NEW BIOSPHERE AGRICULTURE





SONIC BLOOM

HARMONICS



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SONIC BLOOM

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Organic Farming made easy! The best organic fertilizer in the world!

Sonic Bloom has increased production by 50-500% !!!

STOP PRESS: The Indonesian government got a 100% increase in rice and a 100% increase in tea using Sonic Bloom. They are now planning (April 2002) to grow ONE MILLION HECTARES of rice with Sonic Bloom!

SONIC BLOOM UPDATE: Last year Dan Carlson, inventor of Sonic Bloom, was nominated for a Nobel Peace Prize!

> Wilson Mill's Circle K Orchard in Wisconsin, has used Sonic Bloom for 8 years. He gets larger, healthier trees, bigger yields, better fruit quality, fewer insects, higher sugar level, earlier maturity, and a shelf life of five months. He beats his competitors to market by two weeks! Yield is 490+ bushels/acre (vs. 290 average).

LEFT: Without Sonic Bloom RIGHT: With Sonic Bloom

(Note the massive amount of fruit increase)

Sonic Bloom consists of a combination of sounds which are the same frequency as the singing of birds, plus leaf spray organic fertilizer.

While academics have a hard time believing that sound can affect plant growth, all we and many farmers can says is - IT WORKS!!!





Note: The following results can be seen on the video ``Seeing is Believing".

CROP	WITH SONIC BLOOM ORGANIC FERTILIZER AND SOUND SYSTEM	WHAT'S NORMAL
ALFALFA	3' - 5' high ! Gives cows 30% increase in milk production !	1.5 ` high
APPLES	300 - 500 bushels per acre ! 3 times as many apples ! Crop ready 2 weeks earlier, bringing in twice the normal price ! No irrigation required !	200 bushels per acre
BARLEY	57 pound to the bushel 68% better yield !	
CANTALOUPE (ROCKMELON)	Fruit produced in 63 days ! 6 - 8 pickings of fruit ! Healthier fruit Bigger fruit Thicker flesh Higher sugar content	Fruit produced in 90 - 100 days 3 - 4 pickings of fruit
CAULIFLOWERS	So large they fit only 4 in a box	10 to a box
CORN	Reached maturity before the frost ! 500% increase ! Great increase in the number of plants with 2 stalks ! Many plants with 2,3 and 4 cobs ! 70% higher ! Better quality ! More weight ! 20 rows !	Untreated corn did not reach maturity before the frost 16 rows
CRANBERRIES	209 barrels (1997) \$16,700/acre gross profit (1997) 98% increase generally ! During a drought berries stayed the same size as the previous year ! 'Yellow leaf syndrome' disappeared In Australia - they cut back 1/3 on water !	126 barrels (1996) \$10,000/acre gross profit (1996)
FRUIT	Grows on 1 year old trees! No chemicals needed !	Trees take 4 - 5 years to produce fruit!
GINSENG	Heads 3 - 4 times the normal size ! MUCH thicker roots 5 - 7 leaves Seeds on 5 year old plants No disease - virtually no pesticide spraying	4 leaves

	Roots have twice the active ingredient 3,800 lb per acre Green leaves while normal plants are going to fall colors	
GRAPES	While others suffered 'Delayed bud syndrome', a Sonic Bloom farmer had the best crop he ever had! 50 - 100% improvement ! Less water used ! A first time user had a 20% increase on the local record !	'Delayed bud syndrome' - A 'summer which wasn't a summer' gave 'normal' farmers a reduction of 30 - 50%
KIWI FRUIT	2 weeks earlier harvest !	
NUTS & NUT TREES (including BLACK WALNUT)	Up to 5 nuts at a time! Up to 10 years of growth a year ! Hardwoods grow as fast as softwoods !	1 nut at a time
PEACHES, NECTARINES	Better fruit Larger fruit Better flavour Less fruit falling off when it rains Less split fruit Sonic Bloom gave one farmer the best year he ever had !	
PLUMS	No irrigation required Plums sitting 'like grapes'	
POTATOES	Bugs did not eat them	Bugs did eat them
SEED CORN	180 - 450% increases over Mexican crop average !	
SEEDLINGS (Black walnut)	Treating the parents produces larger seeds which produce faster growing seedlings ! Leaves of the offspring are MANY times larger than the Sonic Bloom-treated parent !	
SOY BEANS	6 - 10 fat pods on each fork ! Twice as tall ! 3 times as many beans !	2 - 4 pods on each fork
TOMATOES	19,000 lb per season	9,500 lb per season

HARMONICS:

Q: Can sound frequencies aid in the growth of plants?

Answer:

In 1972, Dan Carlson (University of Minnesota) discovered that natural bird sounds during early dawn hours encourage plants to open the small breathing pores on their leaves (called stomata) wider so as to better receive more carbon dioxide & dew water and release more waste oxygen gas, thereby cooling the leaves and allowing for more rapid growth. Over the last three decades, he has determined that plants respond better to an oscillating sound pattern of rhythmic pulses at frequencies of 3,000-6,000 vibrations per second (3 to 6 kilohertz)--intermediate between the high-frequency chirps of song birds and crickets--best played between the morning hours of 5:30-9:00 AM. Each stoma, though normally more responsive during this time anyway, enlarged its opening size by 400% when exposed to sound energy at this audible range!

