

# Diagnostic Services

In order to identify the causes of plant or soil based health issues, and rather than just treating symptoms, Soilsmart have developed a unique and effective range of soil and plant analyses which include:

## **soil chemistry, plant sap, soil & plant biology and water analysis**

All tests come with a comprehensive and understandable report and a suggested course of action.

### SAP Analysis

The Soilsmart SAP analysis is a valuable diagnostic tool that is able to detect and correct plant deficiencies that other methods have been unable to. It is particularly useful in identifying and assessing the affects that damaged or compromised root systems can have on plant health.

Most importantly, our SAP analysis provides an assessment of some of those basic, natural process that occur within the plant such as carbohydrate production and the effectiveness of the photosynthetic process, which should be checked leading into any period of potential stress.

The timely and regular measurement of plant SAP can not only provide trends in terms of plant performance and nutrient balance, but it has also proven to be an extremely quick and useful method of gauging the potential for health issues. In fact, plant SAP analysis has provided a unique preview of plant health issues enabling the management of potential problems like insect or fungal attack, or nutritional deficiencies before they become obvious.

### Soil Chemistry

The Soilsmart soil chemistry analysis is about achieving the optimum balance of nutrients in the soil. Our methodology has been designed to provide as much usable information as possible. It uses a combination **Albrecht and Reams analyses** to assess soil chemistry. One of the key differences of this method (compared to standard tests) is the assessment of 'plant available' nutrients - ***different extraction methods are used to reveal not only total nutrient levels but also levels of plant availability.*** This can be critically important for minerals such as Phosphorus and Iron which are easily bound in the soil and can become limited in terms of their availability to the plant. Our soil chemistry analysis is conducted in **NATA accredited laboratories** to ensure the highest level of accuracy and uniformity.