Electroculture

by Lindy Sheehan

E lectroculture is one of the latest fads in the gardening world. You can find this topic trending on Facebook, TikTok, YouTube, and other social media sites. Gardeners can find a multitude of electroculture devices for sale from many online retailers, from simple spiral copper wires to entire garden set-ups.



Electroculture proponents claim this gardening method utilizes atmospheric electricity to promote plant growth. It involves placing conductive materials, such as copper and metal rods or wires, into the soil around plants. Believers in electroculture say that these devices act as antennas to capture "free" energy and direct it toward plants. More active approaches can involve the application of electrical current directly to the soil or plants. Proponents

claim that this method results in improved plant health and growth, without using conventional fertilizers. Others believe that the use of electroculture helps combat harmful pests and plant diseases.

Is the electroculture fad just another of those long-held gardening myths we all hear about? Perhaps you've heard that adding a whole egg at the bottom of the planting hole will protect your tomatoes from blossom end rot. Have you heard the one about banana peels or coffee grounds being magical elixirs for growing plants?



I turned to one of my favorite experts in the gardening world, Linda Chalker-Scott, PhD; a professor in the Department of Horticulture and Landscape Architecture at Washington State University. She's also a Washington State Extension Specialist in woody plant physiology. Chalker-Scott has made a career busting garden myths by holding them up to what evidence based, peer reviewed scientific study actually reveals.

As background, it's helpful to know that there was a growing interest in electroculture research in the late 19th and early 20th centuries, partly due to even earlier observations which tied electrical storms to improved plant growth. From those early studies, it was

determined that lightning fixes atmospheric nitrogen into a solid form (nitrate) which dissolves in raindrops and enters the soil system. This was undoubtedly responsible for the reported improvement in plant growth after electrical storms.

In the 21st century, a desire to use fewer chemical fertilizers to aid plant growth has spurred renewed interest in electroculture. A quick internet search will reveal multiple websites proclaiming improved plant growth from sticking copper wires in the soil. According to Chalker-Scott, none of these promises are backed with any reliable scientific evidence. When recognized plant science experts publish positive results that are confirmed by other plant researchers, those results will be in bona fide plant science journals and be worth discussing.

But Chalker-Scott doesn't think serious plant scientists would ever take up a study of electroculture, noting, "if there was some indication that this could work, then 'Big Agriculture' would throw money at it." Despite the claims that this method aids gardens, scientific research and proven results are lacking.

It's a fact that electricity is in the air, and copper does conduct electricity, but a coiled copper wire inserted into garden soil is not going to bring electricity to the soil. Even if it did, the effect on plant growth is purely conjecture.

So what can a gardener do to have healthy, robust plants in their gardens? It all starts with good soil and growing the right plant in the right place. If you are in doubt about what your soil needs may be, start with a soil analysis test from a reputable soil testing lab. The results will tell you what your soil may be lacking in supporting a healthy garden and you can build upon that information.

Read seed packets and research the growing requirements for the plants, vegetables, trees, and shrubs you want to grow. Discuss your gardening concerns with the Yakima County Extension office, Yakima County Master Gardeners, and the North Yakima Conservation District. Instead of social media, stick with trusted resources from land grant universities with Extension departments like Washington State University, Oregon State University, or the University of Idaho. Keep it local and you will find better information on growing healthy and happy plants.

After consulting with these resources, if you still believe electroculture will boost plant growth, I have some oceanfront property in Arizona for sale.

If you're wondering about adding whole eggs, banana peels, or coffee grounds to your garden, stay tuned. In future columns, Yakima Master Gardeners will explore whether these practices are myths, or if they have real value.