



Megagreen[®]

An ecological alternative technique
for agriculture

Strong plants, fertility, improved resistance



Presentation

Foliar Fertilizer

Utilisation according to EC-prescription EC 834/2007 and 889/2008
as ecological fertilizer for all kinds of fieldfruits
viticulture, horticulture, market gardening, fruit gardening

Manufactured and distributed by:

megamin[®] GmbH

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www.megagreenpower.de e-mail: info@megamin-gmbh.de

SUMMARY

By the invention of a new internationally patented milling technology, *Megagreen* could be developed. *Megagreen* is an activated Calcite of a worldwide unique granularity.

Megagreen is an ecological foil fertiliser with a strong impact on plant resistance. Megagreen improves the fertility and health of plants resulting in an improvement of yield and plant quality.

Megagreen is a purely mineral, non-toxic and non-polluting agent. It consists of activated calcite micro particles ranging from 0.1 to 2 μm in size allowing them to permeate directly into the leaf. Due to the continuous process of disintegration of calcite, the atmosphere inside the leaf is enriched with carbon dioxide replicating the conditions of a CO₂ enriched greenhouse.

Studies made in several European countries have shown the high efficiency of Megagreen regarding the increase of dry matter and the reduction of water needs. Furthermore, an improved resistance against fungal diseases and certain varminths was observed. Due to the increased calcium level, better organoleptic qualities of fruits and vegetables as well as prolonged storage periods were noted.

Raw Material

- Calcite : Natural calcite of maritime origin
- Composition:
 - 82,3% CaCO₃
 - 41,7% CaO
 - 3,02% MgO
 - (Mn, Zn, Cu, Co, Fe, Mo)
- Value of neutralisation : 47

Granularity:

0,1 μm to 2 μm

Calcite mainly consists of calcium carbonate, magnesium and trace elements. The fertilisation of the soil by calcite or spraying leaves with calcium products is a common method in agriculture.

HIGHLY REACTIVE PARTICLES



In the tribomechanical activator, the mineral particles are colliding 3,000 times per second on average with triple sonic speed.

The particles burst due to the mineral-mineral collisions, leading to a worldwide unique granularity.

Every particle gets a fragmented and jagged surface, which causes its high reactive potential.

WHY IS MEGAGREEN A NEW CONCEPT?

The raw material is common, but the size and reactivity of the particles are innovative. *Megagreen* reveals the world's finest granularity in calcite products.

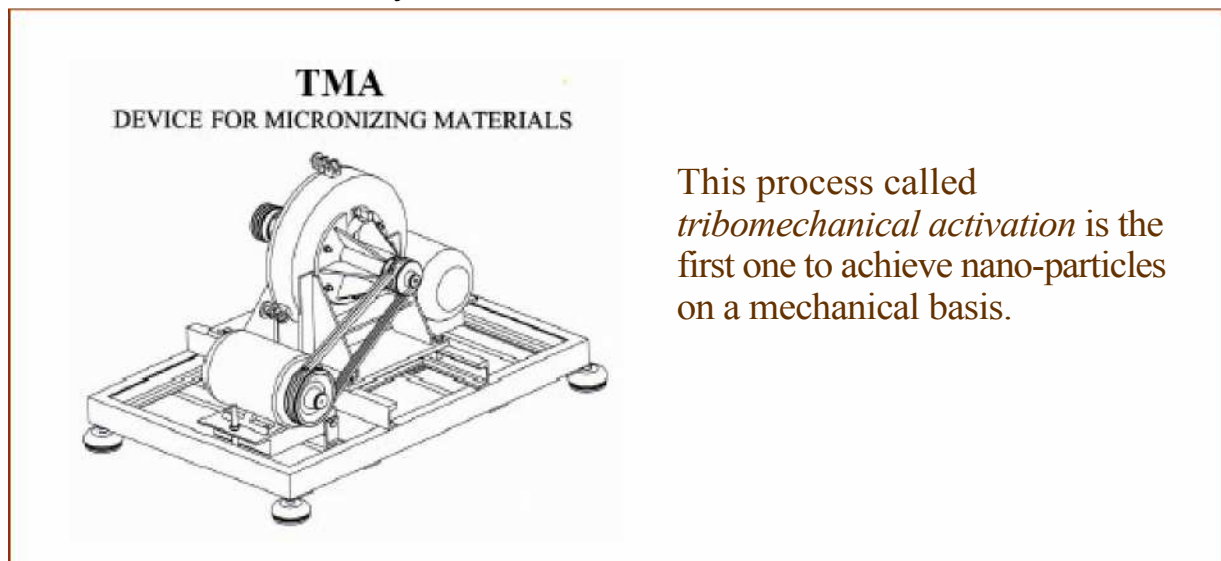
Particles with a size in the range of 0.1 to 2 μm are 10 to 100 times smaller than those found in the finest conventional calcite. This would mean at least a proportional (10 to 100 times) increase of surface area, but due to the fragmentation, the increase in reactive surface is much higher.

