OPENGREEN

Experimental technical tests

Wheat, tomato, kiwi, beet, leafy vegetables, olive, soy and corn

Experimental technical tests

Opengreen, established in 1994, focuses on plant nutrition with a full range of fertilizers and bio-inductors for special nutrition; Open Green has always focused on the research and development of a wide range of products that could solve various nutritional physiopathies affecting the production and quality of the crops where they are applied. The agronomic industries addressed, are represented by extensive cereal crops, and the most advanced fruit and vegetable cultivation in greenhouses above ground.

The products used in these tests derive from the selection of the best raw materials and most advanced production systems, which can guarantee the best quality, offering **micro element chelates, bio inductors, water-soluble and powder leaf fertilizers, liquid or WDG, amino acids and peculiarities**. The quality of Open Green formulas is such as not to cause toxicity or phytotoxicity to pplants and many of these are even classified for nourishment.

Open Green introduces applications in this brochure in the field of some of the products in the **Open Green specialty fertilizers catalogue**.

Test on wheat

Various tests on wheat were performed in many farms in northern and central Italy over the last four years. The products used are **Ramendo**, **Jet 46 and Luxury.**

- **PROVA 1, 2014**

Location: Vicenza, Veneto.

Experiments on common wheat using **Ramendo.**

Ramendo and post-emergency weeding at **3 Kg/ha was used in** this company.

Objective: check the effectiveness of **Ramendo** as a foliar fertiliser but also assess the effects compared to fungicides normally used to protect the foot.

Ramendo is recommended combined with post-emergency weeding in tillering, and stem elongation at 3 Kg/ha.

Thanks to Ramendo the most intense colour was noted from the outset compared to the test to which the traditional defence was applied. The special formula in fact allows iron and copper, to penetrate in the foliar parenchyma conferring a much brighter colour to the plant.

The thickness induced by the endoterapic transmission of copper and iron also highlights more elasticity and strenght of the stem, implying a greater resistance to beating down.
Better tillering was noticed and thanks to endotherapy, a greater resistance to fungal diseases was identified such as foot disease and Septoria that proliferated in 2014 due to the mild winter and to the frequent rains and water stagnation.
Ramendo guaranteed the plant's health and significantly improved production.

ACTIVITY	RAMENDO	TEST	DIFF.
Leaf color	8,1	6,1	+2,0
Thickening/elasticity of the leaves	8,4	6,5	+1,9
Resistance to stress	8,7	6,0	+2,7
Photosynthetic activity	8,1	7,0	+1,1
Seed production	8,6	7,0	+1,6
Endoterapica activity	8,3	4,1	+4,2
Phytotoxicity	9,0	9,0	=
Resistance to allettamento	8,6	6,2	+2,4

- **TEST 2, 2013**

LOCATION: Ferrara, Emilia Romagna.

Experiment on common wheat with **Jet 46.**

This company used **Jet 46** at **5 Kg/ha** in the leaf flag phase with fungicidial treatment.

Objective: check improvement in terms of production, specific weight and seed proteins.

Jet 46 is a product based on nitrogen sulphur that should be distributed in the flag leaf phase at 4-6 Kg/ha with standard defence treatments.

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Thanks to its formula, it has been proven that Jet 46 considerably improves production and significantly increases the specific weight of seed proteins. Sulphur is in fact added in several amino acids essential to ensure a higher quantity of the final product

- **TEST 3, 2015**

LOCATION: Teramo, Abruzzo.

Experiment on biological durum wheat with **Ramendo at 3 Kg/ha** in the growth phase and **Luxury at 2.5 Kg/ha** in the earing phase.

Luxury is a foliar fertiliser based on copper 17% and sulphur 27%. Its use on wheat is recommended in the swelling phase at 2.5 Kg/ha. Copper guarantees defence against the main spike diseases while sulphur increases seed quality.

Objective: check **Ramendo's** defence properties against foot disease, septoria and fusarium and check **Luxury's** effectiveness in terms of the spike's defence and improvement of specific weight and seed protein.

