Plants as Sensitive Agents

by Charles Allon

A recent discussion with Michael Theroux has triggered an incredible series of experiments designed to prove that vital currents do indeed flow through natural environments. Mr. Theroux has conducted a series of plant sensitivity experiments which have sufficiently stimulated my interest to produce a series of reports on the subject. These, I hope will best serve the qualitative sciences in establishing a new and more complete experimental method. I extend my deepest thanks to *Borderlands* journal, which I believe to be the most serious forum available in the scientific community today.

Do plants engage in dynamic conscious dialogue with the ground and other beings? Empirical discoveries made throughout the century by notables such as Bose, Hieronymus, De LaWarr, Backster, Lawrence, and others give adequate proof of this dialogue. We learn that plant tissues can be used and relied upon for establishing "objective" qualitative criteria. The remarkable sensitivity of plants to external conscious and auric influences is providing us all with a revolutionary new means of experimentation. This "objectivized" qualitative sensitivity becomes extremely important for those who wish the maintenance of pure qualitative approaches to experimental research.

The use of plant tissues as objective-subjective sensors becomes exceedingly important in dispelling the acrid dialogue between ourselves and quantitative analysts. Sensitive plant response allows the experimenter to recognize the continuity which exists between plant response and those of our innermost experience. We are thus provided with a means for objectivizing our deepest impressions and reactions to forces which lie in the auric domain.

PRELIMINARY

Plants evidence a state, a condition of consciousness, in which they engage in active dialogue with the world. You will discover what Dr. Bose first recognized, the complete correlation of plant responses with the permeating emotional and mental fluctuations which flood our world.

The equipment which is required for this sort of experimentation is simple, and readily available. Michael Theroux mentioned that he had secured several Biosensors from a local Radio Shack. He successfully employed these to monitor plant responses. The Biosensors sold at Radio Shack were obtained for an incredibly low price, and proved to be excellent monitors for use in plant studies of this kind. I was later informed that none other than Dr. Buryl Payne is the designer and patent holder for this wonderful circuit. Mr. Theroux mentioned that his experiments began when, with these devices as a "poor man’s polygraph", he rediscovered the amazing sensitivity of plants to distant influences.

With these Biosensors at your disposal, you too will find it possible to discover the reality of this phenomenon. The units convert galvanic skin response to an audio signal, generally registering tension responses as a sudden increase in pitch, and tranquility as a lowered pitch state. In this use, one measures the systolic-diastolic fluctuations of biological tissue.

Whenever such tissue is influenced by direct touch or from a distance there is an audio reaction which is immediately discerned. The process is effortless for the experimenter. Before any indications of plant tissue response are obtained, you must carefully observe several steps. The required adjustments are simple, and will insure the accuracy of your results. If you have been successful in securing a supply of Radio Shack biosensors, you should buy TWO or more. You will not likely find another means so affordable for conducting these kinds of experiments. Their applications in qualitative research are endless.

Take one of these units and carefully slice off the Velcro wrappings which surround each electrode disc. Carefully excise the excess cloth and expose the electrodes making sure you have not clipped the wire leads at all. It is important that you take care to not damage the shiny electrode surfaces, which are made of smooth stainless steel. You will not find a better means for monitoring the sensitive responses found active in minerals, plants, and humans. You may keep one Biosensor with its finger wraps to compare your own responses to external influences. Qualitative experiments require subjective controls. With one Biosensor connected to a substance as the variable, you may simultaneously observe your own responses with the other Biosensor as the control.

Obtain a laboratory-type ringstand and clamp. If you can, obtain a clamp with vinylized grips. If the clamp grips are not covered in vinyl, you may wish to wrap them in black tape in order to insulate them. Soft connection with the plant is critical. You do not want to damage the leaf tissues. You may wish to grease the leaf surface where the electrodes are to be placed with some type of electrode creme. Bring your ringstand and mount the clamp at a convenient height. Choose a good sized leaf. There, where you wish to place the electrodes, smear the opposed surfaces of the leaf with a tiny drop of electrode creme. This coating must be transparent. Only a shiny coat should be visible.

