

Spiral Antennas

A Beginners Guide

DAVID WECHSLER RAY LEE BACON





Meet your TEACHERS





RAY LEE BACON

Designer & Educator

Ray Lee Bacon, an awardwinning organic gardener, has triumphed over challenging climates to produce yields 60 times the average. Specializing in Permaculture Design and Earth Divination, Ray transforms ordinary spaces into nutrientrich gardens. With his vast knowledge, watch your garden thrive like never before.

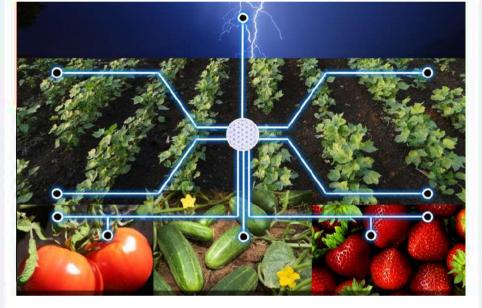
DAVID WECHSLER

David Wechsler, a seasoned electroculture expert with 12 years under his belt, masterfully combines electrical engineering and permaculture. Founder of The Electroculture Beginners to Advanced Group of 150,000+ members, David's insights light up gardens globally.



Author & Creator

ENERGETIC AGRICULTURE



Flavours of Energetic Agriculture David Wechsler & Ray Lee Bacon

42:35

THE #1 PODCAST FOR Electroculture, Magnetoculture & Beyond

You are new to Electroculture...

and you want to understand the big picture

That's why we - created this podcast - so you can get prepared for **the remarkable world of Energetic Agriculture** & listen to some of the most revolutionary discoveries transforming our relationship with food, nature, & the cosmos.

Discover how to harness energy & grow life as you comprehend the emergent fields of Electroculture, Magnetoculture & Beyond!



THE HOME SPIRAL ANTENNA Your Guide for Remarkable Results!

Welcome to the worldwide **movement of Energetic Growers!**

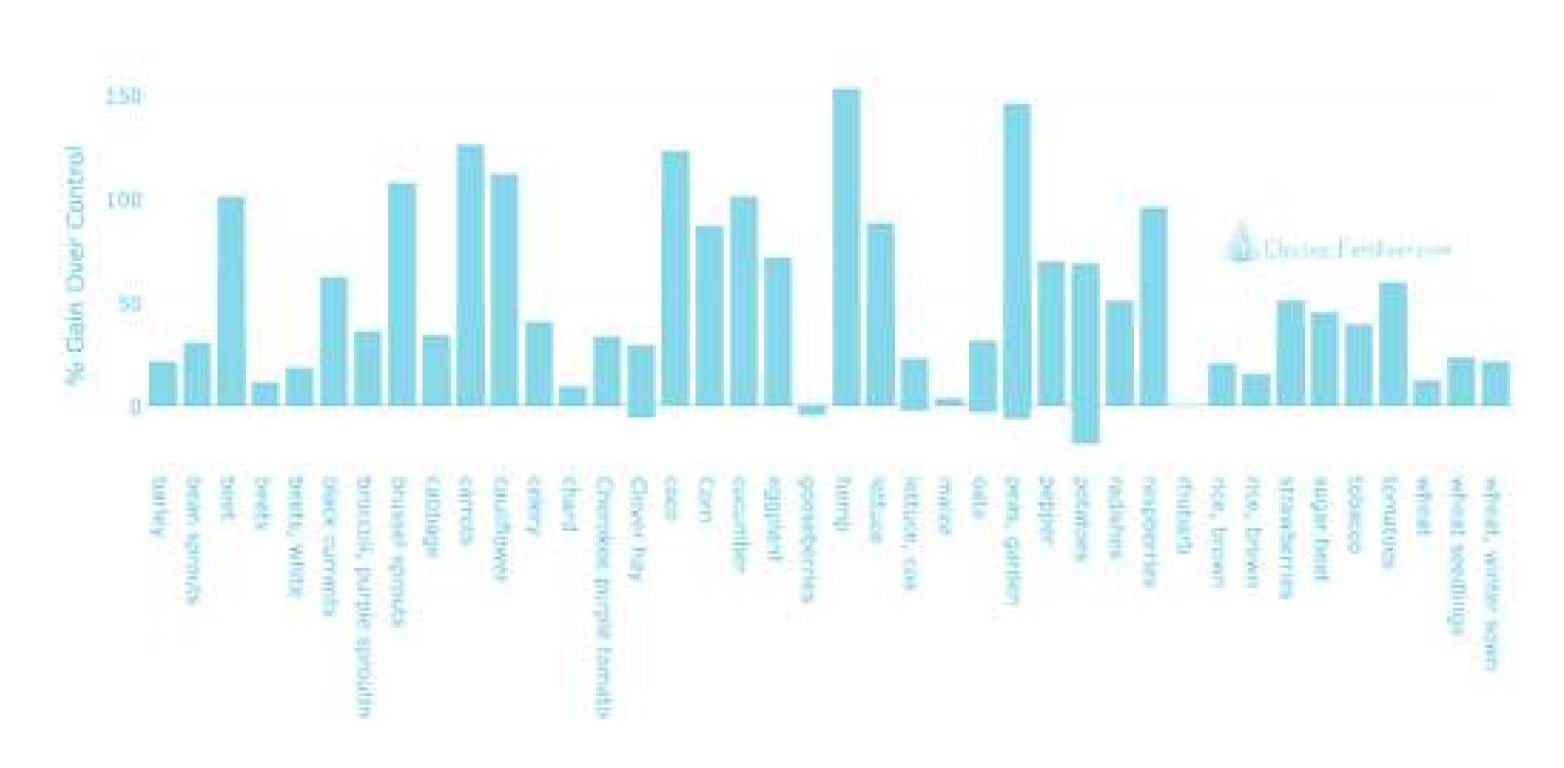
Increased yields from 20 to 100% with some reports of 300%

This Guide is your **Gateway into one of** the most perplexing growing techniques.

You will begin utilizing the Science of Electroculture, to grow more nutrient dense, vibrant and healthy plants by harnessing electricity.

Discover the foundational technique to begin increasing your yields towards over 100% with some reports of 300%.