Ramendo has been spotted to be powerful in plant greenery and very efficient in prevention against fungal foot diseases.

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During the earing phase, Luxury at 2.5 Kg/ha was used for its special composition based on copper and Sulphur and is highly effective against spiking diseases and a significant increase of proteins and specific seed weight.

Tests on tomato

- **TEST 4, 2014**

LOCATION: Cremona, Lombardia.
Experiments on industrial tomato with **Newstart 6.12**.
Objective: to improve and accelerate the development of the plant after transplant and anticipate production.

This company used Newstart 6.12 at 50 Kg/ha for at least 50 lt of water. The product is located directly in the groove through a small pump that distributes 100 lt per hectare through the nozzles located in front of each transplanting machine stub runner.

Newstart 6.12 is Open Green's monopoly, studied and created exclusively for this crop. Newstart 6.12 is a fast and effective fertilizer thanks to its valuable organic components; thanks to its titration procedure, it is ideal for the first stages of the cultivation cycle and is recommended during transplant at 50 Kg/ha of the product and at least 50 litres of water.

Results and considerations:
The most vigorous development of plants treated with **Newstart 6.12** is evident; untreated rows were left where the difference of vegetative development was noticeable. Subsequently, early flowering by about one week compared to the untreated rows and a bigger and much more homogeneous quantity of fruits was noted.
The differences mantioned above were certainly identified more evidently in transplants from April until mid-May.

Newstart 6.12 was successfully introduced especially in companies with cold and silt soils where the delay in harvest was approximately one week compared to other companies. The success of the product is definitely due to the possibility that was given to these farms to anticipate harvest and have a product with a more homogeneous and uniform sizing and ageing with an increase in production.

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- **TEST 5, 2014**

LOCATION: Ferrara, Emilia Romagna

Experiments on industrial tomato with Ramendo, Incas and Vegetik.

Objective: check the effectiveness of the products in controlling downy mildew.

The vintage was very favourable for the growth and proliferation of the fungus; in fact, the mild winter, spring and very rainy summer, were ideal prerequisites so much so that the 2014 vintage was considered one of the worst vintages for downy mildew defence,

Ramendo, Incas and Vegetik are recommended at: Ramendo 3-6 Kg/ha, Incas 3-6 Kg/ha, Vegetik 2-3 Kg/ha. It is recommended to perform treatments every of 7/10 days. If used with pesticides, it is preferable to use the products at a minimum dose.

ACTIVITY	RAMENDO	TEST	DIFF.
Leaf color	7,9	6,2	+ 1,7
Thickening/elasticity of the leaves	8,0	6,5	+ 1,5
Resistance to stress	8,8	5,4	+ 3,4
Photosynthetic activity	8,0	6,9	+ 1,2
Tomatoes production	8,7	7,0	+ 1,7
Endoterapica activity	8,8	4,2	+ 4,6
Phytotoxicity	9,0	9,0	=

The products were used with the following method: **Ramendo 4 Kg/ha, Incas 4 Kg/ha, Vegetik 3 Kg/ha**.

The treatments started from the transplant and continued every 7/10 days until veraison started; if necessary, when it rains heavily, some treatments with standard antiperonosporic products have been integrated.

If treated every 7/8 days, **Ramendo, Incas and Vegetik** reduce pesticide doses.

Results and considerations: using these products highlighted the general healthy condition of the plant; in some cases, it was possible to note the most intense colour of the plants treated with **Open Green** products, further strengthening the leaf, thanks to **Ramendo's** endotherapy and a greater resistance to fungal attacks.

Ramendo and Incas are ideal for organic farming.

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- **TEST 6, 2014**

LOCATION: Ferrara, Emilia Romagna.

The test was made on industrial tomato in the field with **Saker and Banka**.

The test was set up in a farm where there are diseases every year due to the lack of Calcium and Magnesium.

Objective: check the effectiveness of **Banka** in the prevention and treatment of disease due to lack of Calcium and Magnesium and the effectiveness of **Saker** for more Brix.

