



R&D Snapshot

Tracking Nutrients and Soil Health Indicators in Outdoor Piggery Paddocks

APL Project 2015/072

Investigator: Stephen Wiedemann, FSA Consulting

Purpose:

- To analyse soil parameters including organic matter, electrical conductivity (EC), chloride and sodium levels in outdoor piggeries.
- To conduct trend analysis of these parameters, pre and post cropping, over a three year period.

Take home messages:

- Moving of shelters, feeders and waterers frequently resulted in wider distribution of nutrients and salts across the area.
- Organic matter increased significantly over several paddocks whilst sodicity increased significantly on one farm indicating soil type, feed and/or water could influence sodic levels.
- Salt levels were variable, and did not result in toxic salinity levels despite significant increases. EC is a typical indicator of salinity but in paddocks with heavy co-deposition of both nutrients and salts, EC results indicated higher levels than were expected.
- Salinity was more reliably indicated by Cl and Na.
- It may be beneficial to plant salt tolerant cereal crops such as barley in the first year after the pig phase to reduce yield decline in hot spot areas.
- In hot spot areas, low pH and high sodicity may be mitigated by targeted applications of lime or gypsum prior to cropping, depending on whether sodicity or acidification is the issue.

Additional information:

- Contact Janine Price at janine.price@australianpork.com.au or 02 6270 8827 for the final report.

