## Have your ratoons had a health check?

## By Belinda Billing

With input prices in the stratosphere, it is more important than ever to keep your ratoon cane in good health to maintain strong yields beyond third and fourth ratoon, thereby reducing the need for

more expensive plant cane.

Our standard farming practice is to take a soil test prior to planting and, unless we see something out of the ordinary, to assume all is 'okay'. Ameliorants such as lime, gypsum, ash, or mud are applied prior to plant and from that point on we consider macro only nutrients based on the soil test taken prior to plant.



That soil test may have been taken five, six or more years ago. Have you ever considered what your pH might look like when approaching third ratoon? If your pH drops below 5.5, the ability of your crop to take up specific nutrients is reduced, meaning that expensive fertiliser you're applying is potentially being wasted (refer to image 1 below).

If aluminium saturation was high in the initial soil test it may be creeping back up over time. Cane can grow in soils with aluminium saturations of up to 30%, however after this point it becomes toxic to

Strong acid		Medium acid	Slightly	Very slightly acid	Very slightly alkaline	Slightly alkaline	Medium alkaline	Strongly alkaline
				acid	alkaline			
						1		
				ni	trogen			
	1							
	_			p	nosph	orus		
				p	otassiu	ım		
				SI	Iphur			
				Ca	alcium			
				m	agnes	ium		
	irc	on						
	m	angan	ese					
	bo	oron	-					
	cc	pper	& zinc		-			
		-		-				
			_	m	olybde	enum	-	
4.5 5.	0 5.	5 6	.0 6	.5 7	.0 7	.5 8	.0 8.	5 9.0 9.5

Image 1. The effects of pH on soil nutrient availability.

Image from: Roques, Susie & Kendall, Sarah & Smith, K.A. & Newell Price, Paul & Berry, P.. (2013). Review of the non-NPKS nutrient requirements of UK cereals and oilseed rape.

the roots, and takes up precious space that could be occupied by essential nutrients such as calcium and magnesium. Calcium, an important macro nutrient, is unlikely to have been applied

> If you applied phosphorus at planting and have not reapplied for three years, it is possible that your soil needs a top up going into the fourth year (third ratoon).

since prior to planting.

The only way to assess these potential issues is to take a soil test. This does not have to be a complete soil analysis (E43).

A health check could include pH, cations (calcium, magnesium, potassium, salt and aluminium), phosphorus (if required on your soil) and potential issues specific to your situation. For example, consider elements such as zinc or copper if the planting soil test indicated it was marginal or close to marginal at plant.

Many of these issues can be addressed through banding of ameliorants such as lime, with results that may keep your ratoons strong for the next few years and save you money and time.

> If you are involved in Precision to Decision in the Far North and the Burdekin, or Point of Difference in Mackay and have a block you'd like to check up on, please contact your Farmacist advisor to arrange an appointment.



Precision to Decision and Point of Difference are funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation and Farmacist



