



RESEARCHERS TEAM
Advanced Technology 7



DPE AGRICULTURE X

research and study by Giovanni Lapadula PhD

PREMISE

The environment is the main factor that positively or negatively influences the plant.

The main factors that can determine favorable or unfavorable growth are factors such as solar radiation, water/humidity, environmental electricity, excessive acidity or alkalinity of the soil due to chemical agents or crops, and pathogens.

The organizational and commercial structure of the agricultural sector offers us a solution to a single problem when it arises, while ignoring the rest of the environmental components, therefore focusing on the detail to the detriment of the general. This type of solution is rapid and often expensive; they solve a problem which, however, will manifest another one later, which will require a new solution.

The use of these products makes the land increasingly less productive and will eventually render the land practically unusable.

A natural and gradual balancing process can be a single solution to most of these problems.

The advantage of DPE Agriculture X is that once purchased, it can last over ten years without any maintenance. An additional benefit is that the more time passes, the more effective it becomes.

You may not notice the feeling of well-being (though many do) in being within the range of action of the DPE Agriculture X because it is a continuous, natural and gradual process, but when you move outside the field of its action and go, for example, to the city you will notice the difference and the discomfort that you feel, which makes you tired due to the excess of electromagnetic pollution and you will want to return to the vicinity of the DPE Agriculture X to regain the balance of your body and mind.

In ancient times, old farmers, when they were tired of working in the sun, rested by placing themselves under a tree and in contact with it. What process took place? The farmer, having spent a lot of time in the sun, had loaded himself with large quantities of positive solar energy, which caused him great exhaustion, as well as the effects of the physical work. To balance this excess of charges it was necessary to have a mass discharge through the tree trunk, which absorbed the positive solar energy while releasing the negative Earth energy.

You can have this same effect and with much shorter times by touching the metal part of the DPE Agriculture X, which will discharge all the stress of the electrostatic charges accumulated both at work and in the city. Having the DPE Agriculture X nearby will increase the level of well-being and health of you and your family.

THE SOLUTION - THE DPE AGRICULTURE X...

DPE Agriculture X absorbs electrostatic charges, which results in an increase in humidity (11). Furthermore, the particular metal alloys release electrons which, combined with humidity and also with the air, create negative air ions (17). The whole process is enormously accelerated and enhanced by quantum superconductors (6).

These processes have the following consequences:

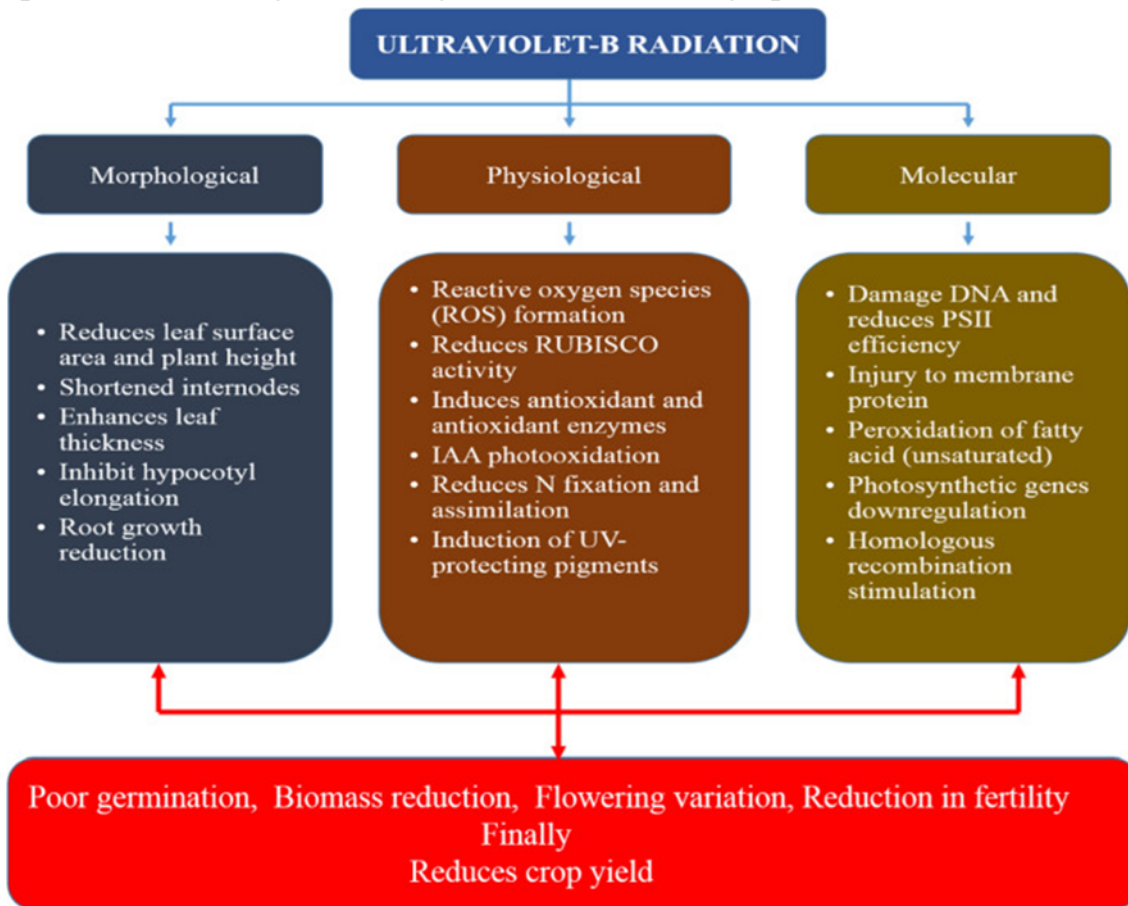
- 1. Increased plant health because DNA is less damaged by radiation**
- 2. Reduction of solar radiation, especially ultraviolet rays and cosmic radiation**
- 3. Increase in storage of energy absorbed during photosynthesis or total chlorophyll concentration - the leaves will be much greener.**
- 4. Drastic reduction in catastrophic weather events that damage crops**
- 5. Lightning protection in the area surrounding the DPE Agriculture X**
- 6. Halving the quantity of irrigation water for the benefit of greater humidity, but also halving the electricity consumption of the irrigation pumps (where used).**
- 7. Drastic reduction of electrostatic, radioactive, ultra-fine particulate and chemtrail pollution.**
- 8. Drastic reduction of seismic and volcanic events.**
- 9. Contribution to the restoration of the ozone layer in the high atmosphere**
- 10. The plants will also require fewer fertilizers and pesticides**
- 11. Insects - return of beneficial and removal of pathogenic ones**
- 12. Sound reduction**
- 13. Neutralization of radioactivity**
- 14. Fewer frosts and droughts and less damage from them**

1) Increased plant health because DNA is less damaged by radiation

Electromagnetic pollution (electrostatic charges) and solar radiation are the main causes of the lack of growth of plants (1). They are closely related to the need for water to avoid dehydration and therefore promote growth (2).

Farmers have noticed that, in recent years, in order to have the same growth of the plant compared to previous years, it was necessary to significantly increase the amount of irrigated water. This is due to electromagnetic pollution in the troposphere which reduces the strength of the magnetosphere (3).

A reduction in the magnetosphere has the effect of greater solar irradiation, especially Ultraviolet-B radiation (4), and cosmic radiation, which accumulates in electrostatic pollution, causing the damage described in the graph below. (Photo 1)



~ Photo 1

UV-B impacts on morphological, physiological, molecular, and yield attributes of plants Kataria et al. (2014). Adapted from (4)

2) Reduction of solar radiation, especially ultraviolet rays and cosmic radiation

Considering what was described above in the introduction, we have designed a device that is capable of constantly absorbing electrostatic charges, even in the highest layers of the atmosphere, and emitting negative ions from the Earth. To do this, we took inspiration from the laws of nature and created a non-invasive and gradual system that allowed us to interact with the environment, restoring its correct balance.

We chose **special metal alloys and added other metals and components to them**. Through various chemical processes that require significant time, we were able to **transform them into superconductors**, radically changing their initial characteristics as, for example, in the case of aluminum (6).

This complex chemical processing system with special temperatures and pressures has made it possible to increase ion exchanges at the speed of light and considerably increase the area of action. We managed to reproduce the effect that nature produces with the stems of plants.

“Some photoelectric sensitive materials such as metals, water, ice, and plants can also cause a photoelectric effect and release electrons, even though no short-wave ultraviolet radiation is applied. The electrons then combine with molecules in the air to form NAIs (Negative Air Ions)” (17).

With the DPE Agriculture X, we managed to emit more negative oxygen ions (Anions) (see photo) and this enables the plants to grow better (7).

These negative ions are projected beyond the troposphere and begin to regenerate the ozone layer, strengthening the magnetosphere in that location and counteracting UV-B rays that damage plants and their DNA (4).

The magnetosphere is capable of mitigating or blocking the effects of solar radiation or cosmic radiation, that also protects all living organisms from potentially detrimental and dangerous consequences.

In the picture below (Photo 2) you can see salads grown within the range of action of the DPE Agriculture X whose leaves are not damaged by solar radiation and are also particularly green due to the reduction of harmful UV-B rays.



~ Photo 2

Authentic photo and without any filter

3) Increase in storage of energy absorbed during photosynthesis or total chlorophyll concentration, the leaves will be much greener.

Now let's see another consequence related to the strengthening of the magnetosphere. An efficient magnetosphere with a better ozone layer reduces UV-B rays, which are harmful to plants.

In fact, studies have shown that:

"Having in mind previously given results, we may conclude that:

- a) present studies have demonstrated that significant variation exists in the plant's response to UV-B radiation between different maize lines
- b) variations in the relative concentration of photosynthetic pigments (chlorophyll) may be an indicator of perturbations in the photosynthetic apparatus
- c) regardless of what may be the reason of the plant's inability to deposit a part of the absorbed energy during the process of photosynthesis $\Delta\varepsilon$ or total chlorophyll concentration" (5).

In the picture below (Photo 3), you can see different crops within the range of action of the DPE Agriculture X in whose intensely green leaves chlorophyll is particularly active.



~ Photo 3

Authentic photo without any filter

4) Drastic reduction in catastrophic weather events that damage crops

“**Agriculture alone absorbed 26% of the overall impact caused by natural hazards** in low- and middle-income countries and even in high-income countries yield losses due to extreme weather are relevant. Vulnerability curves are traditionally used to quickly estimate the damage due to extreme events. This study maps the articles published from January 2000 to May 2022 implementing crop vulnerability curves to weather-related extreme events and climate change. Fifty-two articles have been identified through the use of Scopus, Web of Science, Google Scholar and the references of the selected papers. Fifty-two percent of the considered studies (27 out of 52) implemented drought vulnerability curves, 35% developed flood vulnerability curves, and 8% showed vulnerability curves to climate change, 4% to storms and 2% to extreme temperature (cold). In the case of drought vulnerability curves, there is a clear inhomogeneity in the explanatory variables proposed. Flood vulnerability curves base the evaluation of the flood intensity on water depth, flood duration or the Reynolds number.” (25)

What process allows you to avoid or drastically reduce this?

When we talk about ions in relation to air, in particular, we are referring to negative oxygen ions also called **anions**. The solar ultraviolet UV-B and UV-C rays and the **electrostatic charges** discharged through lightning ionize the diatomic oxygen atoms (O₂), producing the following reaction: $3 \text{O}_2 \rightarrow 2 \text{O}_3$.

Since the reaction is endothermic, it requires the absorption of a certain amount of energy, equal to approximately 69,000 calories/mol, for it to occur.

This results in **further absorption of electrostatic charges** in the atmosphere in addition to those of the DPE Agriculture X.

These processes decrease the amount of electrostatic energy in the atmosphere and therefore also lightning, especially multiple strikes, unless other conditions occur such as the presence of radioactive clouds.

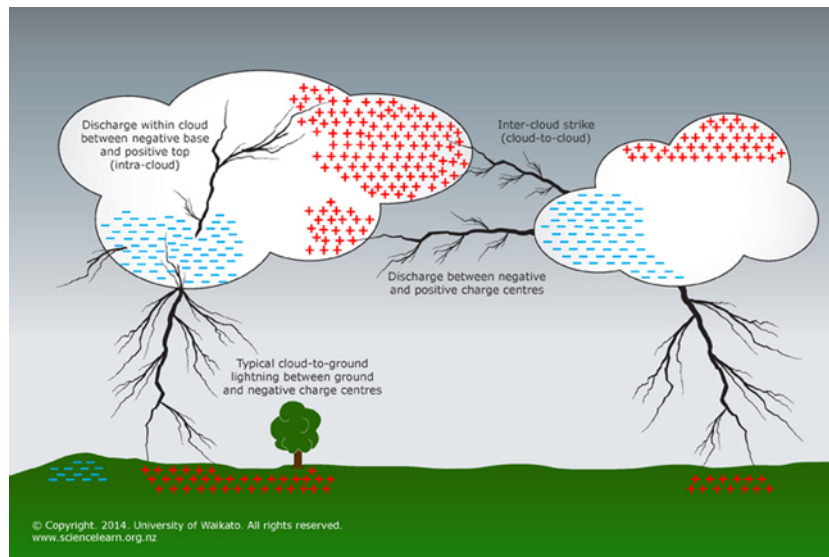
But there are also other important factors to consider..

Anions present in the air **neutralize pollutants when they come into contact but also pathogens caused by chemtrails.**

5) Lightning protection in the area surrounding the DPE Agriculture X

A further benefit is the protection from lightning in the area immediately surrounding the DPE Agriculture X, since to have the lightning discharge towards the ground the bottom part of the storm clouds is charged with negative polarity while the ground, due to electrostatic induction, becomes charged with positive polarity, thus presenting an inverted potential gradient compared to the normal situation.

The values inside and just below the storm cloud and also on the ground can reach very high values, over 10,000 V/m. The difference in electric potential creates the lightning discharge, but if there are negative ions on the ground there is no longer the difference in polarity and the lightning does not occur and will occur in more distant areas. This is particularly useful for fields with photovoltaic panel systems which, due to their intense ability to absorb solar energy and therefore ionize, are subject to being struck by lightning. (Photo 4)



~ Photo 4

We said that DPE Agriculture X is able to absorb electrostatic charges, but what are they?

Static electricity is defined as a non-moving, non-flowing electrical charge or in simple terms, electricity at rest. Static electricity becomes visible and dynamic during the brief moment it sparks a discharge and for that instant it's no longer at rest.

Lightning is the result of static discharge as is the shock you receive just before contacting a grounded object during unusually dry weather.

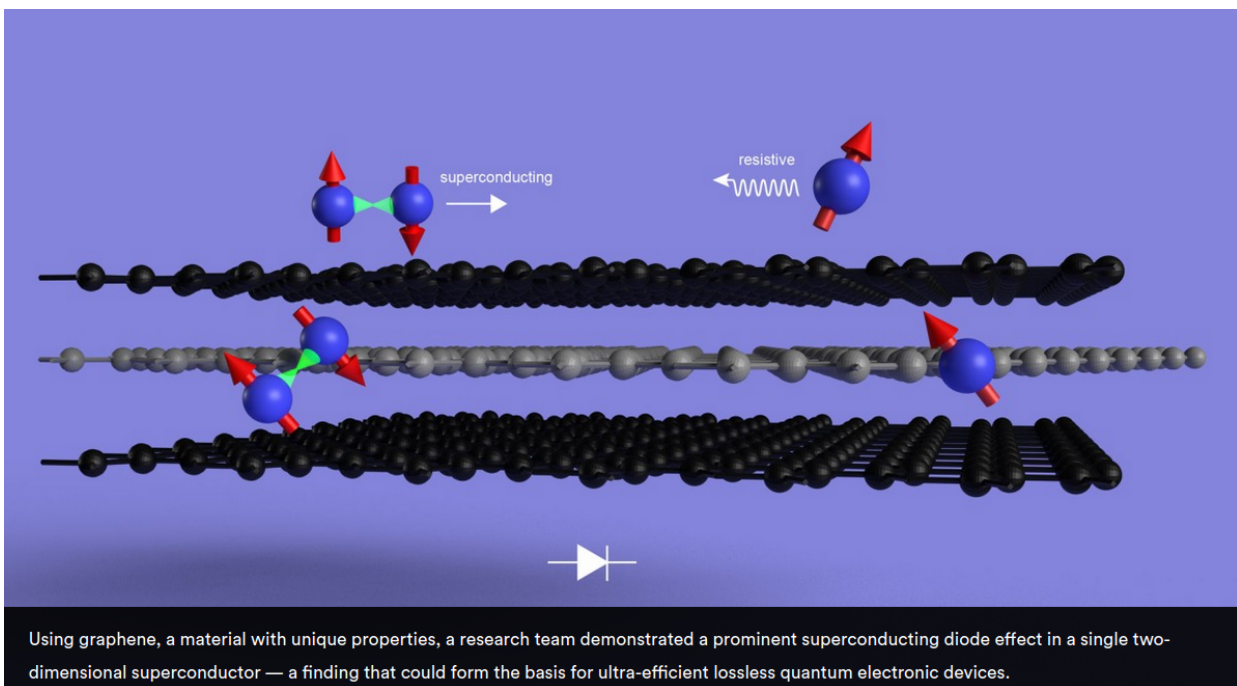
Matter is composed of atoms, which in turn are composed of protons, neutrons, and electrons.

The number of protons and neutrons, which make up the atomic nucleus, determines the type of material. Electrons orbit the nucleus and balance the electrical charge of the protons. When both negative and positive are equal, the charge of the balanced atom is neutral. If electrons are removed or added to this configuration, the overall charge becomes either negative or positive resulting in an unbalanced atom.

Materials with high conductivity, such as steel, are called conductors and maintain neutrality because their electrons can move freely from atom to atom to balance any applied charges. Therefore, conductors can dissipate static when properly grounded, and then there are superconductors that do so at considerably higher rates and quantities.