Carlson's research indicates that these sound frequencies increase the metabolic rate of the plants, allowing them to grow faster naturally by making them more open to receiving foliar nutrition, which is then more easily assimilated internally. By inducing a quadrupling of pore diameter, thus facilitating the plant leaves reaching their full stomatic potential, the acoustical rhythms mentioned not only allow the plant to breathe better but also enhance the absorption of available moisture and growth stimulants, such as multiple vitamins, trace elements, chelated amino acids, and complex sugars.

Dan Carlson has also discovered that, independent of the sound-stoma phenomenon, the nutrientabsorption rate can be tripled by simply introducing plants to a powerful, specially-formulated, liquid nutrient solution--best administered as a fine mist [which, by the way, God first used in Eden! (Gen. 2:6)]. This foliar spray, in combination with the stomata being triggered fully open by the high-frequency chirping vibrations, enables plants to reach what Carlson believes to be their full genetic potential. In fact, Dan Carlson calls this plant growth-enhancer system--an all-natural, organic process which he has spent 30 years developing--by the commercial name of "Sonic Bloom". [Please keep in mind that the Creation Evidence Museum, while providing information regarding the Sonic Bloom system in response to this inquiry, is not to be viewed as endorsing this product, though we may agree with research conclusions which led to its development.]

The patented, two-part Sonic Bloom system is said to provide a stress-free, balanced environment for plant growth by removing stressors (e.g., low light, cool temperatures, low moisture, etc.), with the synergistic effects working best on treated seeds and plant cuttings of the "open pollinated" type (i.e., non-hybrids) with the genetic capability of simulating to some degree the original-ancestor (or parent-variety) growth potential.

The high-frequency sound/fine foliar-spray Sonic Bloom system has resulted in giant, enormously healthy plants which are sturdier, of much higher nutritional value, and better taste. Some of the advertised effects (from more than 15,500 related Internet sites) include the following:

- 40% larger seeds and improved 'crumb structure' of the soil (resulting in increased earthworm activity and bioturbation)
- Much longer taproots and/or greater, heavier root mass

- Much longer vines (e.g., the normally 18-inch purple passion plant growing to a Guinness world-record length of 1400 feet in just 2-1/2 years!)
- Plants becoming a lighter, brighter green
- Leaves swelling, some standing erect
- Fruit becoming much more disease- and insect-resistant
- Everblooming trees
- Crops maturing much faster and producing 20%-100% greater yields (with reports of 15'-tall tomato plants with 836 tomatoes and 16'-tall corn stalks with 2' ears!

It is quite likely that the two criteria employed by this patented growth-enhancing system were originally incorporated by our Creator God in the Edenic paradise of His orchestrated, symphonic creation. Our Creation Evidence Museum Founder and Director, Dr. Carl E. Baugh, on page 68 of his book entitled 'Panorama of Creation', lists the following other antediluvian parameters conducive to plant growth (which he has also spent decades researching):

- 1. There existed increased atmospheric pressure.
- 2. Carbon dioxide was increased to an efficient degree
- 3. Hydroponic growing conditions existed in which plant roots penetrated into the water table in the sand, thus the nutrients were better supplied.
- 4. There was a variation of flow within the water table.
- 5. There was a slightly warmer temperature gradient in the root systems and the water table.
- 6. There was an efficient use of pink light.
- 7. There was an elimination of ultraviolet radiation.

No wonder such lush vegetation existed before the Flood. Only scientific creation can, in principle, match the context that we find in the fossil record."

Truly, as the writer of Ecclesiastes states, "there is no new thing under the sun" (Eccl. 1:9c); there is only, to quote Isaac Newton, the "thinking [of]God's thoughts after Him."



History and Explanation of Sonic Bloom

Extracted from the excellent book "<u>Secrets of the Soil</u>" by Peter Tompkins & Christopher Bird, 1989

Gardening Tip: READ `SECRETS OF THE SOIL'!!! It gives DOZENS of wonderful ways to greatly increase the growth and productivity in your farm or garden, and to repair out planet.

Plants, says Steiner, can only be understood when considered in connection with all that is circling, weaving, and living around them. In spring and autumn, when swallows produce vibrations as they flock in a body of air causing currents with their wing beats, these and birdsong, says Steiner, have a powerful effect on the flowering and fruiting of plants.

A bird's-eye view across country south and east of La Belle, midway between the great Lake Okeechobee and Sanibel Island, reveals an ocean of citrus orchards cut by a skein of dusty 'sea lanes', extending for miles toward the shores of the Gulf of Mexico, once a paradise for seashell hunters until ravaged by pollution.

Any bird overflying this greensward in the mid-1980s would have been perplexed by the lack of avian fellows among millions of orange trees growing in the confines of Gerber Grove, saturated by a fog of chemicals laid down to ward off swarms of insects - except in Section 1. There a multitude of feathered fauna darted among the trees or perched singing in their branches.

