Plant Consciousness

Plant consciousness is the process of bio-communication in plant cells, which has come to mean that plants are sentient life forms that feel, know, and are conscious.

The scientific field of neurobiology has been effective in demonstrating plant consciousness.

Consciousness exists in everything, but manifests itself in different ways. With the reality that all matter is energy vibrating at different frequencies, it is reasonable to say that all matter has consciousness in its unique way, since all matter comes from the same source and is comprised at its basics level of the same building blocks.

This can be seen in DNA consciousness as well.

This would be a universal principle that would be true for any state of energy, be it a solid, liquid, gas, plasma and then as crystalline, plant, animal, human, and higher dimension life forms.

Plants communicate just *through feeling*. They are purely feeling beings, they do not even know what "thinking" is (except to the extent that they can get a taste of what "thinking" means when they connect with a human). You have to get in touch with your own feelings in the moment in order to communicate with a plant.

You have to be there in the moment and be aware of what you are feeling right then when you are in contact with the plant. Not the feelings about what is going on yesterday and tomorrow,

but the feelings of Now, in the present moment. It is one of the things that plants can teach you. Not just entheogens, but any plant who shares your life with you.

Each species has a distinct personality that you can get to know just by being open to "feeling" it.

Scientific Evidence of Plant Consciousness

Although it is not commonly discussed for various *socio-political reasons*, there is an ample amount of scientific evidence that has proven that plants do indeed have some sort of consciousness.

An enormous amount of research was provided in the revolutionary book on this subject entitled *The Secret Life of Plants* by **Peter Tompkins** and **Christopher Bird**.

Plant Nervous System

Each root apex harbors a unit of nervous system of plants.

The number of root apices in the plant body is high and all brain-units are interconnected via vascular strands (plant nerves) with their polarly-transported auxin (plant neurotransmitter), to form a serial (parallel) nervous system of plants.

The computational and informational capacity of this nervous system based on interconnected parallel units is predicted to be higher than that of the diffuse nervous system of lower animals, or the central nervous system of higher animals/humans.

Plant Pain

In the research of **Jagadish Chandra Bose**, in plant stimuli, he showed with the help of his newly invented crescograph that plants responded to various stimuli as if they had nervous systems like that of animals.

He therefore found a parallelism between animal and plant tissues. His experiments showed that plants grow faster in pleasant music and its growth retards in noise or harsh sound.

His major contribution in the field of biophysics was the demonstration of the electrical nature of the conduction of various stimuli (wounds, chemical agents) in plants, which were earlier thought to be of chemical in nature.

He claimed that plants can,
"feel pain, understand affection etc., from the analysis of the nature of variation of the cell membrane potential of plants, under different circumstances.

According to him a plant treated with care and affection gives out a different vibration compared to a plant subjected to torture."

Plant Painkillers

A team of scientists from the *National Center for Atmospheric Research* (NCAR) in Boulder,

Colo., discovered by accident plants in the wild emitting methyl salicylate - a form of the painkiller known as aspirin.

They set up instruments in a walnut grove near Davis, Calif., to monitor plant emissions of certain *volatile organic compounds* (or VOCs).

VOCs emitted by plants can actually combine with industrial emissions and contribute to smog. To their surprise, the NCAR scientists found that the emissions of VOCs their instruments recorded in the atmosphere included methyl salicylate.

They noticed that the methyl salicylate emissions increased dramatically when the plants, already stressed by a local drought, experienced unseasonably cool nighttime temperatures followed by large temperature increases during the day.

At this current point in time, scientists think that the methyl salicylate has two functions:

- stimulating a process similar to the immune response in animals that helps plants resist and recover from disease
- acting as a form of chemical communication to warn neighbors of threats

"These findings show tangible proof that plant-to-plant communication occurs on the ecosystem level," said study team member Alex Guenther. "It appears that plants have the ability to communicate through the atmosphere."

Plan Communication

Research findings that have been published in the journal Oecologia have noted that plants talk amongst themselves to spread information, much like humans and other animals.