The biological activity of a mineral substance depends directly on its active surface, i.e. total contact surface between the mineral and the medium. *Megagreen* particles provide the plant with an unprecedented level of calcium and carbon dioxide.

The process of tribomechanical activation (TMA) not only determines the granularity of the particles and increased surface area, but also induces changes in the biochemical structure of the material. The TMA-processed particles reveal an unusual distribution of electrons which might play a key-role in their biochemical activity.

INVENTION OF A NEW ACTIVATION PROCESS

Since more than one century, numerous scientists have worked on mineral activation,



in order to obtain smaller and more reactive particles.

The discovery of TMA activation is a breakthrough in mineral milling. For the first time, a mechanical device was able to produce nano-particles without the help of other (chemical, electro-chemical) techniques.

In the beginning of the last century, milling-devices called disintegrators were used to activate coal. Such a device was made of two discs running in opposite directions at very high speed, each one carrying steel bars colliding with the mineral particles. This technique resulted in a 30% increase of the calorific value of coal, but the collisions caused the abrasion of the steel bars: this technique was neither profitable, nor applicable to the field of health or agro-alimentary, as these require a perfect purity of processed material.

Tribomechanical activation was developed by replacing the steel bars with blades, therefore allowing aerodynamic forces to accelerate the mineral particles. In this new activator, the discs pulled by rotors at very high speed create extremely numerous collisions among mineral particles, and not between mineral and metal: the particles undergo 3,000 collisions per second at speeds going up to Mach 3. Dimensions obtained that way range from micro to nano-meter scale (nano-particles) depending on the raw material. The surface of the particles becomes extremely fragmented and irregular, which further multiplies active surface and reactivity.

There are many potential applications of this new technology: In the case of *Megagreen*, it is applied on calcite, a mineral emerged from sedimentary algae. The tribomechanical activation produces particles being able to permeate into the leaf where it acts as a permanent source of calcium, oligo-elements and carbon dioxide. Due to its activated surface, the efficiency of this process is multiplied.

When *Megagreen* is sprayed on the surface of the leaves, the activated particles have the following effects:

- They disintegrate on the surface of the leaf and thereby allow the absorption of calcium und carbon dioxide.
- Due to their granularity (unprecedented in the case of calcite) the particles permeate the pores of the leaf (having a mean diameter of 10 μm).

HOW TO APPLY MEGAGREEN

Dosage: 0.5%

- Garden: about 1 teaspoon per litre of water filled into a usual garden sprayer
- agriculture: 1 kg per 200 l of water
- number of treatments: every 14 days, as soon as the plant has a minimum of 3 leaves



Visible effects of *Megagreen* on the plant :

- strengthened plants
- accelerated growth
- numerous fruits
- bigger and more pigmented leaves
- The plants are more resistant to diseases



Experiment on strawberries

Results of a study at Colmar, Departement Haut-Rhin, June 2004:

- tested varieties:
Gariguet, Mara, Florence, Majoral, Honeoye, Darselect
- Yield improvement: 30%
- Strengthening of fruits and prolonged storage life (comment of the farmer: „This year, for the first time, no strawberries were returned to us.”). Perfectly healthy plants



Strawberries treated with Megagreen

Reduced need of water

- significant reduction of water needs (30-70%)
- Better resistance during stress caused by lack of water

Pepper treated with *Megagreen*. The yield is rich while the roots are small. Due to the decreased vaporisation, the water need reduced and the roots were not enlarged.