The disease from calcium deficiency is usually caused by an incorrect use of nutritional or environmental causes, excessive rainfall and/or physiological effects. A typical characteristic of this disease is chlorosos or yellowing leaves that limit plant growth and as a result final productivity. In ripening-stage tomatoes, the lack of this ingredient determines the appearance of apical rot.

USEFULNESS: cell division and cell elongation; correct operation of the cell membrane; permeability of the cell membrane.

DEFICIENCY SYMPTOMS: apical fruit necrosis; loss of crispness, juicy fruits, cellular senescence and degradation, low conservation potential, tip burn and small fruits.

DEFICIENCY CAUSES: acidic soils, sandy or light soils, peaty soil and acids, soils rich in Sodium, soil rich in Aluminum, drought.

- CALCIUM (Ca) -

Calcium is indispensable for plants, in fact
it binds with pectic acid forming CALCIUM PECTATE:
the cement necessary to build the cell wall of plant tissues,
of the pulp, the peel and leaves.
A limited quantity of Calcium makes vegetable tissues
soft and not very suitable
for handling and tomato storage.

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Leaf yellowing also determines magnesium deficiency. Magnesium is the ideal component of chlorophyll molecules. Being abundant in soils, Magnesium is not often not inserted in the fertilizing plans causing a slow depletion of ingredients in the soil and the continuous addition of potassium, which is incompatible with Magnesium, worsens the situation.

- MAGNESIUM (Mg) -

USEFULNESS: chlorophyll molecules; phosphorus metabolism, nitrogen metabolism, protein synthesis, transportation of water in plants.

DEFICIENCY SYMPTOMS: yellowing leaves, from the leaf edge spreading all over; the fruits have a mild colour and are excessively soft; early ripening of fruits.

DEFICIENCY CAUSES: sandy soils, acid soils, soils with a high content of potassium, cold and wet periods.

Banka solves the problem of these diseases; the doses are at 2-4 Kg/ha for foliar treatment starting from the flowering phase with 3-4 treatments every 10-12 days, also usable in fertilizing irrigation.

Saker is an inducer of vegetative growth, recommended in fertilizing irrigation at 1-2 Kg/ha from fruit setting for 2/3 treatments. It stimulates the flowering of flowers and thanks to the glucides, the level of Brix increases up to 12%.

The test started with flowering when the first symptoms of chlorosis started; **Banka** was applied with leaf treatment at **3 Kg/ha**. 3 treatments were performed in a row after ten days. **Saker** was used with **Banka at 1.5 Kg/ha**.

The use of these products on industrial tomato immediately eradicated the Calcium and Magnesium deficiency; in fact, after 3 treatments the leaves were intensely green. There have been no apical rots and the fruit was hard and resistant to machining. The ripening process was uniform and colour intense.

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- **TEST 7, 2015**

LOCATION: Piacenza, Emilia Romagna.

Experiments on industrial tomato with **Ramendo, Incas, Vegetik, Regortek and Biosprint.**

Objective: check the effectiveness of **Ramendo, Incas and Vegetik** in the prevention of fungal diseases; confirm the effectiveness of **Regortek** as promoter of the plant's vegetative growth in terms of increased production and limiting common tomato diseases, promoting their use to stimulate endogenous defences of the plant by preserving a reduction of up to 50% of the chemical active principles used in defence. The test was set on a late production of the tomato industry (late April transplantation).

During post-transplantation, **Incas was used at 3 Kg/ha + Vegetik 2.5 Kg/ha** for two treatments, then **Regortek was integrated at 2.5 Kg/ha** with systemic products normally used reduced by 50%. The use of **Regortek** was planned in specific steps: a treatment at **2,5 Kg/ha** in FULL BLOOM, a treatment at 2,5 Kg/ha during FRUIT SETTING, a treatment at 2,5 Kg/ha during PODS GROWTH and one when VERAISON starts.

Ramendo 3 Kg/ha was used for the final coverage. **Biosprint** was added to **Regortek** for 3 treatments in the most delicate phases of development.

We recommended the use of Regortek on tomato at 2,5 Kg/ha for 3/5 treatments for its dual function:

. it stimulates the plant's immune system that reacts better to fungal diseases;

. it activates the plant's metabolisms considering more flowering and fruit setting, with an increase of registered production by 30%.

