

Shift to liquid vinegar

Farmers turn to natural fertiliser

IN THE past several decades the use of synthetic fertilisers, pesticides and fungicides were increased worldwide to improve crop production.

This increase, combined with unsustainable farming methods, has had an affect on various environmental compartments like soil, water and air.

In order to reverse the negative impact caused by synthetic systems the attention has shifted to promote the use of environmentally friendly methods and products, with less negative affects on the environment.

Organic by-products from agriculture, which would otherwise go to waste in the environment, can now be recycled and used to increase agricultural production.

Pyro Ag is an organic by-product collected from the manufacture of Bio-Char which is developed and manufactured in Australia in a Continual Biomass Converter.

Pyro Ag is a wood vinegar liquid fertiliser, made using a patented process, the 'converter' cooks woody biomass converting it to charcoal and condensed smoke, which is further refined to give us the Pyro Ag liquid.

Based in Tumby Bay, Fert-West Ag has been stocking the liquid fertiliser since 2015 following an inquiry from a client who wanted supplies of vinegar to spray on his Lupins.

Principal Bob Harkness



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No synthetic materials or petro-chemicals are used in the production of Pyro Ag, meaning it is approved as an allowed input for organic farming.

said Pyro Ag was worked on a variety of crops and was used by many horticultural clients.

"Pyro Ag wood vinegar is suited to all crops and can be mixed with most plant protection and fertiliser products at 300-500 times dilution, where it is most effective," Mr Harkness said. "It should only be used in acid solutions however, due to its' low pH value."

He said the wood vinegar was utilised by many farm-

ers in the horticulture scene because it enabled them to reduce their chemical inputs while getting a cleaner product from horticulture.

"They're (farmers) finding they're getting better germination, certainly getting better yields and we're finding a major benefit is the better quality in terms of grain proteins."

Farmers using the product on broad acre crops progressed rapidly from 20 litre drums of the product to

1000litre IBCs as they could see positive changes in crop production, quality and a dramatic lowering of chemical and fertiliser costs. Mr Harkness said Pyro Ag

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also promoted soil health and combat root disease.

"A major soil problem in most areas is a root disease... and we've shown over the last three years is it does virtually stop rhizoctonia."

Pyro Ag was initially deployed to aid germination, growth, yield and quality, and while excellent results were seen in relation to plant health and growth, unexpected results arose in relation to some pests and common crop disease problems.


The improvement in soil health and plant performance is closely related to the soil food web and microbial communities which benefit from the many properties of Pyro Ag.

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It is estimated that wood vinegar contains around 300 constituents including plant nutrients, acetic acid, methanol, etherlene, ester, acetyls, ketone, phenols, formic acid, amino acids, plant hormones such as gibberellins, cytokinins, auxins, abscisic acid, salicylic acid, plant elicitors and many others.

In weak concentrations (1:500) wood vinegar has been shown to reduce chemical applications dramatically, stimulate beneficial microbe populations, aid plant root systems development, photosynthesis, nitrogen metabolism and natural plant protection.

Fert-West Ag has appointed SA biological farming specialists, Bio-Tech Organics, as an agent for Pyro-Ag products in the Virginia, Yorke Peninsula, Mid-North, Riverland, Fleurieu, Mallee and Murraylands regions.



Pyro Ag®
Liquid

NEW Pyro Ag®

Benefits:

- Favours mycorrhizae fungi, actinomycetes, bacillus and other beneficial microbes improving soil health and microbial balance on and around plants.
- Improves photosynthesis, chlorophyll and leaf colour, root and stem development, moisture regulation, nutrient uptake and use. Improves seed germination and strike rate of seeds.
- Enhances flowering and reduces incidence of aborting. Improves flavour, colour and preservation of fruits and vegetable crops. This includes stone fruit, citrus, nuts, melons, greenhouse crops, tomatoes, capsicums, cucumbers and grapes.
- Combats odours from ammonia and accelerates composting.
- Can be used in conjunction with biologicals, seaweed extracts, fish fertilisers, fulvic acid.



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www.biotechorganics.com.au
admin@biotechorganics.com.au

08 8380 8554

Shop 5
Geradis Building
Old Port Wakefield Rd
Virginia S.A.