Improved yield

- Activated growth and shortened vegetation period
- Stronger resistance to diseases of the leaves
- Longer storage life
- Bigger fruits of improved quality and appearance



Megagreen: study on tomatoes and grapevines in a certified laboratory (on the photo: grapevine)

MEGAGREEN: BIOLOGICAL ASPECTS

When sprayed on the leaves, *Megagreen* gets inside the plant through the stomates (biological unit regulating the metabolic exchange in the leaf). The granularity of *Megagreen* (0.1-2 μm) is far smaller than that of the stomates ($\sim 10 \mu\text{m}$). Once in the plant, the CaCO_3 disintegrates progressively into CaO and CO_2 due to the large surface of the activated calcite. Therefore, carbon dioxide and calcium are continuously available.



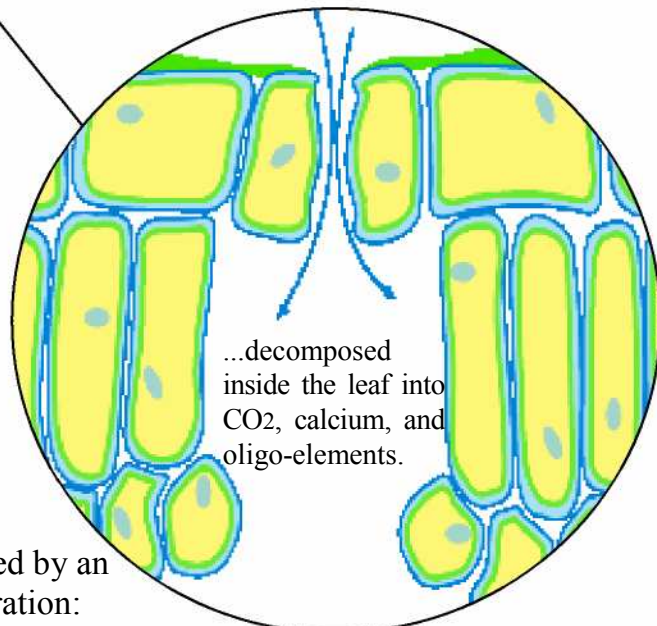
stomate (sideview)

stomates on the leaf surface

The stomates of the leaves have an opening of about 10 microns. Due to their fine granularity, the *Megagreen* particles are easily absorbed and...

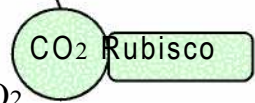


Inside the leaf Rubisco acts as catalyst for the development and the growth of the plant.



...decomposed inside the leaf into CO_2 , calcium, and oligo-elements.

The development of the plant is limited by an archaic mechanism called photorespiration: when the CO_2 ratio decreases in the leaf the enzyme Rubisco binds oxygen: this is starting the process of photorespiration, a consuming a lot of energy and water, an reducing the photosynthesis by 20 to 30%.



The *Megagreen* particles dissociate inside the leaf, releasing CO_2 . The enzyme Rubisco then binds CO_2 and induces an increased photosynthetic activity of the plant. The result thereof is a stronger development of leaves and fruits.

Results of CO₂-increase

Reduction of water need

- The atmosphere inside the plant is saturated with CO₂ causing the stomates to close partially. The evaporation is limited and the water need reduced.

Improvement of photosynthesis (30%)

- Rubisco binds CO₂ and induces photosynthesis
- Photorespiration is reduced

(Photosynthesis and photorespiration are two competitive processes, regulated by the Rubisco enzyme, according to the CO₂/O₂ ratio).

Improvement of the photosynthetic activity

As the disintegration of calcite is going on progressively, the CO₂ is continuously provided in the sub-stomatal cavity inside the leaf. This results in a similar effect as in a CO₂-augmented greenhouse, thereby replicating it at a micro-scale. Photosynthesis is limited in moderate climate regions by a process called photorespiration.

Those plants, called C₃, bind carbon dioxide to RuBP (Calvin Cycle). This process is regulated by the enzyme RuBP-carboxylase/oxygenase (Rubisco). This enzyme has an astonishing property: it can bind carbon dioxide, rendering oxygen (photosynthesis) as well as bind oxygen (photorespiration) liberating CO₂. In this sense it can also trigger the inverse reaction of photosynthesis.

