Improving farmer adoption in farm scale zoning for improved fertilizer decision making.

Setting up a Fertiliser Strip Trial: Procedures and checklist to maximise results.

Where?

Run the strips across different parts of the paddock which are representative of production zones used for pre-season soil testing.

Proposed locations have been provided but can change if not suitable to management operations.

Location of treatment runs need to be accurately recorded for in season and harvest assessments.

What Treatments?

Standard = Grower Proposed rate (GR)

High = Up to twice as much as GR but at least 50% more

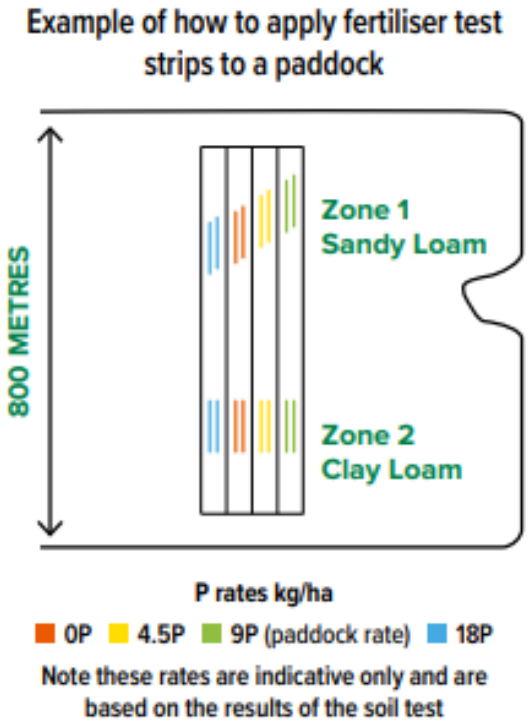
Low = Nil or half GR

How wide?

Make the seeding strip wide enough to be at least two header widths wide, 3 strips is recommended as a minimum to ensure a full strip is harvested by the header without issues.

NB. Allow for spray wheel tracks and other unexpected dilemas that happen in PA so 2 at a bare minimum, but 3 is better.

ensure at least one full cut of the harvester is within the strip. This can usually be done by making each strip two or three seeder runs. This makes it easier to compare yield results and can be seen on a yield map.



Examples:

Phosphorus

GR = 50 kg MAP/ha

Low = 25 kg MAP/ha or Nil

High = 75 or 100 kg MAP/ha

Note* For P trials there will be inadvertently an increase in N with increasing MAP/DAP. Try and maximise N rates and balance where possible.

Nitrogen

GR = 60 kg Urea/ha

Low = 30 kg Urea/ha or Nil

High = 90 or 120 kg Urea/ha

Upfront N is key to maximise NUE in these regions so these rates need to be applicable with sowing deliverables and may need to supplement with N spread as early as possible.

Harvest the strips separately and compare the yields to assess responsiveness and profitability.

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Setting up a fertiliser strip trial – proposed design.

Combining Nitrogen x Phosphorus Treatments

For VR uses aim for around 150m in length and for those without VR put a drum/marker on the fence to mark where the trial is.

Grower rate – Main Paddock

Nil – Seeder run 1
Nil – Seeder run 2
Grower rate = 50 kg MAP/ha + 20 kg Urea/ha – Seeder run 1
Grower rate = 50 kg MAP/ha + 20 kg Urea/ha – Seeder run 2
High Phosphorus = 100 kg MAP/ha – Seeder run 1
High Phosphorus = 100 kg MAP/ha – Seeder run 2
High Nitrogen = 50 kg MAP/ha + 60 kg Urea/ha – Seeder run 1
High Nitrogen = 50 kg MAP/ha + 60 kg Urea/ha – Seeder run 2

Grower rate – Main Paddock

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