no other manufacturer has been able to extract oligosaccharides and polyuronic acid content from within Ascophyllum nodosum cells and cell walls. Other competitive products are simply seaweed meals or seaweed extracts in which the fragile target molecules either remain within the stubborn cell walls or are largely destroyed in the extraction process.

While it is common knowledge that plants need nutrients, discoveries now reveal that successful harvests depend on microbes. Plants are metabolically incompetent. Microbes perform the countless interactions which plants require for nutrient delivery, water absorption, and transforming compounds from the soil to make them bio-available. By feeding and protecting microbes, EKO GEA's Biocomplex directly impacts crop performance, increasing yield and overall plant health.

Ion exchange.

Biocomplex is rich in polyuronic acid which provides powerful biological ion exchange capacity. This chelation mechanism buffers metals, unlocks bound nutrients in soils, and provides plants with the ability to assimilate the compounds they require. Ion exchange also serves to protect microbial populations from inhibiting substances in the soil - further promoting plant and soil health.

Feeding plant and soil microbes.

Biocomplex contains abundant oligosaccharides - a unique microbial food - available in nature in very small quantities. Oligosaccharides promote microbial proliferation and diversity, assuring robust metabolism and directly benefiting the crop microbiome. Along with oligosaccharides, Biocomplex contains a full range of trace elements and micronutrients, another source of microbial (and plant) nutrition.

Brown marine algae have a very rich composition:

over 70 microelements, vitamins, amino acids, and alginic acids.

BCx 900 does NOT contain effective micro-organisms, therefore BCx 900 is in fact food for useful microorganisms. Due to its rich composition and unblocked cells, it is immediately available to microorganisms. The level of useful microorganisms is consequently increased in soil and in the plant.

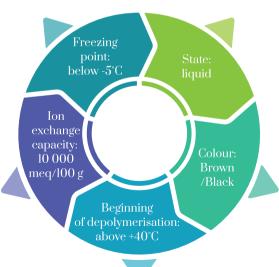




Carbon (C)	19,3 %	Zink (Zn)	5,00 mg/kg
Nitrogen (N)	3.400 mg/kg	Copper(Cu)	2,60 mg/kg
Phosphours (P205)	800 mg/kg	Nickel (Ni)	9,40 mg/kg
Potassium (K20)	18.700 mg/kg	Bor(B)	29,00 mg/kg
Calcium (Ca)	3.473 mg/kg	Selenium (Se)	0,07 mg/kg
Magnesium (Mg)	1.310 mg/kg	Iron (Fe)	403,00 mg/kg
Sulphur (S)	6.175 mg/kg	Mercury (Hg)	< 0,10 mg/kg

Analysis of the dry matter in mg/kg (performance of BIOCOMPLEX does not depend elemental content)

- \cdot When storing, be careful that the temperature does not exceed 40 $^{\circ}$ C.
- $\boldsymbol{\cdot}$ No anti-freeze required.
- \cdot The storage time of unopened bio-activator in originally sealed contains is at least 2 years.
- The additive is completely harmless to humans, animals and plants at the recommended dosage.





Features

EKO GEA additives are significantly distinguished from similar additives because they contain "unlocked" oligosaccharide cells of brown marine algae. Plants better absorb and activate unlocked cells in the photosynthesis process. In soil, they function as pre-biotics, which trigger vital microbiological digestion processes.

Our unique intellectual property biologically unlocks the algae Ascophyllum nodosum cells, has been developed by EKO GEA over 18 years and the process fully optimised Biocomplex 900 - bio-activator provides novel performance in the market.

Comparing the bio-activator BCx 900 with other algae-based additives or fertilizers would be like comparing the apple to the pomegranate, or the pomegranate to the tomato.





Certificates



EKO GEA's full product line is certified under the European Community EEC 2381/94, EG 8342007, and EG8992008 which governs organic production, labelling and control of animal and human feedstuffs. All EKO GEA's products can be sold and applied in agriculture

eco-systems in all member states of the European Community without special permission.