To this oasis the birds had been attracted, not by a natural concert of their colleagues; but by a sonic diapason* closely resembling birdsong, which to human ears, incapable of distinguishing its varied harmonics, recalls the chirping of a chorus of outsized crickets. *(diapason: The full range of notes)

This sonic symphony was being emitted from a series of black loudspeaker boxes set atop twenty-foot poles, each resounding over an oval of about forty acres. Its purpose was not so much to attract birds as to increase the size and total yield of a crop of fruit, 'hung', as they say in Florida, on trees as if it were a collection of decorative balls at Christmas time.

"I have hung oranges the size of peas, shooter marbles, golf balls and tennis balls, some still green, others fully ripe, all on the same tree, all at the same time," said Roy McClurg, a former Union City, Indiana, department-store magnate, part owner of the Gerber Grove.

We had driven down at dawn to his 320-acre holding, where two young field hands, brothers-in-law, each with a tractor and a trailer tank of foliar feed* had started off between two long rows of trees, dousing them with an aerosol mist from top to bottom while a speaker, similar to the ones on the poles, tuned to maximum volume, shrieked a whistling pulse easily audible above the roar of the tractor motors. *(*foliar feed: liquid food nutrient which is applied by spray to the leaves*)

Pointing to one of his many trees, McClurg raised his voice: "This is the typical fruit I'm getting with this brand-new method called Sonic Bloom. It synchronously combines a

spraying of the leaves of any plants, from tiny sprouts to mature trees, with a broadcast of that special sound. With that process, simple but scientifically unexplained, I've been able for the first time to get fruit all over the inner branches of my orange trees, greatly adding to the 'umbrella'-type set which is everywhere the norm.

Back in his pleasantly refurbished clapboard house, oldest in the county, McClurg took from his refrigerator a dozen oranges the size of a small grapefruit. "These were picked at my grove yesterday, he explained. "Ordinarily oranges as big as these would be pithy and woody inside, with very little juice. Slicing four of them with a razor-sharp butcher's cleaver, McClurg held up several of the hemispheres dripping with juice to show off rinds no thicker than an eighth of an inch. An electric juicer processed three of them to nearly fill a pint-sized glass.

"Oranges like these," said McClurg, "will give me a crop with at least a 30% increase in yield and a marked rise in 'pounds solid'. Add to that the fact that the Garvey Center for the Improvement of Human Functioning, a medically-pioneering research group in Wichita, Kansas, has tested the juice to **show an increase of 121% in natural vitamin C over normal oranges**, and you can understand that this new 'Sonic Bloom' discovery we're talking about not only improves quantity, but also quality. I've run blindfold tests with scores of ordinary people who have compared the taste of my juice with that of oranges from many other groves, and they all selected mine as the most lip-smackingly superior."

While McClurg was happily harvesting his oranges, Harold Aungst, a dairy farmer milking a 200-head herd of Holsteins in McVeytown, Pennsylvania, was equally happily applying the Sonic Bloom method to a 100 acre field of alfalfa.

That year Aungst took off five cuttings, one shoulder-high and so thick he had to gear his tractor down to low-low to pull his cutter through it. With this harvest, Aungst won the Pennsylvania State 5-acre alfalfa growing contest over 93 other contestants by producing an unheard of 7.7 tons per acre as against a state average of 3.3 tons.

To dairyman Aungst, the size of his harvest was not its most important characteristic. **Hay from this alfalfa fed to his herd that winter allowed the cows to step up milk productions form 6,800 to 7,300 pounds per hundred-weight of cow, yet eat 1/4 less feed.** "I could hardly believe it," said Aungst, third-generation owner of his property. "My cows were devouring the alfalfa, stems and all. Other years they'd let the stems just lay. A cow's nose is the very best barometer to tell how good your crop is. Cows are really finicky about what they eat. I threw down hay from another of my fields alongside this recordbreaking alfalfa and the cattle first went for the feed exposed to that funny sound every time, changing over to the other only when the good stuff was all gone."

One clue to the cows' preference was revealed in a test run on protein analysis by an infrared scanner at the Pennsylvania State University "Ag-Days" exhibition and fair. Aungst's sound-exposed hay scored a record 29% for protein and an extremely high 80% for Total Digestible Nutrients (TDNs). At the fair the same test showed similar percentages for Aungst's soybeans. Across the United States in the Tiwa Indian pueblo of San Juan, New Mexico, twenty minutes' drive north-west of Santa Fe, the highly alkaline desert soils, composed of playa clay called adobe, can be as hardpacked and impenetrable as a New York sidewalk. Yet a garden under the ministration of the same aurally-spiced nutrition as used in McVeytown and in Florida was growing as if in Eden.

Alongside more than fifty kinds of herbs, vegetables were flourishing, including tomatoes and carrots never before grown in that arid region at the confluence of the Chama and Rio Grande rivers.