Electroculture Yields by Crop



David's historical summary of research - Documenting Success

Is the Spiral Antenna for you?

You are growing inside your home.

House plants don't get much natural exposure to beneficial electric fields - yet with simple applications of electroculture, they can achieve visible boosts in growth and vitality.

You are growing a balcony garden.

Antennas used on food-producing balcony plants can provide greater yields out of a tiny amount of space.

You a growing in a backyard garden.

One of the easiest methods for smallscale food production.

Using antennas outdoors provides a combination of beauty in artistic sculpture and enhanced growth opportunities.



Yet beware of their use in larger ag... They tend to get forgotten about in open farm environments & may damage expensive farm machinery.

You are growing a Market Garden.

They work great when starting seedlings!



The fabric of the Universe is encoded with Geometry. Through Biomimicry we can unlock hidden secrets for better plant vitality & growth,

The Galaxy Garden - Designed by Ray



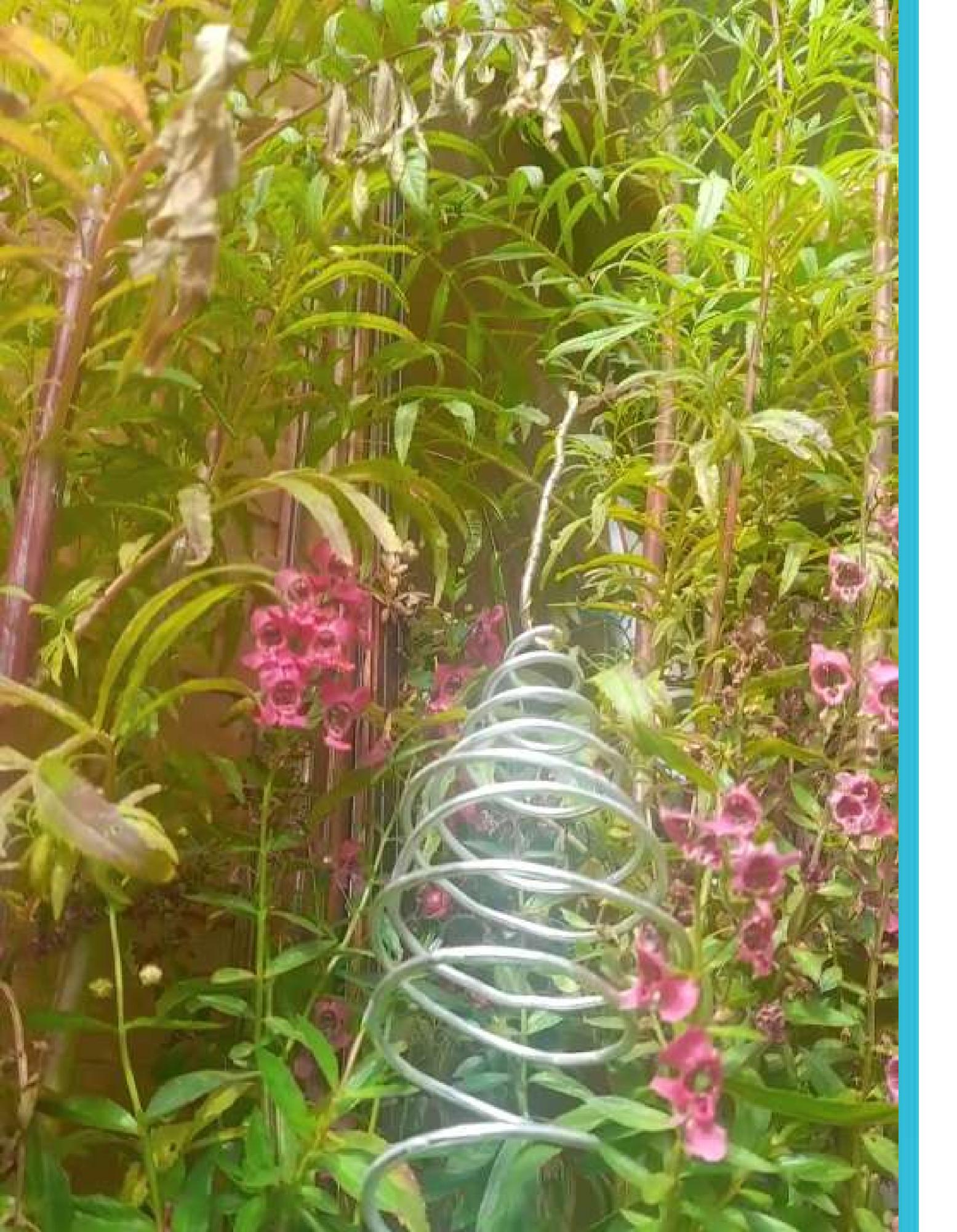
Spiral antennas are suddenly exploding in popularity in the last few years.

Easy to make & often extremely effective, they are improving plant growth for an emerging community of hobbyists & commercial growers alike.

Many naysayers are being proven wrong constantly as Energetic Growers band together & document their results.

These coils are simple to make & require little time to prove just how effective they are!





Ghe length of wire making up the spiral relates to resonant frequency.