Photorespiration can lower the effect of photosynthesis by almost 50% in total.

Why this counterproductive effect of Rubisco?

Nowadays, photorespiration is useless; it appears as a relict of an era when the earth's atmosphere was poor of O₂ and rich of CO₂.

Rubisco is able to trigger the photosynthesis as well as the photorespiration. In the latter case, growth is interrupted and, as the stomates open to let CO₂ enter, evaporation increases. Incidentally, biotechnological research for GMO that suppress photorespiration is on the way.

The property of Rubisco to function as catalyst for either reaction actually depends on the ratio of CO₂/O₂ within the leaf. During the disintegration of *Megagreen*, a sufficient amount of CO₂ is available and therefore, photosynthesis prevails.

Reduced Water Needs

Evaporation is the basic mechanism ensuring the water balance in the plant. It is responsible for the circulation of water inside the plant

Maximal evaporation rates for most plants in moderate climates (mesophytes) range from 2 to 6 mg water per minute and gram leaf, which equals several gram per hour and square centimetre leaf surface.

Evaporation is influenced by several factors, such as humidity, airflow, and light. 90% of the evaporation is due to the pores of the plant, giving vent to the vapour.

The application of *Megagreen* does not change the process of evaporation itself, but avoids unnecessary evaporation, thus leading to an improved utilisation of the water.

Megagreen and ecology

- *Megagreen* is absolutely innoxious
- *Megagreen* has no toxic threshold
- *Megagreen* reduces the water needs

Evaporation is influenced by several factors, such as humidity, airflow, and light. 90% of the evaporation is due to the pores of the plant, giving vent to the vapour.

EFFECT OF CALCIUM

Megagreen Calcium is available in the leaf. This is essential, as calcium limited mobility in the plant

Effect on the structure:

- Strengthening of the epidermis
- Important for the integrity of the cell membranes

Functional effect:

- Transmitter for immune reaction
- Part of ATPase: enzyme providing the energy needed for producing sugar in the plant

Structural effects

Calcium is important for the structure of the cell wall as well as for the integrity of cellular membranes. Therefore, calcium has a positive effect on the production and storage of fruits. Moreover, the disposability of calcium in the leaf during the period of growth is a real gain: calcium is generally rather immobile, but now it is available where it is needed. The improvement of membranes and cell walls results in a better physical defence against diseases.

Functional effects

After passing the physical barrier, a pathogen transmitter causes a defence reaction within the plant, which in turn triggers a strengthening of the epidermis and a change of metabolic activity. Calcium is one of the most important transmitters in the immune reaction of the plant, caused by either a pathogen organism or certain environmental conditions.

Furthermore, calcium is one of the components of ATPase, the enzyme needed for the transformation from ATP into ADP. This reaction is essential, as it supplies the energy necessary for the production of sugar (dark phase of the photosynthesis).

MEGAGREEN FIELDS AND LABORATORY STUDIES

Production of potatoes, summer 2004 Alsace, France



The treatment with *Megagreen* yields very good results on potatoes. During the experiments of 2004, there was a yield improvement of most of the varieties of about 30%, 100% of the potatoes could be sold. The improvement of the foil strength works also as a protection against potato beetles. Tested varieties: Mona-Lisa, Desiree,

Italy, Jun./Nov. 2004



courgette (zucchini), non treated



Megagreen-treated series :

During the study, the producer confirmed not only the robustness of plants and improvement of yield, as may be witnessed on the photo, but also a significant reduction of water needs of the plant series treated with Megagreen.



Megagreen-treated series beans



Non-treated beans



Study on the production of pepper, June 2004,
Lombardy, Italy



control plants



Plants treated with *Megagreen*





Study on the production of grapevines

Comparison of the grapevines treated with *Megagreen* (pink line), and comparative vines (blue line)