BIOCOMPLEX 900 is registered with the Institute for Ecological Agriculture Maribor for use in organic farming.









Spraying with the additive provides ion exchange and benefits the chemical composition of the soil, balancing the soil biologically. Grey humic acids, which are the carriers of soil fertility in the top soil layers, establish a clay-humus complex with the fine inorganic particles. Humic acid fertility carriers are severely reduced without microbial activity, and soils become more susceptible to harmful external influences (e.g. pesticides, fertilisers, acid rain, ...).

Even the experts have been astonished that the yield has increased by at least a tenth after using the BCx 900, and on average by as much as 20%. The yield has been higher in quality only after a single or multiple application of the BCx 900 bio-activator, while reducing the fertilizer requirements.

Growing quality crops at the highest possible yield is our goal. Add the latest biological soil technology to your plant cultivation toolkit, and experience the effective performance of BCx 900.



Instruction for use Biocomplex 900

Shake well before use!

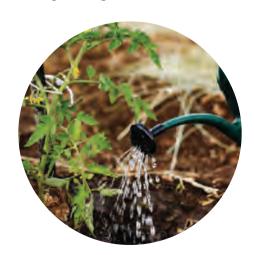
Dilute BCx 900 in fresh water in a 1:200 dilution.

BCx becomes active upon dilution with water, so use the BCx 900 within 2 days after dilution!

 $BCx\ 900$ has a strong marine odour. When diluted with water, the odour wears away in a few moments.

Many users of the BCx 900 bio-activator in Slovenia and around the world have documented the results of BCx 900 applied to crops and soils. References are available upon request.





1. SPRAYING CYCLE

Please observe the indicated spraying cycle. The greater the delay in the application, the smaller the yield will be and the improvement in quality. If one application must be omitted due to adverse weather conditions, it should not be repeated after the stage 40 (after the beginning of the bud formation)!

2. GROUNDING



BCx 900 is a poly-electrolyte, which can be partially deactivated by static electricity. Therefore tractors, self-propelled spray machines, and back-pack atomizers must be grounded with a chain that is in constant contact with the earth during filling, mixing, transportation and spraying operations. The chain should be attached to the trailer coupling at the rear of the tractor or to the rear axle of a self-propelled spray machine. If an extra water tanker is towed, this rig should be also grounded. This simple measure guarantees that the electrical charge is safely grounded before BCx 900 can be deactivated and that the filter sieves on the spray units do not choke due to precipitation. This also protects the plants from receiving electrical shock.

3. SPRAY MIXTURE

- a) fill up the tank up to 1/3 with water;
- b) add BIOCOMPLEX 900 diluted in water (in a ratio of l: 200) in the quantities prescribed for each plant;
- c) if necessary add 0,5 I/ha AHL (nitrogen fertilizer);
- d) finally, mix in all other sprays.

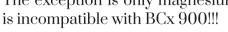
4. MIXING WITH OTHER PLANT PROTECTION PRODUCTS

First dilute BCx 900 in water. Always add sprays after adding BCx 900 to water, never

the other way around!

BCx 900 can be mixed with pure AHL and SSA. After that it can be mixed with all other fungicides, insecticides and herbicides.

The exception is only magnesium which





For further questions regarding the mixing, please contact EKOGEA our consultant (info@ekogea.com).



BIOCOMPLEX PRODUCTS FORTIFY SOIL AND PLANTS!

Shake well before use!

The ratio between the additive and the water must always be at least l: 200!

Strictly follow the instructions for use!

The first spraying is carried out at the 2-leaf stage, after the first genuine leaves appear and not after the cotyledons!

If one application is omitted due to adverse weather conditions, do not apply BCx after stage 40! (BCx promotes root growth)
Spray foliage - on plants and on soil!





