



# RENERGI PYROLIGNEOUS ACID

## Wood Vinegar - Nature's Plant Tonic

Pyroligneous Acid (or Wood vinegar) is a powerful plant-derived biostimulant comprised of hundreds of complex beneficial compounds. Key ingredients such as carbonic acids and Karrikins jumpstart seed growth, soil microbial activity, and plant metabolic processes - much like the surge of growth seen after a bushfire, where chemical signals in smoke trigger dormant seeds and ecosystems back into rapid life.



### What is it?

Pyroligneous Acid contains a complex mix of biologically active compounds such as, but not limited to: organic acids, phenolics, aldehydes, ketones, furans, karrikins, and sugar-type compounds. These combine to provide different beneficial growth activating and plant health functions, such as improving photosynthesis, nutrient and water adsorption, seed germination (karrikins), and antioxidant, disinfectant and antibacterial properties.

### Benefits & Uses

Pyroligneous Acid offers growers a natural low-harm and sustainable alternative to boost plant vigour and increase resilience to pests, disease, and drought, and enhance soil biology for healthier and more productive crops. It can be used as a foliar spray, soil drench, as a germinator or seed soak, or combined with or alongside other products when seeding.



#### Stimulates Plant Growth

A natural way to boost crop yields between 20% & as high as 150%



#### Improves Soil Fertility

Enhances soil fertility, structure, drainage, & aeration.



#### Improves Plant Resilience

Enhances plant tolerance & stress resistance to drought & pests, while antioxidant and antibacterial properties suppress pathogens.



#### Enhances Nutritional Quality

Wood vinegar improves the nutritional quality of fruits & vegetables (E.g. soluble sugar, soluble protein, & vitamin content).



#### Improves Plant Health

Enhanced antioxidant enzyme activity, reduction of oxidative stress, & helps maintain a higher chlorophyll content.



#### Seed Germination & Karrikin

A great seed germinator & replicates nature's Karrikin process of seed germination only occurring after fire.



#### Stimulates Root Development & Microbial Activity

Improves the chemical properties of the rhizosphere & regulates the bacterial community.



#### Promotes Sustainable, Eco-friendly Agricultural Practices

Mitigates/reduces the use and therefore negative impacts of chemical fertilisers, herbicides, & pesticides.



# PYROLIGNEOUS ACID (WOOD VINEGAR)



**RENERGI**  
Bioenergy & Biocarbon Solutions

## The Renergi Difference

Renergi's wood vinegar is produced through condensing of various bio-gases and bio-oils from the process known as 'pyrolysis'; the carbonisation of biomass under conditions of relatively high heat and low or no oxygen that also produces biochar.

Although it is derived from organic plant material, it is not a live biological product; rather, it is a carefully refined condensate containing hundreds of beneficial organic compounds such as organic acids, phenols, and ketones.

Renergi's production from our state-of-the-art patented 'grinding pyrolysis' technology is a highly controlled process developed by a team of PhD-level chemical engineers over 10 years, ensuring that each batch is highly consistent in composition and quality.

Renergi's technology ensures that each feedstock particle, regardless of size, experiences the same optimal temperatures from the particle edge to the particle core to ensure the maximum levels of rich, complex beneficial organic compounds that together combine to create this natural, ground-breaking plant and soil resilience and growth tonic.



**Formats Available:**  
5 Litre 'Jerry' Container  
15 Litre 'Jerry' Container  
1000 Litre 'Shuttle' (IBC)



## Application Guidance

Renergi Pyroligneous Acid is considered a 'biostimulant' that is acidic in nature, with a pH between 3 and 3.3. Dilution with water is necessary. Dilution rates depend on the desired application purpose and method.

**Warning:** It can be phytotoxic on certain plants if used in an entirely concentrated form (no dilution), though is generally considered low harm to your crop if only a low dilution ratio. Always apply first to some small test areas. There is no shelf life expiry, however, some sedimentation may occur over time to the stored product; this will not effect product performance.

It is always recommended you consult with and follow the application advice of your agronomist.

General usage guidance is as follows:

For use as a biostimulant, dilution rates with water are recommended anywhere between 5x and 150x.

Lower dilution rates will be more effective for less regular applications targeting resilience and deterrence.

For pastures and broadacre crops an application of ~5L per hectare alongside/with your standard regime is considered an effective starting point.

For foliar and soil drenches, a dilution of between 15-20x and 50-70x is generally effective - on the higher side if application is more frequent.

For seed germination, tube stock, and root dipping, use a dilution of between 80x and 150x.

