National Landcare Program: Smart Farms Small Grant – Fruit Growers Victoria

Sustainable Soil Health Management in Orchard Production Systems

Introduction

Fruit Growers Victoria and conNEXUS Global are pleased to cooperate and deliver this project funded by a grant from National Landcare Program - Smart Farms Small Grants - Soil Extension Activities.

The project collected soil samples, analysed these samples and then provided extension services, helping develop grower skills in interpretation of soil test reports for improved production and nutrient use efficiency in fruit crops, and develop confidence to undertake more soil sampling to improve decision making.

Requirements

The guidelines of the project required two primary tasks to be completed.

1. To provide the collected analysis results to the National Soil Database.

2. Develop an extension program where growers use their soil tests from the project to improve understanding of the analysis conducted and use the results to improve on farm management.

   At the early introduction meeting, growers attending decided to undertake short meetings on a frequent basis.

In addition, demonstration plots were installed in cooperation with growers to show how the application of ameliorants influenced the soil analysis over time.

Goals

The goal of soil analysis is to inform nutrient resources to assist in determining soil and plant management for the environment and crops grown. Soil and plant analysis are accurate ways to determine nutrient needs and the characteristics of the soil that support crop growth.

It is important to recognize the values obtained when a soil sample is analysed are of little use as raw analytical data. In order to make use of the values in predicting nutrient needs, the test must be calibrated by conducting nutrient response research under local conditions.

The purpose of this series of FACTSHEETS is to provide a basic and general explanation of each of the parameters provided on the soil analysis report to aid understanding of the influence of the parameter and provide reminders to assist growers on how to determine constraints and also where improvements can be made.

The aim of this series of FACTSHEETS is to provide a practical resource for reference, rather than an all-inclusive report on each parameter in the analysis.

Each line item on the soil analysis report has decades of extensive research to support the laboratory methods through to

discussion on each line item and the interpretation and use of recommendations.

Growers have been able to improve skills and learned to undertake testing that supports improved nutrient management using soil analysis.

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