| | Leafing development | | | | | | | | | | | | | | | | |
|--|---------------------|---------|-------|--|---------|---------|---------|--|----------------|------|-------|-------|----------------------------------|----|-------|----|--|
| <table border="1"> <thead> <tr> <th colspan="4">Number of leaves</th> </tr> <tr> <th>June 15</th> <th>June 22</th> <th colspan="2">June 28</th> </tr> </thead> <tbody> <tr> <td>Control series</td> <td>15,5</td> <td>16,33</td> <td>25,17</td> </tr> <tr> <td><i>Megagreen</i>-treated series</td> <td>16</td> <td>18,83</td> <td>28</td> </tr> </tbody> </table> | Number of leaves | | | | June 15 | June 22 | June 28 | | Control series | 15,5 | 16,33 | 25,17 | <i>Megagreen</i> -treated series | 16 | 18,83 | 28 | Effect of <i>Megagreen</i> on the number of leaves |
| Number of leaves | | | | | | | | | | | | | | | | | |
| June 15 | June 22 | June 28 | | | | | | | | | | | | | | | |
| Control series | 15,5 | 16,33 | 25,17 | | | | | | | | | | | | | | |
| <i>Megagreen</i> -treated series | 16 | 18,83 | 28 | | | | | | | | | | | | | | |
| <p>Photos and graphics: Laboratories SADEF with the agreement of the French ministry of agriculture COFRAC programmes 96, 108, 134 et 156</p> | | | | | | | | | | | | | | | | | |

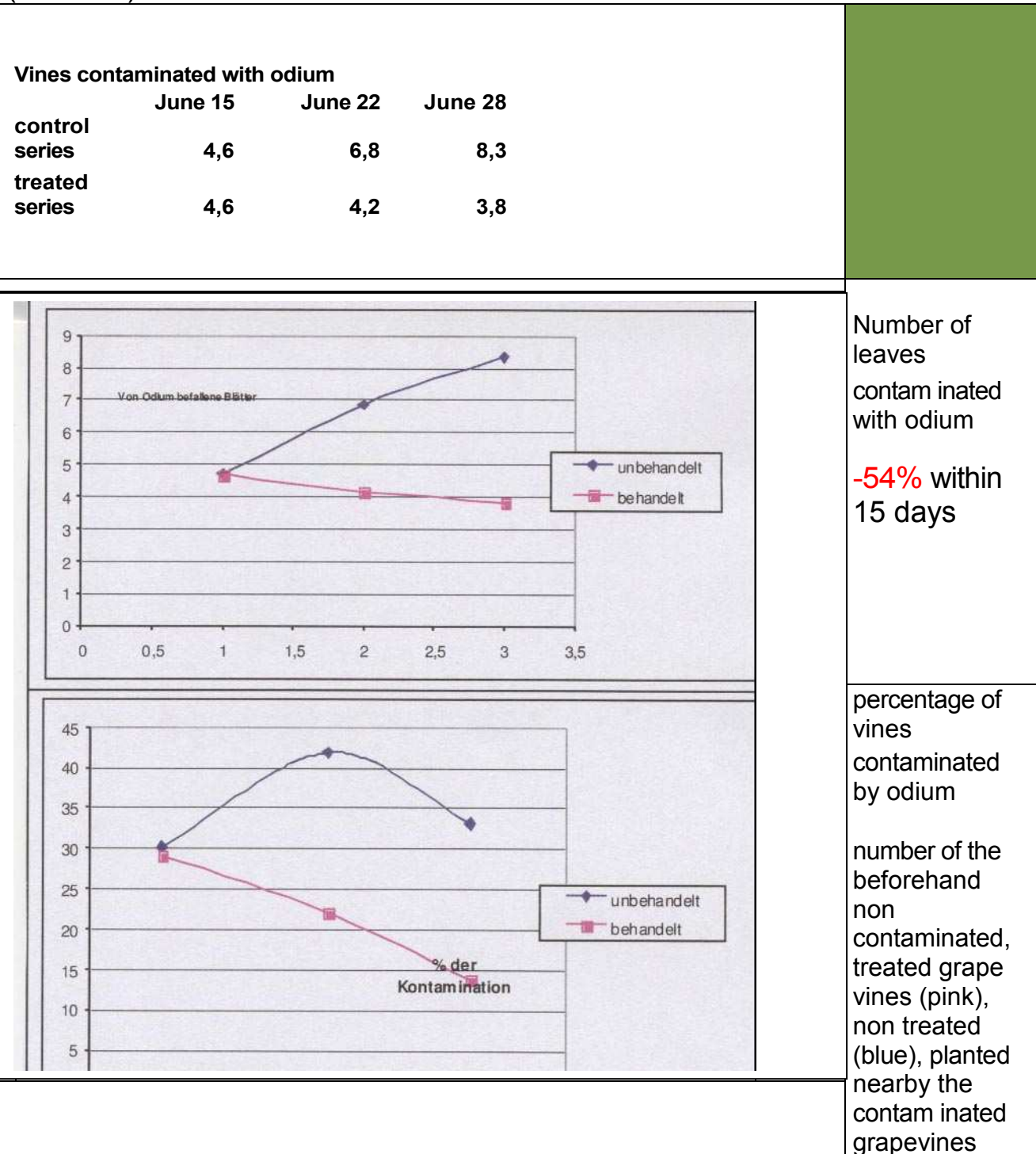
Study on *Megagreen* on grapevines with odium,
June/July 2004, SADEF laboratories