A unique internal network apparently allows plants to warn each other against predators and potential enemies. Plants have an early warning system, very much like in military defense, but more effective: each member of the plant network can receive the external signal of impending herbivore danger and transmit it to the other members of the network.

The attacked leaf is lost. However, the remaining leaves are protected against predators.

In another study, whose research findings were published in the journal *Ecology Letters*, it was found that plants engage in self-recognition and can communicate danger to their "clones" or genetically identical cuttings planted nearby. The findings were found while studying sagebrush.

Richard Karban and fellow scientist **Kaori Shiojiri** of the Center for Ecological Research, Kyoto University, Japan, found that sagebrush responded to cues of self and non-self without physical contact.

The sagebrush communicated and cooperated with other branches of themselves to avoid being eaten by grasshoppers, Karban said. The scientists suspect that the plants warn their own kind of impending danger by emitting volatile cues.

This may involve secreting chemicals that deter herbivores or make the plant less profitable for herbivores to eat, he said.
"Plants are capable of responding to complex cues that involve multiple stimuli," Karban said.

"Plants not only respond to reliable cues in their environments but also produce cues that communicate with other plants and with other organisms, such as pollinators, seed disperses, herbivores and enemies of those herbivores."

Plant Hereditary Awareness

Some more amazing research has shown that plants actually know their own siblings and kin, with the help of chemicals released from the roots.

This way, if siblings of the plants are growing alongside them, the plants will grow their roots more downward and be taller, whereas if alien plants are living beside them, they will grow their roots outward and the alien plants will be shorter and grow less.

Plant Thinking & Memory

Recent research has uncovered that plants transmit information about light intensity and quality from leaf to leaf in a very similar way to the nervous system of human beings.

In the experiment that found this, scientists showed that light shone on to one leaf caused the whole plant to respond and the response, which took the form of light-induced chemical reactions in the leaves, continued in the dark.

This showed that the plant remembered the information encoded in light. Plants seem to be able to perform a sort of biological light computation, using information contained in the light to immunize themselves against diseases.

These "electro-chemical signals" are carried by cells that act as "nerves" of the plants.

The Secret Life of Plants

In the documentary entitled The Secret Life of Plants, which is based on the book with the same title, several scientific studies were shown and discussed that showed enough evidence to remove all doubt of an ancient truth; that *plants have a consciousness.*

Below are a few of the scientific experiments presented in the film that have a revolutionary impact on how we view plants.

- When a plant was put into a Faraday tube, and a telescope pointed at Ursa Major, hooked up to an instrument that converted plant consciousness expressions into audible tones, it was demonstrated that the plant was communicating with something in that star system… most likely something in the plant kingdom. This must have been happening since plants have existed… always constantly communicating with each other since all is one.

- A Russian experiment was done with two cabbage plants… one hooked with electrodes to a machine that converted its energetic expressions into audible tones. When the

cabbage that was not hooked up to any instrument was being destroyed at random by a human scientist, the plant hooked up to the machines was heard screaming or crying, with a very high pitch tone.

- Another Russian experiment put a cabbage on a plate that measured changes in energetic vibrations and when cut into small bits with a machete, it was expressing a similar type of screaming/crying sound that the previous plant made.

- A plant was hooked up with electrodes on a leaf and a vial of small shrimp were set up in a mechanism over boiling water that would release at a completely random time into the boiling water. When this moment happened, and the shrimp started dying, the plant was seen to go frantic, on a polygrah-like graph paper and needle setup.

- Another study had a man watch film clips on a projector of events ranging from children playing to nuclear bombs destroying things. The plant adjacent to the man was seen to mirror the needle movements on the graph paper of the man, exemplifying their emotions were changing and changing to the similar energetic vibrations.

- A Chinese woman hooked up a cactus to an instrument that created an output of the plant essentially speaking, or at least making audible tones. She would talk to the plant and attempt to teach it Chinese and it would reply with what seemed like answers to the woman's requests.