Therefore, an underground omnidirectional antenna has the possibility of discharging electrostatic charges (8). (Photo 5)

This process not only affects the place where the electrostatic energy discharge occurs but also in the more distant surrounding area (9).



~Photo 5

Image source: PROVIDENCE, R.I. [Brown University] — Superconductors —

6) Halving the quantity of irrigation water for the benefit of greater humidity, but also halving the electricity consumption of the irrigation pumps.

Why is it possible to have the same crop with almost 50% less water with the DPE Agriculture X?

This happens through two main processes:

The DPE Agriculture X creates more than double the humidity as the low frequency electric current generated by the special metals it contains generate a chemical reaction which releases water molecules during an electrolysis process. (31)

An area with higher electrostatic charges is less humid.

Studies demonstrate low humidity supports an increase in ESD (Electrostatic Discharge) severity.

The effect of humidity in ESD severity is a function of charge voltage; the higher the charge voltage, the weaker the effect of humidity. Compared with absolute humidity, relative humidity is more important. (10)

This is because water vapor has a high electrical conduction ability and facilitates the dispersion of static energy present in the environment, which is therefore dissipated. When the air is dry - that is, when the quantity of water is less -, the charges do not dissipate and they can move freely and remain suspended in the atmosphere, accumulating.

Therefore, if electrostatic charges are reduced, humidity increases but if negative ions are released, as in the case of the DPE Agriculture X, humidity increases significantly.

Scientific publications show that the total negative ion density is exponentially linked to the humidity. (11)

Most NAI (Negative Air Ions) in the air are formed by the combination of oxygen or water molecules with electrons in the air (Lina et al., 2019). Another reason for this relationship is that the basic principle of NAI observation is the collection of electric charges carried by the air with a capacitive NAI collector. When the air humidity is high, many water molecules ionize under the electric field between the collector and the polarization plate, which increases the observed value of NAI concentration (Jinming et al., 2006). When the air humidity increases, the number of water molecules in the air also increases, which promotes the formation of NAI.

Another potential reason is that humidity and gas contaminants also have a coupling effect on NAI concentration; the diffusion coefficient of humidity affects gas pollutants. With the increase of ambient humidity, the diffusion rate of pollutants accelerates and the air quality improves, which reduces the deposition caused by pollutants and increases the survival time of NAI (Ning et al., 2006). (17).

In addition to saving water, the biggest saving is certainly the halving of the electricity costs used by both the well pumps and those for irrigation.

In the picture below (Photo 6) you can see several crops within the scope of the DPE Agriculture X that were irrigated for 2 hours in the morning and 2 hours in the afternoon for just two weeks during the planting period carried out during the summer.



~ Photo 6

Authentic photo without any filter

7) Drastic reduction of electrostatic, radioactive, ultra-fine particulate and chemtrail pollution.

A further advantage of increasing humidity is that it manages to agglomerate a large quantity of ultra-fine particles in suspension.

This is a big problem for Agriculture because it not only damages the plants, it pollutes the product making it of lower quality and also increases the amount of magnetite which is responsible for the effect of frost damage on the plant. (35)

The results demonstrated from the extended soft-sphere DEM (discrete element method) simulation of the evolution of wet particles illustrate an enhancement in the agglomeration rate of particles corresponding to the atmospheric humidity; and due to the increased aqueous liquid bridging force. The higher humidity (> 80%) would enhance the ionization on the particle surface, giving rise to higher electrostatic interactions. These interactions would lead to agglomerations of large amounts of ultrafine particles and consequently affect the size of agglomerated particles, and thus affect the size distribution of PM (particulate matter) in the atmosphere. Therefore, the dynamic evolution of particles is actually and additionally, attributed to the physical effects of aerosol particles in the atmosphere, together with chemical effects on particle surfaces (12).

The process happens when an electric potential between two points has gotten large enough to where the voltage can actually ionize the air between the two points. Basically, there is potential energy stored in keeping these charges separate from each other.

Water is a polar molecule (one side is positively charged while the other is negatively charged) which means it's a dielectric. Between the two charged points, water molecules essentially line up like Lego, with their positive end facing the negative end of another molecule so that they form a little bridge between the two points. Since the two electrodes are sort of connected to each other the electric potential is reduced. In the situation where the static electricity made a spark happen, what occurred was that the electric potential between the two points was great enough such that the charge difference could ionize the air between the two points and create the visible spark and the cracking sound. When there is water present in the air, the potential between the points is lower since water is bridging the charges. Since the potential is lower it does not have the energy to ionize the air between the two points.

This humidity provides water to the plants which therefore require less water for irrigation, as well as cleaning the plant from pollutants.

8) Drastic reduction of seismic and volcanic events.

In previous scientific reports we have been able to find the importance of the magnetosphere in reducing solar radiation and how its weakening can lead to greater solar radiation on the planet. The close relationship between solar radiation and earthquakes has been known for decades, but only recently have the mechanisms been understood:

“Due to the effect of solar wind, modulating the proton density and hence the electrical potential between the ionosphere and the Earth. Although a quantitative analysis of a particular, specific model for our observations is beyond the scope of this paper, we believe that a possible, likely physical mechanism explaining our statistical observations, is the stress/strain pulse caused by reverse piezoelectric effects. Such pulses would be generated by large electrical discharges channeled in the large faults, due to their high conductivity because of fractured and water saturated fault gauge. The widespread observations of several macroscopic electromagnetic effects before, or however associated with large earthquakes, support our qualitative model to explain the observed, highly statistically significant, proton density-earthquakes correlation. It is important to note that our hypothesis only implies that the proton density would act as a further, small trigger to cause the fracture on already critically charged faults, thus producing the observed large scale earthquake correlation. Such a small perturbation would add to the main factor producing worldwide seismicity, which is tectonic stress.” (13).

So, if we strengthen the magnetosphere and the ozone layer, we have the possibility of drastically reducing this process and the speed of the solar wind and consequent manifestation of the earthquake.

“Solar wind speed which causes more dynamic pressure on Earth’s magnetosphere is the physical mechanism which increases the number of earthquakes. Variations in solar wind during a Coronal Mass Ejection event can exert pressure, deforming and shrinking the magnetosphere by $4R_e$ (Earth radius). The tension on magnetic field lines is analogous to the tension on a violin string.

The pressure will affect the Earth surface in different ways, depending on the tectonics of each region; some areas are more susceptible to release energy in a form of earthquake or other analogous phenomena (such as volcanoes).” (14)

Not only has a possible connection been verified between solar cycles or other solar events and volcanic activities, but also a further relationship between eruptions and climate changes. (15)

We have extensively described all the processes through which the DPE Agriculture X acts on both solar radiation and climate change.

9) Contributes to the restoration of the ozone layer in the atmosphere.

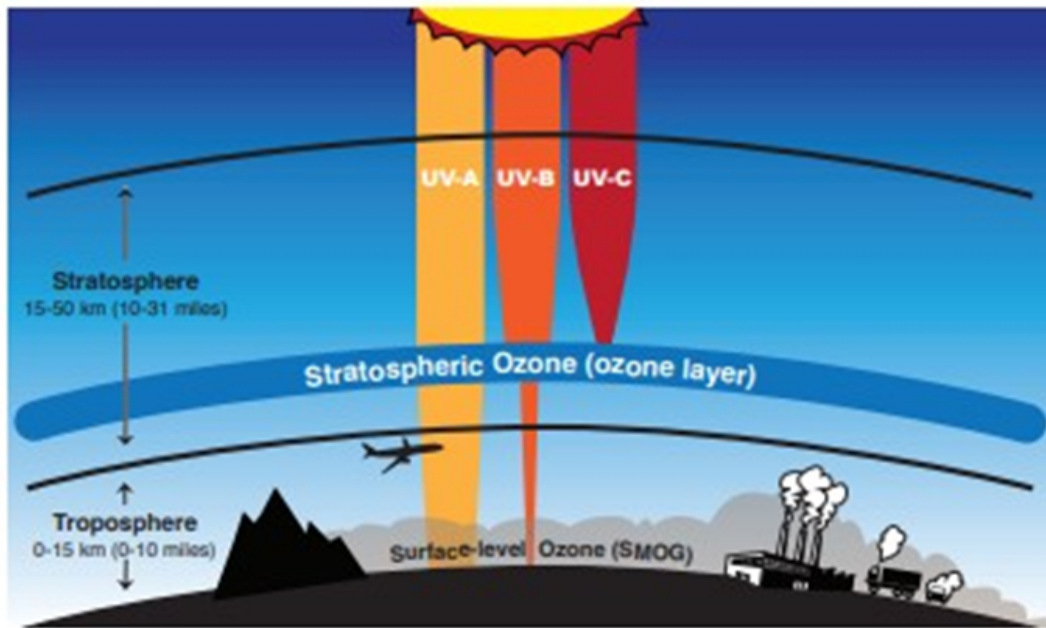
The Ozone Layer

The Earth's atmosphere is composed of several layers. The lowest layer, the troposphere, extends from the Earth's surface up to about 6 miles or 10 kilometers (km) in altitude. Virtually all human activities occur in the troposphere. Mt. Everest, the tallest mountain on the planet, is only about 5.6 miles (9 km) high. The next layer, the stratosphere, continues from 6 miles (10 km) to about 31 miles (50 km). Most commercial airplanes fly in the lower part of the stratosphere.

Most atmospheric ozone is concentrated in a layer in the stratosphere, about 9 to 18 miles (15 to 30 km) above the Earth's surface. Ozone is a molecule that contains three oxygen atoms. At any given time, ozone molecules are constantly formed and destroyed in the stratosphere. The total amount has remained relatively stable during the decades that it has been measured.

The ozone layer in the stratosphere absorbs a portion of the radiation from the sun, preventing it from reaching the planet's surface. Most importantly, it absorbs the portion of UV light called UVB. UVB has been linked to many harmful effects, including skin cancers, cataracts, and harm to some crops and marine life. (16)

Ozone layer in the stratosphere, about 9 to 18 miles (15 to 30 km) above the Earth's surface (Photo 7)



~ Photo 7

SOME EFFECTS OF OZONE LAYER DEPLETION

Effects on Plants

UVB radiation affects the physiological and developmental processes of plants. Notwithstanding components to decrease or fix these impacts and a capacity to adjust to expanded dimensions of UVB, plant development can be straightforwardly influenced by UVB radiation. Circuitous changes brought about by UVB, (for example, changes in plant structure, how supplements are conveyed inside the plant, timing of formative stages and optional digestion) might be similarly or now and then more critical than harming impacts of UVB. These progressions can have vital ramifications for plant aggressive parity, herbivory, plant sicknesses and biogeochemical cycles.

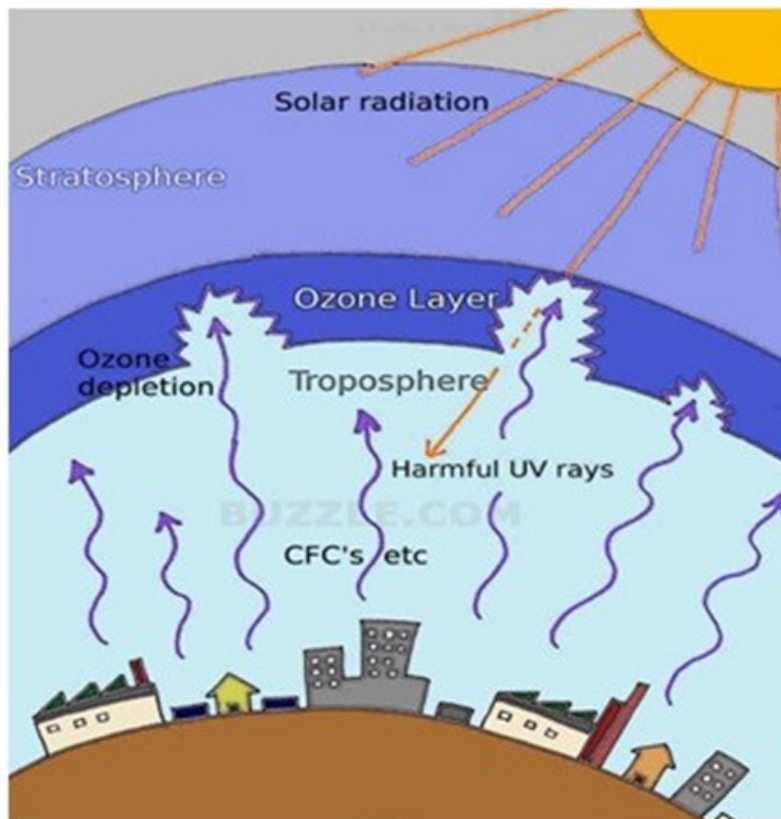
Effects on Air Quality

Decrease of stratospheric ozone and expanded infiltration of UV-B radiation result in higher photograph separation rates of key follow gases that control the concoction reactivity of the troposphere. This can increment both creation and demolition of ozone and related oxidants, for example, hydrogen peroxide which are known to affect human wellbeing, plants and open-air materials. Changes in the air concentrations of the hydroxyl radical (OH) may change the climatic lifetimes of imperative gases, for example, methane and substitutes for chlorofluorocarbons

(CFCs). Expanded troposphere reactivity could likewise prompt expanded generation of particulates, for example, cloud buildup cores from the oxidation and consequent nucleation of sulfur of both anthropogenic and regular source (for example COS and DMS).

Effects on Climate Change

Ozone exhaustion and environmental change are connected in various ways; however, ozone consumption is certainly not a noteworthy reason for environmental change. Climatic ozone affects the temperature parity of the Earth. It retains sun based bright radiation, which warms the stratosphere. It likewise assimilates infrared radiation produced by the Earth's surface, successfully catching warmth in the troposphere. In this way, the atmospheric effect of changes in ozone concentration differs with the height at which these ozone changes happen. The real ozone misfortunes that have been seen in the lower stratosphere because of the human-created chlorine-and bromine-containing gases, which have a cooling impact on the Earth's surface. (18) (Photo 8)



~ Photo 8

Ozone Layer Depletion

One of the important reasons for the ozone hole, which not surprisingly is increasing precisely in the lower stratosphere, is the layer of electrostatic and electromagnetic energy that accumulates in the underlying layer and so in the troposphere.

“Electromagnetic waves with a frequency of several kilohertz known as "chorus waves" were observed to trigger electrons over a wide energy band of geospace to fall towards the Earth all at once and generate the flickering aurora referred to as a "pulsating aurora".

The high-energy electrons in the radiation belt penetrating into an altitude of 60 - 80 km were discovered to be responsible for the depletion of ozone in the middle atmosphere....

The results demonstrated that when chorus waves are generated in geospace, electrons with a wide range of energies are scattered into the Earth's atmosphere, creating a pulsating aurora and at the same time, electrons from the

radiation belts deplete ozone in the middle atmosphere. It has been pointed out that ozone depletion in the middle atmosphere is an important process that could affect climate change. **The results from this study therefore suggest that the precipitation of electrons from geospace may impact the middle atmosphere and thus, climate change (3).**

How the DPE Agriculture X contributes in 2 different ways to the restoration of the ozone layer in the high atmosphere

We described previously that the DPE Agriculture X emits electrons and produces negative ions and projects them into the stratosphere. When these accumulate, they create a shield of negative charges which repel the negative charge of the electrons coming from space as the polarities themselves repel each other. Since electrons coming from space are mainly responsible for the ozone hole, the process of destruction of the ozone layer is interrupted.

A further action of the DPE Agriculture X is to discharge electrostatic currents such as microwaves, radio waves etc. into the stratosphere and mesosphere, as they are the cause of the overheating of the atmospheric layers and the consequent thinning of the ozone layer. As stated in the following study.

“A large number of radio transmitters emit radio waves of different wavelengths into the Earth’s ionosphere. It is important to study the possible consequences of this effect on the ozone content in the mesosphere for understanding the degree of influence of human activities on the atmosphere. For these studies, the methods of controlled artificial influence on the Earth’s ionosphere by powerful HF radio emission are used [26,27,28] and references therein.”

“The purpose of the experiments was to study the possible effect of artificial influence on the ionosphere by powerful high-frequency radio emission from the SURA facility on the concentration of mesospheric ozone at an altitude of 60 km. The correlation between the decrease in the intensity of the emission spectrum of the atmosphere in the ozone line and the period of switching on the powerful heating facility, found in other observations, was confirmed [29,30,31,36]. Diagnostics of the lower ionosphere, carried out by the method of resonant scattering of radio waves on the periodic irregularities, showed that during the heating on period strong disturbances in the D-region were observed. “(21).

The DPE Agriculture X contributes to the formation of ozone also through oxygen ions. We have seen in the previous paragraphs how the production of oxygen negative ions is created (O⁻), which reach the upper atmosphere. We know this because it’s possible to see the hole in the clouds.