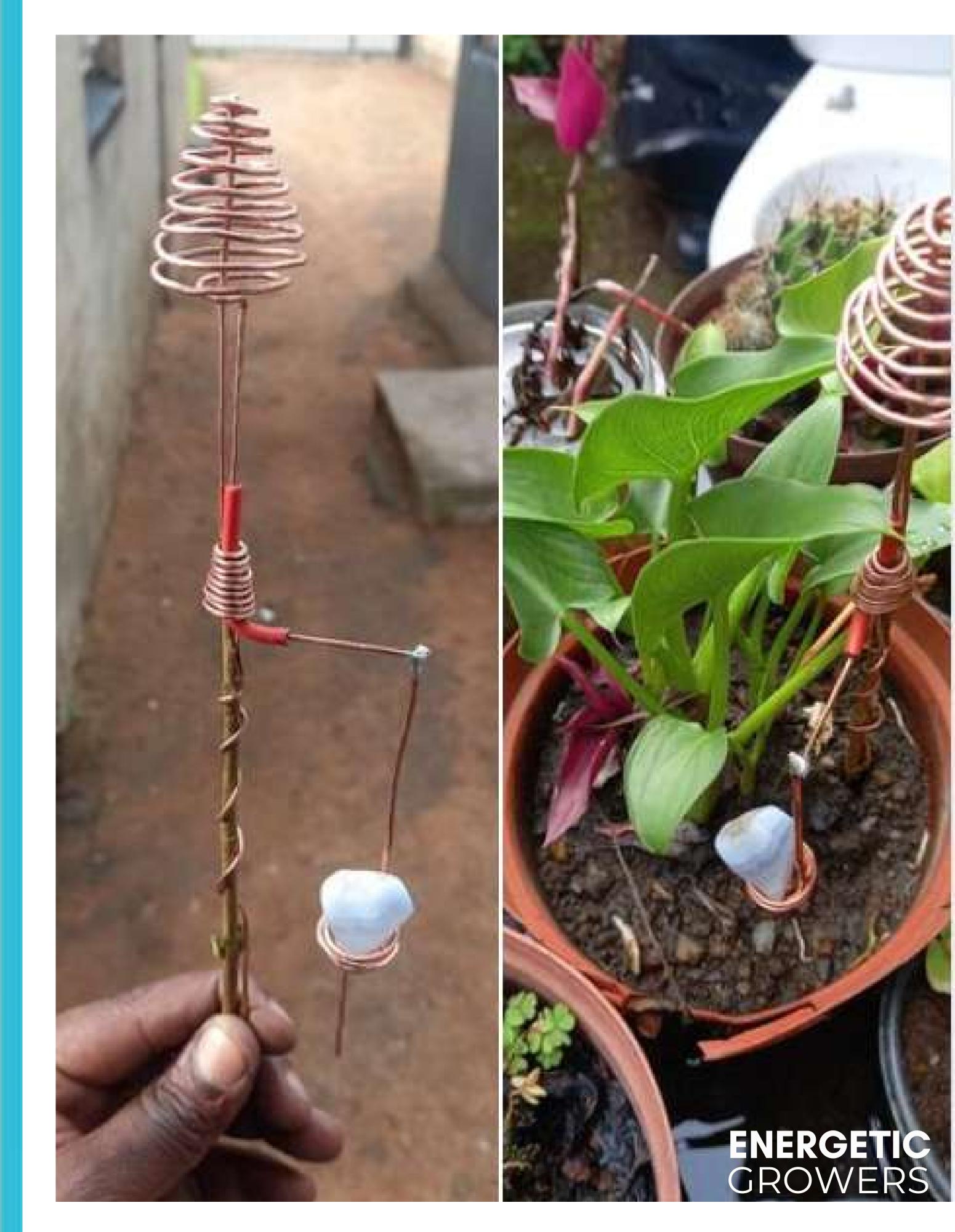
Different shapes & lengths have the potential to create different growth outcomes.



There is a lot of mystique surrounding the use of spirals for stimulating plant growth. Beginning Enegertic Growers often start with the most basic question: What direction does the Spiral spin?

To understand & answer this, we have to establish how & why the Spiral works. Full of conjecture & confusion, this question still elicits debate within the Energetic Agriculture Community.

Likely there are a few mechanisms at play. The most common principle has to do with ambient electricity. The antenna "picks up" electromagnetic waves from the air & converts them into tiny amounts of electricity.



We constantly get new members as

- Does the direction matter based which hemisphere I'm in?
- Which direction gives the best re

Some Energetic Growers have been adamant that direction matters. We not convinced. Based on our experie results have been inconclusive.

While one-off experiments may show particular plant's preference in grow pigmentation, more experimentation needed with many plants to get defi results.

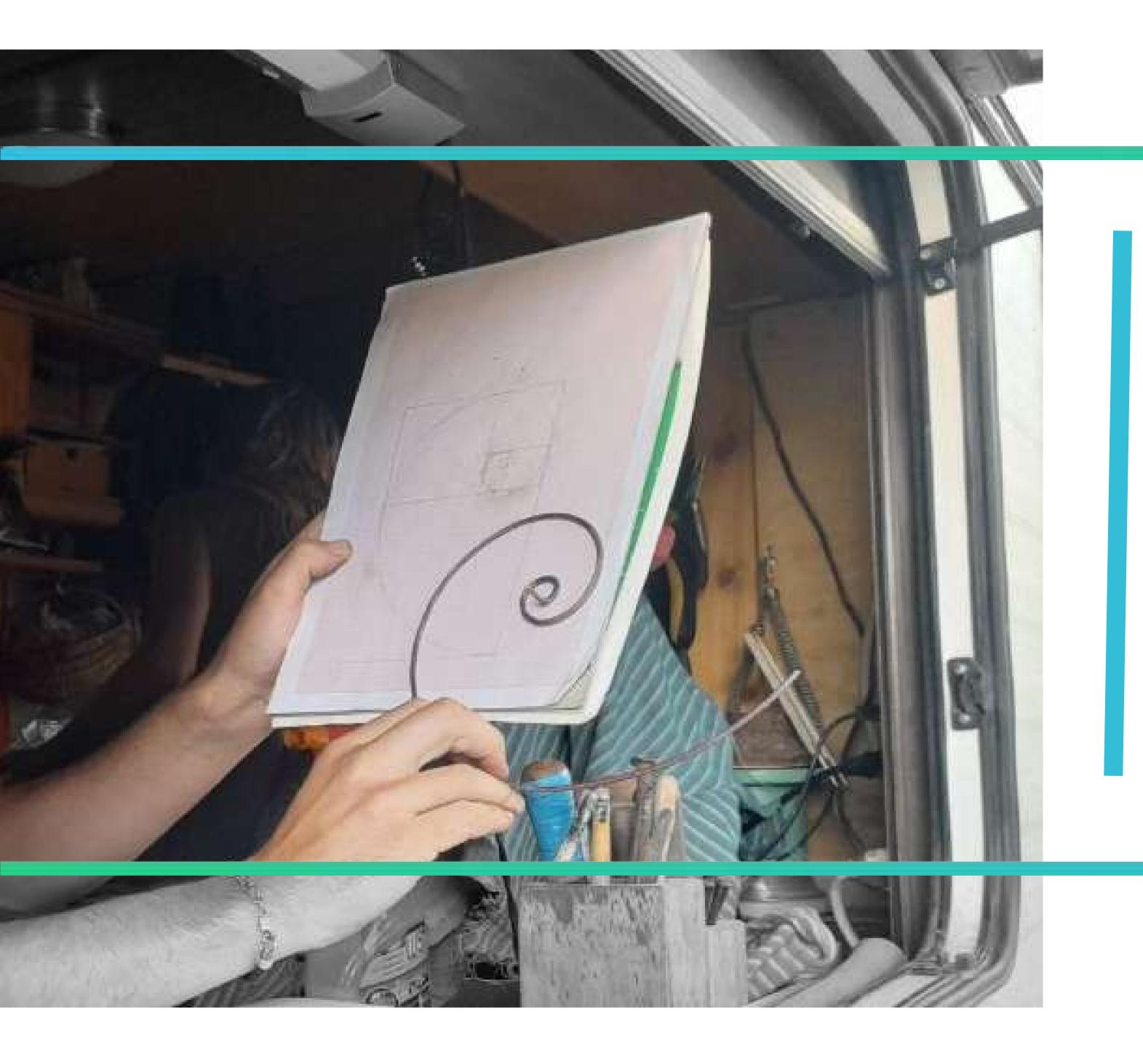
This is where your contributions come in!