Considerations: the test was set up to compare the conventional defence provided by the regulations normally followed by the company. For this reason, it was possible to highlight the numerous positive aspects due to the use of our products; first, the considerable increase in production which was around 20% higher. Another positive aspect was the extreme resistance of the plant, in fact the plant remained green and continued to vegetate until harvesting. The use of Open Green products has allowed a 30% reduction in chemical defence. There was also a lower presence of apicall rot due to Regortek's effect which optimized the absorption and storage of calcium in cells.

The use of Biosprint in strategic phases such as flowering, setting and veraison, has increased sugar content in fruits.

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- **TEST 8, 2015**

LOCATION: Venezia, Veneto.

Experiments on industrial tomato with Ramendo and Regortek.

Objective: reduce the use of fungicides coverage and increase production.

The test was set on a 15 April transplant. **Ramendo** was used at **3 Kg/ha** for the first treatments.

Regortek was introduced at **2.5 Kg/ha** in the following 5 treatments based on systemic fungicides.

Ramendo at 3 Kg/ha was used subsequently for the final defence.

Considerations: following the first treatments with **Ramendo**, it was possible to see the lack of colour difference compared to the conventionally treated part; the same colour difference was also found in the final phase. Ramendo's effectiveness has been confirmed to favour the greening of leaves; in fact, the plants have remained green until harvesting.

Thanks to **Regortek**, less falls and greater resistance to high temperatures were noted in the months of July and August.

Production data also confirmed the effectiveness of **Regortek**. 15% more was recorded compared to the conventionally treated part.

- **TEST 9, 2015**

LOCATION: Catania, Sicilia.

Test on tomato Sir'Sargrano variety (ovetto verde - San marzano).

Objective: check the effectiveness of **Regortek, Luxury, Vegetik, Eltamin, Biosprint and Seaweed** against the main fungal diseases of the area and check their effectiveness in terms of nutrition, reduction of diseases, resistance to stress and increase in production.

Treatment with **Regortek + Luxury (gr 150 - gr 200)** x 100 liters of water at intervals of 10 days, starting from 30 days post-transplant.

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Greater resistance to fungal diseases, such as downy mildew and powdery mildew and an interesting positive side effect has been highlighted: increased resistance to virosis.
Excellent results also with **Biosprint + Seaweed (300 gr + 100 gr)** x 100 lt at regular intervals every 10-12 days. Longer bunches and larger roots have been highlighted.
At the end, **Eltamin** was applied in the first phase and then **Vegetik** in a label dose.
We recommend the use of Biosprint at 3 Kg/ha in the most delicate phases of the vegetative plant growth; its composition based on amino acids, in fact, promotes uniform flowering and setting and increases the plant's response in case of pedoclimatic stress.

Consideration: the use of the Open Green line has significantly reduced chemical products used in conventional defence; in fact, at the end of the campaign a reduction by 30% of the pesticides used was recorded compared to the conventionally treated field.
Furthermore, apical rot was noted, greater resistance to high temperatures and higher yields in terms of weight and number of berries.

The same test was also set on the Pixel tomato (cluster red); the treatments were done on a weekly basis and **Biosprint and Seaweed** were used at the roots. The results highlighted were the same.

- **TEST 10, 2015**

LOCATION: Brindisi, Puglia
Test on bunch tomato, Colt variety.
Objective: to test Regortek's effectiveness to improve flowering and setting and to increase production.
Regortek was used 3 times: the first one at 2 Kg/ha for the second bunch; the second after 15 days, when the 4th/5th bunch is well-formed; the third 25 days after harvest at 2.5 Kg/ha. A much more uniform flowering and fruit setting was noted with greater resistance to climatic stress; the ripening phase was more uniform and the increase in production was around 20% higher.

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Tests on actinidia

- **TEST 11, 2015**

LOCATION: Rovigo, Veneto

Test on actinidia with **Ramendo, Incas, Vegetik and Regortek.**

Objective: test on plants that show PSA symptoms. A protocol has been set up to check the effectiveness of the products in limiting the development of the disease.