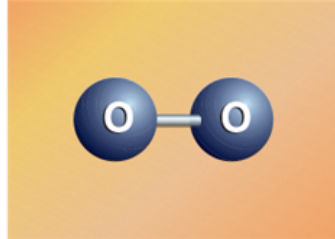
When ozone concentrations exceed atomic oxygen concentrations, O⁻ and O₂⁻ ions will largely transfer charge to ozone producing O₃⁻. (19) (Photo 9); (Photo10)

Ozone and Oxygen

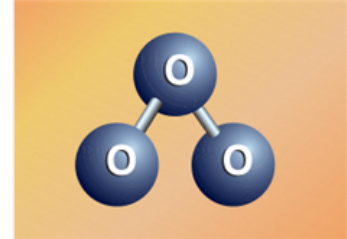
Oxygen
atom (O)



Oxygen
molecule (O₂)



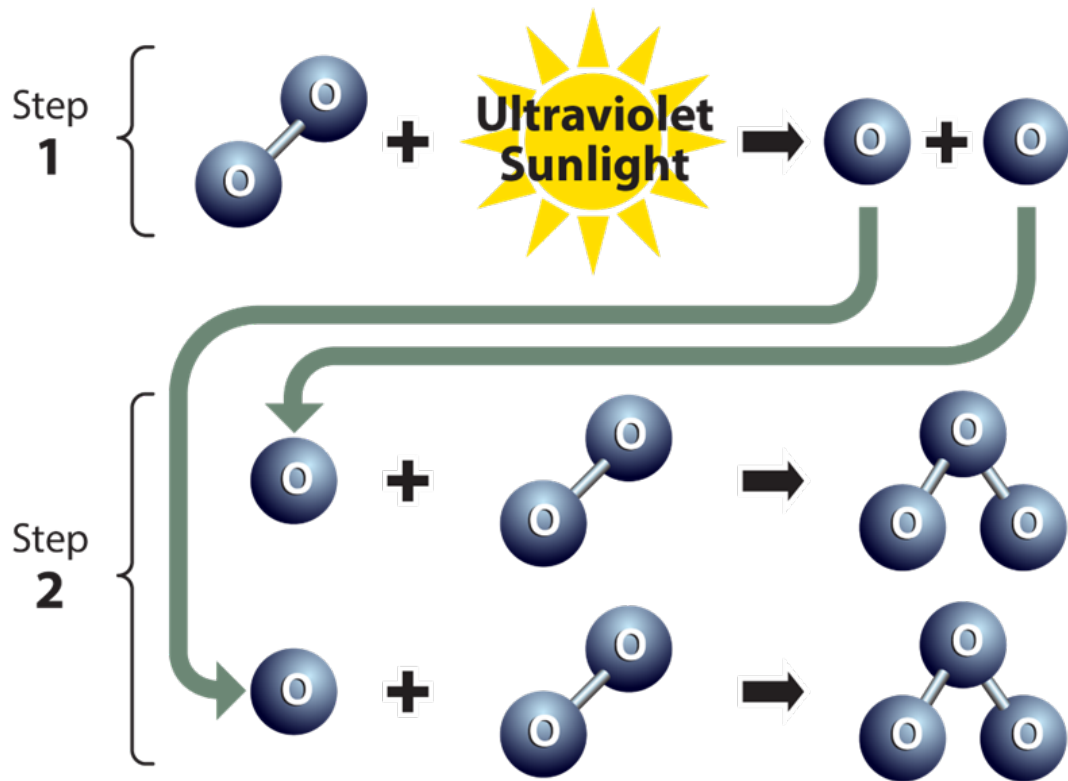
Ozone
molecule (O₃)



~ Photo 9

From: Scientific Assessment of Ozone Depletion: 2018 (20)

Stratospheric Ozone Production



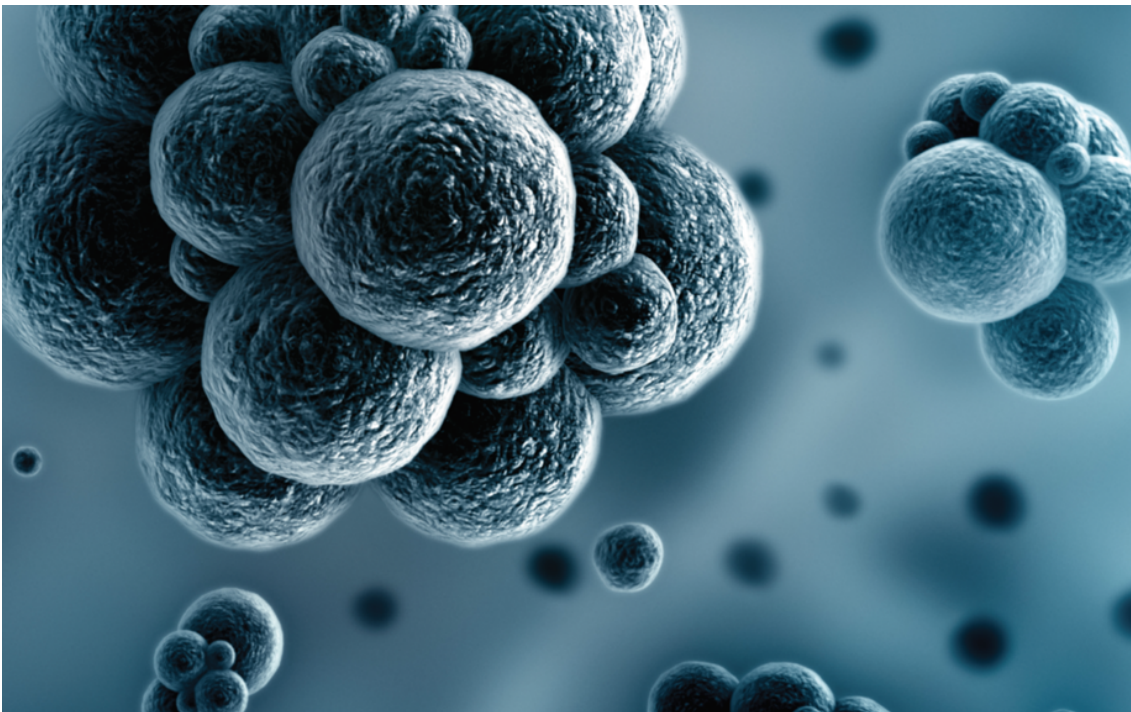
~ Photo 10

From : *Scientific Assessment of Ozone Depletion: 2018 (20)*

“ O₃ (Ozone) absorbs the ultraviolet full band of 0.3 mm, and O₂ (Oxygen) mainly absorbs the visible light bands of 0.69 mm and 0.76 mm. One of the most important environmental factors that affects the formation of NAIs (Negative Air Ions) is PAR (Photosynthetically Active Radiation), which affects the photosynthesis of plants. Photosynthesis is a natural pathway for NAI production. In a certain range, photosynthesis increases with the increase of PAR (Photosynthetically Active Radiation), leading to the increase in the amount of oxygen released, and ultimately the increase of the NAI concentration (Yongqing et al., 2014).

Photosynthetically active radiation (*PAR*) is light of wavelengths 400-700 nm and is the portion of the light spectrum utilised by plants for *photosynthesis*.

Thus, NAI concentration and PAR are positively correlated. The photoelectric process that produces NAIs is promoted by ultraviolet light. Short-wave ultraviolet radiation can directly promote the occurrence of air ionization, and the oxygen separation process of O₃ under the action of ultraviolet radiation is the main factor contributing to the formation of NAIs (Yanjun et al., 2010). It can be seen that NAI concentration is positively correlated with ultraviolet radiation. **Some photoelectric sensitive materials such as metals, water, ice, and plants can also cause a photoelectric effect and release electrons, even though no short-wave ultraviolet radiation is applied. The electrons then combine with molecules in the air to form NAIs** (Jinming et al., 2006). (17) (Photo 11)



~Photo 11
Image source: Elanra Medical

10) The plants will require much less fertilizers and pesticides

We have previously extensively described all the processes through which electrostatic energy is discharged.

“Discharges of electricity in the air, especially during thunderstorms, cause some union between the oxygen and nitrogen, which, being soluble in water, are carried to roots of plants and absorbed by them directly. (32)

It has already been established, since the end of the 1800s through the discoveries of Dr. Louis Grandeau, that nitrification of the products of the soil through vegetation was due to the atmospheric electricity. Therefore, nitrogenous products draw the elements of their transformations from the surrounding air and the electrical flow. The electrical flow has an influence on the fixation of the nitrogen by the soil and the plants; in fact, this current allows the nitrification of the soil, which creates nitrates and cyanamide, which are excellent nitrogen fertilizer elements.

“The sun's rays, rain, nitrogen from the air, atmospheric electricity carried by clouds; all these elements can be utilised to take the place of manures.

If manure is used to intensify the growth, it must not be assumed that the chemical products have a direct influence on vegetation.

The facts are: *All chemical bodies, which decompose, give forth an electric current, and it is this electric current which is due to the decomposition of manures in the ground which gives to vegetation the necessary fluid for the intense development of the plant.*

The elements from the atmosphere bring far more nourishment to the plants than the soil itself and strengthen our statement that if *chemical fertilisers intensify the production, it is because their decomposition in the soil **PRODUCES AN ELECTRIC CURRENT WHICH STRENGTHENS THAT OF THE ATMOSPHERE.***” (31)

Once the DPE Agriculture X is installed, there is no need to interfere with it, and it remains there indefinitely. The first expense has been made once and for all time, and the cost of manuring is minimised, for the soil contains it. The results will go on increasing, that is to say, that the second year and the years following it will be better than the first.

The ravages of drought are greatly minimised, and we will explain the reason why: As it is necessary to have water or rain to decompose the fertilisers in the soil, and thus supply to the plants the necessary current to their vitality, this current slowly, but continuously, and, therefore it supplements rain just as it supplements fertilisers. Likewise, vegetation growing in soil which is electro-magnetic is protected from rotting by heavy rains, as the germs of rot cannot develop when in contact with the electric currents.

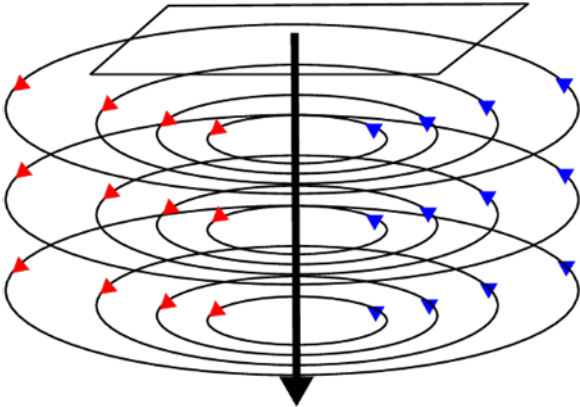
“The chemical fertilizers, pesticides, and suitable genetic resources are commonly used for improving the crop yield. Magnetic field (MF) therapy for plants and animals has been found to be an effective and emerging tool to control diseases and increase tolerance against the adverse environment. Very limited studies have been attempted to determine the role of MF on plant tolerance against various stress conditions. This review aims to highlight the mitigating effect of MF on plants against abiotic and biotic stresses.

MF interacts with seeds and plants and accelerates metabolism, which leads to an improved germination. The primary and secondary metabolites, enzyme activities, uptake of nutrient and water are reprogrammed to stimulate the plant growth and yield under favorable conditions. During adverse conditions of abiotic stress such as drought, salt, heavy metal contamination in soil, MF mitigates the stress effects by increasing antioxidants and reducing oxidative stress in plants. The stunted plant growth under different light and temperature conditions can be overcome by the exposure to MF. An MF treatment lowers the disease index of plants due to the modulation of calcium signaling, and proline and polyamines pathways. This review explores the basic and recent information about the impact of MF on plant survival against the adverse environment and emphasizes that thorough research is required to elucidate the mechanism of its interaction to protect the plants from biotic and abiotic stresses.” (27)

We have demonstrated before that the DPE Agriculture X strengthens the geomagnetic field, which is essential for the development and health of plants. But two processes take place... One in vertical depth which strengthens the geomagnetic field and the other radial, i.e. on the surface of the ground.

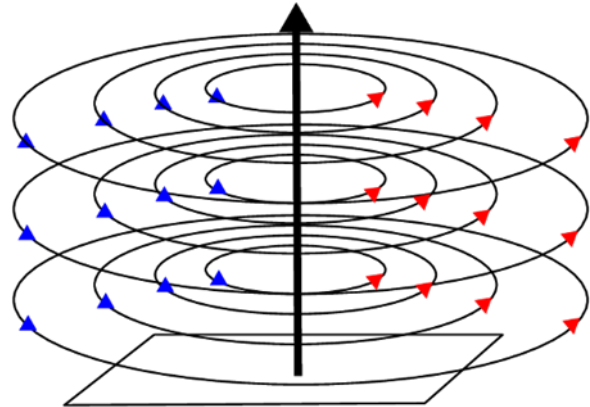
We tested this effect with the fennel test that you will find on the following pages. When interacting harmoniously with nature, the processes must be slow, continuous and gradual, but this will allow for stability without having negative consequences.

In fact, the DPE Agriculture X, being made up of quantum superconductors, behaves alternately like a monopole depending on the imbalance to be compensated.



~ Photo 12

Discharge electrostatic currents such as microwaves radio waves.



~ Photo 13

Emission of negative oxygen ions, electrons Gravitons that generate the magnetosphere

First process described in photo 12

In quantum mechanics, an alternate way of viewing EMR (electromagnetic radiation) is that it **consists of photons** - uncharged elementary particles **with zero rest mass** which are the quanta of the electromagnetic field, responsible for all electromagnetic interactions [6]. Quantum electrodynamics is the theory of how EMR interacts with matter on an atomic level [7]. Quantum effects provide additional sources of EMR, such as the transition of electrons to lower energy levels in an atom and black-body radiation [8]. The energy of an individual photon is quantized and is greater for photons of higher frequency. This relationship is given by Planck's equation $E = hf$, where E is the energy per photon, f is the frequency of the photon, and h is the Planck constant. A single gamma ray photon, for example, might carry $\sim 100,000$ times the energy of a single photon of visible light.

The effects of EMR upon chemical compounds and biological organisms depend both upon the radiation's power and its frequency. EMR of visible or lower frequencies (i.e. visible light, infrared, microwaves, and radio waves) is *non-ionizing* because its photons do not individually have enough energy to ionize atoms or molecules or to break chemical bonds. The effect of non-ionizing radiation on chemical systems and

living tissue is primarily simply heating, through the combined energy transfer of many photons. In contrast, high frequency ultraviolet, X-rays and gamma rays are *ionizing* – individual photons of such high frequency have enough energy to ionize molecules or break chemical bonds. Ionizing radiation can cause chemical reactions and damage living cells beyond simply heating, and can be a health hazard and dangerous.

Second process described in Photo 13

When photons are discharged towards the center of the Earth, they undergo the Gertsenshtein effect which converts the photons into gravitons.

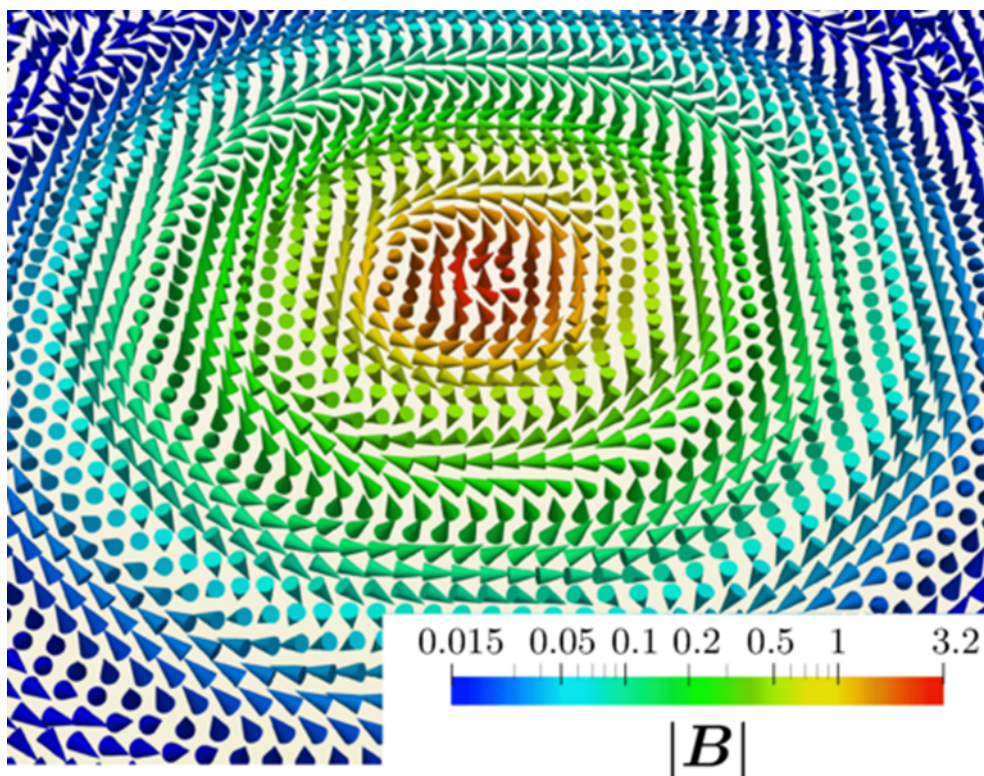
“The Gertsenshtein effect describes the conversion of electromagnetic waves into gravitational waves and vice-versa. Conversion is made possible by an external magnetic field that provides the extra angular momentum necessary for a spin-1 field to mix with a spin-2 field.” (28)

Increasing the gravity in that area also increases the strength of the magnetosphere on that place since gravity and the magnetosphere are closely related - the slip on the perpendicular is very minimal.

“An important feature of the observed correlation is that the gravitational field is correlated not with the geo-magnetic field at the same location, but with the geomagnetic field shifted in longitude through an angle $\phi(t)$ towards the east, where $\phi(t)$ increases linearly with time at a rate of about 0.27 /year, a manifestation of the well-known “westward drift” of the field.” (29).

Now let's see the Gertsenshtein effect in superconductors of type II

Type II superconductors include copper-oxides and metal alloys, which have been used in the DPE Agriculture X as well as type 1 superconductors such as aluminum. “Gravitational waves propagate inside superconductors with a phase velocity reduction of ~ 300 times and a wavenumber increase of ~ 300 times. This result has major significance for the propagation of gravitational waves. It is shown here that one important consequence may be regarded as a considerably enhanced Gertsenshtein effect for very-high-frequency gravitational waves within type-II superconductors. This arises because type-II superconductors do not always completely expel large magnetic fields; above their lower critical field they allow vortices of magnetic flux to channel the magnetic field through the material. Within these vortices, the superconducting order parameter reduces to zero and so the material has properties approaching those of normal material or non-superconductor. Varying the applied magnetic field varies the proportion of material that is normal, which consequently affects the propagation speed of very-high-frequency gravitational waves through a type-II superconductor.” (30) (Photo 14)



~Photo 14

Image source: Vortices with magnetic field inversion in noncentrosymmetric superconductors

11) Insects settlement of beneficial and removal of pathogenic ones

Healthy ecosystems and sustainable agriculture require insects.

