The Barossa Pasture Challenge

Pasture Management Plan – Koonunga Ag Bureau Paddock

Pasture paddock details

Producer: Jamie Nietschke
Location: Hayshed paddock, Koonunga (Belvidere Rd)
Size: 2.2 ha
Annual average rainfall: 480 mm

Soil type: Red brown earth
Soil pH ($CaCl_2$): 5.6
Soil phosphorus (Colwell): 20 mg/Kg

Soil organic carbon: 1.5%

Pasture species/cv and when last sown: Lucerne (cv. L56, a semi-winter dormant variety) sown in 2007

Land class assessment (1-5): 1 (Arable land suited to intensive cultivation)
http://www.mla.com.au/mbfp/Pasture-growth/Tool-21-Mapping-pasture-zones

Producer aim for the paddock in 2014

- Improve the productivity of the paddock as best can given lucerne plant numbers are getting low (ie <20 plants/m^2)
- Provide quality grazing feed (high metabolisable energy and crude protein levels) for dairy calves/heifers and then potentially cut for hay later in the year

Likely paddock issues

- Broadleaf weeds, particularly capeweed and marshmallow. Barley grass can also be an issue
- Soil nutrition- soil phosphorous levels are considered low
- Lucerne flea can be a concern

Potential management options to address key issues/improve pasture production

- Apply herbicide mix to control broadleaf and grass weeds
- Conduct plant tissue analysis to determine any nutrition issues (late May)
- Possibly apply superphosphate and if calcium levels are low, possibly gypsum

Other comments

- Lucerne plant numbers in the Hayshed paddock are 12 plants/m^2. In an adjoining paddock (the Vineyard paddock- 2.5ha) lucerne numbers are slightly lower (9 plants/m^2) and so oats will be drilled into it (after being cleaned with sprayseed/diuron) to provide extra feed. Both paddocks will then be monitored throughout the season to determine the difference in production and demonstrate what can be achieved in a dryland lucerne stand when plant numbers start to drop-off.