

Have you tested your soil pH?

Aim for a topsoil pH of 5.5+

Resilient soils for future food



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Thinking about lime?

How to calculate your lime requirements

The amount of lime required to treat soil acidity depends on a number of factors such as the current soil pH; desired or target soil pH; soil texture and lime quality. The aim should be to raise the top-soil to above pH 5.5 (CaCl_2).

The following equation gives a guide to the lime requirement:

Lime requirement (t/ha) = (target pH – current pH) x soil texture factor.

Soil texture factor = Loam to clay loam: 4 Sandy loam: 3 Sand: 2

Raising the soil pH by up to 1 unit is recommended.

**For example: to raise a sandy loam soil of pH 4.8 (CaCl_2) to pH 5.5 (CaCl_2)
(5.5 – 4.8) x 3 = 2.1 tonnes of lime per hectare is required.**

More lime is required to raise the soil pH in clays than in sands so it is important to know the soil texture. It is recommended that lime quantity applied at any one time should aim to raise the soil pH by only 1 unit. This is particularly important on sands and sandy loams as over-liming may induce trace element deficiencies.

If more lime is required on these soil types to raise the soil pH to 5.5 (CaCl_2) then application will need to be split. Apply an application now and another application in about 3 – 4 years' time.

Lime application rates on soils with very low organic carbon levels (less than 0.5 % for sand; less than 0.7 % for sandy loam and less than 1.2 % for clays) need to be adjusted by cutting the lime application rate by 25 % from calculated total required.

The lime requirement calculation is based on a pure lime or an NV of 100%. If the NV of the material to be used is less than this, then higher rates of lime (adjusted) can be used.

For further information contact your local Natural Resources Centre
www.naturalresources.sa.gov.au/adelaidentloftyranges

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Adelaide and Mt Lofty Ranges