sking:	As a community, there is a group consensus
lon	that in the Northern Hemisphere, winding
	from bottom to top counter-clockwise is
esults?	best. And the opposite is true for the
	Southern hemisphere.
ı very	
e are	We have seen positive results using both
ience,	directions and want to encourage you to
	start and not get stuck on the details.
ow a	We recommend that all beginning Energetic
wth or	Growers test out both winding directions
on is	with the same length of wire on at least 3
finitive	sets of the same plant (left & right versus
	untreated).

When there is contention - direct experience is best.



on at least 3 right versus



Spirals don't have to be 3 dimensional.

Taking inspiration from mathematical constants observable in nature, you can use shapes like the famous Fibonacci sequence.



We know that plants are electrotropic influenced by electric fields & that their ability to uptake minerals, metabolism, hormone synthesis and more... is influenced by electrical inputs!

There are also electrical effects on soil. microbes, water & nutrients.

Soil-based substrates high in organic matter & adequately moist respond better to these Spiral based antennas.

David expands upon this in his book "ElectroPermaculture" - His explanation is probably the most relevant reason as to why plants are positively impacted.

"Spiral, or circularly polarized antennas can receive electromagnetic waves that spin clockwise or counter-clockwise depending on their structure...

These types of antennas receive radio-wave signals that are either horizontally polarized or vertically polarized, but less efficiently than circularly polarized signals, like those generated naturally from galactic sources⁵³, those used by the National Oceanic and **Atmospheric Administration (NOAA), etc.**

Within the realm of electromagnetoculture, it maximizes the chances of picking up on any radio source and relaying it into the ground. "

David Wechsler, "Electro Permaculture"



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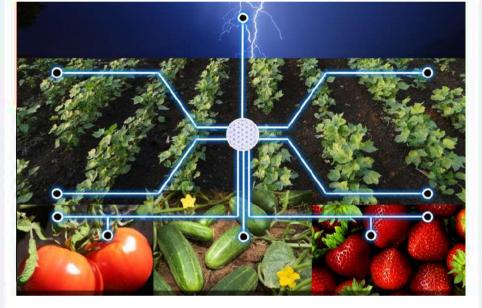


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AMPLIFY YOUR GROWTH!

Master Electroculture with David's In-Depth Guide, "Electro-Horticulture"

After reading about the ways these researchers were able to ach

It was February 2011, and I decided to experiment with Romaneso broccoli by doing a side-by-side comparison. For this first electrification experiment, I turned a plastic lettuce makeshift pot, and planted some seeds in it. The

typical fashion, in 2-inch cell pots. Both sets of p under the exact same conditions, including soil ventilation, but the first set of plants was electrif Although I was completely skeptical about the pr lutely surprised when after one week I saw resul

group of plants had stalks that were twice as electrified group.



After one month, the differences between the



"The ears of the crop will be larger and fuller, the leaves of vegetables, fruit trees, vines, and other vegetation will begin to be thicker, larger, greener, the fruit will be larger and more numerous, the vegetables, such as potatoes, tomatoes, beans, etc., will be much larger and more abundant." [Electroculture by Justin Christofleau]

Now that we have a basis for the scientific fundamentals of electroculture, we can take a more detailed look at the many benefits that can be realized.

Electro-Tropism

While you have probably heard of the term photo-tropism (the movement of plant limbs towards light) from high-school science class, you may not have learned that plants respond in a similar way in the presence of an electric field. Plants are known to respond directionally to various environmental factors through greater elongations of one set of cells over another set of cells. These are called tropisms. So phototropism is a biological trait that enables plants to maximize exposure to sunlight.

Similarly, with respect to this body of work, there is electrotropism - which is the response of plants to electric fields. As we covered earlier, plants thrive under different types and strengths of electric fields, so it makes sense that the way they behave in response to



