



Testing for Phosphonate in root samples

Introduction

Growers that use phosphonate to control Phytophthora can now test the roots of their avocado trees for treatment effectiveness.

The new phosphonate analysis has been developed in consultation with the Avocado Industry Association and is designed specifically to meet the quality requirements of the New Zealand avocado grower.

The test costs \$95.00 excl GST per root sample submitted and results are generated in 5 to 10 days using state of the art laboratory testing equipment. For their convenience submitters can receive results on paper or electronically via either e-mail or on-line through the laboratory's website.

Why test for Phosphonate?

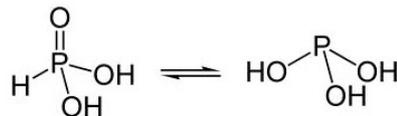
Phosphonate is sometimes injected into the roots of trees to help protect against the effects of Phytophthora, a fungal like organism responsible for damaging plants.

Once injected phosphonate translocates to leaves and to the root system where it protects feeder roots against Phytophthora root rot.

By testing for the level of phosphonate in root samples a grower can understand the best timing of application, application method and subsequent duration of treatment effectiveness for phosphonate treatment.

What is Phosphonate?

Phosphonate is used to describe salts of Phosphonic/Phosphorous acid: H_3PO_3 , MW 82. These two acids exist in an equilibrium with Phosphonic acid being the predominant form.



Phosphonic acid Phosphorous acid

This acid is commonly purchased as Potassium Phosphonate (KH_2PO_3 or K_2HPO_3).

Submitting a sample

- We need at least 10 grams (preferably 50g) in a sealable plastic container. The larger the sample, the more representative of the whole feeder root system it is likely to be.
- The samples must be clearly labelled, in the correct container with the correct paperwork i.e. the submission form
- Send fresh samples immediately or freeze samples until set of samples is collected for submission
- If you need urgent or a specified timeframe for testing, contact the laboratory to arrange this.

Contact information

Ordering your Phosphonate testing is easy and simple, contact a Food and Bioanalytical client service manager at Hill Laboratories on 07 857 0616.

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