The defence started by budding with **Incas 3 Kg, Vegetik 2 Kg, Regortek 2.5 Kg** at regular intervals every 10 days until flowering. From flowering onwards **Ramendo** was used at **3 Kg**, **Vegetik 2 Kg, Regortek 2,5 Kg** every 10 days.

Considerations: the season was not significant for PSA attack, in fact the high temperatures of July and August limited the attacks.

However, some positive data were highlighted following the implementation of the Open Green protocol:

- the plants were more luxuriant and produced more fruit during the season. The impression was confirmed by the production data showing an increase in production of 10% compared to the untreated plot.

Relating to size, a fruit increase of 105-125 grams was noted compared to the smallest size.

The PSA defence test will continue during the winter season.

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Tests on beet

- **TEST 12, 2014**

LOCATION: Rovigo, Veneto.

Although this crop is clearly decreasing in Italy, sugar beetroot is a suitable crop for the use of some Open Green products. In 2014, some tests were carried out in collaboration with CO.PRO.B. of Bologna and some farms in the Veneto region.

Objective: to reduce the contribution of phytosanitary products to defend against cercospora since it is proven that the contribution of fungicides over time can lead to the insurgence of resistant stumps.

ACTIVITY	RAMENDO	TEST	DIFF.
Leaf color	8,9	6,3	+ 2,6
Thickening/elasticity of the leaves	8,0	6,5	+ 1,5
Resistance to stress	8,6	5,8	+ 2,8
Photosynthetic activity	8,1	6,9	+ 1,2
Root activity	8,5	7,0	+ 1,5
Endoterapica activity	8,7	4,0	+ 4,3
Phytotoxicity	9,0	9,0	=

Open Green offers a low environmental impact solution that reduces the contribution of systemic fungicides while still guaranteeing the necessary coverage. The products used in this experiment are: Ramendo 3 Kg/ha, Incas 2,5 Kg/ha, Vegetik 2,5 Kg/ha. An anticercosporic product has also been used with half the dose compared to the label.

The use of Ramendo 2-4 Kg/ha, Incas 2-4 Kg/ha, Vegetik 2-3 Kg/ha from early June to mid/late July, every 15-20 days is recommended.

The first treatment in this farm was done in the second week of June, followed by two other treatments at a distance of 20 days from each other.

Results and considerations:

The 2014 season was particularly rainy and thus cercospora proliferated over the whole of the Po Valley and at the same time, has made it difficult to maintain the anticercosporic defence because it was physically impossible to enter the camp.

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Since the first treatment in this test, it was possible to note the better health of the plant compared to the test only treated with conventional anti cercospora products. The plants were considerably bigger with much greener and lush leaves. Even the defence worked very well, in fact, no notable infections have developed. Evidence has shown that defence is possible even by significantly reducing the use of pesticides.

TESI	DOSI IMPIEGO	EPOCA IMPIEGO			RILIEVI CERCO		t/ha	Pol	Sacc t/ha	PLV euro/ha
		A	B	C	10/08	1/09				
1 Ramendo + Vegetik	3 Kg+2,5 Kg	X	X	X	4	90	90,44	15,48	13,94	3303
2 Incas + Vegetik	3 Kg+2,5 Kg	X	X	X	5	98	96,11	15,78	15,16	3551
3 Incas + Ramendo + Vegetik	2,5 Kg+3 Kg + 2,5 Kg	X	X	X	5	98	104,44	15,32	16,01	3681
Rif. Tratt. anticercosporici		X	X	X	7	100	95,33	15,19	14,49	3372

TREATMENTS: A=13/06 B= 27/06 C= 15/07 ESTIRPO: 15/09/2014

Saker: anti cercospora treatments at a dose of 3-4 Kg/ha with Saker is useful to stimulate vegetative development and improve the stress response and above all increase the Brix level.

Tests on leafy vegetables

The experiments on vegetables, were mainly done in 4th range greenhouses where the problem of waste is a limit every day in the defence process.