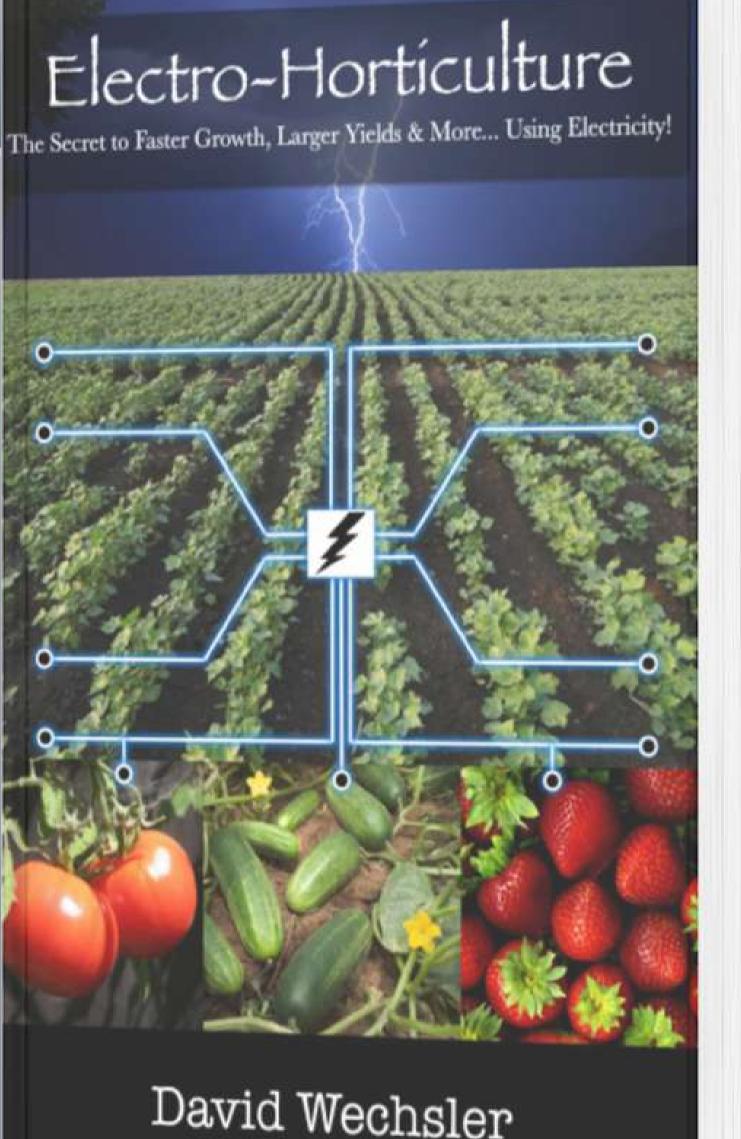
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ic tools like wire strippers, pliers. Optional: A solon with solder and flux. source like a wall charger or battery s: iron or steel nails

container complete with soil and seed

Tools

robably get by using a pocket knife or scissors, it easier to use tools specifically made for working a pair of wire strippers/cutters.







David's answer may not explain everything at play:

Many Energetic Growers have reported that plants in proximity to the spiral even without receiving direct contact still grow better. Plants are so sensitive, they can even respond to the minute magnetic fields induces within the spiral antennas... This opens a whole world of potential!

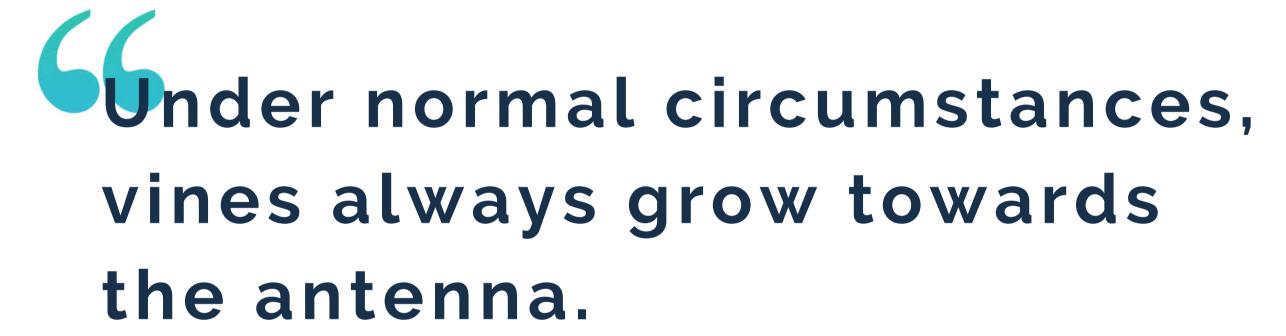


The Spiral with the soil

does not need direct contact







Observe this house plant entwining into the coil



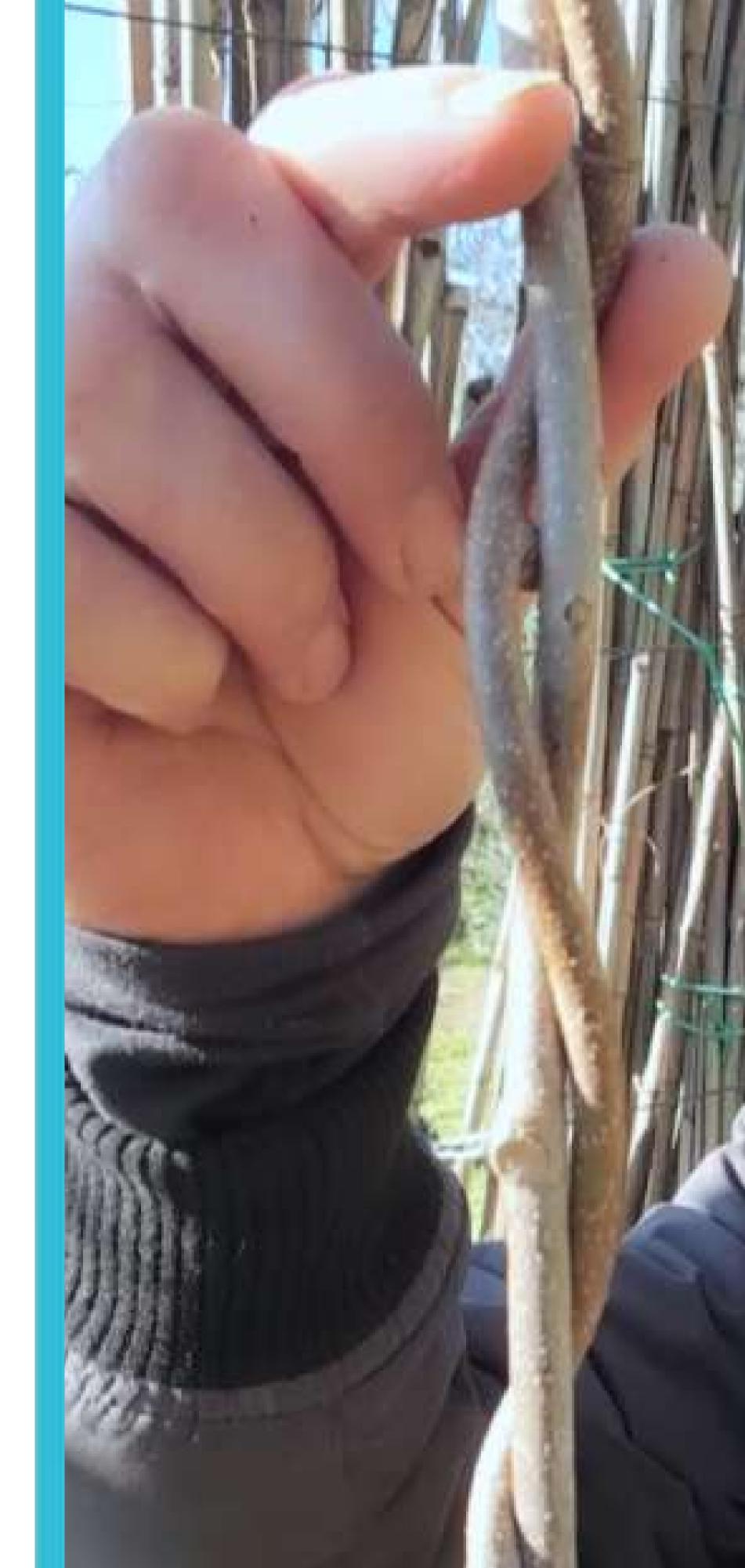
From shells to galaxies, we see the spiral pattern in many natural forms & phenomena.

