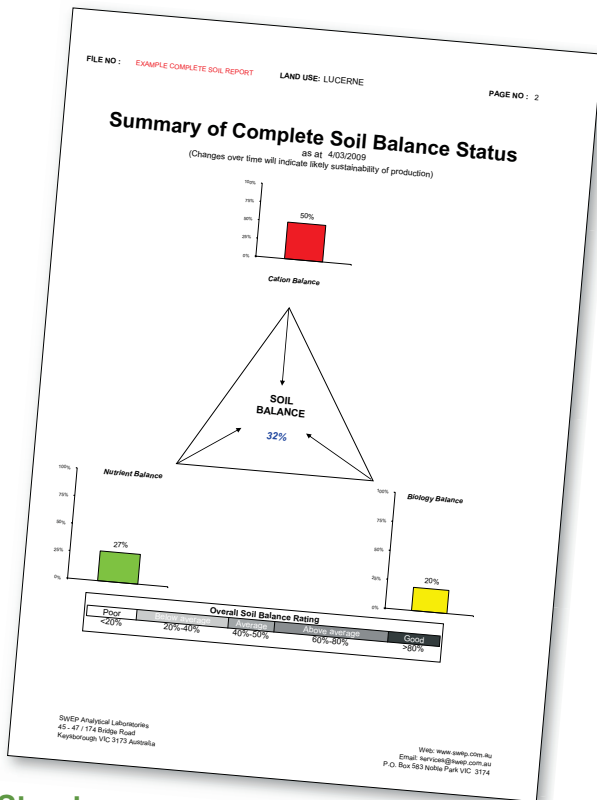


INTERPRETING SWEP SOIL TESTS

This fact sheet provides a basic outline to interpreting SWEP soil test results. Your SWEP agent should also be able to help you interpret your results. For those without an agent, please contact SWEP to discuss your results or any questions you may have.

Each soil component analysed by SWEP is measured against 'optimum' standards for that soil and component. SWEP then provide recommendations to achieve this optimum, in the form of soil ameliorants, fertiliser, trace elements and/or biological stimulants. Please note that any products and amounts stated in soil test results are recommendations for soil. For advice on plant requirements, we recommend you submit a plant tissue test to SWEP, and/or consult your SWEP agent or agronomist. SWEP soil test recommendations are intended to be used for soil based applications and thus all recommendations are provided on the basis of soil requirements and applications.



Structure

Soil structure is primarily affected by the relative proportions of exchangeable cations calcium, magnesium, potassium, sodium and hydrogen. When you receive your SWEP soil test results, you will see that on page 2 the proportion of exchangeable cations and the desirable levels for that soil are provided. This is also demonstrated in the report by a pie chart. Lime, gypsum and/or dolomite (soil ameliorant) recommendations relate to balancing these exchangeable cation proportions to achieve the desirable figures.

Nutrients

Soil nutrients include the major elements (such as N, P, K and S), as well as essential trace elements. Soil nutrient requirements are determined primarily by the soil CEC and specified land use (including the sample depth). Requirements are then adjusted according to the level of soil balance and the leaching potential.



Total nutrients indicate the total amount of a particular nutrient in the soil. Nutrients listed as "available" refer to the level of plant available nutrients present in the soil. These are used to determine the soil fertiliser requirements, relative to the specified land use. Remember, these nutrient recommendations are to balance the soil and then for the soil to support that land use, and does not consider any factors out of SWEP's control, e.g. product use instructions, plant salt tolerance, water availability, time or application quantity etc. The required amount of each nutrient on the report then needs to be converted to a fertiliser application, as we provide nutrients in kilograms per hectare. Knowledgeable suppliers should be able to convert these into appropriate products for you.

Biology (Complete Soil Test)

Soil biology results reflect the key indicator groups of soil microbes present and their numbers and are identified by SWEP as being "Active bacteria". Like soil structure and nutrients, each biological indicator group needs to be in balance within and between each of the groups. Certain biological stimulants have different effects on each group – some products stimulate key groups, other products may suppress certain groups. Soil biology recommendations are for broad groups of biological stimulants, at rates found appropriate from SWEP research to adjust active bacterial growth.

For further information please visit our website: www.swep.com.au or call us on 03 9701 6007.