Wood Vinegar Suggested Use.

* NOT FOR HUMAN CONSUMPTION-DO NOT USE FULL STRENGTH

Most applications for Plant use require a 200:1 Dilution or .67 oz per gallon. Application suggestions are as follows:

- Seed Soak- 1000:1 dilution for 24-36 hours- ensures germination and boosts early growth.
- Microgreens- Use a 1000:1 dilution for seed soak and foliar spray.
- Trees/Veggies/flowers/ornamentals-On emergence- 200:1 dilution foliar spray 1x every 2 weeks
- Drip or hydro- 200:1 With normal fertilizer regime 1x every 2 weeks
- Frost Damage-spray on at 200:1 to encourage re-flowering.
- Spray on compost pile at 50-100:1 to supercharge bacteria and fungus growth and keep odor down
- House plant- 200 or 500:1- Spray or Apply direct to soil with normal watering 1x every 2 weeks.
- 1 Gallon Covers 10 acres 1x -------1 pint will do 1.1 acres -----2oz makes 4 gallons of 200:1 solution.

Trials:

Spongy Moth trial at home in Newfield at a 200:1 dilution foliar spray. Sprayed blue spruces, red oaks and walnuts that were covered in spongy moth and tree was decimated and not yet re-leafing. Observed that 3 days later the caterpillars were gone, and tree was re-growing leaves quickly and uniformly. Continued to spray once per week, no caterpillar reemergence and tree is happy and healthy. Will continue test in 2023.

Microgreen user Testimonial at 1000:1 dilution

“Last winter we had serious problems with sunflower and bull’s blood beets due to a mechanical failure in our four-season greenhouse. In cool temperatures and seasonal lack of sunlight we were at 5% to 10% germination with high rates of fungal infection. After experimenting with a series of Seneca Farms NOFA-NY and OMRI-listed wood vinegar concentrations we settled on a vinegar-to-water dilution rate of 1:1000. This solution was used for overnight seed soaking, and then, in the grow trays, sprayed after initial seeding and then upon emergence. We subsequently top-watered three or more times. Any signs of minor fungal infection at bad seed were pinched out and discarded. This was a true triple win for us: the wood vinegar acted as a fertilizer, growth-rate accelerator, and fugal suppressant. Germination climbed to over 95%. I attributed these extraordinary results directly to the use of the wood char vinegar. We repeated the experiment in early summer and got similar results. It works where others don’t. Without doubt, a farmer’s best friend.”

Michael McDonough

MicroGreens Grower

Seneca Farms Biochar Trial Information

2022 Soybean Trial with Titus Zimmerman

40 acres of soybean

20 acres of corn

40 acres of alfalfa

All were treated with 1:200 dilution on emergence and once again the subsequent week, apart from the alfalfa. Alfalfa was treated for the first time after the first cut, then again one week later.

Controls: none

Fields were not irrigated.

Soybean fields produced 73 bushels/acre v. 52 in untreated field.

The second alfalfa cut was as productive as the first. Alfalfa is not normally equally as productive on 2nd cut.

Titus said “The corn was fantastic.”

Another farmer used the same dilution to spray his tomatoes and potatoes. He sprayed half of this plants with wood vinegar.

The tomato plants stay green and productive up to the first frost.

He reported that the leaf and stems of the potato plants did not look any different from those not sprayed. However, when he harvested the treated plants, the root systems were much more extensive and the yield considerably greater but did not have any numbers. He did buy more wood vinegar for next year and is using it on half of his winter wheat.

Seneca Farms Biochar In house trials

Seeds on the right were soaked for several minutes before planting. The soil was sprayed lightly with a 200:1 dilution daily and after emergence. The grow cycle time was reduced from 57 to 42 days. There was no smoky taste after leaves were washed with water.

Outside Trials

Pictures from **Arrowhead Solutions -Saskatchewan Canada**. Testimonial Email Below:

Below is taken straight from email: Pictures above

"I did a seed treatment trial with my product Arrow Max and your wood vinegar mixed together. Then did your wood vinegar by itself and my Arrow by itself. Here are pics I did with our products mixed together and wood vinegar alone on a seed treatment. Our stuff mixed together is on the bottom. Will have the seed treatment in the soil tests back middle of the week. .
Pretty cool.
Both pictures are great and I think there is massive benefit having wood vinegar as a seed coating."

The Environmental Factor in Canada, Near Toronto is trialling both our Char as a medium for their biological release solutions as well as our wood vinegar, to blend into a seed starter/soil enhancement product. Her latest email reply is below:

"Good day, Jon. It would have to go through CFIA. Yes, we can do this, but we must do it under our name because you need a Canadian contact. If you have another company you are doing business with, you can ask them to submit it.
As for the test, the results are fantastic; Nanism with doing up the report this week. I will have her send it to you once completed."

Please check out our new website.

Lorelei Hepburn
President/CEO
The Environmental Factor Inc.
85 Chambers Drive Unit 8
Ajax ON Canada
L1Z 1E2
905-686-9909
Fax 905 686-0357
lhepburn@environmentalfactor.com

Simplyorganics. www.simplygro.com

Currently testing Wood Vinegar and Ammonium Nonanoate solution for roundup replacement in organic sugar cane industry. Jim Reinertson just got back 2 weeks ago from the field in south America where he was overseeing testing etc. Will know more in the coming weeks and will update asap

Update: tests went extraordinarily well. Our wood vinegar did not kill vegetation as others did, and helped deliver the desiccant to the plant mimicking what round up does. Jim is very impressed with the results and stated that only OUR wood vinegar worked as he had planned. He is finalizing paperwork for Columbia and the US. And will follow up in early September 2023.

This order would initially be 4500 gallons a month and potentially 10000 gallons a month.

Current tests 2023

Intergrow in Clarion NY: 105 acre Greenhouse.

Wegmans: Tomatoes are in testing with hydroponics. Waiting for results

Krehers Farms (Wegmans Eggs, Beets, Soy):

Testing 120 acres of produce. 40 acres each of Corn, Beets, Soy

Also testing our Biochar on Chicken scat compost and as a medium for an air filter for chicken houses. Results are pending.

Wegmans Organic Farm Canandaigua NY
Using Biochar in Compost operations.

Cornell University

Rebecca Nelson is testing our wood vinegar to be used to lower the ph of soil and nutrients collected in her “peecycling” study. It will have the added benefits of increasing the soil health and raising the value of the end product for market.

Cornell Hemp Study with Dr. Larry Smart

We are currently in discussions to use wood vinegar to help in hard to germinate hemp species at their research plots in Geneva NY. They are interested in both wood vinegar and biochar usage

We are also looking for interested academic leaders who want to test on wheat and other crops requiring desiccants just before harvest,