

WOOD VINEGAR

Natural Biostimulant

PRODUCT SPECIFICATION and USE

Green Man Char Wood Vinegar is a plant derived 'liquid wood smoke', formed as a by-product of the biochar production process. It is formed from natural and 100% sustainable woody biomass and has numerous potential agricultural and horticultural applications.

Product Use:

Green Man Char Wood Vinegar is normally applied as a germination enhancer (biostimulant). There are other uses of the product, but this specification sheet relates to use as a biostimulant.

These application procedures are intended as a guide only and application should be tested on a small area of plants first. Results can vary based on circumstances and natural conditions during application.

BENEFITS:

Green Man Wood Vinegar is a plant biostimulant. It enriches the soil, aids seed germination, and enhances plant growth, fruiting, and flowering. It is a natural extract from wood.

KEY CONSTITUENTS:

Condensed liquid smoke from natural wood sources. It is an amber appearing liquid and smells significantly of wood smoke. The main components are: water, acetic acid, phenols, other organic acids, and other smoke-derived organic compounds in low concentration. In total, approximately 400 different organic compounds in low concentrations are often found in wood vinegar including phenolic compounds, organic acids, aldehydes, ketones, esters and water.

DIRECTIONS FOR USE:

- Shake well before using
- Product should be diluted with water prior to application. Suggested dilution rate is 1:200 depending on application. This is 1-part wood vinegar: 200-parts water (or 5mL per 1L of water).
 Note: other dilution ratios with water have been reported in the literature from 1:100 up to 1:1000 with good results depending on the application.
- When used at low concentrations ($^{\sim}1:100 1:800$) it can be used as a germination enhancer to promote germination and plant growth. It can be applied as a foliar spray or direct to soil.
- CAUTION: GREEN MAN CHAR WOOD VINEGAR should be tested on a small area prior to widespread
 use. Results may vary based on circumstances and natural conditions during application. TO BE
 USED ONLY AS DIRECTED.



Plants/crops	How to apply (when diluted with water)
Citrus, Avocado, Apples	Start foliar spray from pre-flowering/early flowering and continue weekly during fruiting.
Grapes, Passionfruit, Blueberries, Kiwifruit	Apply every 2 weeks during fruiting.
Tomato, Capsicum, Melon, Zucchini, Cucumbers, Leafy Vegetables	Commence foliar sprays 2 weeks after planting and continue at fortnightly intervals to harvest.
Potato, Sweet potato, Onions, Ginger	Commence foliar sprays 4 weeks after emergence followed by re-application every 2 weeks.
Wheat & other cereal grains, Corn, Sunflowers, Soybeans	Foliar sprays 3-4 after emergence and repeat every 2 weeks.
Seed germination	Sow the seed and apply spray until soil is moist. Alternatively, soak seed in solution for up to 24 hours prior to sowing.
Orchids	Mix at recommended ratio. Apply weekly as a foliar spray to plant leaves/flowers, air roots, and to the holding medium/soil in the root zone of plant. The wood vinegar can be combined with the normal Orchid nutrient regime.

Safety Information:

Care should be taken when using Wood Vinegar in its concentrated form and suitable protective equipment should be used during application procedures (including gloves and eye protection equipment if spraying).

Care should be taken to avoid direct contact of the concentrated wood vinegar with skin and eyes. If contact with eyes occurs, wash out with water immediately and seek medical advice. Wash hands after use.

The product is not a refined product suitable for consumption. If the product is consumed, seek medical advice immediately.

FIRST AID: If poisoning occurs, contact a Doctor or Poisons Information Centre - Phone 13 1126.

For further information, visit www.greenmanchar.com.au or see the MSDS for more detailed safety information.