We must consider that there are two types of insects for plants, the useful ones that are functional to the plant, such as bees, bumblebees etc. and the harmful ones which are harmful both because they devour the plant and because they introduce pathogens into it. We would be lying if we said that we can completely eliminate the harmful insects and leave the useful ones and this would not be in accordance with the laws of nature. So, our goal is to:

- **Increase pollination insects,**
- **Reduce harmful insects and make pathogens weaker**
- **Strengthen the plants' immune system so that they better fight pathogens.**

To do this we must understand the causes of this imbalance and by understanding them we can remedy it.

We can consider that there are two main reasons:

- 1) **Electromagnetic pollution which alters the biological rhythms of insects.**
- 2) **Climate changes.**
- 3) **Changes in the Schumann resonances.**

Increase pollination insects...

We can consider the most important one that can serve as an example for us, the honey bee...

“Honeybees carry honey, pollen, propolis, and water from the outside to their hives. Honeybees are talented insects who can find plants in the field and return to the hive. Worker honeybees are rare social insects that collect foods from distances of up to 8-12 km and return to their hives without losing direction.

The ability of the bees to feel the electromagnetic field of the Earth is one of the most important factors that honeybees use in finding direction. Although it is thought that the most important factor that honeybees use in finding direction is the sun; they can also use cues such as smell, polarized light, compass of the sky, signs around the hive, chemicals, acoustic instruments and magnetic field.

Today, the use of devices that produce the electromagnetic field such as mobile phone towers, mobile phones, Wi-Fi, Bluetooth, electric appliances and high voltage lines has increased considerably.

Honeybees have magnetite crystal structures in bodyfat cells. These magnetite structures are the active components of the magneto-reception system. Thanks to

these structures, honeybees can feel even slight changes in the magnetic field lines of the Earth.

These delicate structures are affected by the slightest magnetic pollution and cause the honeybees to lose their direction. The bee dances that honeybees use to communicate with each other are distorted.

The increase in losses in bee colonies all over the world has caused a phenomenon in which the number of bees in the hive has decreased very rapidly, without showing the symptom of an illness. It's called the Colony Collapse Disorder (CCD).

According to Sharma and Kumar (2010), a large amount of radiation also disturbs the bee's ability to navigate and prevents them from returning to their hives.

According to Pattazhy (2011), if the number of towers and mobile phones increases, honeybee may disappear within a decade.” (22)

Bees are undoubtedly the most affected insects but this phenomenon is common to many insects.

“*Grillus bimaculatus* (two-spotted cricket) responds to EMF, like stressful conditions, which may change the condition and fitness of exposed individuals, disrupt mate selection, and, in consequence, affect the species' existence”.

“Findings indicate that changes in the chirp rate might be a stress-related behavior, as they are accompanied by changes in the levels of stress hormones in the brain. The reproduction of crickets is important to the worlds of plants, animals, and humans. The cricket diet contains a lot of cellulose-rich plant materials. Bacteria and fungi easily decompose cricket fecal matter, increasing the energy and nutrient flows in the ecosystem. This provides plants with a rich source of easily available essential growth factors. Crickets also help control plant communities in both natural and human-made ecosystems. Additionally, they are essential food sources for insectivores (Rogers 2021). Changes in calling songs induced by EMF exposure may confuse mating, which can lead to adverse health outcomes, alter population dynamics, and impair sexual selection. EMF is becoming a very strong and important environmental factor.” (23).

“Pulsed microwave radiation from cell phones or WiFi disrupts the development of *Drosophila* fruit flies and leads to reduced fecundity and increased mutation rate; these effects have been documented by several research groups (26).

“Pulsed microwave radiation from cell phones or WiFi disrupts the development of *Drosophila* fruit flies and leads to reduced fecundity and increased mutation rate; these effects have been documented by several research groups [83–85].

Levitt et al.'s review: Levitt et al. is a three-part review of EMF effects on flora and fauna [86]. Part two discusses the effects of EMFs on animals and lists 140 references dealing with insects.” (26).

How does DPE Agriculture X work in the case of bees and beneficial insects?

In the previous pages we have described the process through which the DPE Agriculture X is able to discharge electromagnetic pollution and restore the normal geomagnetic field of the area, allowing the causes of the effects described above to be removed, thus allowing the insects to reproduce and return to their normal biological functions and behaviors.

Reduce harmful insects and make pathogens weaker

The increase in harmful insects is mainly due to strong climate changes which allow species to multiply dramatically. Therefore, a normalization of the climate entails two important consequences, the first the reduction of damage to Agriculture which today.

“Two main types of extreme events can be characterized either as exceeding normal maxima or minima parameter ranges by a rare magnitude, or maintaining a normal maxima or minima for an unusually long duration. Events which do not normally occur in a region such as violent storms or floods can be included in these categories. Extreme parameters can include temperature (including lack of, or occurrence of, unseasonal frosts), precipitation (including snow, hail or extreme intensity), wind, light (e.g. lack of intensity due to cloud or dust), humidity, or any unusual sequences of such extremes or even unusual combinations, none of which is extreme on its own. The effect of extremes is illustrated by events in the summer of 2003 in parts of Europe, where temperatures were 6C warmer than long-term means and precipitation deficits of up to 300 mm were recorded.

In many respects, rapid changes in the climate caused by extreme events are likely to be more devastating for crop production if they lead to sudden pest outbreaks and disease epidemics because control measures are difficult to apply quickly enough or on a sufficiently large scale to contain the problem.

When addressing how climate change will affect pests, experimentalists have conventionally focused on long-term climate changes such as elevated global CO₂ concentration and air temperatures (reviewed above) but there are several examples of extreme events having impacts on pest incidence in the shorter term.

Historically, there are also many examples of invertebrate food webs responding to short-term changes in climatic conditions. For example, conditions in the UK in 1975 and 1976 were particularly beneficial for aphids in terms of early development and reduced overwintering mortality, leading to large increases in aphid populations, including the cereal aphids *Sitobion avenae* and *Metopolophium dirhodum* (Jones, 1979).

Extreme events can also have indirect or secondary consequences as illustrated by outbreaks of potato late-blight in Canada. The epidemics in 1994 to 1996 were due to genotypes of *Phytophthora infestans* from distant regions which were associated with the unusual tropical storm tracks moving up the eastern seaboard of the USA (Peters et al., 1999). In the UK, the unusually wet season of 2007, coinciding with the prevalence of epidemiologically-fit new pathotypes of *P. infestans*, resulted in an unprecedented number of outbreaks of late-blight (www.eucablight.org).

This was also reflected in the number of isolates and their genotypes.” (24)

A further action of the DPE Agriculture X is produced by the combination of positive electricity coming from the atmosphere and negative electricity coming from the Earth, which cause continuous ebbs and flows of natural electricity in the ground.

This destroys cryptogamic diseases of vegetation, but mildew and odium also.

“This current destroys all insects and parasites that attack plants and life due to the very fact that the vibrations caused are proportionally greater than the vibrations of the insects themselves.” (31)

Furthermore, rotting germs in the soil cannot develop in contact with electric current.

Changes in the Schumann resonances

“Geomagnetic storms caused by solar flares have been shown to cause stress in animals, a fact well documented in fish and Daphnia, migratory birds, and honeybees. During solar flares impacting the Earth, the distance of the ionosphere to the ground changes, which in turn changes the Schumann resonances [48]. **It may be that the perception of the stable frequencies of the Schumann resonances (7.83 Hz, 14 Hz, 20 Hz) was a key step in evolutionary history that enabled stable biorhythms** [49, 50].

The rat heart responds to very weak magnetic fields in the range of the first Schumann resonance (7.6–8 Hz) [51]. This may be mediated by VGCCs (Voltage-gated calcium channels) and sarco/endoplasmic reticulum Ca²⁺ - pumps (SERCAs), since specific blockers abolish the effect [52].

This is in accordance with theoretical calculations by Panagopoulos and Balmori, and may be the **way animals perceive upcoming earthquakes, since earthquakes are preceded by geomagnetic field and ionospheric perturbations** [53, 54]. The hypothesis that VGCCs are the main conduit by which biological effects of EMFs are produced is based on observations that EMFs cause calcium release (leading to oxidative stress), that calcium channel blockers protect from adverse effects as well as on theoretical grounds.”

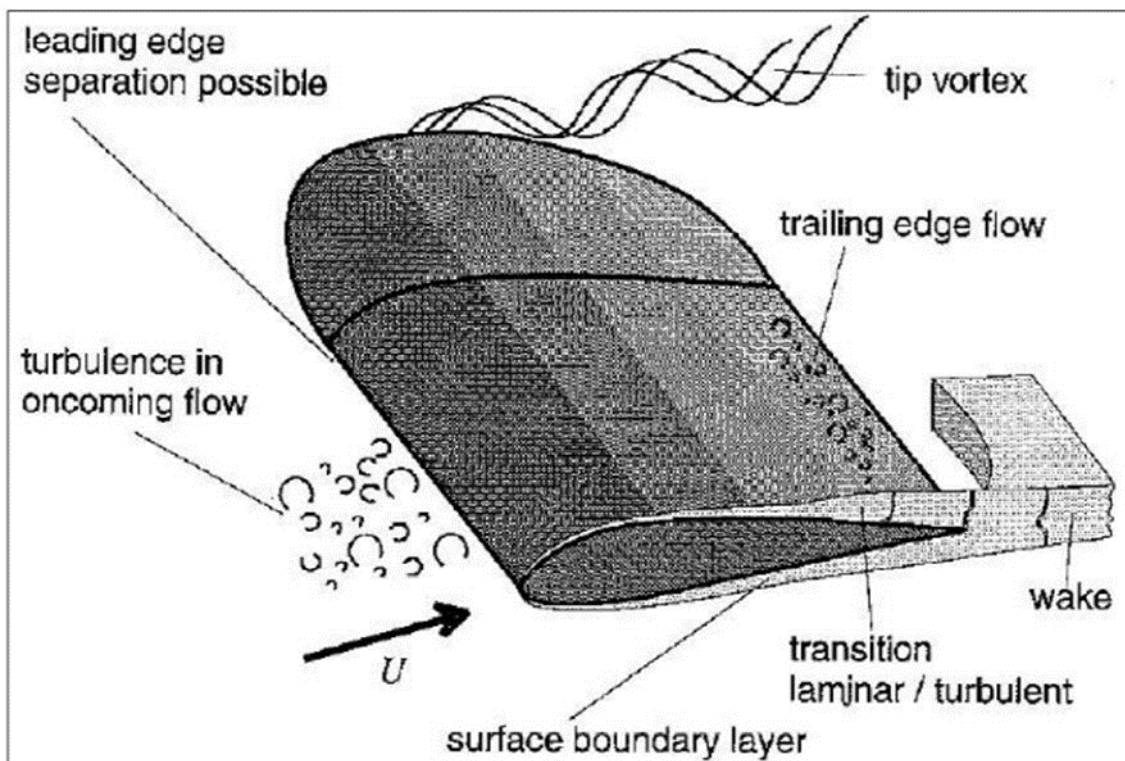
“Many behavioral aspects in biology are thought to be synchronized with both the Earth’s natural fields and Schumann resonances.

But now, for the first time in evolutionary history, we have covered the Earth’s surface with a blanket of artificial energy fields without knowing what the consequences might be. (26).

12) Sound reduction

Sounds can have various origins, but in this case, we take as an example those generated by wind turbines.

The acoustic power emitted by a wind turbine is initially made up of two different contributions: mechanical noise and aerodynamic noise. The mechanical noise originates from the different components of the machine, such as the electric generator and the gears. The aerodynamic noise is generated by the effects of turbulence due to the interaction of the air with the vanes. Aerodynamic noise is the predominant component. Aerodynamic noise caused by the relative motion between the air and the turbine blade is caused by different generation mechanisms. The diagram of the incident air flow on the blade profile and the resulting fluid dynamics phenomena are illustrated in the following figure. (Photo 15)



~ Photo 15

In the air that reaches the blade profile on its leading edge there is a natural inflow turbulence. The boundary layer of the air that flows in contact with the blade surface can be of the laminar or turbulent type. Downstream of the blade, the boundary layers of the upper surface in depression ("suction side") and the lower one under pressure ("pressure or lifting side") combine to give rise to the vortex of the air that leaves the blade. At the external end of the blade ("blade tip") the pressure difference on the lower and upper surfaces of the blade tends to compensate itself, causing a transverse flow that generates extremity vortices.

The effect of the turbulence inherent in the wind at the entrance to the blade surface ("inflow turbulence") generates broadband noise in a frequency range up to 1 kHz and is perceived as a whistle or hiss. The frequency of the generated noise is a function of the size of the vortices carried by the wind. The frequency of the generated sound increases as the size of the vortices decreases, entering the field of the actual noise disturbance ($f > 100$ Hz) when the latter have dimensions smaller than or equal to the blade chord. The intensity of the generated noise is then proportional U^5 , where U the relative speed of the wind with respect to the blade profile in the general section of the blade. The shape of the blade profile and the curvature of the blade inlet profile have significant importance on the generation of this aerodynamic noise, the amount of which is however believed to be less than the noise source caused by the flow on the trailing edge of the blade. It is generated on the rear edge of the blade ("trailing edge noise") is caused by the interaction with the blade output profile of turbulent eddies that are created on the blade surface inside the boundary layer, where the turbulence induces a fluctuating pressure field.

The aerodynamic noise due to turbulence on the trailing edge is perceptible as a hiss, i.e. a broadband noise with a peak usually between 500 and 1500 Hz. It has been observed, as shown in the following figure, that the area of greatest emission perceived by an observer on the ground in front of the turbine occurs on the blade during downward rotation. The emission was not maximum at the end of the blade, but at distances from the hub between 75% and 95% of the blade length. (Photo 16); (Photo 17).



~ Photo 16



~ Photo 17

Through studies on the noise emitted by wind turbines, formulas have been obtained that should allow a first approximation of the total sound power emitted by a wind turbine on the basis of fundamental parameters, one of which is dictated by Haged and based on the speed V_{Tip} of the blade tip and of the rotor diameter D :

$$L_{WA} = 50 \log_{10} V_{Tip} + 10 \log_{10} D - 4 \quad [\text{dBA}]$$

Without reducing the speed of rotation of the blades, we work not on the amount of air moved but on the transmission of the sound wave.

It is possible to reduce the sound power emitted by the blades without reducing the speed of the turbines and the amount of air moved by them. This is possible by interacting on the chaos of the particles through which sound is transmitted.

Let's see how ...

In our technological approach we have always strived to replicate as faithfully and harmoniously as possible what nature does. The natural phenomenon that occurs and that allows the reduction of sounds is the one that occurs during snowfalls.

Now we will give you technologically new information and how it has actually been applied. The **snowflake ice crystals are diodes that capture all the wandering energies in the air** and then discharge them into the Earth, which is why the air is cleaner when it snows.

We do electronically what snow does in 1000 km² ...

We first massively recall all the wandering energies, then we create the muffled effect as the resonance is eliminated.

Atomic physics: magnetic resonance

Phenomena consisting of the significant absorption of electromagnetic energy that occurs when electrons or nuclei with their own magnetic moment are subjected to a variable magnetic field of frequency equal to or very close to the system's own frequencies. These frequencies are different according to the type of magnetism that is considered, so that, from the study of magnetic resonance, different phenomena that would otherwise be difficult to separate can be observed separately. For example, it is possible to study nuclear magnetism, which is much weaker than paramagnetism or electronic diamagnetism which generally completely mask it. In the case of nuclear magnetic resonance (NMR), in which the resonance frequencies are in the field of radio waves, it is possible to have information not only on the presence of the atomic nuclei involved, but also on the electronic environment in which the nuclei are immersed.

This technique enables the study of the magnetization properties of matter related to the bipolar interaction between the spins. The principle of operation of this technique is as follows: in atomic nuclei with angular momentum μ different from zero, the spin magnetic moment and the angular moment I are parallel. If in such a system we introduce an external static magnetic field this, since it acts only on the spin magnetic moment, will cause the spin moment around the angular moment to be prescribed according to the following equations (Photo 18):

$$\eta \frac{dI}{dt} = \mu \times H$$

$$\frac{d\mu}{dt} = \gamma \mu \times H$$

~ Photo 18

μ and γ are respectively μ the Planck constant divided by 2π and γ a constant.

The introduction of a second magnetic field of a variable type, in a transverse direction with respect to the static one (since the DPE Agriculture X creates a toroid of forces), means that in particular conditions, at particular frequencies of the second field, phenomena are observed of energy absorption. This type of phenomenon is particularly used in the medical and biological fields to obtain information on cellular tissues. In fact, one of the main characteristics of this technique is that it does not damage the material on which it operates, unlike many other analysis techniques based on irradiation spectroscopy (for example, X-rays); a feature that makes this technique one of the most promising in the medical field. In solid state physics, the study of magnetic resonances is of great importance due to the large number of properties that can be investigated through this technique.

The physical factor of conductivity, reactivity and relativity due to stray energies are lost and therefore the acoustics of the place change drastically.

The currents that these mega wind turbines create also change according to the same principle.

The sound transfers in the air and travels at the speed of 1,193 km / h. In the last 25 years all the sounds have changed, even the acoustics of the planet have changed because we have overloaded the air with electromagnetic waves of military, civil, radar, cellular, internet technologies etc ...

To give an example, let's imagine that we have 1 cubic m of air crossed by an electromagnetic wave that occupies it, now let's imagine that other waves begin to cross it and again and again They still pass through that space but will begin to create Chaos in that area.

We can define electromagnetic chaos as a set of invisible perturbations that create disorder in an environmental balance that had remained unchanged for millions of years.