SUGAR BEET, FODDER BEET, TURNIP RAPE:

- 1. 2 l/ha in stage 4 (2 green leaves)
- 2. 2 l/ha approx. l4 days later



WINTER RAPE:

- l. l,5 l/ha up to a six-leaf stage
- 2. l,5 l/ha approx. l4 days later
- 3. 2 l/ha mixed with AHL solution (ammonium nitrate + urea) or 5-7 days after Use with granular fertiliser as a growth nutrient



ASPARAGUS:

- l. 2 l/ha at the green plant height of l0 cm
- 2. 2 l/ha l4 days later





GERMAN CLOVER:

- 1. 2 l/ha during a two-leaf stage
- 2.21/ha8 days later and after each mowing 21/ha



PASTURES, PLAYGROUNDS, LAWNS:

2 l/ha at the beginning of vegetation



FLAX, SUNFLOWER:

- l. 2 l/ha at the plant height of $5\ \mathrm{cm}$
- 2. 2 l/ha l4 days later



SAPLINGS:

- l. during a two leaf stage
- 2. when transplanting plants, soak roots for 30 minutes in a solution, plant and water with
- the mixture (reduces stress at transplantation)
- 3. l4 days after transplantation
- 4. l4 days after last spraying

VEGETABLES, SPICES AND HERBS:

- l. during two-leaf stage
- 2. 14 days after the first spraying
- 3. 14 days after the second spraying





ANNUAL, BIENNIAL AND PERENNIAL FLOWERS:

- l. during two- leaf stage, at transplanting
- 2. l4 days after the first spraying
- 3. over a longer period throughout the year







BERRIES (STRAWBERRIES, RASPBERRIES, BLACKBERRIES, CRANBERRIES, BLUEBERRIES, ARONIA, AND SIMILAR):

- l. at the beginning of the vegetation before sprouting (21 of Biocomplex 900 diluted in 4001 of water/ha)
- 2. l4 days after the first spraying (2 l of Biocomplex 900 diluted in 400 l of water/ha)
- 3. 4 weeks after the second spraying ((2 l of Biocomplex 900 diluted in $400 \, \mathrm{l}$ of water/ha)



RECOMMENDED:

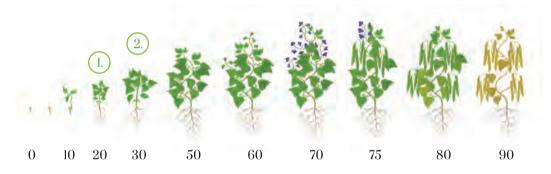
a) in stressful conditions (drought and very high temperatures, too much rainfall) – 11 of Biocomplex 900 diluted in 1000 I of water/ha b) two days before harvesting we recommend spraying Biocomplex 900 diluted in water in the form of mist on the fruits in a ratio of 1: 400. Spraying can result in increased amount of sugar, preservation after harvesting and quality of the fruit.





PULSES - BEANS, BROAD BEANS, SOY, CHICKPEAS, LENTILS

- l. spraying during the development of first leaves (4 l/ha)
- 2. spraying at the beginning of bud formation (4 l/ha)



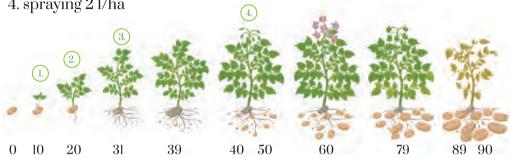


STAGES:

- 0 germination
- 10 proliferation
- 20 development of leaves and stems
 - 30 growth in height
 - 40 budding
 - 60 beginning of flowering
 - 70 end of flowering
- 75 development of fruits
- 80 maturity
- 90 drying

TUBERS - POTATOES, TOPINAMBUR, RADISHES, TURNIP, SWEET POTATOES, GINGER

- l. spraying 2 l/ha 2. spraying 2 l/ha 3. spraying 2 l/ha 4. spraying 2 l/ha



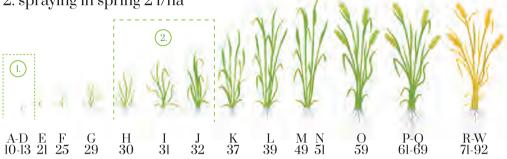




- 0 germination
- 10 proliferation
 - 20 formation of leaves and stems
 - 31 beginning of growth in height
- 39 end of growth in height
- 40 beginning of budding
- 50 end of budding
- 60 flowering
- 79 first blossoms fall off
- 89 tuber drying
- 90 tuber maturity