To Gabriel Howearth, a bearded, pony-tailed master gardener employed by the tribe, veteran of several years' working with Maya Indian farmers in Mexico's Yucatan peninsula, Sonic Bloom was as miraculous in its results as was the Maya's ability to grow crops with no chemical additives by simply mentally communicating with them in some mysteriously hermetic way.

"As you can see," said Gabriel, parting the purplish-green leaves of a German beet to cup his hands around the top hemisphere of a swollen mauve-maroon root much larger than a softball, "I can't get my hands completely around it. All these beets, which normally scale at not more than 4 pounds, will weight at least 9, possibly 10."

THE ORIGINS OF SONIC BLOOM

The idea was seeded in the mind of its developer one bitter cold winter day in 1960 in the Demilitarised Zone between North and South Korea. Dan Carlson, a young Minnesota recruit serving with the US Army motor pool, happened to see a young Korean mother deliberately crush the legs of her 4 year old child beneath the back wheel of a reversing 2 ton GMC truck. Tearfully, the woman explained in distraught and incoherent English that, with 2 more children starving at home, only by crippling her oldest boy could she beg enough food in the city to feed her entire family.

There and then, Carlson decided he would single-mindedly devote the rest of his life to finding an innovative and cheaper way to grow food, accessible to anyone with even the smallest and poorest plot of land. Back home in Minnesota, he enrolled in the University's Experimental College. Like David Vetter at Ohio, he was allowed to design his own curriculum and reading program in horticulture and agriculture.

Soon he concluded that in poor soils, if plants could be appropriately fed, not through their roots, but through their leaves via the minute mouth-like openings called stomata (which plants constantly use to exchange gaseous aerosols and mists with the surrounding atmosphere) they might flourish and even grow rapidly in soils that were acidic, alkaline, salty, arid, desert or other otherwise deprived of balanced nutrients.

But some motive force, he soon realised, was needed to awaken the stomata to action. Puzzling as to what this might be, Carlson stumbled on a record called "Growing Plants Successfully in the Home", devised by George Milstein, a retired dental surgeon who had won prizes for growing colorful plants. Milstein's innovative idea had been to get a recording company, Pip Records, to amalgamate into a popular tune the pure sound frequencies broadcast by University of Ottawa researchers to increase wheat yields, which he had read about in "The Secret Life of Plants".

Picking up where Milstein left off, Carlson focused on finding frequencies that would motivate the stomata to open and imbibe. Though he did not at first suspect a tie with the sound that caused the birds to flock to McClurg's orange grove, he managed through a stroke of spiritual insight to hit upon a combination of frequencies and harmonics exactly accordant with the pre-dawn bird concerts that continue past sun-up into morning.

To help create a new cassette tape of popular music into which his non-musical sonics could be embedded for inclusion in a Sonic Bloom home kit for use in small backyard gardens and greenhouses and on indoor plants, Carlson enlisted the technical expertise of a Minneapolis music teacher, Michael Holtz. Within seconds of hearing Carlson's 'cricket chirping' oscillating out of a speaker, Holtz realised its pitch was consonant with the early-morning concert of birds outside his bedroom window.

The first cassette, using Hindu melodies induced stomata to imbibe more than 7 times the amount of foliar-fed nutrients, and even absorb invisible water vapour in the atmosphere that exists, unseen and unfelt, in the driest of climatic conditions. But this sound proved irritating to most American horticulturalists and farmers.

Looking for western music in the range of Carlson's highest frequencies, the ones which in Hindu experiments had shown the best bumper crops of corn, Holtz culled several baroque selections from "The Dictionary of Musical Themes", settling on the first movement of Vivaldi's "The Seasons", appropriately called "Spring". "Listening to it time and again", said Holz, "I realised that Vivaldi, in his day, must have known all about birdsong, which he tried to imitate in his long violin passages."

Holtz also realised that the violin music dominant in "Spring" reflected Johann Bach's violin sonatas broadcast by the Ottawa University researchers to a wheatfield, which had obtained remarkable crops 66% greater than average, with larger and heavier seeds. Accordingly, Holtz selected Bach's "E-Major Concerto for Violin" for inclusion in the tape. " I chose that particular concerto," explained Holtz, "because it has many repetitious but varying notes. Bach was such a musical genius he could change his harmonic rhythm at nearly every other beat, with his chords going from E to B to G-sharp and so on, whereas Vivaldi would frequently keep to one chord for as long as four measures. That's why Bach is considered the greatest composer that ever lived. I chose Bach's string concerto, rather than his more popular organ music, because the timbre of the violin, its harmonic structure, is far richer than that of the organ."

Holtz next delved into what for him was a whole new world of bird melodies. In the 1930s, Aretas Saunders, author of "Guide to Bird Songs", had developed a method of visually representing, through a newly devised audio-spectrogram, the arias of singing birds that can neither be described in words nor adequately shown with any accuracy on a musical staff.

Soon Holtz came to see where the various predominating pitches in birdsongs could be calibrated by reference points on the musical scale and their harmonics. Dan Carlson had

instinctively hit upon frequencies that were the ideal electronic analogues for a bird choir. "It was thrilling," said Holtz, "to make that connection. I began to feel that God had created the birds for more than just freely flying about and warbling. Their very singing must somehow be intimately linked to the mysteries of seed germination and plant growth."

