

# 10 years on...

# Time to *Re-Lime* Lime

## Lime still works for soil acidity, just like these two!

Ten years on from the successful Time to Lime promotion, the details have been refined but the basic messages are the same:

- **Soil test to determine your soil pH profile.**
- **Apply lime to treat acid soils.**

The Avon Catchment Council (ACC) funds a project to develop a current picture of soil pH in the Avon River Basin and to promote best practice for the management of soil acidity.

With the aid of the ACC soil testing subsidy, over 7,500 soil pH profiles reveal that 78% of the topsoils are below pH 5.5 and 59% of the 10–20 cm subsurface soils are below pH 4.8. *Lime use must increase to meet ACC targets\**. Based on this data and the work done by DAFWA, the messages for farmers are:

- **Keep topsoil pH above 5.5 to treat subsurface acidity.**
- **Keep subsurface pH above 4.8 to avoid aluminium toxicity.**

Achieving these pH values will enable more flexible rotations with barley, canola and lucerne.

During the 'Time to Lime' campaign, lime use increased through the 1990s. Recent data, however, shows that even those soils treated continue to acidify and now it is time to re-lime.



In 1997, Department of Agriculture and Food Western Australia (DAFWA) researchers Chris Gazey and Dave Gartner demonstrated the benefits to a canola crop of using lime to treat acid soil at Varley (above). Ten years later at a Wongan Hills Field Day, they highlighted the importance of treating subsurface soil acidity (below).



### Rule-of-Thumb Lime Guide

This guide provides a good indication of the amount of lime required to achieve the ACC targets\*. Seek expert advice to develop individual recommendations.

| Soil depth  | pH        | Lime amount over 5 years |
|-------------|-----------|--------------------------|
| 0–10 cm     | under 5   | 2 t/ha                   |
|             | under 5.5 | 1 t/ha                   |
| <i>plus</i> |           |                          |
| 10–20 cm    | under 4.5 | 2 t/ha                   |
|             | under 4.8 | 1 t/ha                   |
| <i>plus</i> |           |                          |
| 20–30 cm    | under 4.5 | 1 t/ha                   |
|             | under 4.8 | measure pH in 3 years    |

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\*The Avon Catchment Council has set a target  $pH_{CaCl_2}$  of 5.5 for topsoils and 4.8 for subsurface soils in the Avon River Basin by 2020.

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