Carefully place the steel electrode surfaces on opposite faces of the smeared leaf. Slowly and gently close the well insulated clamp on electrodes and leaf until firmly held. Do not "play" the wires too much. Make sure that you do not tear the leaf. If this has occurred, simply find another leaf and repeat the procedure.

BASELINE

Once the electrodes are in place you are ready to rediscover the Bose-Backster effect. We will refer to the wired plant as the "monitor" throughout our discussion. The Biosensor feeds a mild electrical current to the leaf. Changes in conductivity are converted to a wavering audio pitch. Turn on the Biosensor and carefully adjust the gain. Listen. The pitch must not be excessively high. Lower the pitch to a reasonable wail. If the gain is too low, the pitch will studder like the sound produced by a Geiger Counter. Raise the pitch. Establish an "audio baseline" in the monitor by adjusting the Biosensor gain control until a steady signal is obtained.

One must be patient during this adjustment phase, since the plant goes into "shock" whenever any electrical gain is delivered. The plant is irritated by the current, and must become used to both the electrodes and the current applications. An ever mounting pitch reveals the commencement of plant "shock". After a few minutes, you will hear a subsequent rapid pitch decrease until the audio signal becomes a staccato. Raise the gain until a "constant pitch" is secured. Plant responses to radiant conscious energies appear as a great variety of audio pitch fluctuations.

When you have secured a gain position in which the plant audio signal is tremulous, a wavering quality which neither rises nor falls, it is then that you have reached the required "state of sensitivity". This state is dependent on time. Remember that, when experimenting with plant tissues, you are not dealing with a digital switch. Plants require time to respond. Also, unlike the reactions of switches and other electrical components, there is no indefinite sensitivity with bioorganisms. Plants suffer shock and fatigue. They offer us a time-dependent "window" of sensitivity, during which we may perform our qualitative experiments. Prolonged experimentation requires several prepared plants. Since plant tissues do suffer shock and fatigue, each separate experiment should employ a new prepared monitor plant.

When having obtained the "window of sensitivity", plant tissues will function as a conduit for bioenergies. Flowing in the spatial surroundings, these influences will modify plant homeostasis and trigger strong responses in your Biosensors. We insist on using the term "responses" and not "reactions". We do so for a great number of reasons. The observation that plants continually "read" both the emotional and mental state of the experimenter contributes astounding new knowledge on conscious energies.

The fluctuating audio pitch in the monitor results from a fluctuating cytoplasmic electroconductivity, an activity difficult to explain by reducible forces. One monitors the very obvious fluctuations resulting from variations in light, heat, moisture, barometric pressure, breezes, and other such inert influences. These each reveal their influence in the lagging plant response to changes in the inert environment. I refer to both these forces and to the environment which they represent as "inert" because the plant is in no way reaching out to them. The plant is not connected to their energies in a vitalistic manner...as by anatomical extension so to speak.

EXPERIMENT 1

Those forces termed electric, magnetic, sonic, thermic, photic, or barometric, do contribute their stimulating effects on plant tissue. But they do so as inert agencies. They do so as disconnected messages from the biological space in which the plants have their being. These inert influences very clearly register their influence in plant responses. One observes the effect of increased light on the plant by simply turning a bright lamp directly on the clamped leaf. Notice how the pitch begins to rise in increased activity. Apply water to the soil, wait and hear the rising pitch in the monitor. Blow a puff of air on the plant and notice the pitch rise.

Quantitative scientists would recite their long lists of force exchanges to explain each of these effects. They would tell how light, water, frictive, and compressive effects each stimulate increased cytoplasmic dilation and flow. The application of these inert forces would be, for them, satisfactorily explained in the enhanced electrical conductivity. This would then produce the audio pitch rise. Their explanations for each of these experiments becomes increasingly strained with each variable which I will cite. Nevertheless, they will continue in producing their mechanistic "bucket brigades" even when it is apparent that have strained their own credulity to the point of failure.