"I guess Rachel Carson was right," Holtz said nostalgically. "The spring season down on the farms is much more silent than ever before. DDT killed off many birds and others never seem to have taken their place. Who knows what magical effect a bird like the wood thrush might have on its environment, singing 3 separate notes all at the same time, warbling 2 of them and sustaining the others!"

One morning while Holtz was mentally bemoaning all the species of birds that had vanished from Iowa, a yellow warbler, looking for all the world like a canary, flew, as if reading his mind, to perch on the top of a tree outside his bedroom window and, as if cued by his band maestro's baton, burst into song. Holtz grabbed his tape recorder and managed to register an aria that went on and on for 9 to 10 minutes. In the field guide he found that the little bird registers a high 8,000 cps. (Cycles per second). Drawn deeper into the subject, Holtz consulted books that detail the structure of birdsong, such as "*Vocal Communication in Birds*", "*Born to Sing*" and "*Bird Sounds and Their Meanings*". He also consulted biological texts to find that tiny villi (minute shaggy hairlike tufts in the cochlea of the human inner ear) vibrate to certain "window" frequencies.

"What I was trying to figure out with Dan Carlson was what exactly we were oscillating in plants", Holtz explained.

Looking at drawings of a cell, Holtz further discovered the representation of a subcellular structure within the cyptoplasm known as a mitochondrion. Pointing to the enlarged drawing of one of them he asked, "Of what does their shape remind you?" A glance suggested the form of the sound box of a violin.

"That's right!" Holtz exulted. "And I found it more than of passing interest that the resonant frequency of mitochondria is 25 cps, which, if interpolated upward, gets to a harmonic of 5,000 cps, the same frequency used by Dr Pearl Weinberger to grow winter wheat 2.5 times larger than normal with 4 times the average number of shoots, as reported in Dorothy Retallack's "The Sound of Music and Plants". It could be that the frequencies he used vibrated not only the mitochondria in the wheat seeds, but the water surrounding them, increasing the surface tension and thus enhancing penetrability through the cell wall."

Holtz connected this to Retallack's having also discovered that the transpiration rate rose, indicating greater growth activity in her experimental plants when they 'listened' to Bach, 1920s jazz, or the Indian strains of Ravi Shankar's sitar - whereas exposed to hard rock, with the same rate nearly tripled, within 2 weeks the plants were dead.

"I believe such frenetic music," said Holtz, "was too much for their overall systems. The intense, grindingly monotonous energy in that rock sound could have virtually blown the cells apart! Young volunteers for the US Navy who have listened to that type of music

since childhood have been rejected because of partial deafness, even before reaching the age of 20."

Asked if one could simply play the recording of a crescendo involving all of a symphony orchestra's instruments with their hundreds of frequencies and harmonics and allow plants to select those best suited for their needs, Holtz replied: "You have to take into account a law of diminishing returns. Too big a dose of anything is not necessarily of greater benefit than just a little or even a tiny dose."

It seemed significant that Holtz, the musicologist, could say this without any knowledge of homeopathic 'potentising'.

Carlson, who we met in Kansas City at one of Charlie Walter's annual eco-agriculture conferences, explained his approach with lively enthusiasm. "What I've tried all along to do with the sonic part of Sonic Bloom," he expostulated, his jet-black hair and pirate beard reflecting the hue of the Western-cut suit he wears for public lectures, giving him the air of an Amish elder, "is to stay within boundaries set by nature. I think there are certain cosmic forces which can account, however 'unscientifically', for much of our success. Properly adapted they will get plants to grow better ... or even inspire people to relate to one another more harmoniously. There's plenty of evidence that various frequencies of both sound and color can be curative. But 'hard rock' is not consonant with nature's own harmonics. I believe birds exposed to it for long periods would fall ill and die, just as Retallack's plants withered away."

He waved his hands like an evangelist. "I get over a hundred calls a year, from people experimenting with my broadcasts. **Most of them say that when the sound is turned on plants actually turn away from the sound to grow toward the speakers!** Always! To me that means the sound is as important to plants as whatever we understand about photosynthesis. Perhaps that's what Rachel Carons meant when she intimated that 'spring' might one day be silent without Vivaldi's violins.

With a cold Minnesota winter coming on, and limited space in which to carry on his early experiments in a VHA-financed home, Carlson took a big step: he spent 88 cents on a tropical *Gynura aurantiaca* or purple passion vine. Known also as a velvet plant, native to the Indonesian island of Java, its fleshy teardrop leaves are densely covered with violet veins and hairs, and its yellow-orange dishlike flowers exude a nasty smell. But to Carlson this was his cherished baby. Once a month with a cotton swab he applied doses of nutrient to the top of his vegetal pet, almost homeopathically weak doses, while simultaneously getting it to 'listen' to his sonics. The swabbing turned the top a withering brown, but quickly a new sprout burgeoned forth one leaf below the dead tip to grow at an accelerated rate. Within a few days, the original tip had completely recovered and was spurting rapidly ahead, both shoots exhibiting thick, healthy stalks and exceptionally large leaves.

