



Lightly sprinkle white powder from the puffer bottle on to the top of moist soil paste.



The white powder changes to a different colour. Compare the new colour against closest colour on the colour chart to obtain a pH reading.

Changing/Adjusting soil pH

Lowering pH of alkaline soils:

We recommend to use Manutec Sulphur which is the most common & economical soil acidifying product for lowering pH.

To lower the pH by one unit (eg. from 7.5 to 6.5) , use following amounts per square metre of soil surface, depending on soil type.

Sandy – 25g/m² Loamy – 50-70g/m² Clay – 100g/m²

These amounts will lower pH of top soil by one unit, to lower the pH by more than one unit, multiply the above amounts accordingly.

Note: Sulphur is gradually converted to acid over a period of 4 - 6 weeks depending on soil temperature and microbial activity. It is most important to test the pH after this period and repeat the application if necessary.



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Lowering pH of bulk soil/potting mixes

To lower the pH of bulk potting mix / compost by one unit, add approx. 500g of Sulphur per cubic metre (i.e.1000L) of soil, or 5g (1 heaped teaspoon) per 10 litre of soil.

Mix through thoroughly.

Increasing pH of acidic soils:

We recommend to use either Garden Lime or Dolomite Lime. Both are effective in increasing soil pH, but the difference is Dolomite has a higher Magnesium content which is ideal for highly acid soils.



To increase the pH by one unit (for example from 5.5 to 6.5) use following amounts per square metre of surface area, depending on soil type.

Sandy – 100g/m² Loamy – 200g/m² Clay – 300-400g/m²
 These amounts will raise the pH of top soil by one unit, to raise the pH by more than one unit, multiply the above amounts accordingly.

Note: Soils that are naturally acidic or alkaline need regular monitoring and correction.

For further details on soil pH kit & related products, visit our specific web site www.soilphtesting.com or contact Manutec on

08 – 8260 2277

Note: For longer shelf life and effectiveness of this product, please ensure to store in a cool and dry condition, closing the bottles tight after use and avoiding direct exposure to sunlight during storage.



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SOIL PH TEST KIT Product Information Guide



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What is Soil pH?

In simple terms, measuring soil pH is determining how acid or alkaline your soil is? It is measured on a scale of 0 to 14 with a neutral value of 7. Acid soils have pH values less than 7 and alkaline soils have pH values more than 7. Normally a pH in the range of 6 to 7 is considered ideal for optimum plant growth.

Why Soil pH is Important?

Soil pH directly affects root activity and the absorption of essential nutrients, which in turn affects growth of plants.

- All nutrients are easily available & readily absorbed when pH is in the neutral range of 6 – 7.
- Under alkaline conditions, trace elements such as Iron, Zinc and Manganese are locked up and become less available, resulting in deficiency symptoms.

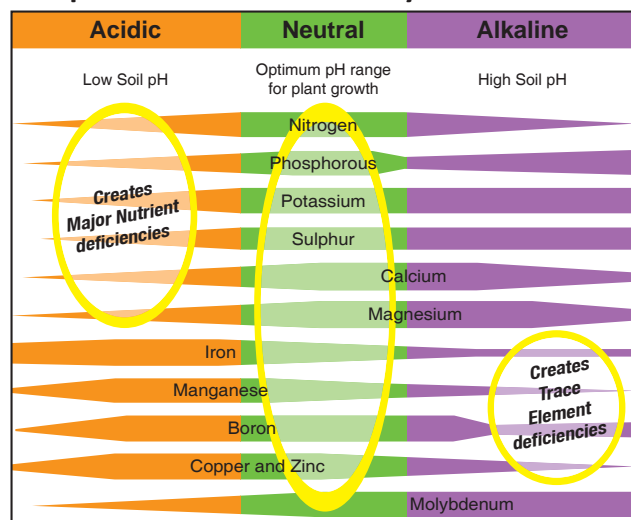
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- Similarly, under acidic conditions, major nutrients such as Nitrogen, Phosphorus, Potassium & Magnesium become less available, resulting in deficiency symptoms.

Without the correct soil pH, fertiliser applications can be ineffective and result in wastage, as nutrients will not be available for plants to absorb.

Soil pH & nutrient availability



Preferred pH range for plants

Most plants grow best in soils that are either slightly acidic or in the neutral range of 6 – 7. Some plants which are native

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to an acidic soil region (referred to as acid loving plants – such as Azaleas, Camellias, Blue Berries, Rhododendrons etc), can tolerate acidic pH between 5 and 6.

Note: Although a few plant groups prefer slightly acid or alkaline conditions as listed below, they still can grow effectively in the neutral pH range of 6 – 7.

General Plants preferring (pH 6 to 7)	Acid loving Plants preferring (pH 5 to 6)	Only a few Plants can grow in slightly alkaline (pH 7 to 7.5)
Most fruit & citrus trees	Azaleas & Camellias	Lilac
Most vegetables	Gardenia, Blue berries	Figs
Rose & most flowers	Rhododendrons	Pink Hydrangeas
Lawn & most garden plants	Blue Hydrangeas	Black Currants

Currants

Testing Soil pH

Soil pH can easily be tested using the Manutec Soil pH kit. Developed by the CSIRO, this kit is accurate, instant and economical. It is widely recommended for home gardeners, professional horticulturists and farmers. This kit can be used to test soils, potting mixes and compost.

Taking soil sample

- Collect a small sample of soil from the area to be tested. If the soil is hard & lumpy, crush to make it finer for easy mixing.
- For shallow rooted plants (most common plants), samples should be taken at a depth of 10 – 15cm below soil surface.

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For deep rooted plants such as fruit trees & large shrubs, take sample at a depth of 25 – 30cm. Remove any debris like leaves / bark or mulch before sampling.

- When sampling potting mixes or compost, try to remove any large undecomposed material such as bark.
- We recommend taking a sample size of about half a tea spoon. Taking a larger sample will be wasting liquid and powder.



Using Manutec pH Test Kit

The four steps illustrated below will provide a quick guide for testing soil pH. Please note that this is an illustration only, the actual colour you may get will vary depending on pH of your soil.

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Place a small soil sample on the white mixing plate and add a few drops of indicator liquid.



Then mix the indicator liquid with the soil sample to make a thick paste.

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