| | |
|---|--|
|  | <p>grapevine with odium</p> |
| | <p>Comparative plant of good health</p> |
|  | <p>Grapevine with Odium at the same phase of growth treated with <i>Megagreen</i>.</p> |

These findings are exemplary regarding the effect of *Megagreen* on the disease resistance of leaves

Study on the effect of *Megagreen*, Laboratory SADEF, June, July 2004

Comparison of the vines, treated with Megagreen (pink line), and witness (blue line)



These experiments have shown that *Megagreen* has a potentially preventive effect on the one hand, reducing the possible contamination of healthy grapevines, and, on the other hand, a healing effect on the grapevines already contaminated with odium.

During the study appeared an unexpected effect of *Megagreen* became evident: *Megagreen*, regularly applied, changes the surface of the leaf (tensioactivation).

Non-treated grapevine







On this non-treated grapevine, water was sprayed: the water formed drops which spread over the leaf: the contact surface between the water and the leaf is limited.

Megagreen-treated grapevine



On a grapevine treated with *Megagreen*, the water forms no drops but evenly spreads over the surface of the leaf. In this way the whole leaf is moistured. This might be a further explanation for the reduced water needs of the plant.

Study on tomatoes SADEF, June/September 2004

| | | | | | | | |
|---|--|-----------------------------------|--|-------------|------|---------|------|
|  | <p>Non-treated tomato plant manifesting signs of withering of the plant (the leaves get yellow due to the aging of the plant).</p>  | | | | | | |
|  | <p>A grapevine of the same age, planted and cultivated under the same conditions but treated each fortnight with <i>Megagreen</i>. The leaves remain green and constantly produce new buds.</p>  | | | | | | |
| <p>Number of flowers and buds of treated and non-treated plants: From August 14 to September 6, 2004.</p> | <table border="1"> <tr> <td colspan="2" style="text-align: center;">Number of flowers and buds</td> </tr> <tr> <td style="text-align: center;">non-treated</td> <td style="text-align: center;">18.0</td> </tr> <tr> <td style="text-align: center;">treated</td> <td style="text-align: center;">28.3</td> </tr> </table> <hr/> <p>Effect of Megagreen on fertility : +57%</p> | Number of flowers and buds | | non-treated | 18.0 | treated | 28.3 |
| Number of flowers and buds | | | | | | | |
| non-treated | 18.0 | | | | | | |
| treated | 28.3 | | | | | | |

These observations show the potential antioxidant effect of Megagreen

Strawberries, Megagreen study Laboratory SADEF, June/September 2004

The pictures seen below demonstrate the different conditions of grapevine leaves of two vines of the same age, among which only one line was treated with *Megagreen*. The obvious anti-aging effect suggests a strong antioxidative action of *Megagreen*.

Untreated grapevine



Grapevine treated with *Megagreen*



Strawberries, Megagreen study Laboratory SADEF, June/September 2004



Megagreen, an Antioxidant for plants?

The amazing efficiency of Megagreen is based on the availability of calcium, produced by the activation of calcite. But the action of calcium alone is not sufficient to explain all effects of Megagreen. Specially the vitalizing and anti-aging effects found in laboratories studies as well as in outdoor trials indicate an antioxidative effect of *Megagreen*.

The aging process of all living organisms is related to the permanent emission of free radicals, mainly of the peroxide ions. Peroxide ions evolve during the combustion of oxygen in mitochondria. Free radicals are atoms with unpaired electron, which makes them highly reactive, as they catch the missing electron from organic proteins. This process occurs continuously and the repeated damages in DNA or cell membranes are the base of the aging process.