- Through a series of experiments, the authors portray the sentient quality of common plants. The simple fact that a plant "knows" when you are thinking bad thoughts. They respond to external stimuli much like any human would. In fact, it seems as if their "awareness" is heightened to include those in the psychic categories.

- In one experiment, they have a random selection of men. One is chosen at random to go in and destroy one of three plants. The other two plants (common rhododendron) are then hooked up to electro-encephalographs (EEG - brain wave monitors.) and they march the men in one by one. The plants exhibit no alarm, but as soon as the one responsible for the plant death enters the room, the other two plants start registering wildly on the graphs. Basically, they knew who it was that killed their friend. Or, too be more blunt, they read his mind.

Some researchers have used polygraph instruments connected to leaf surfaces to observe responses through electromagnetic activity to various stimuli such as:
raucous, loud music compared with mellow, harmonious music.
The results are always the same: plants react favorably to mellow music while continuous raucous sounds can actually kill them.

Even more amazingly, perhaps, is that plants accurately react to good or bad thoughts directed at them or other biological life forms and even at great distances.

Global Support for Plant Rights

Very recently, the notion of plants being conscious life forms has become a legal affair.

In 2007, the government of **Switzerland** had issued a bill of rights for plants. Swiss Government's Federal Ethics Committee on Non-Human Biotechnology concludes that plants have rights, and we have to treat them appropriately.

A majority of the panel concluded that,
"living organisms should be considered morally for their own sake because they are alive."
Another country that has officially declared plants and ecosystems having rights is **Ecuador**.

The Ecuadorian population voted to change their constitution to proclaim that nature has,
"the right to the maintenance and regeneration of its vital cycles, structure, functions and evolutionary processes."
Almost 70% of Ecuadorians voted in favor of protecting nature in this method. Ecuador drafted the changes with the help of the U.S. based *Community Environmental Legal Defense Fund.*

Along with it's work in Ecuador the Fund,
"has assisted more than a dozen local municipalities with drafting and adopting local laws recognizing Rights of Nature."
The basis of these rights,
"change the status of ecosystems from being regarded as property under the law to being recognized as rights-bearing entities."
It is not surprising for a country such as Ecuador to embrace this decision, since they are a country with a culture dating back to prehistory of shamanism and treating plants, especially entheogens, as if they had their own spirits.

Implications of Plant Consciousness

There is an energy that flows throughout everything on this planet and throughout the entire multiverse.

There is one invisible energy that ties us all together. Humans, cats, dogs, trees, rocks, and any other manifestations of energy are all interconnected. The principle of oneness is found in all ancient religions.

The new evidence implies that these ancient beliefs, which were answers that mystics found by going within and accessing higher knowledge, were true in the sense that all is one and all is connected.

The whole multiverse is, in this case, a sentient organism.

Never treat a plant like it is an inanimate object. It is just as alive as you are, just in a different way. It's consciousness is basic but it does exhibit feelings of fear, empathy, happiness, etc.

- Is it not best to respect everything and everyone the same way you respect yourself?
- Why must it only involve human beings?
- Why not broaden the criteria to everything with a consciousness?

It is the right thing to do that you can see in the deep of your soul.

If we treat all manifested Reality as if it was us, but in a different manifestation, then imagine how different life would be.

Insights From Plant Consciousness

The purity and unselfishness of plant existence can be pondered upon.

Plant life can be seen as a model for ideal human conduct; unlike animals and humans, most plants do not kill and do not live at the expense of other organisms. They are in direct contact with all four elements (earth, wind, water, and fire i.e. sun) and their ability to transform cosmic energy is absolutely indispensable for life on this planet.

Plants are uncontaminated by questions about purpose, awareness of goals, or concerns about the future; rather they seem to represent pure being in the here and now, the ideal of many mystical and spiritual schools of thought.

Not exploiting and hurting other organisms, most plants serve themselves as a source of food and bring beauty and joy into the life of others.