As the vine crawled upward out of its pot, Carlson screwed teacup hooks into the wall of his kitchen, 6 inches apart, to support it; and so fast did the vine race for the hooks, he had to add half a dozen every week.

At which point he made another startling discovery. If he snipped the growing tips with a scissors, the Javanese plant, far from daunted, put out a new shoot at the first leaf node below the cut.

As novel as this seemed to Carlson, he was even more puzzled by his pet's growing not only the teardrop leaves characteristic of its species, but also saw-toothed ones typical of its Indian cousin *Gynura sarmentosa*, along with completely alien split leaves previously never seen on any purple passion plant. The sound-plus-solution treatment appeared to be strangely affecting something to do with his vine's genetic qualities even as it grew.

In a paper on his experiment submitted to his profession, Carlson presciently asked: "Does one cell of a plant genus contain all the characteristics of all the species of that genus? If not, why has my plant, grown from a *Gynura aurantiaca* cutting, developed leaves, over 90% of its length, peculiar to the *Gynura sarmentosa* and, at the same time, exhibited an entirely new split-leaf form? Could the combined application of nutrient and audio energy result in such rapid growth rate that the very process of evolution is condensed? Have I enabled my plant to adapt more quickly to its environment? Is this the reason for the different leaf characteristics appearing on one plant? If any of these questions can be answered 'yes', can this knowledge be applied to other plants? Could food crops be treated to achieve more rapid growth and better adaptability to their own or alien environments?"

As winter wore into spring, and summer into fall, Carlson noticed another oddity: his plant had bloomed not the usual once, but twice .Even more fantastic was its incredibly extending length. In only the first 3 months, the vine, which normally never exceeds a length of 18 to 24 inches, had grown a total stem of 150 feet !!! During the rest of the year it pushed on at the same rate, out of the kitchen through a 1.5 inch hole bored in the wall leading to the living room, where it roved back and forth along the ceiling on wires strung 18" apart, to attain a length of over 1/10 of a mile.

During the next year Carlson began snipping 4" shoots from his vine, which he started in small plastic pots. 400 of these, labelled with his address and phone number and a request to call him for a replacement should the shoots die, he took to a flea market, where they rapidly sold for \$4 apiece.

"I had many calls," he reminisced, "but none were to complain about sick or dying plants. Instead the callers wanted to know why the offshoots from my mother plant were growing 20, 30, 40, 50 feet long, and even more. I at once thought that this unheard-of development might give rise to the possibility of whole new strains of hardier superflora.

Despite this achievement, worthy of Luther Burbank, when Carlson, in happy excitement, asked member so his university committee to come to his house to see for themselves what he had done, their only reaction amounted to a yawn.

Didn't he realise, they asked, that, because his results had been obtained on a non-edible house plant, they were of no commercial value or interest? (Despite the fact that he had made \$1,600 from a plant that cost him 88 cents).

Desperate to get anything into the public record that would substantiate his achievement, Carlson wrote to Guinness Superlatives Limited in Middlesex, England, publisher of the famous Guinness Book of World Records, which sent to Minnesota to check his claim "specialists in the matter of freaks in the plant kingdom."

Carefully measuring his plant's stem, inch by inch over its entire length, the freak specialists congratulated Carlson. That same autumn the new edition of the record book had an entry on page 113 extolling his find. To counter the notion that his new method was commercially valueless, Carlson next began to supply portable sonic equipment and nutrient mix to backyard gardeners who had called him after the Minneapolis *Star* ran a huge photo of the Carlson family standing under the passion plant, its leaves intertwined in the supporting chain of a chandelier before proceeding, through additional holes in the wall, into his children's bedrooms.

Not to be outdone, the St Paul *Dispatch*, describing his African violets, with more than 400 blooms in a full spectrum of colors, and his morning glories, purple, blue, white, red and pink, as enveloping his house from its foundation to its roof eaves, quoted Carlson as foreseeing a Jack-and-the-Beanstalk world with gigantic flora capable of feeding multitudes while their stomata increased the Earth's supply of oxygen.

It occurred to Carlson that if Luther Burbank could coax a spiny cactus into losing its thorns by informing the plant that it no longer needed them because he would 'protect it', (see "Secret Life of Plants), he too might get his climbing plants to adapt to human desires.

"I subscribed to Burbank's idea," Carlson told us, "that at the highest level, plants are capable of creating what is in the mind of man as a means of assuring their survival into future generations. I did not discount the many stories about trees which had borne no flowers or fruits for years, suddenly blossoming and bearing when threatened with an axe."

One spring, as he collected the seeds from his morning glories for successive annual planting, Carlson and his 12 year old daughter, Justine, meditated on how to get the vines to respond to their lovingly felt desires by focusing on their favourite hues, purple for Dan, pink for Justine. "We believed," said Carlson, "that the plants might respond to the colors we favoured and draw closer to us as we were mentally and emotionally drawing closer to them." By late summer when the vines were putting out the usual mixed spectrum of blooms over most of Dan's house, he found massed all around his daughter's bedroom window nothing but pink flowers and around his own bedroom window only purple ones.

