

Summit Fertilizers

P.R.I. Verification Trials

Beacon & Pithara - 1997

These two trials were designed to check the efficacy of the PRI soil test that Summit Fertilizers uses and compare it to the Reactive Iron test that is the standard test used in WA.

SOIL ANALYSIS		
	BEACON	PITHARA
Phosphorus	12	20
Potassium	668	589
PRI	23	18
Reactive Iron	320	260
pH	7.7	7.7
Organic Carbon	0.95	0.93

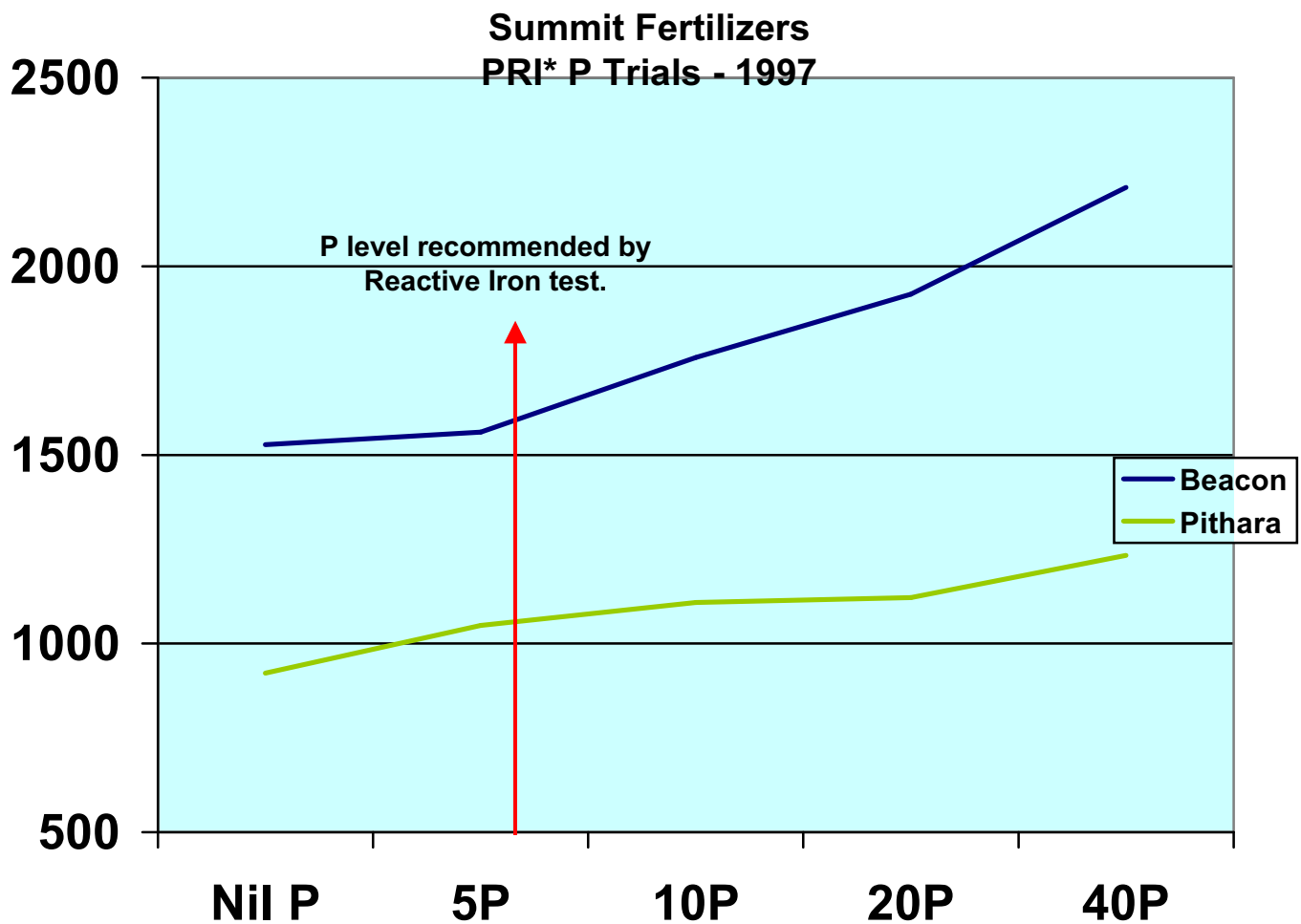
In both cases the recommendation for Phosphorus based on Reactive Iron was 5 or 6 kg/ha P. This indicates that the soil is non-fixing, low responsive soil.

At Beacon, this treatment would have been \$66.50/ha cheaper, however lost production would have been \$104.00/ha.

These soils are typical of a wide area of the north eastern wheatbelt in WA. The failure of the Reactive Iron test in this instance was that it didn't pick up large quantities of free Calcium, which will also bind Phosphorus very tightly.

Given the rotational factors, and the heavier soil types, fertilizers such as DAPSZC or MAPSZC at 80 to 120 kg/ha would be very suitable as a Phosphorus source, to lift the soil P levels to desirable levels.

See trial results below.



PHOSPHORUS PLACEMENT.

Other trials have shown that even where P levels were reasonably high in the soil, placement of applied Phosphorus near the seed gave improved early seedling vigour and improved yield.