Over time, this chaos has led to a slowdown in the propagation of sound under the same conditions and temperatures.

Let's make a brief excursus ...

1636

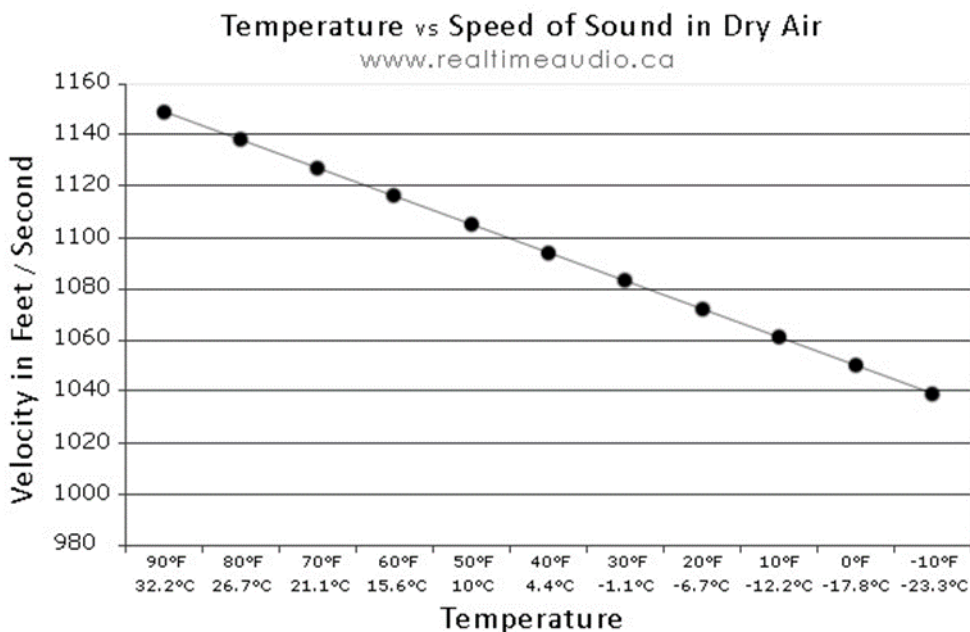
Mersenne created the first absolute monochord (a board on which a string is stretched between two fixed trestles between which a third mobile one can be placed) for the measurement of acoustic frequencies. Also, Mersenne, measuring the time interval between the instants in which the lightning and the explosion caused by a distant firearm were perceived, around 1636 performed the first measurement of the speed of sound in the air, obtaining $v = 448 \text{ m / s}$. Subsequently, in 1656, Borelli (1608-1679) and Viviani (1622-1703), using the same method, found $v = 350 \text{ m / s}$.

1965

The speed of sound in 1965 was about 340 m / s at a temperature of +10 degrees Celsius, today it is 333.5 m / s at the same temperature. (Photo 19)

(<http://soundphysics.altervista.org/la-velocita-del-suono/>)

1100ft = 335.2800m



~ Photo 19

Now let's see what law it comes to subjected to the dynamics of a snowflake ice crystal in an environment subjected to electromagnetic waves.

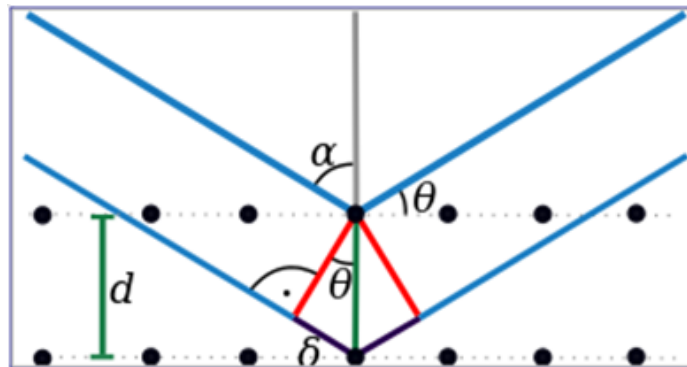
It responds to Bragg's law ...

By making an appropriate electromagnetic wave [1] affect a crystal, interference phenomena are observed, caused by the reflection of waves from different but parallel crystalline planes. This phenomenon was first interpreted by William Henry Bragg and his son William Lawrence in 1913 and summarized in the so-called Bragg's law: (Photo 20)

$$n \lambda = 2d \sin(\theta)$$

where is it:

- θ (theta) is the angle that the outgoing beam forms with the crystalline plane
- λ (lambda) is the wavelength of the radiation
- d is the distance between two adjacent floors
- n is a positive integer.



~ Photo 20

The formula is explained analytically by considering an optical path difference equal to $2d \sin(\theta)$.

Bragg's law can be geometrically interpreted in reciprocal space as an Ewald sphere. By drawing a graph that has the values of the radiation frequency as abscissas and how you order the values of the momentum, we obtain that the latter linearly depends on the wavelength in an inversely proportional manner, and that the product between the two is a constant which measured exactly is Planck's constant. It is deduced that a wavelength is associated with each moving particle, which is a fundamental step for the formulation of the wave-particle dualism formulated by De Broglie.

In physics with the Anglo-Saxon term backscatter or backscattering (in Italian backscatter or return radiation) we mean the backward diffusion, that is the reflection, of matter, radiant energy, waves, particles or signals that come back in the same direction from which they come, but in the opposite direction, ie with a diffusion angle of 180° . [1] It is widespread reflection, distinct from specular reflection. The concept has important applications in astronomy and in various fields of physics, as well as in photography and ultrasound.

Backscattering of waves in physical space

Backscattering can occur in quite different physical situations. The incoming waves or particles are deflected from their original direction by different mechanisms:

- diffuse reflection from large particles (Mie scattering), which causes enrosadira and gegenschein and appears in the weather radar;
- inelastic collision between electromagnetic waves and the transmission medium (Brillouin scattering and Raman scattering, important in optical fibers, see below;
- elastic collision between accelerated ions and a sample (Rutherford backscattering);
- **Bragg diffraction from crystals (in this case of snowflake ice crystal)**, used in inelastic scattering experiments (neutron backscattering, X-ray backscattering spectroscopy); (Photo 21)
- Compton scattering, used in X-ray backscatter scanning imaging.

Sometimes, the scattering is more or less isotropic, ie the incoming particles are scattered randomly in various directions, with no particular preference for "backward" scattering.

Considering the laws of physics described so far, it is shown how it is possible to modify the propagation and direction of sound and reduce its power.



~Photo 21

The largest single snow crystal ever photographed, 10.1 mm from tip to tip (Credit: Libbrecht)

13) Neutralization of Radioactivity

Demonstration of the DPE Agriculture X's ability to neutralize nuclear radiation.

We consider as a starting point an environment full of ionizing radiation.

Ionizing radiation is **electromagnetic particles and waves** with a high energy content, capable of breaking the atomic bonds of the impacted body and electrically **charging neutral atoms and molecules** - with an equal number of protons and electrons - ionizing them.

We can identify three essential components of ionizing radiation for our study:

- Electric density
- Ionic density
- High energy content

There are many causes of ionization, among which, in addition to the chemical ones, precisely:

- **interaction with electromagnetic radiation** (absorption of visible, UV, X, Gamma radiation, which are the ionizing components)

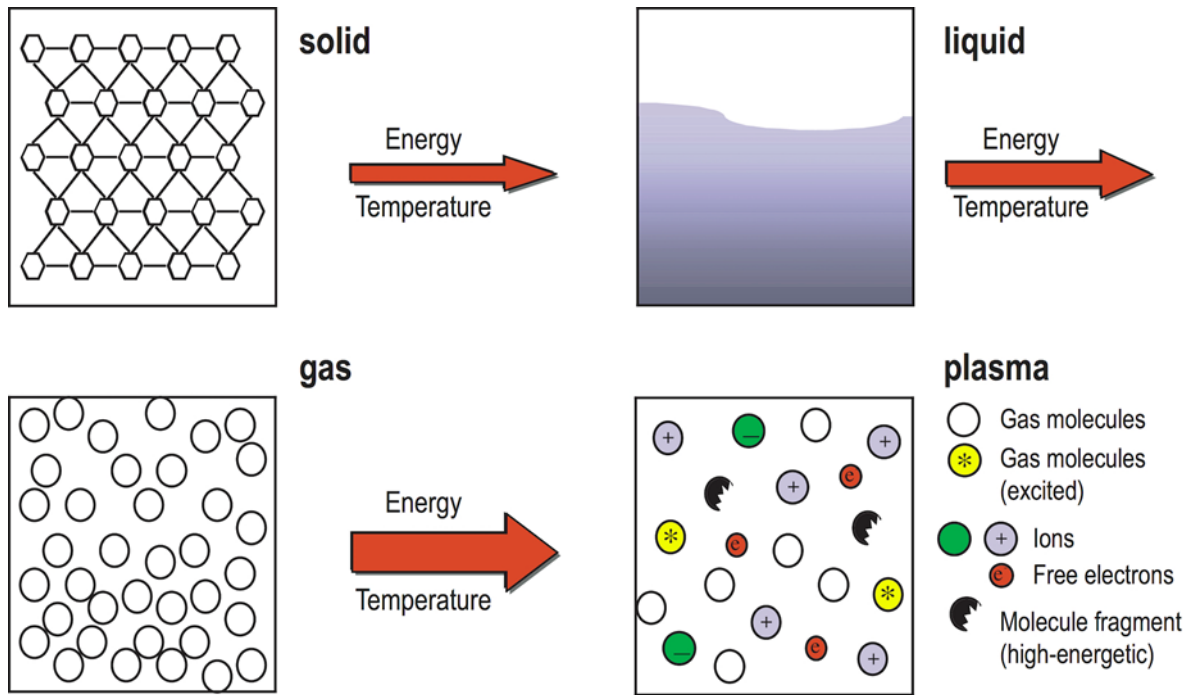
- **collision with charged particles** (electrons, ions, atomic nuclei, nuclear collisions, corpuscular radiation)

- **thermal agitation** (high rise in temperatures, as occurs in stars, in physics laboratories or in industry: as an idea we speak of cold plasmas, those that reach temperatures between 500 and 800° C, while hot plasmas around 10,000° C)

The most widespread and universal case of ionization is plasma, the 4th state of matter, everywhere present in the Cosmos as an ionized gas consisting of protons + (ions) and electrons - disconnected from each other and moving at very high speeds, and globally neutral (the total electric charge is zero).

By administering energy, the states of aggregation change: a solid body becomes liquid, a liquid passes to the gaseous state. If additional energy is administered to a gas, the latter ionizes and transforms into plasma, a state of aggregation with a high energy level also called the fourth state of matter.

The energy input determines the transition from one state of aggregation to the next according to the order: solid, liquid and gaseous. By administering further energy to the gaseous matter with an electric discharge, plasma is obtained. (Photo 22)



~ Photo 22

A plasma is therefore a gas excited to the point of splitting electrons from the atomic or molecular bond. The plasma is therefore made up of the positive ions of the gas and the free-moving electrons. Ions are highly reactive because they look for a new binding partner at the site of the lost electron.

This is not a particularly rare state in nature. On the contrary: over 99% of the visible matter in the universe is in the plasma state. **On Earth it is present in a natural form, for example, in lightning or in the northern and southern lights.** During solar eclipses it is possible to observe plasma in the form of a luminous corona surrounding the sun.

In the case of lightning, it is a high-pressure electrical discharge of gas between a thunderstorm cloud and the Earth. The current in the lightning channel reaches values of approximately 10,000 A. The plasma and neutral gas in the lightning channel heat up intensely due to the current flow. The sudden expansion of the lightning channel thus causes thunder. It has recently been observed that lightning discharges also occur between clouds and the ionosphere.

Now let's review the concept of the three essential components of ionizing radiation:

- **Electric density**
- **Ionic density**
- **High energy content**

Electric charge density

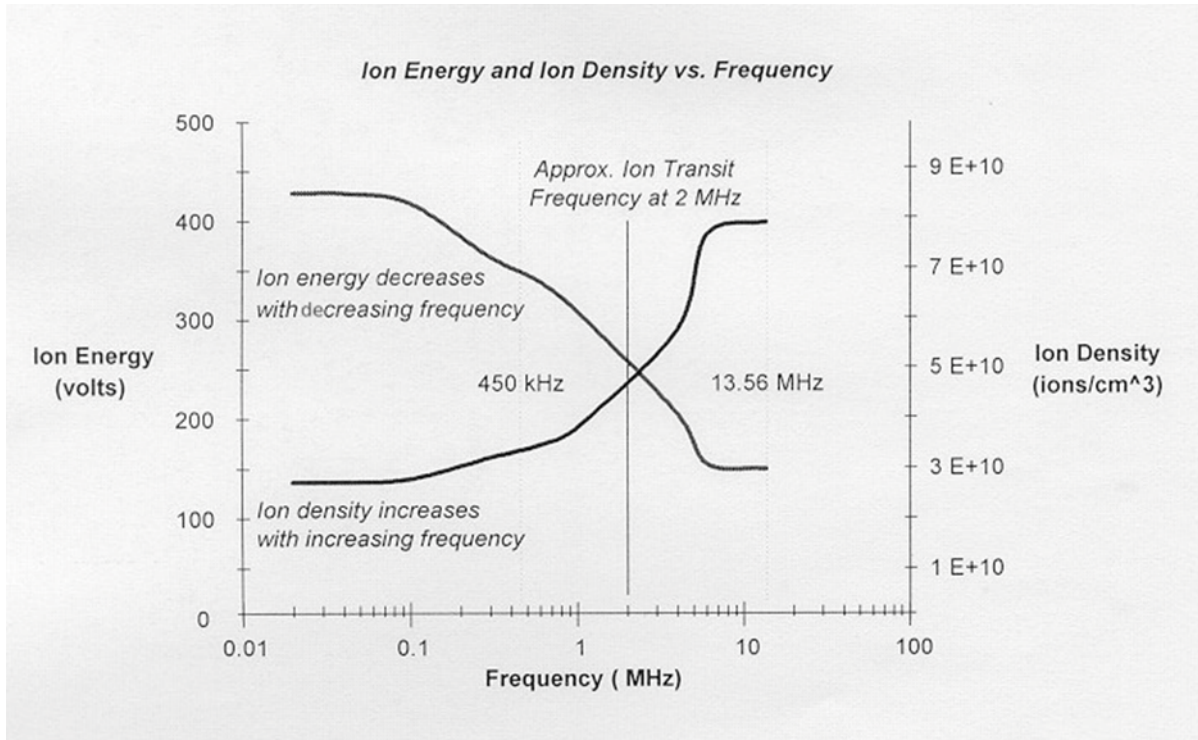
(similar to the concept of mass density) indicates the ratio between the amount of electric charge present in a portion of space and the region itself. It is a tool that idealizes a continuous distribution of charges, a useful approximation for managing the sum of charges as simple integrals.

The electron or ion density or ion concentration.

In meteorology it indicates in atmospheric electricity, the number of ions per unit volume of a given sample of air; more specifically, the number of ions of a given type (small positive ion, small negative ion, large positive ion, etc.) per unit of air volume. The ionic density is a very important element of atmospheric physics and perhaps has a considerable importance also from the biological point of view; however, our knowledge on the subject is still too scarce to be able to deduce a clear conclusion. What is ascertained is a rather intimate relationship between the various meteorological factors and the ionic density; among the most recent studies, cf. the writings of McLaughlin (1929), Israel (1930-32) and Martinozzi (1932). Local conditions also have a notable influence, such as the presence of particularly radioactive soils or sources or considerable industrial activity. In the countryside there is a preponderance of small ions (500 - 600 per cm^3 .) While in the cities the number of small ions is considerably reduced (even below 100 per cm^3) and instead there are up to 50,000 large ions per cm^3 . In general, there is an increase in large ions every time there is an increase in turbidity of the atmosphere. Furthermore, a diurnal and annual variation in the content of small ions has been observed which is almost inverse to that of the atmospheric electric potential gradient, while this is directly related to the variation in the number of large ions. The number of ions varies with height above sea level: in general, the conductivity of the air increases with height due, at considerable heights, almost exclusively to free electrons and small ions, while the number of large ions decreases considerably until it is reduced to zero at the height of a few thousand meters. As for the causes that produce atmospheric ionization, the radioactivity of the soils, of the waters, and the emanation present in the air must be placed in the first place; secondly, there is the production of ions due to the shattering of the waters on the ground (sea waves, streams, violent rains), by the rubbing of masses of earth raised by the action of the wind, by the scattering of drops of water in the air, by the activity of industries, for thunderstorm discharges, for penetrating radiation, etc.

High energy content

There is a correlation between electric charge, frequency and ion density. As energy decreases, frequency and ionic density increase. See the graph below. (Photo 23)



~ Photo 23

We have tested that the DPE behaves as a bidirectional regulatory antenna that exerts a particular discharge to the mass, this discharge of the energy measured in millivolts occurs continuously from the moment it is installed. **During the test, we measured the absorption of this energy and the emission of negative ions.**

So, when an ionizing radiation arrives, the DPE Agriculture X rapidly absorbs its power due to the potential difference and the ionizing radiations, lowering in energy, frequency and ionic density, collapse into plasma and electrical energy and then into lightning, thus neutralizing the radioactive component.

Then there will be an intensity of consecutive and simultaneous lightning in proportion to the energy and quantity of ionizing radiation on the spot.

The very interesting thing is that this process does not take place only above the DPE Agriculture X but begins wherever on the coverage area that the ionizing radiation arrives.