"This confirmed to me," he said, "that we can, in some still undefined way, communicate with plant life, which is even capable of altering the colors of flowers and the shapes of leaves. It must somehow be based on trust. The plants must feel your intent and realise that if they respond you'll save their seeds to assure their flourishing continuance."

Even more intriguing was Carlson's belief that his method would allow him to determine the very likes and dislikes of plants. By exposing them to a varied menu of nutrients hitherto unavailable to them, he aimed, through their reactions, to find out which selections they might prefer, instead of just forcing them to accept what is believed is good for them. This he hoped might ultimately lead to the elimination of deficiencies resulting in badtasting fruit or vegetables and the eradication of plant disease.

"What I began to realise," said Carlson, "was that my method was challenging the seeds' potential, a potential maximised with the right number of Sonic Bloom sprays - which have turned out to be 5 - put on 2 weeks apart." Striking a massive fist on the table for emphasis, he added: "I believe I've come across a new principle that can be called *indeterminate growth*! It shatters the idea that plants are genetically limited to a given particular size or yield."

This belief in a lack of limitation led Carlson to another principle: geometric progression. We began regularly to discover that plants treated during one growing season would pass along whatever changes were taking place in them, and create, right through their seeds, a successive generation 50% larger and more fruitful, even when the newly generating plants remained untreated with Sonic Bloom. I also call this genetic elasticity, the latent ability of plants to exhibit characterisitcs hidden in their gene pools, pulling out advantageous ones that may have been hidden for hundreds of years. This is connected to the ever-bearing trait brought out in McClurg's oranges."

SONIC BLOOM QUESTIONS AND ANSWERS

Q: To begin, what exactly is SONIC BLOOM?

A: SONIC BLOOM is a revolutionary new organic system to enhance plant growth naturally.

Dan Carlson, a research scientist, developed a concept which involves the unique combination of sound and a specially developed foliar spray.

Q: Yes, but how does it actually work?

A: The special sound is made up of harmonic frequencies which stimulate the tiny pores of plant leaves to open. When these pores, called stomata, are open, the plant is able to increase its uptake of Sonic Bloom Balanced Nutrient (an organic fertilizer) by over 700%.

Q: That is a big increase! The sound is obviously very important, but what about the Nutrient?

A: The Nutrient itself is really the important thing. It's a combination of over 100 trace minerals, amino acids and naturally-occurring growth hormones. The sound is a tool to increase the effect of this organic foliar spray. 45 minutes minimum sound stimulation is necessary before and after the leaves are sprayed.

Q: Yes, but if this sound increases absorption by so much, won't any foliar spray work with the Sonic Bloom sound?

A: This is an important point. Dan Carlson discovered the sound almost 20 years ago, but it took 15 years of painstaking development to create a balanced nutrient to complete the

system. The problem was that the huge increase in absorption tended to magnify any imbalances and elements could become locked up as a result. So the sound and the balanced nutrient are inseparable. This is the world record-breaking combination. Trials have shown other combinations to be ineffective.

Q: Okay, so Sonic Bloom is the clever balance of a sound and a nutrient. Now, how often do they need to be applied?

A: This varies from crop to crop. Vegetables, for example, require sprays every 7 to 10 days, while tree crops need a monthly spray. 5 to 7 sprays is ideal for most things. The sound should be applied as often as possible, particularly early in the morning when the dew is still on the leaves. Dew actually contains free-floating nutrients and when it is absorbed so effectively it can provide both drought protection and increased growth.

Q: Now, how exactly are the spray and sound applied?

A: The Sound Units are activated by a solar cell which turns them on at daylight and off at nightfall. They are powered by a 12 volt battery and are fully weatherproof. They are usually mounted on a pole or tree in the middle of the growing area. These units are available in three different sizes:

- a. Model I unit covers 1 to 5 acres.
- b. Model II unit covers 25-40 acres and
- c. Model III unit covers 60 acres.

Multiples of these units are used for larger acreages.

Q: Will the sound affect my animals or annoy my neighbors?

A: No, the sound doesn't worry animals at all and is inoffensive, so there's no problem. The smallest commercial unit includes a volume control to govern the right amount of sound for the size of the area to be treated. The larger commercial units should not be situated near a house. From a distance they become a back-ground noise similar to crickets; but if too close, they could annoy.

Q: Are fertilizers still necessary or is Sonic Bloom the complete substitute?

A: Sonic Bloom is NOT a fertilizer. It is a plant growth enhancer. We always recommend that the grower continue to fertilize as usual. After Sonic Bloom treatment you can expect rapid growth, earlier maturity and good yield increases on top of what you would normally expect. You can experiment later and reduce fertilizer costs. Many of our growers do, but initially it's best to carry on as normal.

Q: Sonic Bloom apparently has the ability to heal sick plants. Can it be used as the perfect problem solver?