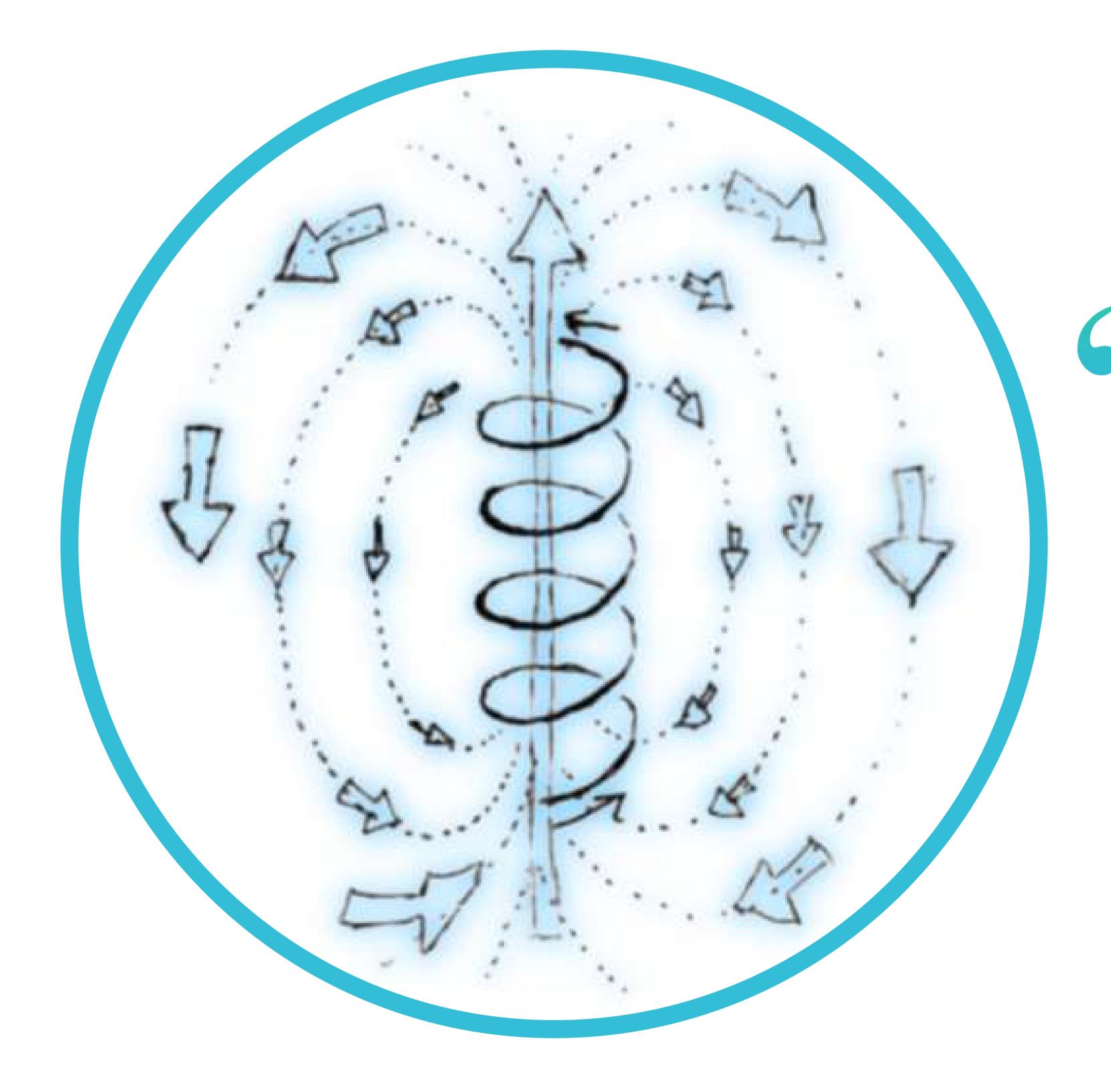
The use of spirals to collect energy was likely first adopted by observing the twirling growth of many forms of life.

It's well known that vines & plants form tight spirals to extend their reach. Under normal circumstances, vines always grow towards the antenna.

We are discovering that plants harness more electromagnetic forces than just visible light.

Recent research demonstrates that plant proteins respond to ambient radio waves.





Gasecondary factor influencing antenna efficacy may have to do with photon emissions... & even still, if you are to believe the work of Pier Luigi Ighina, there may still be profound mysteries waiting to be discovered.

When used properly, could the Spiral antenna elicit a toroidal response?