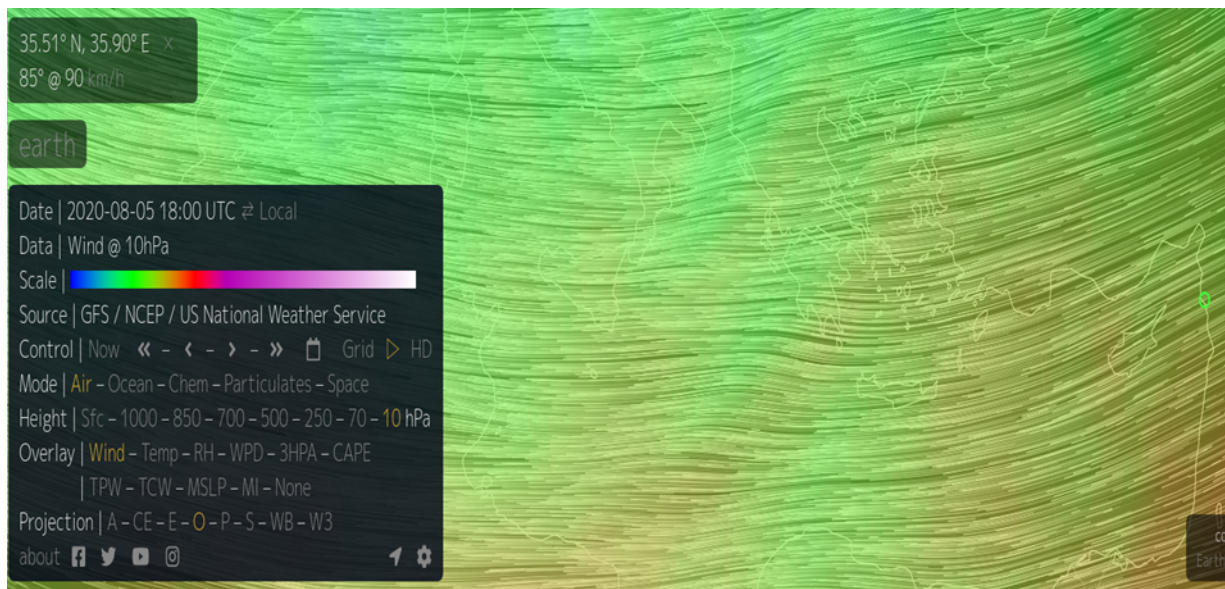
We have mentioned the ability of the DPE100 and the DPE Shield to absorb nuclear radiation, and the following provides the evidence, which can be examined and verified.

On August 4, 2020 at 14.48 UTC, two explosions occurred in Beirut, Lebanon.

(https://en.wikipedia.org/wiki/2020_Beirut_explosions)

The second explosion, the most devastating, released radiation that was pushed by the winds until it reached Sicily (Italy) and was detected by the Geiger counter of the Pedara detection center <https://radmon.org/>.

Below we show the winds blown on 04 August 2020 18.00 UTC up to a height of 30km (10hPa); (Photo 24)



~ Photo 24

The radioactive fallout was detected at Pedara, a distance of 1889 km from Beirut. Radioactive fallout is a set of radioactive debris from an atomic explosion that falls back to Earth and which is made up of the fission products from atoms of uranium and plutonium: this material is incorporated or deposited on the surface of the dust that forms in the explosion of a nuclear bomb or thermonuclear event.

This dust is produced by vaporization and subsequent recondensation of the solid materials that made up the bomb, from dust already present in the air and dust from

the ground if the explosion occurs close enough to the surface for the fireball to touch the ground.

World precipitation

Particles that are too fine to precipitate in the first few hours generally descend in a large area of the world and which can assume various modalities.

Should the bomb be powerful enough to push the "mushroom cloud" into the stratosphere (above about 15 km), this delayed fallout is indeed worldwide and the debris covers a very large area before returning to the ground.

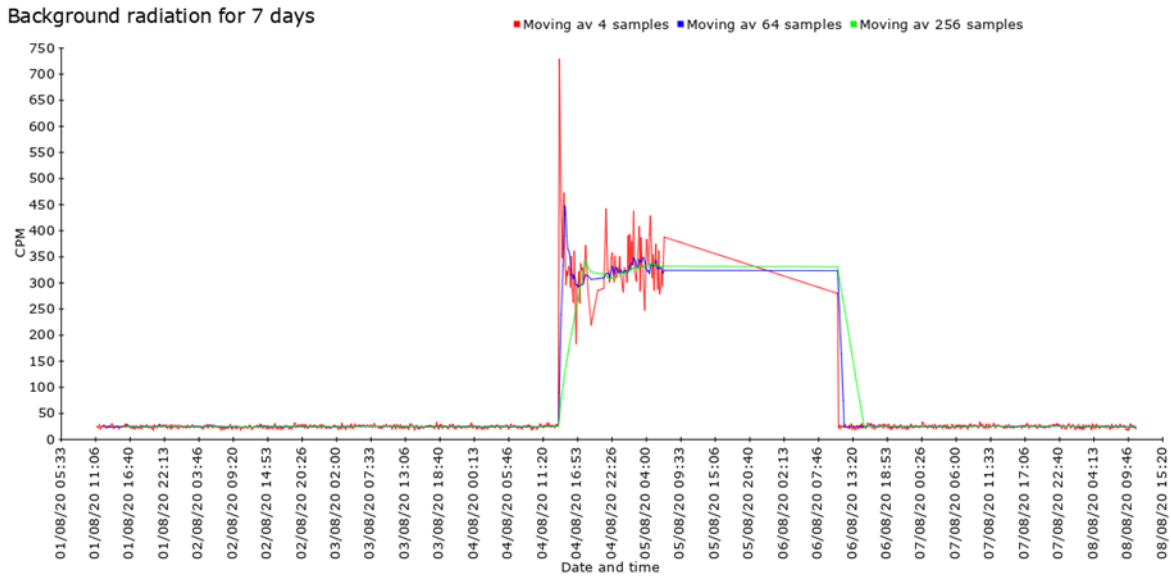
The duration of this return varies widely according to latitude, altitude and the time of year when the debris is injected into the stratosphere, and it can be from a few months to several years.

Roughly speaking, hydrogen bombs can be assumed to be powerful enough to carry the cloud of debris into the stratosphere, while atomic bombs do not. Therefore, while the stratospheric fallout is produced mainly from hydrogen bombs, even atomic bombs reach the troposphere.

(Source: <https://www.chimica-online.it/download/ricaduta-radioattiva.htm>).

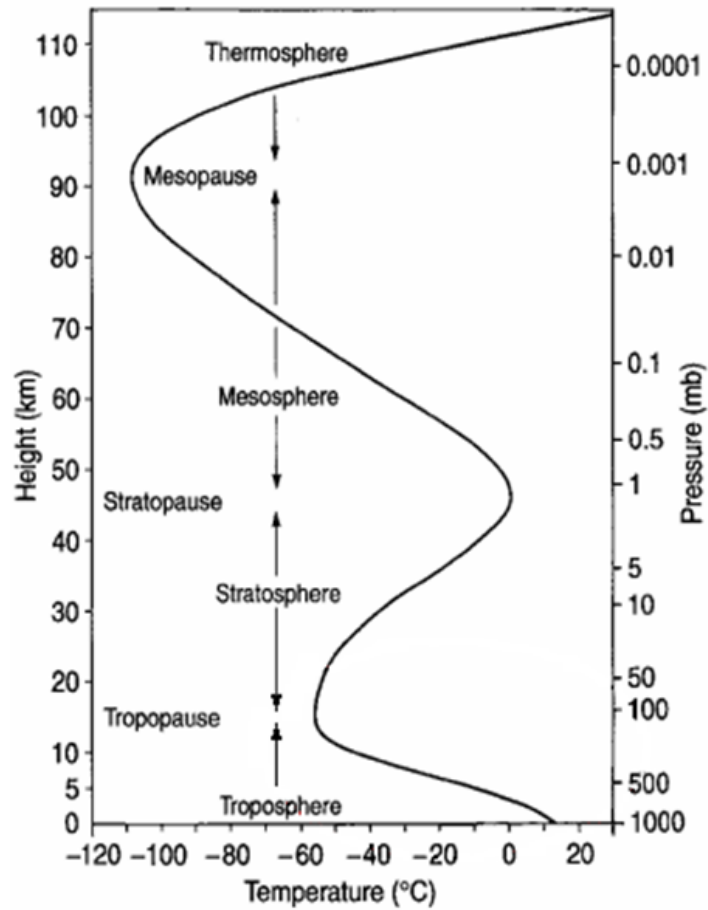
On 04 August 2020 at 15.00 UTC, radiation reached the maximum level of 854 CPM (Count Per Minute) (Photo 25) when the maximum safe level is 25 CPM.

The radioactive drift continued until it was detected a further 951 km beyond Pedara, at the Losio station (Alessandria-Piedmont). All of this is supported by the wind map posted above. (Photo 24)



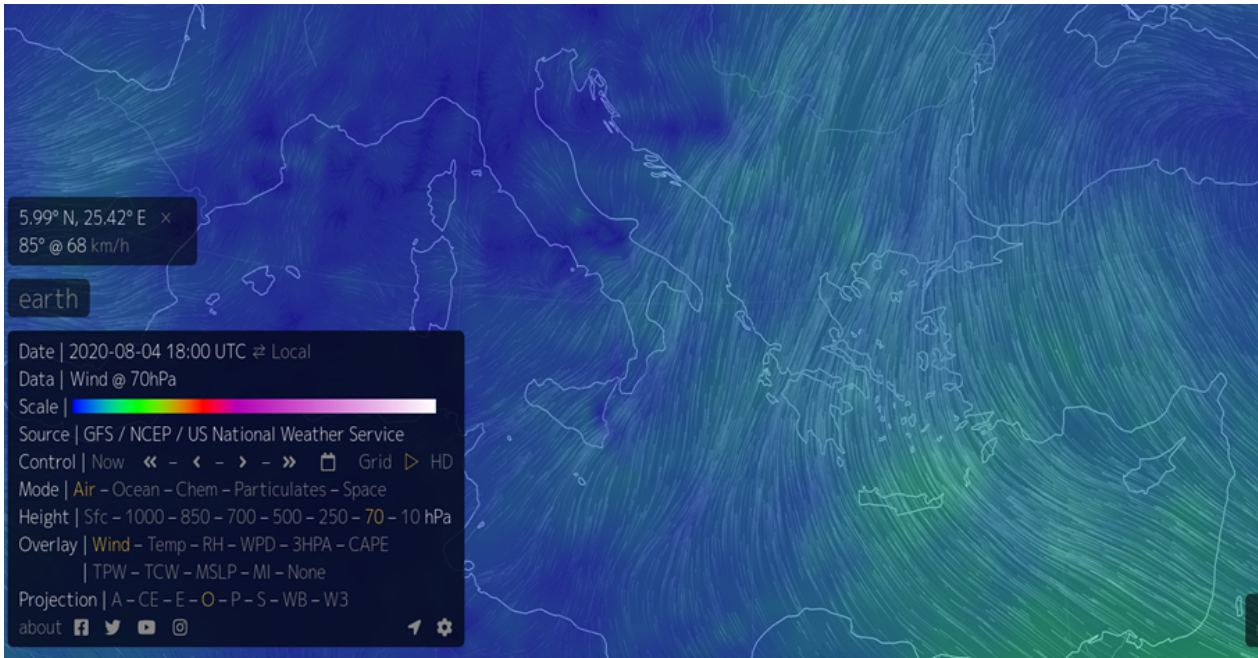
~ Photo 25

So, the debris was projected into the stratosphere, with a maximum level of 10 hPa at a height of 30 km, following the path indicated above, and then continued on to Northern Europe where other detections took place, while those at lower altitudes, with levels up to 70 hPa at an altitude of 18.5 km were pushed by other winds towards Puglia. (Photo 26)



~ Photo 26

This picture below (Photo 27) of the winds below relates to 04 August 2020 at 18.00 UTC



~ Photo 27

The direction of these winds should have brought the radioactive debris dust to Serbia, Bosnia, Bulgaria, Romania, Ukraine, Hungary, Poland, Slovakia, etc. In several of these countries there are other radiation detection stations that did not detect any variation beyond the safe limits of the radioactive level. This is an important index that confirms that the DPE was able to neutralize the radiation before it reached those countries.

We know that the DPE is able to balance the environment up to an altitude of 200 km, but how does this balance happen?

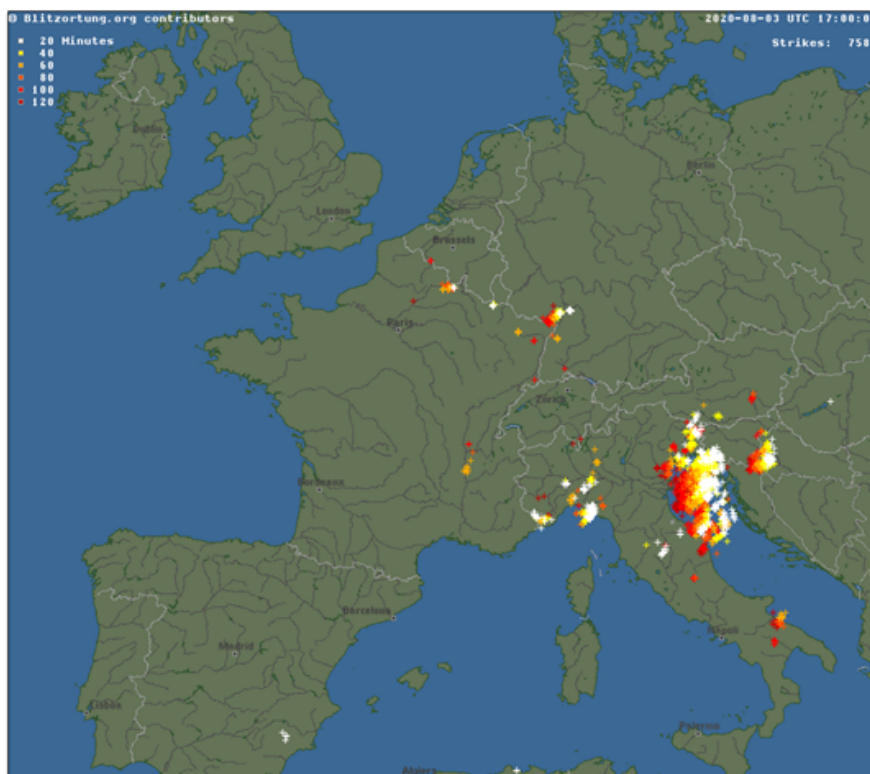
Ionizing radiation is defective solar energy cells which, through a process of interaction of the energy emitted by the DPE from the Earth, correct the defective solar energy cells into healthy cells, namely Plasma.

This excess of plasma is then discharged to the ground through lightning. In fact, the lightning is a column of ionized gas (plasma).

If this was so, we should have had moderate or no lightning activity in the DPE action zone in the days prior to 04 August 2020, then intense lightning during the

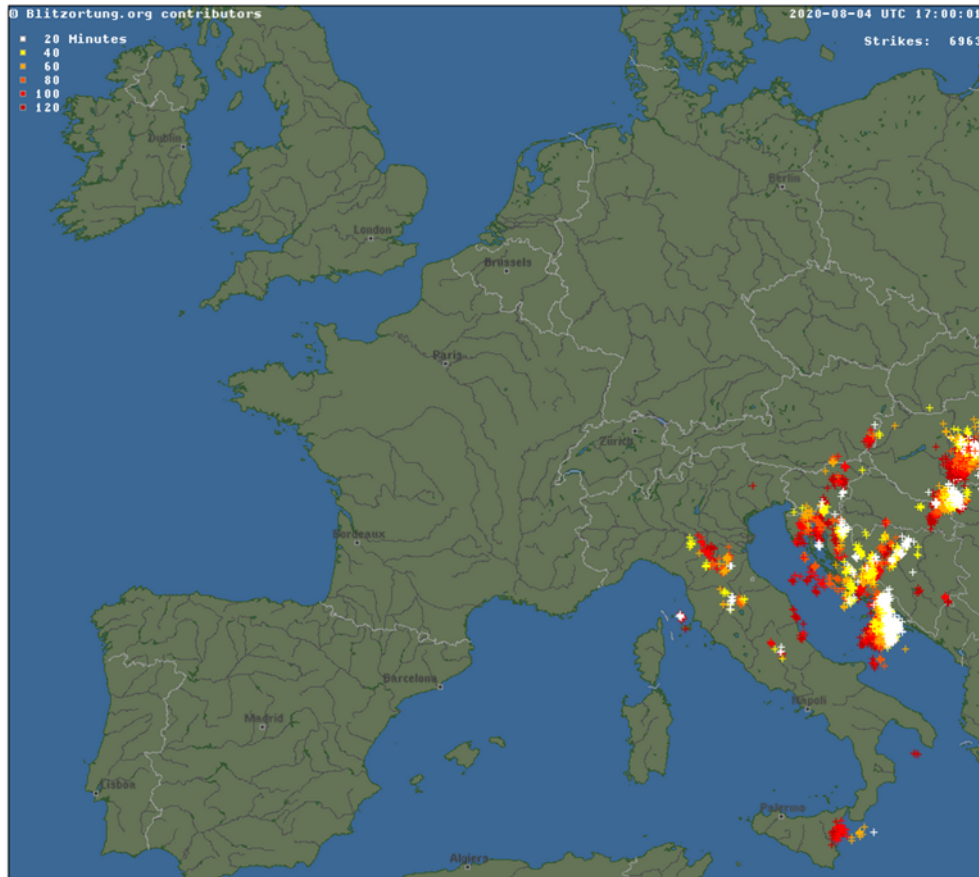
presence and discharge of radiation, and then again moderate or no lightning activity after neutralization of the radiation.

This picture below (Photo 28) is from 03 August 2020 at 17.00 UTC and is the recorded lightning activity.