CEREALS - WHEAT, BARLEY, OATS, MILLET, BUCKWHEAT

l. spraying in autumn 2 l/ha 2. spraying in spring 2 l/ha



STAGES:

 $\mbox{A-D}\mbox{ } 10\mbox{-}13\mbox{ root}$ development up to three-leaf stage

E 21 beginning of plant development

F 25 overall plant development

G 29 end of plant development

H 30 beginning of spring

I 31 first phase of formation of nods

J 32 second phase of formation of nods

K 37 formation of back leaf buds

K 37 formation of back leaf buds

 $L\,39\,formation\,of\,ligule$

 $M\,49$ opening of back leaf buds

N 5l beginning of ear formation

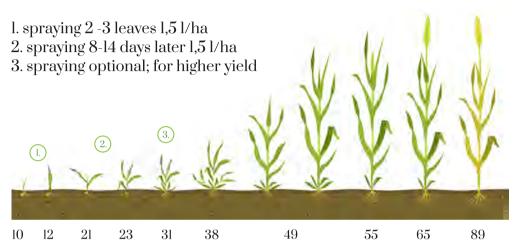
O 59 end of ear formation

P - Q 61-69 flowering

R-W 71-92 formation of cereal



ENERGY GRASSES - ALL CORN TYPES, SORGHUM, ALFALFA, SUDANESSE GRASS ...





STAGES:

- 10 formation of first leaves
- l2 seedling growth
- 21 beginning of proliferation
- 23 end of proliferation
- 31 beginning of stem development
- 38 visible stem "flag"
- 49 bud formation
- 55 flowering
- $65\,\mathrm{ear}$ formation
- 89 ear ripeness

TREES, FRUIT TREES, SHRUBS:

Biocomplex 900 can be added at intervals throughout the year, which will reflect in the optimal growth of plants.

RECOMMENDATION:

It is recommended to spray leaves in a ratio of l: 1000 after a heavy rainfall and after a long dry period.





APPLES, PEARS:

- l. spraying at the beginning of budding
- 2. spraying when the first leaves emerge
- 3. spraying l4 days after the second spraying
- 4. spraying three weeks before harvest



Application:

100 ml of Biocomplex 900 diluted in 101 of water per mature tree.

CHERRIES. SOUR CHERRIES AND PLUMS:

- l. spraying lweek before flowering
- 2. spraying I week after flowering
- 3. spraying 6 weeks before harvest;
- 4. spraying 3 weeks before harvest.

Application:

100 ml of Biocomplex 900 diluted in 10 l of water.

For small trees, approx. 2,5 l of mixture; for big trees, approx. 5 – 6 l of mixture.

OLIVE TREES:

- l. spraying at the beginning of vegetation;
- 2. spraying l4 days after the first spraying;
- 3. spraying 14 days after the second spraying;
- 4. and 5. spraying 3 months after the third spraying at a l4 day interval.

Application:

 $2\,l$ of Biocomplex 900 diluted in 500 l of water for approx. 200 olive trees or 0,04 l of Biocomplex 900 diluted in l0 l of water for 4 olive trees.







Farmers who regularly used BCx 900 note significant soil fertility improvements, year-on-year.

BCx improves soil fertility, water retention capacity, germination of seeds, and resistance to erosion caused by the wind or water.

BCx prevents plant diseases associated with harmful microbes, pathogens, mould and nematodes.

Three years of BCx 900 application prevents wind and water erosion. With the $20\,\mathrm{years}$ of experience gained worldwide, we have optimised the use of Biocomplex 900 to reduces the need for any other plant protection agents.













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