A: No. It's a mistake to treat Sonic Bloom as a "cure all". It can, in fact, heal sick plants, but if you have a problem, soil analysis is recommended. Sonic Bloom will not overcome a major soil deficiency. It may help, but ultimately the problem must be addressed.

Q: Is the system easy to use? Is it as simple as "play, spray and grow" or is a degree in chemistry necessary to follow instructions?

A: Yes, basically it's just "play, spray and grow", but there are a few rules that must be followed to fully benefit from the system. These are clearly explained in the Sonic Bloom Manual.

Q: The nutrient is totally organic, but isn't it a bit like force-feeding the plant, using sound to increase absorption?

A: The only way to answer that is to suggest that you look at the end result. Sonic Bloomtreated plants are obviously more luxuriant and healthy. They are more disease and pest resistant, produce more and live a lot longer. It depends on your criteria, but it would be very hard to deny that these are happy plants.

Q: Does the foliar spray have a `use by' date?

A: Because the foliar spray is organic, it should be used within a year of purchase.

Q: Now, the big question: How much does the system cost?

A: Every Sound Unit is sold with a minimum Nutrient purchase. The reason for this is to preserve the integrity of the Sonic Bloom system. It is human nature to try other foliar sprays with the sound, but they simply do not work and it makes our system look bad.

Q: Should you leave the sound on all the time?

A: It is adviseable to play the sound only when birds normally sing. That is, sun up and sun down. Otherwise, the stomates will open up in the middle of the day and may cause dehydration. However, if the stomates are open at sun up, they can absorb the dew etc. and decrease water demands by as much as 50%.

GARDENING TIP: Since it has been found that the singing of birds helps plants to grow, grow plants that will attract birds. The best thing to plant are BUSHES rather than trees. Bushes provide SHELTER and a place for the birds to sit that is low to the ground, as well as food and nesting places. Have bushes at least every 100 yards, because birds will eat insects within 50 yards of their perching place.

The price of our Sound Units provides a very low profit margin for us initially, but it ensures that growers achieve maximum benefit.

The system costs about \$80 to \$120 per acre per crop per season for a full program for field and row crops. A yield increase of just 2-10% is all that's necessary to cover the cost of treatment. Local yield increases have **GREATLY** exceeded this.

Add to this EARLY MATURITY, DROUGHT RESISTANCE, INCREASED PEST and DISEASES RESISTANCE, HIGHER SUGAR LEVELS and associated TASTE IMPROVEMENT, EXTENDED SHELF-LIFE and RAPID BALANCED GROWTH, you begin to see a situation where SONIC BLOOM becomes a gilt-edged investment.





Sonic Bloom CD 1*:

- Classical Music with the frequency
- Photos
- Articles
- Short Video

Sonic Bloom CD2:

 Music with the sound like crickets singing in the background. Plus TRACK 15 has the sound of crickets singing with NO human music. Sorry - this sound goes for only 30 seconds. You will have to program your CD to repeat this track. This is the only CD with the whistling/cricket sound with no human music.

Sonic Bloom CD3:

• The frequency both as inspirational violin music, and the crickets singing

Sonic Bloom CD Set

• All three CDs for only \$39.50. Save \$5.50!!!

IMPORTANT NOTE: Your plants will gain some benefit from the frequency alone, but for truly amazing increase in growth the foliar spray WITH the sound is ESSENTIAL.

Home & Garden Kit

\$65.00 2lb, 10 oz

1 Audio Tape PLUS 16 oz. foliar spray* concentrate

This is for people with a very small garden or who want to try out Sonic Bloom. Note that the sound quality on the tape is not the best. I much prefer the CDs.

Professionals or people who are serious about growing plants will want to get the Greenhouse Kit or something larger instead.

Greenhouse Kit (Commercial Kit 1)

\$475.00 with FREE SHIPPING 12lb, 6 oz

For up to 5 acres

1 Sound Unit which plays the Sonic Sound continuously in ONE direction (powered by 12 volt battery or plug into wall).

NOTE: The sound unit has a light sensor so that it turns itself off when it's dark.

PLUS

1 gallon foliar spray* concentrate (which took 20 years to develop)

To order by mail

Commercial Kit II

\$1,700

For up to 40 acres.

3 Sound Units PLUS 5 gallons foliar spray* concentrate







This unit is designed to go on a tractor. The sound goes in TWO directions only (to protect the driver). It is recommended that serious farmers also have a Commercial Kit III so that this unit can stay permanently on the tractor.	
Please order by mail	
Commercial Kit III	
\$2,950	dia survi
For up to 60 acres.	
7 Sound Units PLUS	
10 gallons foliar spray* concentrate	
This sound goes in FOUR directions. Designed to be left permanently in the field.	
Please order by mail	
Foliar Spray Concentrate, 16 oz. REFILL for the Home& Garden Kit\$49.50	
Foliar Spray Concentrate, 1 Gallon \$225.00 with FREE SHIPPING	
Produces 250 gallons of spray. Does up to 5 acres.	
Took twenty years to develop.	
Foliar Spray Concentrate, 5 Gallons \$1,050.00	
Does up to 40 acres.	