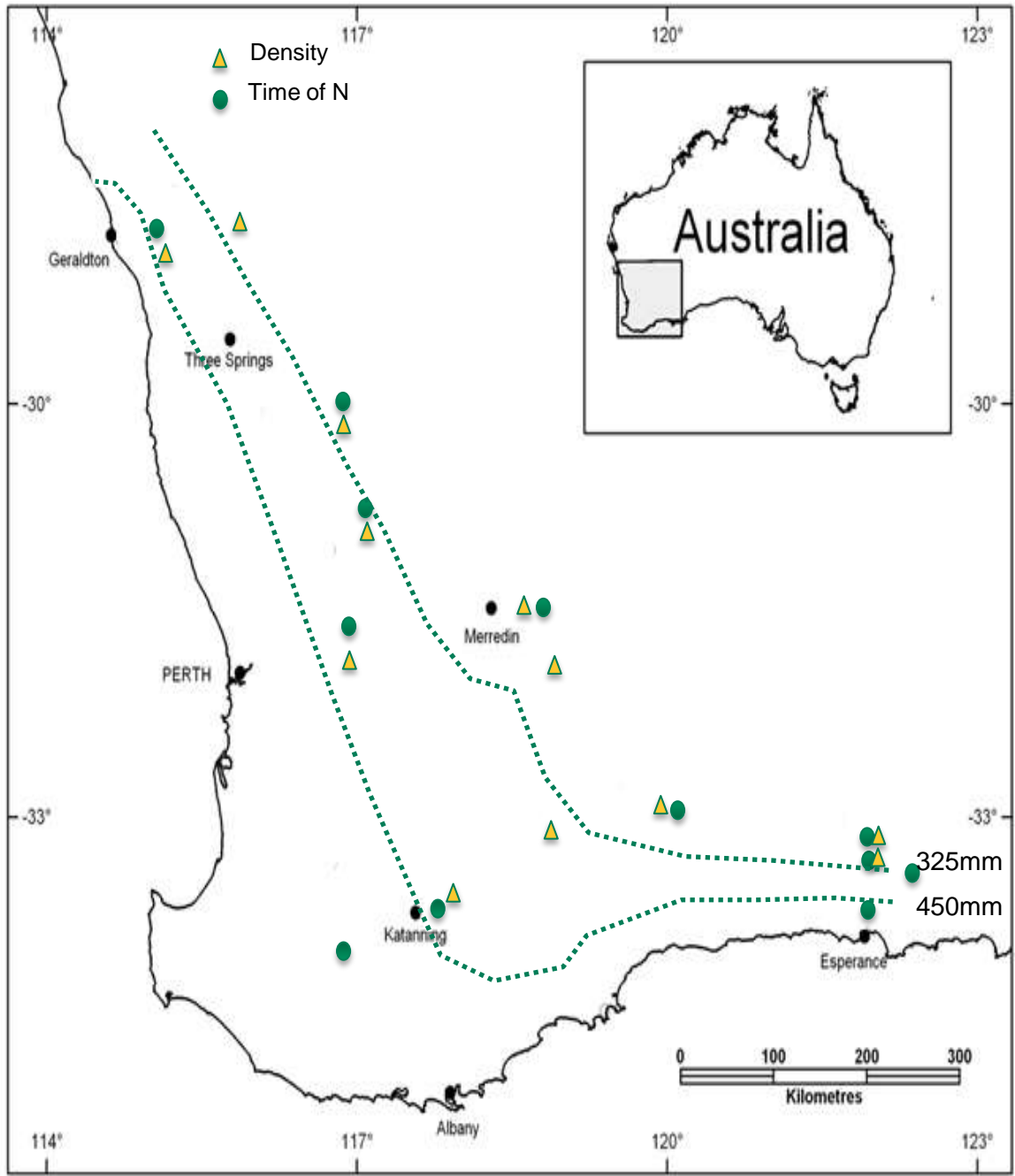




Canola agronomy in lower rainfall environments of Western Australia.

Mark Seymour, Bob French,
Raj Malik, Sally Sprigg and
Jackie Bucat





Plant density



To compare the plant density response of hybrid and open pollinated TT and RR canola

- **Why**

- Rate of OP TT canola releases slowing down - more hybrids on the market
- RR increasing in WA
- Therefore costs of seed increase

- Hopefully EPR solves this.....