EXPERIMENT 2

The same force-chain explanations would be cited to destroy the wonder which one experiences when gently touching the probed leaf. Touch the leaf to which your probes are connected. The plant "coos and sighs" as do many domestic animals when stroked. We would be once again reprimanded by the "school of quantities" on this account, demanding us to relinquish our anthropomorphic identification with the test subject. They would explain that touch has altered the electroconductivity of the leaf, either by physically moving the electrodes or by increasing cytoplasmic flow through the addition of thermal energy.

Touch and stroke another leaf of the same plant, taking care not to disturb or move the probes in any way. Now, the "sighing" responses are heard again, and academic science halts for a moment to ponder the mystery. How to explain the response in the probed leaf when touching other more distant parts of the same plant? This infers the existence of a communicative system within the plant; a neural system through which responses are communicated and exchanged. Academes refute the very existence of neural systems in plants, despite the discoveries of Dr. Jagadis Chunder Bose.

Dr. Bose found that all plants have deeply imbedded neural strands within their vascular bundles.

While vascular bundles serve as agents of fluidic transfer throughout the plant, the microscopic strands which Dr. Bose located demonstrate activity when adjacent plant parts are stimulated. Dr. Bose found that these strands exhibited negative electrical impulses when the plant was in any way disturbed or stimulated. He further found that such neural connections extended throughout the plant anatomy, effectively interlinking roots, stems, branches, leaves, and flowers. This great discovery explains responses which occur within the plant.

EXPERIMENT 3

Now we will perform certain experimental variations which will force the academes to strain the reducible force explanations upon which they are so reliant. What shall they say of responses which occur through space without material connection? Bring a second potted plant into the room. Place it near the first "wired" plant. Notice any pitch changes? However carefully you approach the monitor plant, you will find that its audio pitch fluctuations become strong and excited. Leave the two plants together for a time and listen to the sounds. What you are hearing is a dialogue of mystifying content. These are communications of a most remarkable nature.

Allow the plants to remain in close proximity until the monitor reaches quiescence. Now very carefully remove the free plant to a six foot distance. Hear the "wailing" reaction in the Biosensor? Place the plants in proximity again. The wild and erratic wails cease after a short time. The plant grows excited by the presence of a second plant. The audio response becomes "frantic" when that presence is removed. The "wailing and quailing" of the monitor plant evidences a response which can only be termed "emotional".

There are those who have taken other qualitative analysts to task on this citation. In the remarkable experience of this phenomenon one simply cannot cite the cause of this holistic response in sudden modifications of plant conductivity. The division between force responses and emotional responses is striking. It begins in simple experiment, with subsequent consideration of actual results. The response of plant tissues to inert forces displays far more complex attributes than can be attributed to ordinary changes in conductivity. They are asymmetric in tone and atempic in dynamics.

These audio indications reveal true biological responses, not inertial reactions. Moreover, they indicate defined degrees of response to external stimuli which can only exist in pre-patterned neurological systems. In both the sustained wailing or pacification alike, plants are revealing capacities of response. Such capacities are vast in their implications, normally associated with "higher" life forms such as animals. In more conventional circles they are referred to as behaviours. The degree to which plant species each participate with environmental changes may differ greatly.

We may hypothesize that plants collectively respond to a specified range which includes both sensual, emotive, and semi-conscious variations. And it is in this that we as qualitative scientists are most enthralled and intrigued. The behavioral response of plants to the environmental influences, caused by inert forces and other bioorganisms, is striking and most unexpected. The recognition of this phenomenon overturns the most fundamental tenets on which quantitative science is based, revealing anew the dimension of life discovered over a century ago by the great Dr. Jagadis Chunder Bose in India.