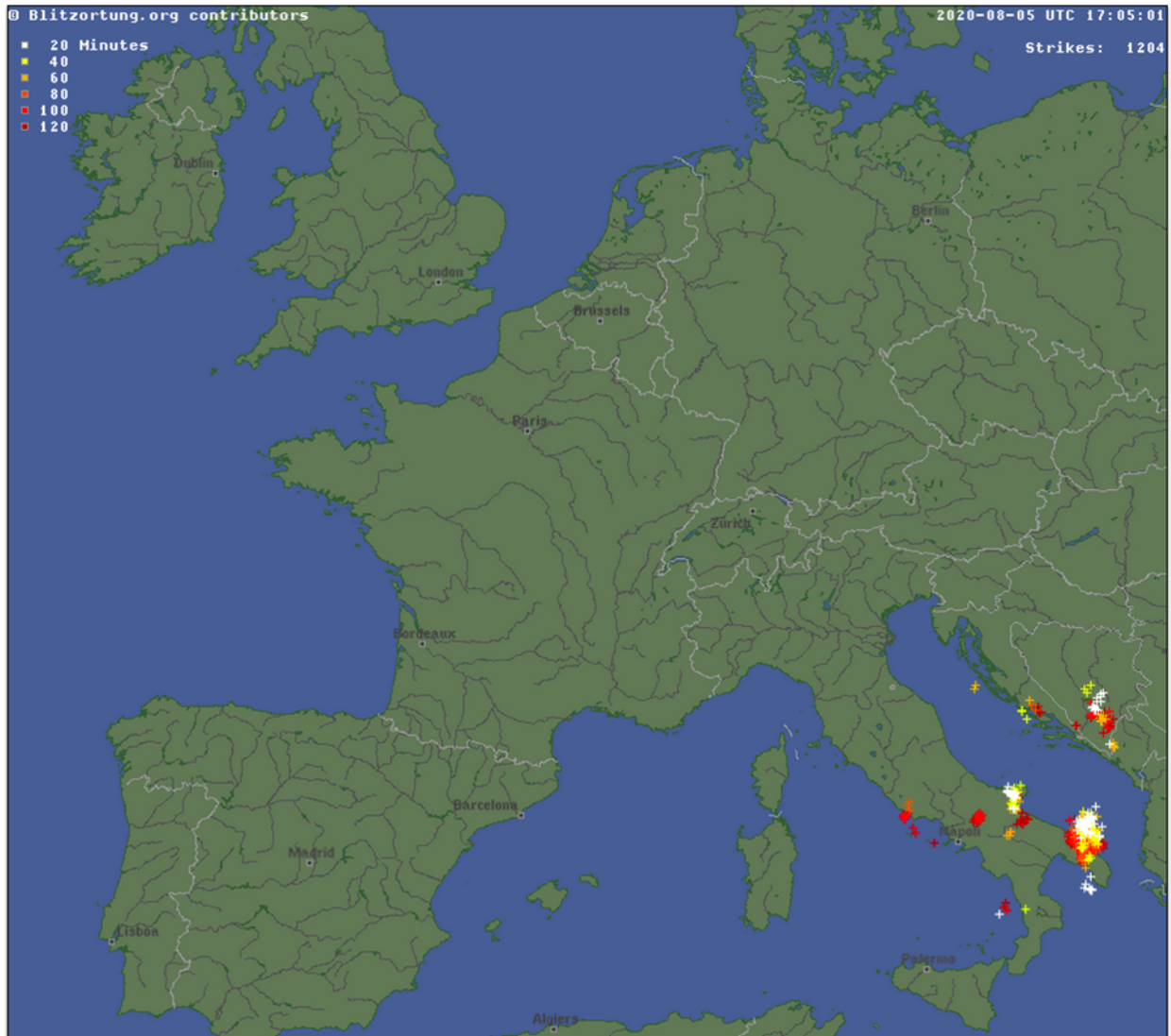
~ Photo 28

The next picture (Photo 29) is of 04 August 2020 at 17.00 UTC and shows the recorded lightning activity. It should be noted that Puglia is free and should have remained so, considering that the storm front was moving towards the East.



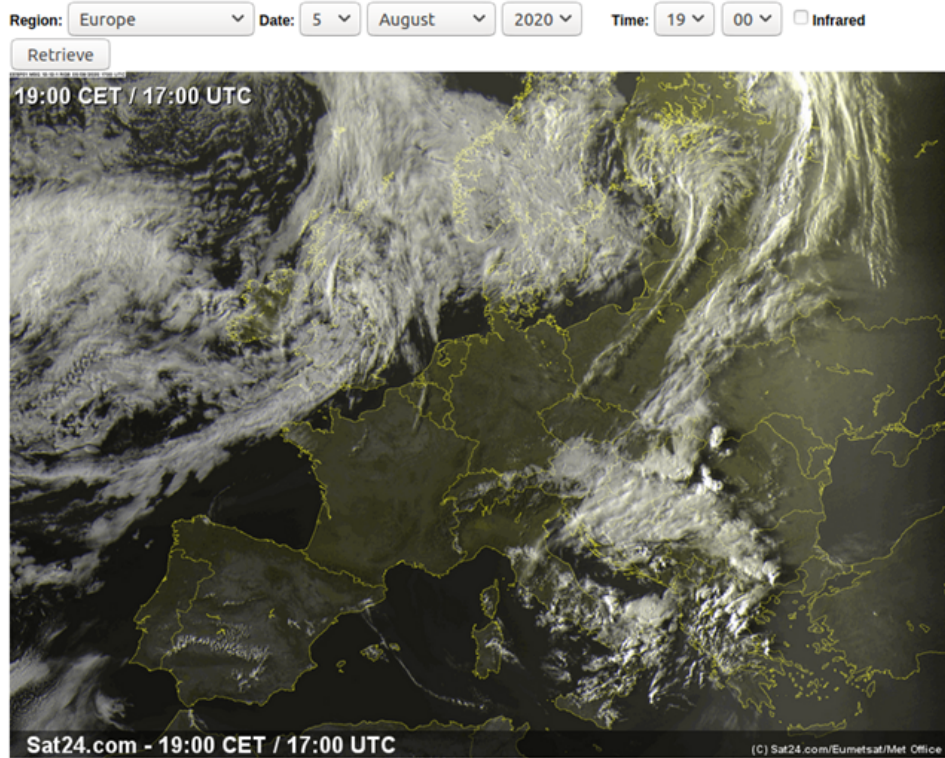
~ Photo 29

The next picture below (Photo 30) is of 05 August 2020 at 17.05 UTC and is the recorded lightning activity. The intense lightning activity recorded in the DPE area is clearly visible.



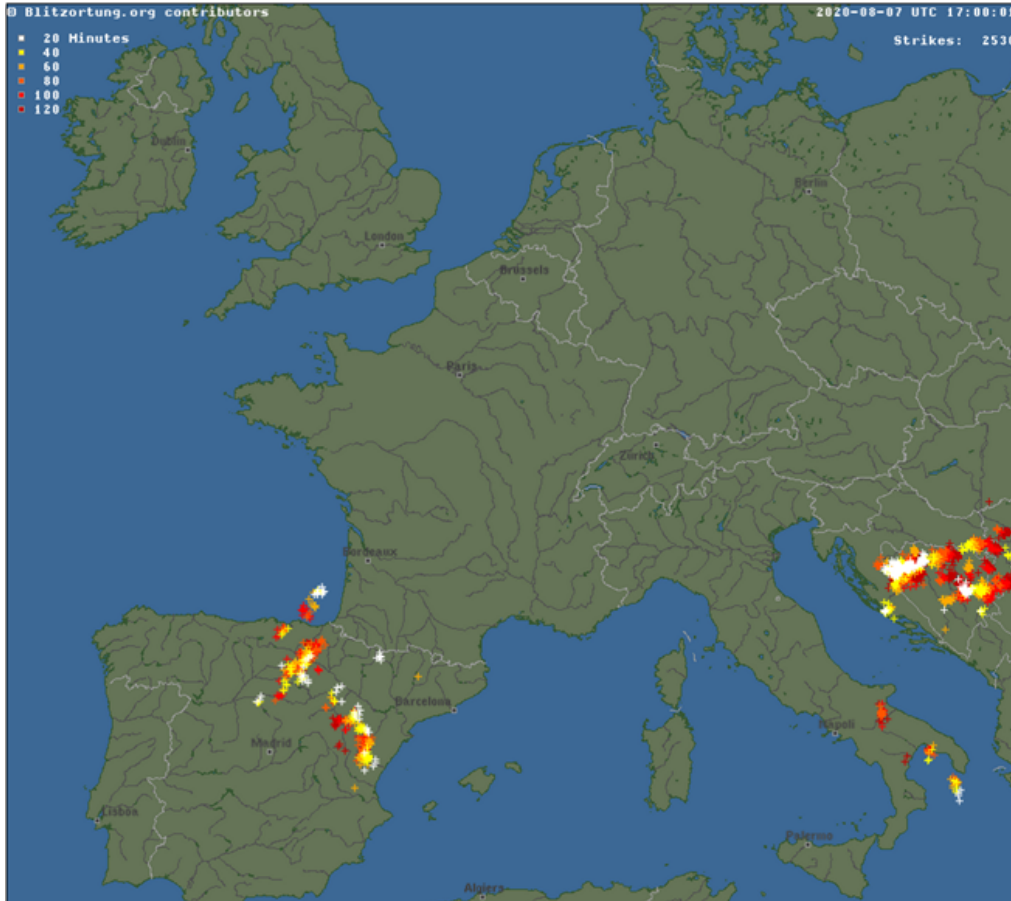
~ Photo 30

We also made a comparison with the weather conditions at that time, shown in the picture below (Photo 31) and they do not justify that intensity of lightning activity shown, especially when compared with the front in the rest of Italy.



~ Photo 31

And after the radiation was discharged, the balance was restored and the lightning activity stopped. (Photo 32)



~ Photo 32

I made some on-site measurements with my Geiger counter and the parameters on 07 August 2020 at 17.00 UTC were normal.

Since the installation of the DPE, we have always been scrupulous in detecting every single anomaly and it was these that revealed the evidence described above.

Since the installation of the DPE, we have seen a drastic reduction in the power and number of lightning strikes, as we have verified that the DPE drains excess energy, not allowing a dangerous accumulation.

So, we were used to seeing limited thunderstorm lightning in the distance.

In the days described above, however, many lightning strikes occurred in the area and one even in a clear sky a few kilometers from the DPE.

That didn't make sense, but later we found out why...

Another important detail can be seen in the photos of the lightning activity recorded on 03 August 2020 at 17.00 UTC and the one on 04 August 2020 at 17.00 UTC. If you look at the photos, the lightning front moves progressively eastwards.

In the photos of the lightning activity of 05 August 2020 at 17.05 UTC and that of 06 August 2020 at 17.05 UTC, the lightning literally "appeared" and then disappeared the next day, without moving on to other areas, which tells us this lightning is not caused by a storm.

We also carried out further investigations to see if other survey stations between Sicily and Puglia had recorded other values but, unfortunately, there are no stations present in that area. On the other hand, the other leeward operating stations beyond Puglia did not register changes beyond the safety limit of the radiation, and as of August 16, the levels remain low in various parts of Northern Europe (Västerbotten, Sverige; Saarland, Germany; Drenthe, Nederland; etc.)

This was not the only event, but it was also reproduced when there were at least 8 nuclear explosions of small to medium power occurred in Khemlnitsky (Ukraine) from May 13 to May 28, 2023 in several nearby places.

(<https://www.saveecobot.com/en/radiation-maps#15/51.3879/30.1063>)

14) Fewer frosts and droughts and less damage from them

As water freezes, positively charged protons and negatively charged electrons separate. Frozen ice crystals become electrified as the top of the frost becomes warmer than the bottom of the frost. This causes charged ions to move from top to bottom (warm to cold), but it turns out that the positive ions can migrate faster. **The top of the frost ends up being negatively charged while the bottom is more positively charged, a concept known as charge separation. (33)**

In the paragraph: **2) Reduction of solar radiation, especially ultraviolet rays and cosmic radiation** we have described that some photoelectric sensitive materials such as metals, water, ice, and plants can also cause a photoelectric effect and release electrons, even though no short-wave ultraviolet radiation is applied. The electrons then combine with molecules in the air to form NAIs (Negative Air Ions) (17).

The negative ions in the air attract the positive ones and neutralize them before they fall to the ground, thus reducing the phenomenon of frost.

The positive ions that manage to settle are "attracted upwards by the negative ions", the frost particles breaking off their substrate and jumping toward the negative ions constantly, melting them. The scientific process is described below. (Photo 33) **(34)**

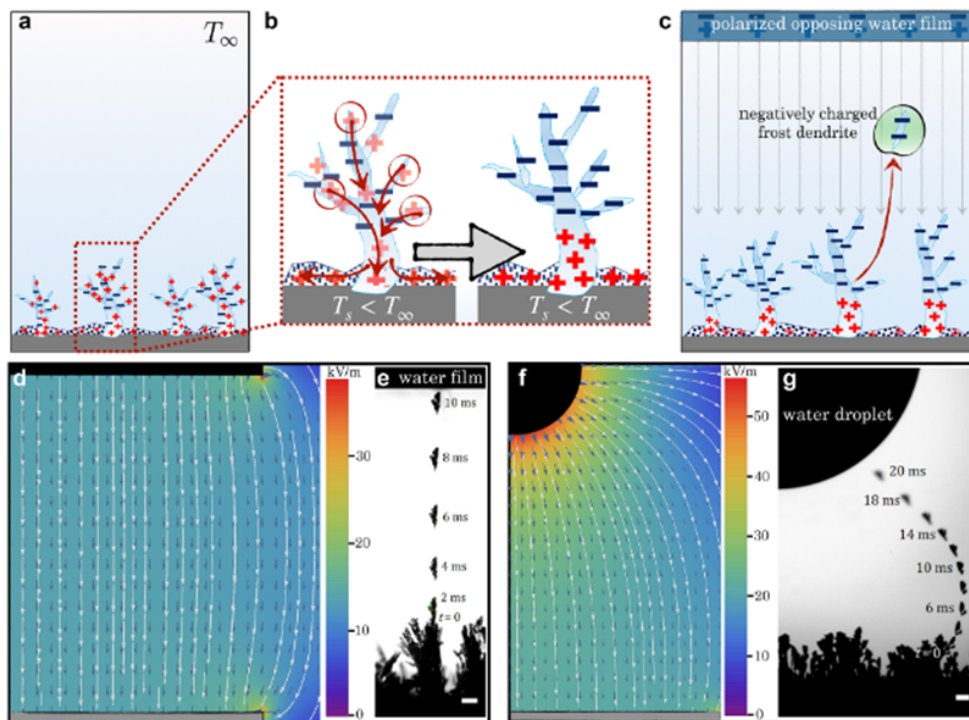


Figure 3. Origin of the attractive force on the frost dendrites. (a) Initial (nanoscale) frost exhibits a roughly uniform temperature and distribution of ions (defects) within the dendrites. (b) As the frost dendrites grow to a microscale, $T_{top} > T_{bottom}$, such that ions are more concentrated in the warmer upper dendrites. Positive ions then diffuse to the lower concentration basal frost at a much higher mobility than the negative ions. (c) This charge separation enables the fracture and jumping of frost in the presence of an opposing polarizable liquid. (d) Numerical simulation showing that, when the frost and opposing water film are both planar, the electric field is uniform. (e) This results in a straight trajectory and constant terminal velocity for jumping frost particles, validated here by chronophotography, where the particle consistently travels $\sim 300 \mu\text{m}$ every 2 ms at terminal velocity to cross the 2.5 mm gap. (f) Numerical simulation showing that, when frost is now opposite a pendant droplet (*i.e.*, plate and sphere configuration), the electric field is nonuniform with curved field lines. (g) Chronophotography (successive position of the dendrite temporally separated by 2 ms) confirms a curved trajectory for a jumped dendrite opposite a water droplet, where the sudden increase in acceleration near the droplet is confirmed by increased distance between successive positions. Both scale bars represent $100 \mu\text{m}$.

~Photo 33

Damage caused by drought is greatly reduced to a minimum because since it is necessary to have water or rain to decompose the fertilizers in the soil and thus provide the plants with the current necessary for their vitality, the DPE Agriculture X provides this current slowly, but continuously, and therefore integrates rain just as it integrates fertilizers. Likewise, vegetation growing on electromagnetic soil is immune to rot caused by heavy rain, since rot germs cannot develop in contact with electric current.

This process is amplified by greater moisture rising from the soil, which was covered in the section: *Halving the quantity of irrigation water for the benefit of greater humidity, but also halving the electricity consumption of the irrigation pumps.*



Tests

Measurements were carried out on both the emission of negative and positive ions. These measurements were taken both on the DPE Agriculture X and at a distance of approximately 20 meters from the DPE Agriculture X in the open field.

We have therefore measured that in the DPE Agriculture X, an alternating exchange occurs between the emission of negative ions and the absorption of positive ones.

In the test videos it is possible to see collapses of readings, both on negative and positive ions, during the measurements which explain exactly this dynamic, which is fundamental for a balance between the absorption of electrostatic charges and the regeneration of the magnetosphere above the area of the DPE Agriculture X.

These are the measurements of Negative Air Ions emitted by vegetable garden about 20 meters away from the DPE Agriculture X. (Photo 34)



~ Photo 34

These are the measurements of Negative Air Ions emitted by the DPE Agriculture X in the vegetable garden. (Photo 35)



~ Photo 35

Positive ions absorption video

These are the measurements of Positive Ions absorption by vegetable garden about 20 meters away from the DPE Agriculture X. (Photo 36)



~ Photo 36

These are the measurements of Positive Ions absorption by the DPE Agriculture X in the vegetable garden. (Photo 37)



~ Photo 37

Verification test carried out in a garden

We installed the DPE Agriculture X three months before and afterwards we planted almost a thousand seedlings using a mulching technique. We were immediately surprised by the high percentage of seedling survival that took root, over 90%. You can verify the veracity of the statement made in the following photo.

After planting the seedlings, we irrigated the crops in the pictures below (Photo 38); (Photo 39) for 2 hours in the morning and another 2 in the afternoon for about 2 weeks in summer despite the fact that during the entire summer period there was no rain, but we noticed an increase in humidity as the evening fell.