- **TEST 13, 2013**

LOCATION: Venezia, Veneto.

The test was done on crispu salad in 4° range greenhouses.

VEGETIK: potassium phosphite is one of the most commonly used defence products.

Vegetik should be used at a dose of 150-300 g/1000 m2 on all leafy vegetables every 7-10 days.

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Objective: check the effectiveness of Vegetik in monitoring Bremia.

Vegetik has porven to be more resistent than Bremia. **Vegetik** has been compared to other potassium phosphites, to evaluate and confirm the superior quality of Vegetik; in fact, it has never been toxic even at high doses (over 400 g/ 1000 m2). **However, many times even the phosphite of potassium is limited inuse due to its residual value**. For this reason, highly innovative substitute products have been introduced.

- **TEST 14, 2014**

LOCATION: Rovigo, Veneto.

Test performed on salad in a 4° range greenhouse.

Another significant setback often occurs in the production in the 4° range: copper cannot be used as a defence for fungal diseases because this metal often stains the leaf, making the product unsuitable for sale.

Bioplus is an innovative **Open Green** product that compensates for the use of copper and residual roofs that limit the use of potassium phosphites. **Bioplus**, like potassium phosphite, stimulates the production of phytoalexins; it therefore does not act on the fungus but merely stimulates the endogenous defences of the plant. **Used on lettuce and crispy salad at a dose of 300-400 g/1000m2, it stimulates the plant defences in the fight against Bremia, without the leaves and being well below the imposed residual limit.**

Bioplus was used at a dose of 300g / 1000 m2 in this test; the results obtained were equal to potassium phosphate.

. Better results were seen by combining Bioplus with Sublim, a product based on Bacillus Amyloliquefaciens and Bacillus Subtylis.

. The product should be applied by foliar application at a distance of 7-10 days.

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- **TEST 15, 2014**

LOCATION: Padova, Veneto.

Bioblack has been used on Valeriana, Rucola and Spinacio in a 4° range greenhouse.

Bioblack is an innovative product that can be used in vegetables whose leaves are not stained with the use of copper. In fact, it replaces potassium phosphite and copper in leafy vegetables such as Rucola, Spinacio and Valeriana.

Bioblack is composed of 10% plant extracts, potassium oxide (K2O) 5% and copper, chelated with EDTA, 0.8%. It acts on the plant's immune system exerting an elliptical thrust: it stimulates the indigenous defences in the plant itself so that it can develop defences such as to counterack fungal diseases such as Bremia. Bioblack is composed of 0.8% copper combined with EDTA which favours coverage and improves defence.

This test reveals **Bioblack's effectiveness** on a par with potassium phosphite, but, unlike the common potassium phosphate, the residue is 10 times lower; furthermore, 1% of copper present, made the leaves of the crops thicker, shinier and the colour was more intense.

Bioblack should be used at 150/1000 m2.

The treatments must be repeated at fixed intervals every 7-10 days.

- **TEST 16, 2015**

LOCATION: Taranto, Puglia.

Test set on Anguria Minirossa with Regortek.

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Objective: check the activation properties of Regortek metabolisms.
The product has been used in fertigation for three treatments, the first at 2.5 Kg/ha when flowering starts, the second at 2.5 Kg/ha during fruit setting and the third in the swelling phase at 2.5 Kg/ha.

The results were very satisfying: there was a very high percentage of fruit setting and production soared up to 30-40%.

- **TEST 17, 2015**

LOCATION: Cagliari, Sardegna.
Test set on artichoke with **Regortek and Biosprint**.
Objective: replace the use of chemical hormones such as giberellic acid with Regortek and Biosprint to encourage the appearance of flower heads.

A test has been set up on re-flowering artichoke in this company. Before the appearance of the flower heads, a fertigation treatment was performed **with 2.5 Kg/ha of Regortek and 5 Kg/ha of Biosprint**.

The effect on the plant was immediate: more vigour, parasite attacks were reduced, and the flower head duly appeared. Thus, the replacement of chemical hormones is possible and the use of **Regortek and Biosprint** promotes an excellent yield and a superior quality of the final product. The second intervention after 15 days implied the use of Biosprint at **5 Kg/ha**.