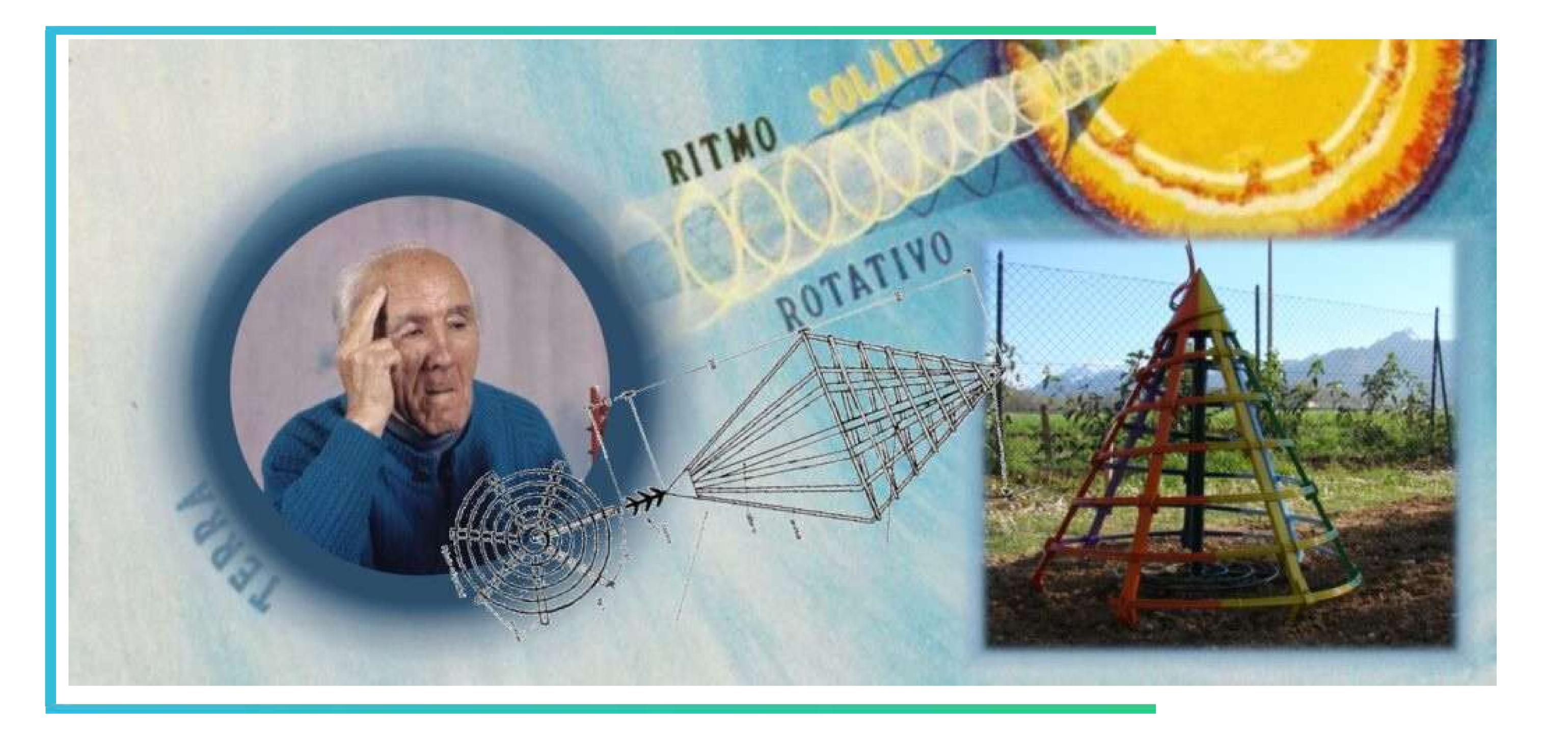
DULTATION



Argued to have worked with the very wellknown Marconi, Italian scientist Ighina developed his own theories on electromagnetic & non-Hertzian/scalar energies.

He was known for the creation of larger than life machines that were meant to promote the growth & stability of living things while proclaiming to prevent earthquakes, & manipulate weather patterns.

According to Ighina, the sun would send some sort of spiraled magnetic energy to the earth with a positive charge, & the Earth would send it back with a negative charge, in some form of energetic entrainment.



While most of the scientific community considered him mad, he managed to validate many of his claims. He continues to inspire modern researchers to extend his work into the domain of Energetic Agriculture.





Throughout his work, Ighina was likely an advocate of experimenting with colour. Early pioneers of Energetic Agriculture in Italy have undergone diverse experiments using different coloured spirals with different plants.

It appears that there may be consistent patterns between the polarizing colours on the visible light spectrum & their impact on plant growth. Suggesting that using green spirals have a stabilizing influence being that green lays in the visible light center.

Could colour have an impact on plant morphology much like that of red light & blue light?

More research needs to be done & fortunately can be undergone easily within the present community of Energetic Growers & Beyond.





Generational States of St when selecting conductive metals like copper and aluminum wire.

Notice the copper vase on the bottom right





The antenna receives electromagnetic waves from the air & converts them into tiny amounts of electricity... stimulating plant roots and soil bacteria.

This Energetic Grower shared his antennas ability to eliminate an insect infestation.

Within 24 hours, they were all dead!

What about other insects?



Does that mean you should worry that your antenna may harm all insects? No, you don't need to worry! Accounts of insects being killed may have more to do with a given plant being stimulated to produce internal defense compounds or cease emitting distress signals that predatory insects are attracted to.

Energetic Growers have observed insects being attracted to antenna. Of the 20 potted annual plants that finished their growth cycle - only 1 pot has an antenna left inside. After 6 months Ray noticed that this pot became the home of an ant colony whereas the others left in proximity had none.



Show it

Elevate your

Antenna



Adding height to your antenna can help with preventing your antennas from getting knocked over by children, animals, and yard maintenance equipment.

Raising it up can also improve reception of radio signals if installed in areas of dense foliage.