All this has made it possible to achieve savings, in our case, of over 50% not only in water, but also in the electricity of the irrigation pumps.

It was not necessary to add any fertilizer or even fungicide since we managed to have protection from fungi from the effect of the DPE Agriculture X. This was confirmed by the non-appearance of downy mildew, a few months later, in the most distant vineyards nearby the garden subject to testing.

It is important to understand that the DPE Agriculture X increases its radius over time and could even reach 8 km in ideal conditions with the new model with superconducting metals. The DPE Shield Agriculture X will reach at least 16km. This radius depends on whether the area is mountainous or not, the type of conductivity of the soil, the quantity of sources of electromagnetic pollution, etc...



~ Photo 38



~ Photo 39

To get quick feedback on the operation, we planted fennel plants around the DPE Agriculture because we knew that it was the first useful area of the DPE Agriculture's range of action. (Photo 40)



~ Photo 40

At the harvest we obtained these results....

In the picture below (Photo 41); (Photo 42); (Photo 43) you can see the difference between the larger fennel of 1729 g, (the one near the DPE Agriculture), and the smaller one purchased at the greengrocer of 412 g grown outside of the DPE Agriculture area.



~ Photo 41

Comparison of fennel with and without the DPE Agriculture



~ Photo 42

With the DPE Agriculture



~ Photo 43

Without the DPE Agriculture

The other plants also benefited from it, picture below (Photo 44); (Photo 45); (Photo 46); (Photo 47).



~ Photo 44



~ Photo 45



~ Photo 46

In the picture below (Photo 47) you can see the cherries collected 8 kilometers away. Throughout the entire range of action of the DPE Agriculture there was an increase in quantity and quality.



~ Photo 47

Other aspects we found were the increase in chlorophyll in the plants, a notable improvement in the organoleptic properties, and the ability of the plants to regrow spontaneously even though they were not supposed to (Photo 48); (without irrigation and fertilization).



~ Photo 48

Advantages and features of the DPE Agriculture X

In addition to the advantages described above, the DPE Agriculture X has:

- 1) Practically over ten years duration, so the investment is made only once.
- 2) Maintenance-free
- 3) It does not need special positioning according to the terrestrial hemispheres of installation
- 4) With the passage of time, the field gets stronger and the crop and the land improve, becoming more fertile.
- 5) You don't need to choose a specific point such as a Hartmann, Curry or Benker knot, as these depend on the earth's magnetic field lines and they change.

Warnings

- 1) To increase and speed up the effectiveness of the DPE Agriculture X, we recommend placing it in an outdoor place at least 10 meters away from walls or houses.
- 2) In particularly dry areas, we recommend watering the soil in contact with the DPE Agriculture X
- 3) Among the metals contained in the DPE Agriculture X, there is magnesium which is flammable, so we recommend mowing the grass within a radius of at least one meter from it.
- 4) The DPE Agriculture X has a radial action proportionate to the distance, so we recommend installing it in the center of the area where you want to optimize the harvest.
- 5) The range of action is about 8 km, this distance will be reached progressively over time depending on local conditions.
- 6) If possible, place it on non-rocky ground to optimize the propagation of electric waves.
- 7) It is normal for the thread at the base of the lower part of the DPE Agriculture X to be darker in color, this is due to the special treatments done on the internal metals. The outer copper tubing may also have stains or a darker color than the one in the photo for the same reason.

STRUCTURE OF THE DPE AGRICULTURE X

We would like to point out that we are constantly studying and applying improvements in order to obtain better performance at the lowest possible prices, as we are aware of the economic effort that farmers are making at the moment, so we try to do the maximum possible. For this reason, we have designed 2 types of DPE Agriculture X:

- DPE Agriculture X
- DPE Shield Agriculture X

All the metals used are pure and not recycled as recycled ones create different reactions and therefore poorer results.

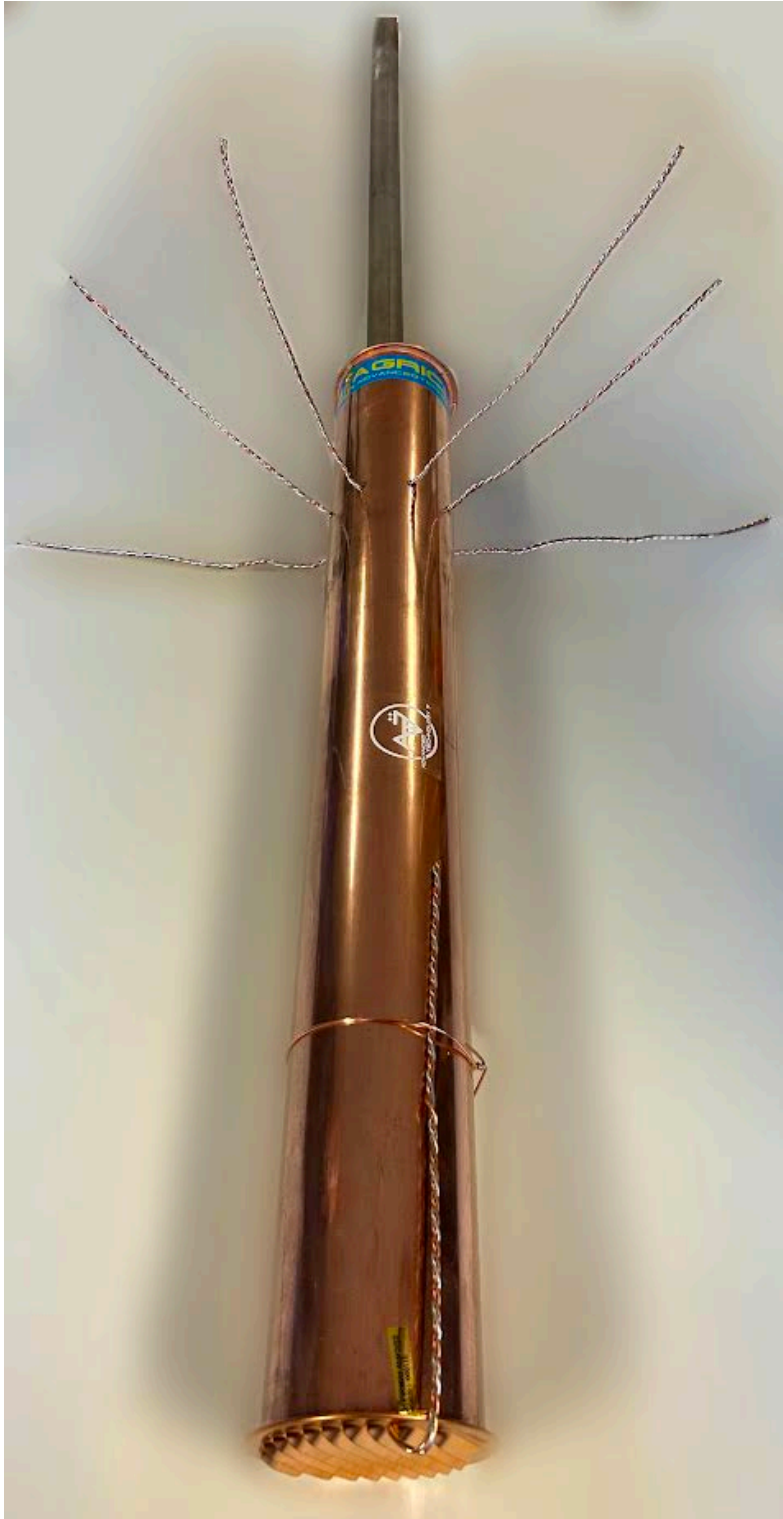
DPE AGRICULTURE X

(Photo 49)

It consists of 3 parts:

- 1) The part to be buried includes grounding wires of copper and aluminum
- 2) The central part must be buried for about 90 cm. It is the fundamental part of the DPE Agriculture X and consists of a copper tube of about one meter with a diameter of 120 millimeters which is the "CORE" of the DPE Agriculture X as it contains superconductors and other materials that enable it to function. At a distance of about 20 cm from the upper edge of the core, 8 wires start which must be laid out in the radial direction and buried parallel to the ground for about ten centimeters. These are used to optimize the propagation of the low frequency electromagnetic waves to be transmitted to the ground in order to reach the plant roots.
- 3) The aerial or upper part consisting of a one-meter pick-up antenna to capture electrostatic charges and electromagnetic waves.

Its weight is approximately 12 kg.



~Photo 49

DPE SHIELD AGRICULTURE X

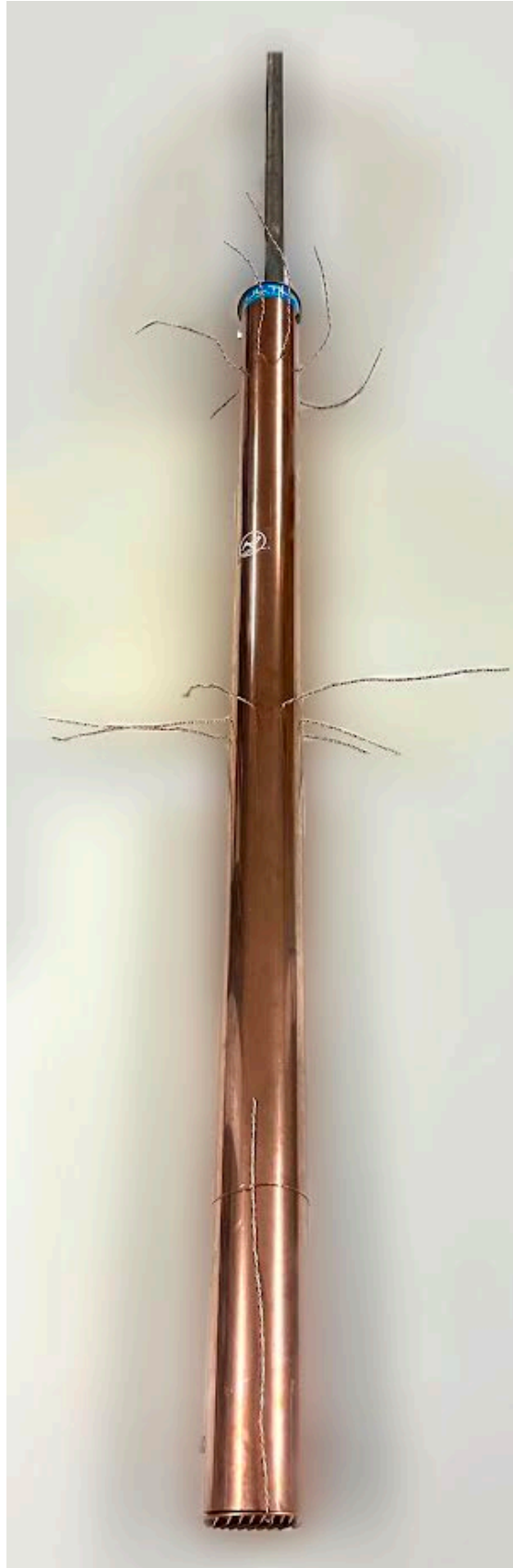
(Photo 50)

It consists of 3 parts:

- 1) The part to be buried consisting of a grounding of a copper and aluminum wire
- 2) The central part, which must be buried for about 120 cm. It is the fundamental part of DPE Agriculture X and consists of a copper tube of about two meters with a diameter of 120 millimeters which is the "CORE" of the DPE Shield Agriculture X as it contains superconductors and other materials that enable it to function. At a distance of about 100 cm from the upper edge of the core, 8 wires start which must be laid out in the radial direction and buried parallel to the ground for about ten centimeters.
- 3) The aerial or upper part consisting of a one-meter pick-up antenna to capture electrostatic charges and electromagnetic waves.

Its weight is approximately 25 kg.

The upper part of the metal wires, observed from above, forms a clockwise spiral in the shape of a hemisphere:



~Photo 50

We constantly conceptualize and design our products in order to make them with ever greater quality and performance. The DPE Agriculture X in the test photos is visibly different from the previous one because it has been significantly improved in structure, materials and effectiveness.

Illustrative image of the quantum energy processes that occur during the operation of the DPE Shield Agriculture X. (Photo 51)



~ Photo 51

References:

- 1) Systematic review of biological effects of exposure to static electric fields.
part ii: invertebrates and plants
kristina schmiedchen a,*, anne-kathrin petri a , sarah driessen a , william h. bailey
<https://www.sciencedirect.com/science/article/pii/S0013935117312513>
- 2) Mitigation of excessive solar radiation and water stress on ‘keitt’ mango mangifera indica trees through shading
ayman e.a. shaban, mohammed i.m. el-banna, ahmed a. rashedy
- 3) Correlation between electromagnetic pollution and increase in temperature in the troposphere and consequences on the interaction of solar and terrestrial magnetic fields
ph. d. giovanni lapadula
- 4) Ultraviolet b radiation in relation to Agriculture in the context of climate change : a review
waqas liaqat, muhammad tanveer altaf, celaleddin barutçular, hira nawaz, izhar ullah, abdul basit, heba i. mohamed
<https://www.ncbi.nlm.nih.gov/pmc/articles/pmc10099031/>
- 5) Effect of uv-b radiation on chlorophyll fluorescence, photosynthetic activity and relative chlorophyll content of five different corn hybrids
b.r. jovani, b. radenkovi, m. despotovi-zraki, z. bogdanovi, d. bara
- 6) Aluminium-oxide wires for superconducting high kinetic inductance circuits
h rotzinger 1 , s t skacel 1 , m pfirrmann 1 , j n voss 1 , j münzberg 1 , s probst 1 , p bushev 1 , m p weides 1 , a v ustinov 1,2 and j e mooij 1,3
- 7) The effects of negative air ions on plant growth
s. l. wachter and r. e. widmer^{1,2}
department of horticultural science and landscape architecture,
University of Minnesota, St. Paul, MN 55108
- 8) Horizontal polarized dc grounded omnidirectional antenna for uav ground control station

muhammad shahzad sadiq 1 , cunjun ruan 1,2, * , hamza nawaz 3 , shahid ullah and wenlong he

9) Fields radiated by electrostatic discharges
perry f. wilson, member, ieee, and m.t. ma

10) The effect of humidity on static electricity induced reliability issues of ict equipment in data centers
fayu wan, David swenson, michael hillstrom, david pommerenke, carlton stayer

11) Influence of negative ions on the humidity effect on the first corona inception
p ortéga , r díaz, f heilbronner and f rühling

12) Atmospheric humidity and particle charging state on agglomeration of aerosol particles
yuanping he, zhaolin gu, weizhen lu b, liyuan zhang, tomoaki okuda , kentaro fujioka, hui luo, chuck wah yu

13) On the correlation between solar activity and large earthquakes worldwide
vito marchitelli, paolo harabaglia, claudia troise & giuseppe de natale

14) Influences of solar cycles on earthquakes
marilia tavares, anibal azevedo

15) Sun disturbances on earth's volcanism
marilia hagen, anibal azevedo

16) Ozone layer protection
u.s. environmental protection agency
<https://www.epa.gov/ozone-layer-protection/basic-ozone-layer-science>

17) Study on the change of negative air ion concentration and its influencing factors at different spatio-temporal scales
hui wang, bing wang, xiang niu, qingfeng song, mingwen li, yuanyuan luo, lidong liang, pengfei du, wei peng

18) Causes and harmful effects of ozone layer depletion
kuldeep sharma

19) Laboratory measurements of negative ion reactions of atmospheric interest
f.c. fehsefeld, a.l. schmeltekopf, e.e. ferguson

- 20) Scientific assessment of ozone depletion: 2018
ross j. salawitch, david w. fahey ,michaela i. hegglin, laura a. mcbride, walter r. tribett,sarah j. doherty
- 21) Mesosphere ozone and the lower ionosphere under plasma disturbance by powerful high-frequency radio emission
nataliya v. bakhmetieva , yuri yu. kulikov and ilia n. zhemyakov
- 22) Effect of electromagnetic field (emf) and electric field (ef) on some behavior of honeybees (apis mellifera l.)
yaşar erdoğan and mahir murat cengiz
- 23) Electromagnetic field exposure affects the calling song, phonotaxis, and level of biogenic amines in crickets
joanna wyszkowska, jarosław kobak, hitoshi aonuma
- 24) Integrating pests and pathogens into the climate change/ food security debate
peter j. gregory, scott n. johnson, adrian c. newton and john s. i. ingram
- 25) Quantifying crop vulnerability to weather-related extreme events and climate change through vulnerability curves
beatrice monteleone · iolanda borzì · brunella bonaccorso · mario martina
- 26) Biological effects of electromagnetic fields on insects: a systematic review and meta-analysis
alain thill, marie-claire cammaerts and alfonso balmori
- 27) Magnetic field regulates plant functions, growth and enhances tolerance against environmental stresses
ramalingam radhakrishnan
- 28) A simple derivation of the gertsenshtein effect
andrea palessandro and tony rothman
- 29) The correlation between gravitational and geomagnetic fields caused by interaction of the core fluid motion with a bumpy core—mantle interface
h.k. moffatt and r.f. dillon
- 30) Enhanced gertsenshtein effect in type-ii superconductors
r.c. woods

31) Electroculture

mons. justin christofleau

32) Electro – horticulture

george s. hull, m.d., sc. d.

33) Jumping frost crystals: lab works toward electrostatic de-icing

by alex parrish, virginia tech

<https://phys.org/news/2021-02-frost-crystals-lab-electrostatic-de-icing.html>

34) Electrostatic jumping of frost

ranit mukherjee, s. farzad ahmadi, hongwei zhang, rui qiao, and jonathan b. boreyko

35) Magnetic control of heterogeneous ice nucleation with nanophase magnetite:
biophysical and agricultural implications

atsuko kobayashi, masamoto horikawa, joseph l. kirschvink and harry n. golash

For more information, visit the website: <https://advancedtechnology7.com/>