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Tests on olive tree

- **TEST 18, 2015**

LOCATION: Brindisi, Puglia.

Test on olive tree with **Regortek**.

Objective: check **Regortek's eliciting** activity on the endogenous defence system and the plant's metabolism stimulus.

Regortek was used on olive tree with 3 applications: the first was made 15 days before flowering at 2.5 Kg/ha; the second in post fruit setting pepper berry, also at 2.5 Kg/ha and the third application in the first week of September at 3 Kg/ha.

The results on production show a production increase of 20-25%.

Besides **Regortek**, Ramendo was also used in the coverage against the cyclone, also known as the peacock eye, a cryptogamic disease that affects the green parts of the part.

After new grwth, upon identifying the disease, **Ramendo at 4.5 Kg/ha** was applied. The phytotoxicity of copper caused the defoliantion of the infected parts and the healthy parts were covered, considerably limiting fungus growth.

Besides the anticryptogamic effect, the plant was subject to the greening effect due to the presence of iron.

Tests on soy and corn

- **TEST 19, 2013**

LOCATION: Verona, Veneto.

Soy test with **Dragon, Etabor 15 and Verbel**.

Soybean is one of the main extensive crops in Italy.

It is a fairly rustic crop that does not need special care to ripen. However, **Open Green** has decided to teckle stress caused by climate or, more often, by herbocide treatments.

As we know, the weeding treatment causes a sort of plant physiological set back that can last even 10-15 days. **Open Green** offers a simple and inovative answer to this issue: **DRAGON**.

Dragon is a bioinducer; combined with post-emergency herbicides, at a dose of 2-4 Kg/ha, it transmits herbicides in infected plants, accelerating the effect and stopping factors that prevent plants from growing.

Dragon was used in this test at a dose of 3 Kg/ha with the herbicide.

Following use, it was shown that, compard to the test treated only with weeding, the plant's growth was not stopped; the difference was clear after 15 days when the plants treated with the herbicide only stopped growing.

By using **Dragon** there were no burns on the leaves and the plants remained green and lush.

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Dragon can be used at the same dosage also on Corn, Wheat and Beet, combined with the post-emergency herbicide.

During the flowering phase another experiment was performed to reduce baseline cluster flower abortion and to improve final production. The products used are **Etabor 15 and Verbel. Etabor 15** is Boro 15% monoethanolamine complex. It is a registered EC fertilizer allowed in organic farming. Thanks to its Sodium-free formulation, **Etabor 15** can also be used on the most sensitive crops.
Verbel is a bioinducer based on amino acids. Etabor 15 and Verbel were used together in this test on soybean, in the flowering phase.

As known, soy tends to abort the flowers of the first baseline clusters, whixh in why this treatment with Etabor 15 was applied at 2 Kg/ha with Verbel at 2 Kg/ha during the flowering phase, more precisely one week after flowering on the average cluster starts.

Results and considerations:

After use, plants treated were healthier due to the amino acids present in **Verbel**.
Etabor 15 stimulated the seeting of lfowers and as a result there was a greater number of pods per plant and a greater and early enlargement of the latter. This stimulated higher production compared to untreated plots.

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- **TEST 20, 2013**

LOCATION: Bologna, Emilia Romagna.

Experiment on corn with **Eltamin**.

Objective: check if the use of **Eltamin** increases yield.

The experiment compares two plots: Eltamin is added in one of the plots for the borer treatment. In fact, the agronomic practice is identical: i.e. the geodisinfectant used, fertilization, herbicide and irrigations.
The only variable in the treatment with **Eltamin at 5 Kg/ha** with the borer treatment.

Considerations: the analysis of the results shows an increase in production for the plot treated with **Eltamin by 7%** with a quantity per hectare of 17,400 T.

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Tests on leafy vegetables ...

Tests on olive tree ...

Tests on soy and corn ...

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Wheat, tomato, kiwi, beet, leafy vegetables, olive, soy and corn

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