

The Effect of Weak Energy of the Water on Plant Growths, Germination and Photosynthesis

Sunao Sugihara

Shonan Institute of Technology, Fujisawa shi,
Japan

COLUMN ARTICLE

Water is essential to a plant and human body as well known, and there is a lot of kind of water reported like electrolyte ion-water, nano-water, hydrogen-water, ozone-water, etc. Furthermore, water is so common in daily life, so people are not much interested in basic science, particularly not to mention. There is a lot of evidence as in the results like the growth of crops and plant after using some processed water as mentioned above.

However, the search is few on basic science of water in terms of physics in particular.

The basic science of water is supposed to possess a key-point to understand the phenomena generated with water and any applications essentially.

We have researched the water that exists and possesses information rather than energy after hydrogen bond dissociation of water. It is necessary to consider the water in microscopical. Here is the basis for microscopic study in DV-X α method (Discrete Variational-X alpha potential) We calculated structures of energies after hydrogen bonds dissociation of water by more than 100 MPa [1]. We defined the elementary particle-like as the extended particle as designated in $\langle H^+ \sim e^- \rangle$ which we call it infoton [2]. The size of infoton is assumed to be pico-size (order of 10^{-12} m) so that it can squeeze into aquaporin protein to be said the smallest part of approx. 1.4×10^{-10} m that every living organ has and

plant equips three times of the number than any animal does it [3].

We assume that the particle possesses certain information like momentum ($p = v \times m$, velocity and mass), then this information can transfer to other substances which property may change with the information. We call the transfer of information "transference" even in space. It is so called the special process. The other substances are any materials like glass, ceramics, plastic and plant as well as other water which can obtain the information from the original specially-processed substance. Incidentally, we can calculate the energy of infoton associating with a dielectric constant of the water, which corresponds to far infrared to THz electromagnetic wave, which is weak energy [4].

Example #1 indicates the specially-processed rope (approximately 120m), which immersed in the original water for three days. Now we get the activated rope and provide it into a rice field for three to four months so that the water in the field can equip the information from the rope. After harvest, the roots of the rice plant were stronger, and the number of roots was much more than usual years according to farmer comments. We can presume the reason why a large difference generates. Water becomes activated one with the rope in the rice field, and the root absorbs easily the pico-water resulting in an increment of the photosynthesis effectively.

Example #2 is to employ the water itself; The growth and blossom of the flowers show in the following photo.



Here is an example of Hyacinth From left 1st; activated water, 2nd; non-activated, 3rd activated one and 4th non-activated.

Bloom is different remarkably. The activated water can be more easily absorbed due to the pico-water so that photosynthesis occurs more effectively.

Example#3 is to activate polyethylene bag through which N₂ in the air inside the bag so that we can keep the food fresh [5], where we also discuss the mechanism of activation of N₂; the activated bag works for transferring the information to the inside of the bag. As a result, it seems to be difficult that O₂ adsorbs on the food due to more reductive N₂ in other word activated. We measure the gases of O₂ and CO₂ at a real time for seven days. O₂ inside the bag is higher in the activated one, and CO₂ is lower than the non-activated one (normal). Namely, in the activated bag, plants are breathing to absorb CO₂ and emit O₂. However, in a normal bag, the amount of O₂ is lower, and CO₂ increases. It is because O₂ does not emit while CO₂ emits. We reported the same experience on the mushrooms for five days [5]; i.e. in the activated bag, O₂ emits and no CO₂, but no O₂ and CO₂ is almost zero in the normal bag. Activation of a polyethylene bag can inhibit from dripping gravy of beef as well as keeping fresh it. Another interesting activation of N₂ gas relates to sharper spectra in the glycine of N₂NCH₂COOH measured with NMR instrument, where the amino radical is supposed

to have larger momentum due to the activation of glycine [1]. Here is an interesting example of “transference”; we can activate “light” such as fluorescent and an LED lamp, where fluorescent substance and or glass can activate so that any plant and seeds under the activated lighting can grow faster and larger.

Furthermore, strawberry becomes sweeter. We can estimate that the chemical reaction occurs more effectively; $6\text{H}_2\text{O}+6\text{CO}_2 = \text{C}_6\text{H}_{12}\text{O}_6+6\text{O}_2$. We measured the light with chromaticity resulting in shifting toward a lower frequency (i.e. longer wave) of the light so that a plant can absorb a longer wave one easier. As a result, photosynthesis occurs under this light actively. An active light possessing the information of infoton can transfer into the air in a room so that we can reduce or eliminate the odor like ammonia in a breeding room.

Another marvelous example introduced here; we can activate a mulberry tree wiped with the activated ropes, and then leaves can activate. After harvesting the leaves, a silkworm eats them, resulting in the larger amount of silk thread becomes 20 % up for three years, according to the farmer.

Finally, we must mention two items concerning microbe; one is the reduction of radioactivity by the bacteria [6], where we discussed the existing of the extended particle generated by the bacteria. The other one is still an unknown phenomenon that the lactic acid bacteria can still exist under high pressure like 100MPa for 15 min that we had one experience now.

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