



The following article was written by Soiltech
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(Response to article “Carbonate, not calcium needed on hills” Country-Wide, Northern Edition, Vol 6, No. 9, September 2005, p 26)

CALCIUM PLAYS A VITAL ROLE IN THE HILL COUNTRY

To claim that “carbonate, not calcium is needed on hills” as your headline suggests is at best misleading, and at worst, mischievous and dishonest.

Your article implicitly assumes that the sole reason for adding lime (calcium carbonate) to the soil is to offset increasing acidity. This is incorrect. There are many other equally compelling reasons to apply lime to the soil, for instance: to increase the calcium base saturation on soil cation exchange sites (ensures adequate calcium is available for plant uptake), to stimulate legume vigour (leading to better nitrogen fixation and improved dry matter production and quality), to stimulate soil animal and microbial activity (leading to faster nutrient release and cycling and improved soil functioning and structure).

It is certainly true that the pH of all pastoral soils naturally decline with time if no remedial action – such as applying lime - is taken. It is also true that as the pH drops too low, problems with aluminium and manganese toxicity increase. But to imply that the benefit of applying calcium carbonate lies solely with the carbonate portion of the lime is an oversimplification.

More and more farmers today are becoming aware of the additional benefits of applying smaller quantities of finely ground calcium carbonate, often in a water based suspension or slurry and in combination with a range of other additives. The objective of these applications is not the same as with conventional agricultural lime. As a result, when your article cites the economic effectiveness of lime application solely in terms of the quantity of carbonate applied/unit weight, it is obviously misleading and confusing. The cost of any product must always be considered in relation to benefit expected and the reason for applying it.