Due to the numerous high speed collisions the activated particles show an unusual distribution of electrons in the mineral structure: This results in a partial availability of electrons which might be the key of their biological activity: The calcite activated micro particles may return the missing electrons in this way when coming in contact with the reactive radicals.

These days several scientific studies are going on in EC examining the mechanisms of free radical neutralisation by TMA particles.

The action of Megagreen in delaying cell senescence is visible. This process leads to longer flowering periods resulting in the increase of harvest often noticed.

Melon „Sanfilippo“
 Effect of Megagreen on the quality of fruits
 Laboratory Neutron
 Modena, Italy, June 2004

Comparison between melons treated with Megagreen and fruits of the control series. The observations clearly show increase of Fructose and Glucose, indicating a positive effect of Megagreen on the organoleptic qualities of fruits.

| | <i>Melons non traités avec Megagreen</i> | <i>Melons traités avec Megagreen</i> | <i>Unité de mesure</i> | <i>Bilan</i> |
|-------------------|--|--------------------------------------|------------------------|--------------|
| <i>Résidu sec</i> | 13,8 | 14,5 | g/100g | +5 % |
| <i>Fructose</i> | 1,17 | 1,70 | g/100g | +45 % |
| <i>Glucose</i> | 0,86 | 1,25 | g/100g | +45 % |
| <i>Saccharose</i> | 9,99 | 9,93 | g/100g | -0,6 % |



Modena (Italy), li 15/06/2004

NEOT-DIR/002/002
 Pagina 1 di 1

COMMITTENTE
ECOIDEE
 Via Iseo, 12
 25030 Erbusco BS

RAPPORTO DI PROVA n° 04F01365-It-0

CAMPIONE 04F01365

Data Inizio Analisi 07/06/2004

MELONI - 1 SACCHETTO - DATA ARRIVO CAMPIONE 07/06/2004, PRELIEVO ESEGUITO DA: COMMITTENTE, TRASPORTO EFFETTUATO DA: CORRIERE.

| DESCRIZIONE ANALISI | RISULTATO | SI | RECUP. | UNITA' DI MISURA | LD | LD | IMPED. | TECNICA ANALITICA | DATA INIZIO ANALISI |
|---------------------|-----------|--------|--------|------------------|-----|----|-------------------|-------------------|---------------------|
| Residuo secco | 14,5 | ± 0,4 | | g/100 g | | | * segue | Cromatografia | 08/06/2004 |
| ZUCCHERI | | | | | | | | | |
| Fruttosio | 1,70 | ± 0,11 | | g/100 g | 0,1 | | 07/04/05-05/06/05 | | 15/06/2004 |
| Glucosio | 1,25 | ± 0,07 | | g/100 g | 0,1 | | 07/04/05-05/06/05 | | 15/06/2004 |
| Saccarosio | 9,93 | ± 0,25 | | g/100 g | 0,1 | | 07/04/05-05/06/05 | | 15/06/2004 |
| Lattosio | < LQ | | | g/100 g | 0,1 | | 07/04/05-05/06/05 | | 15/06/2004 |
| Maltosio | < LQ | | | g/100 g | 0,1 | | 07/04/05-05/06/05 | | 15/06/2004 |

FINE RAPPORTO DI PROVA

Note:

< LQ = Inferiore al Limite di Quantificazione

U: Incertezza estesa: per le ricerche microbiologiche è espresso l'intervallo di confidenza con livello di probabilità del 95% >>> LQ: Limite di Quantificazione >>> LD: Limite di Rilevabilità >>> Rec: Recupero % "+" indica che il recupero è stato applicato al risultato. >>> Le sigle dei metodi interni accreditati SINAL si debbono considerare preceduti da NEOT-DIR/002/ >>> I risultati numerici compresi tra parentesi (...) dopo l'espressione <LQ sono puramente indicativi di tracce non esattamente quantificabili. Le prove contrassegnate dall'asterisco (*) non rientrano nell'accreditamento SINAL di questo laboratorio

Il presente Rapporto di Prova si riferisce esclusivamente al campione sottoposto alla prova. Il presente Rapporto di Prova può essere riprodotto solo per intero. La riproduzione parziale deve essere autorizzata con approvazione scritta dal Laboratorio.

