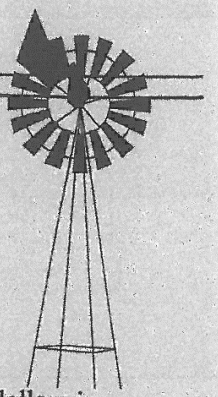

Answers for Acid Soils:
Investing in the future of your soil

Soil acidification: the sleeping giant

Acidification is costing the national agricultural economy around $300 million dollars in lost production each year. Soil acidity contributes to reduced yield in crops and also limits the types of crops we can grow. Unlike salinity, which has clear visual degradation, acidity is much more subtle. There is just a gradual decline in production which can easily be blamed on other causes such as poor season, lack of fertiliser etc.

Lime application is the most effective method of repairing acid soils. Implementing a liming program will ensure that high yields can be maintained and valuable crops can be grown, well beyond 2000. Applying lime is also profitable with research showing yield increase between 25-50% in barley, wheat and canola.

What causes soil acidity ?

Soil acidification is a natural process, accelerated by some agricultural practices such as:

- removal of plant and animal products
- leaching of excess nitrate
- addition of some nitrogen-based fertilisers
- use of shallow-rooted annual based pastures

Cropping contributes to acidity by:

1. Crop removal: 5-10 kg of lime per tonne of wheat harvested is required to replace alkalinity in the soil. A pasture/ crop system requires 100-250 kg/ha/year of lime.
2. Nitrogen-based fertiliser use: fertilisers which contain ammonium-nitrogen and sulphate-sulphur are highly acidifying. For example, if nitrate is leached after using sulphate of ammonia, 7.1 kg lime/kg N is needed to neutralise the acidity.

Removal of farm produce and reliance on annual plant species means that lime must be applied to balance acidification. We need to view lime as a fixed cost of production.

With Compliments:
Victorian Limestone Producers Association Inc.
www.vlpa.asn.au