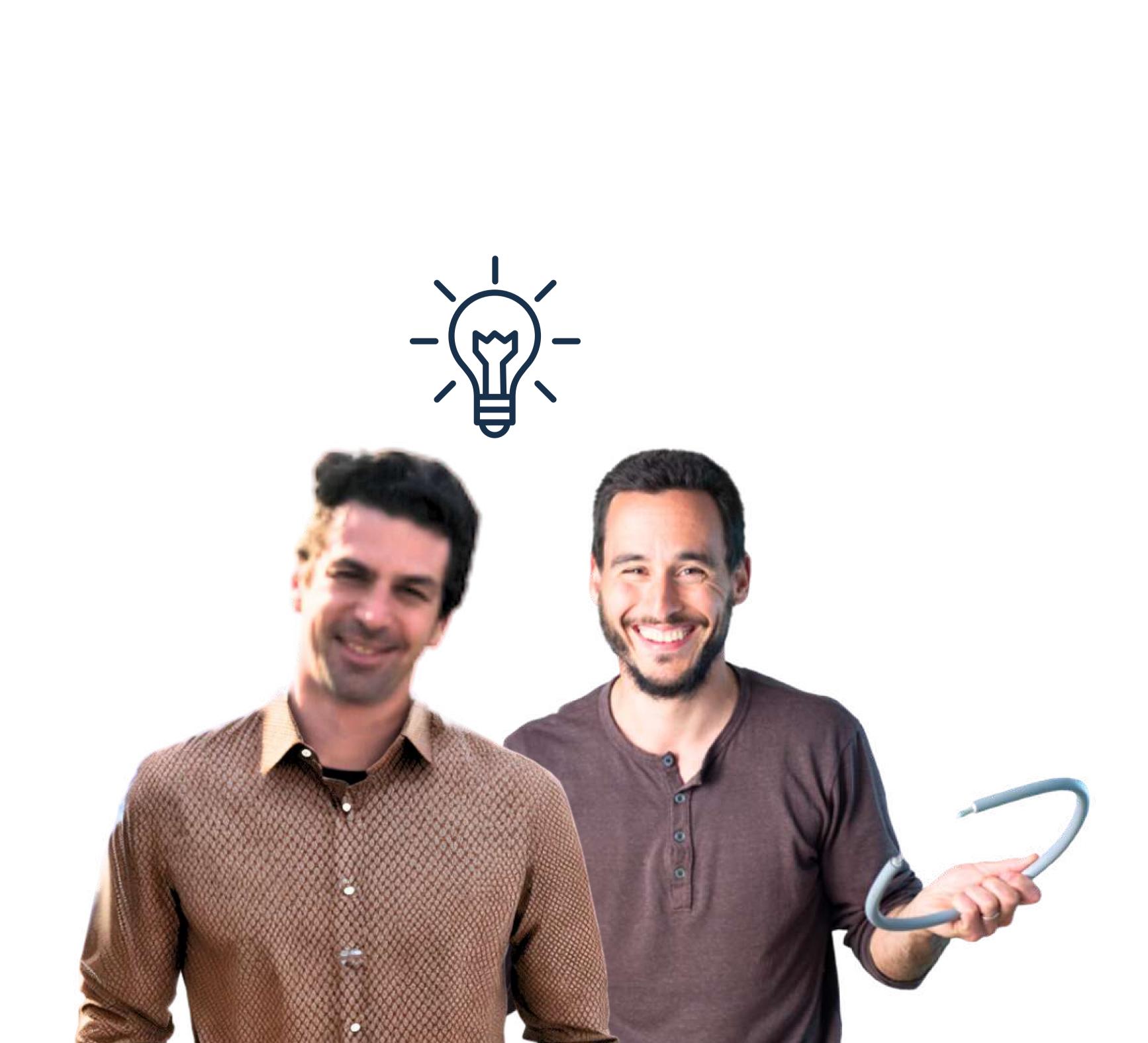
Beyond that, elevating your antenna turns it into a piece of functional artwork to admire and ponder about.

Make Functional Art...

That Massively Improves Growth!







Hi & Thank You...

David & Ray here - founders of the Largest Electroculture Movement Online - catalyzing a new type of grower, gardener & farmer.

As researchers, & educators, we are dedicated to integrating frontier science with forgotten knowledge so that you can help rewrite our relationship to food, life & the cosmos.





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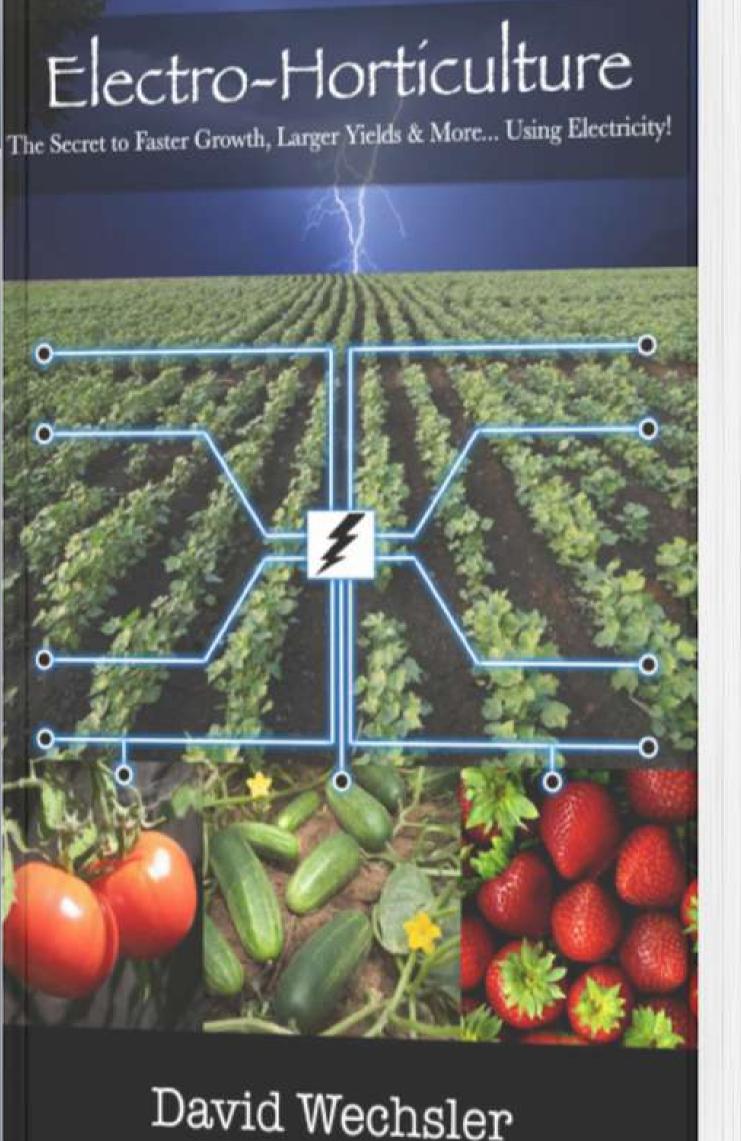
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