RESPONSABILE DI ANALISI E LABORATORIO: DOTT. GIAN CARLO GATTI

SEGUIRÀ RAPPORTO DI PROVA IN ORIGINALE

Experimentations program 2004 / 2005 in France



1) **CIRAD / CENTRE DE COOPERATION INTERNATIONALE EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPPEMENT**
(international organism of agronomy,



Date: Nov/Dec 2004

Subject: calcite TMA biochemical and mechanical properties, penetration and processing through the leaf

Scientific purposes: to establish definitely the changes obtained through tribomechanical activation, and establish the effect of Megagreen in terms of calcium migration and enzymatic activity

Marketing perspectives: to have official and visual evidence, differentiating Megagreen from any known calcite

1) mineral structure analysis

- Comparison of Megagreen with two other calcite products (micronised calcite, and Lithothamne)
 - Size
 - Structure
 - Scanning electron microscope photography and observation
 - dissociation speed

2) Biological activity of Megagreen

- Entrance of the product in the leaf (vineyard, strawberry, tomatoes)
 - Scanning electron microscope photography of the entrance of Megagreen in the plant.
 - Observation and measure of the dissociation in leaf tissues

- Influence of the calcium on the tissues and the photosynthesis.
 - Tracing of the evolution of the calcium in the cells by use of radioactive markers
 - Study of the evolution of the vegetal tissue structure
 - Measure of the starch in chloroplasts

2) LABORATORY BIORIZON, BORDEAUX

The most competent laboratory in vineyard studies, in Bordeaux, specialized on mildew and powdery mildew.

Date: Dec 2004/Feb 2005

Subject: Vineyard fungal diseases

Scientific purposes: the study is meant to understand the biological mechanisms of the anti-fungal action of Megagreen, and to evaluate its efficiency compared to the reference products of the time

Marketing perspectives: The whole French vineyard cultivation is waiting for an efficient and non pollutant vineyard-protection, and all results of BIORIZON are inducing important repercussion in the profession.

- Measure of the influence of Megagreen on cryptogamic diseases in comparison with copper and Fosetyl (the most common fungicide).
- Analyse of Megagreen action on the three main vineyard fungal disease (odium, mildew, botrytis)
- Effect of Megagreen on foliar immune system

3) SADEF / SOCIETE ALSACIENNE D'ETUDE DE LA FERTILITE

Laboratory accredited by the French Ministry of Agriculture.



Date: June/Nov 2004

Subject: tomato, vineyard, strawberry

Scientific purposes: to evaluate and prove the effect of repeated applications of Megagreen on hydric stress, plant growth and fertility.

Marketing perspectives: This study will provide distributors with official evidences about Megagreen's effects



- Effect on tomato growth and fertility
- Effect on odium, as preventive and curative strategy
- Effect on strawberry

The important effects noticed during the experience lead the researchers to set the hypothesis of an anti-oxidative effect of Megagreen.
This effect would explain the noticeable prolongation of flowering period, resulting in potentially important increase of yields

4) GRAB / GROUPEMENT DE RECHERCHE EN AGRICULTURE BIOLOGIQUE

Official organism for the organic farming research

Date: March/July 2005

Subject: vegetables

Scientific purposes: to observe the effect of Megagreen in organic farming techniques

Marketing perspectives: GRAB is the scientific reference in French organic farming

- Study on salad and cucumber cultivations

5) BRETAGNE BIOTECHNOLOGIES VÉGÉTALES

applied research on market gardening in the best area in France for shallot, artichoke...

Date: Jan 2004/Dec2006

Subject: flowers, ornamental plants, medicinal herbs

Scientific purposes: to compare the ten most important eliciting substances

2004: comparative effect evaluation

2005: biochemical mechanisms

2006: extended study on plant immune system stimulation

Marketing perspectives: This laboratory is the competent authority concerning the most important vegetables cultivations in west France



- Study of Megagreen during 3 years to demonstrate the agronomic effect and to show the natural stimulation of immune defences of the plant
 - Megagreen was selected as one of the ten most interesting products in the market, on the advice of INRA specialists (INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE)