



## Wood Vinegar Application Notes

**PyroAg® Wood Vinegar** is a biostimulant produced in the biochar production process. It has many organic compounds including organic acids that are used by the microbes and plants to solubilise nutrients in the soil and as an energy source. Enabling plants to give higher yields and better resistance to disease.

### Use with everything

PyroAg® has great synergies with other treatments and therefore is not required to be applied on its own, reducing diesel costs and time on the tractor. PyroAg can be sprayed, applied to seed, added to irrigation water or injected in furrows. At recommended application rates (over the page), PyroAg® can cost as little as \$1/Ha. At such a low cost it's not difficult to get a good return on investment.

### Lower rates attracts different bacteria than higher rates - University research shows:

*"PyroAg® application caused a distinct change in the microbial composition between low and high rates of amended soils. Low application rates enhanced microbial diversity and the of the beneficial microbes which could positively relate to better soil quality, indicating enhanced plant growth and yield.*

*In contrast, higher concentrations promoted the abundance of spore-forming bacterial genera such as Bacillus, which is responsible for defensive action such as reducing the pathogenic bacteria and pest control. Overall, this study demonstrates PyroAg® potential for improving soil biological health by enhancing the beneficial plant growth-promoting bacteria."*

**Lower rates higher frequency shows better overall results than high rates and low frequency** - consider it a food source for microbes - it is a consumable and as such needs to be reapplied when necessary - **Put some in every tank!**

### Important

- Always add at specified application and concentration rates
- Can generally use with most other products - perform jar test first with unknown mixes
- Test spray small area for sensitive plants or new applications before full application
- PyroAg® has a low pH (2.3-3.5) - do NOT mix directly with alkaline products
- Always dilute in spray water first and jar test if unknown.
- PyroAg® is a carbon food source for beneficial bugs - do not mix & store together
- Avoid applications around pollination period, the smokey smell can deter bees
- Store in dry cool area out of direct sunlight. Seal lid/cap after use. Do not store mixed

## Broadacre & Pasture & Turf Application Rates

Assuming 100 L/Ha water	200mL/Ha (1:500) for beneficial applications
Assuming 100 L/Ha water	500mL/Ha (1:200) with herbicide, fungicide, insecticide
On Seed	50-80mL in 8L of water per tonne
In furrow	500mL/Ha

## Horticulture & Viticulture Application Rates

Assuming 1000 L/Ha foliar	2 L/Ha (1:500) for beneficial applications
Assuming 1000 L/Ha foliar	5 L/Ha (1:200) with herbicide, fungicide, insecticide
Soil drip	5 L/Ha (1:200)

**Frequency** - Maximum of every two weeks

### Possible Beneficial applications

Improve Seed Germination, Feed and grow Healthy soil Bacteria and microbes, Promote healthy growth and increase yields, Increase natural resistance to pests and diseases, Strong deterrent to pests and snails, Enhance fertiliser uptake and composting activity, Optimises pH for other chemical applications, Reduces synthetic chemical use

## SAFETY DIRECTIONS

Do NOT swallow. Use in a well ventilated area. Avoid contact with skin and eyes. Wash hands after use. Wear gloves, long sleeves and glasses while handling. Do not mix directly with alkaline substances.

## FIRST AID

If ingested contact a doctor or Australian Poisons information centre on 13 11 26.  
If in eyes, hold open and flush with water for 15 minutes before seeing doctor.

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