Salmon Gums, sown April 16 June 11 2013



Hyola 404RR
20

Hyola 404RR
5



Salmon Gums Sept. 2013

Hyola 404RR
20

Hyola 404RR
5

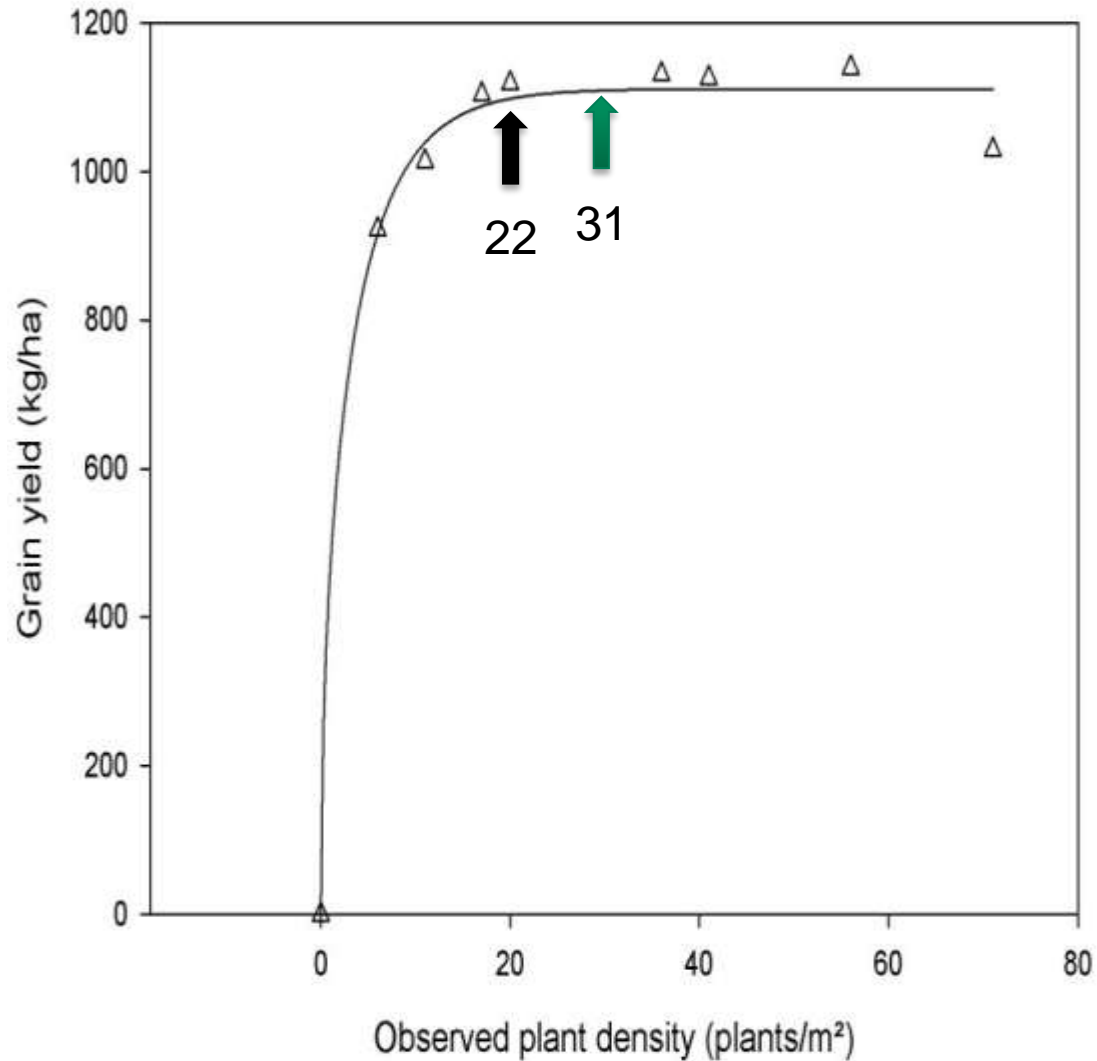


13ED09 Salmon Gums TT OP

\$2 to \$11/kg

Costs \$0.2 to 0.9/ha to increase
plant density by 1

CB Telfer



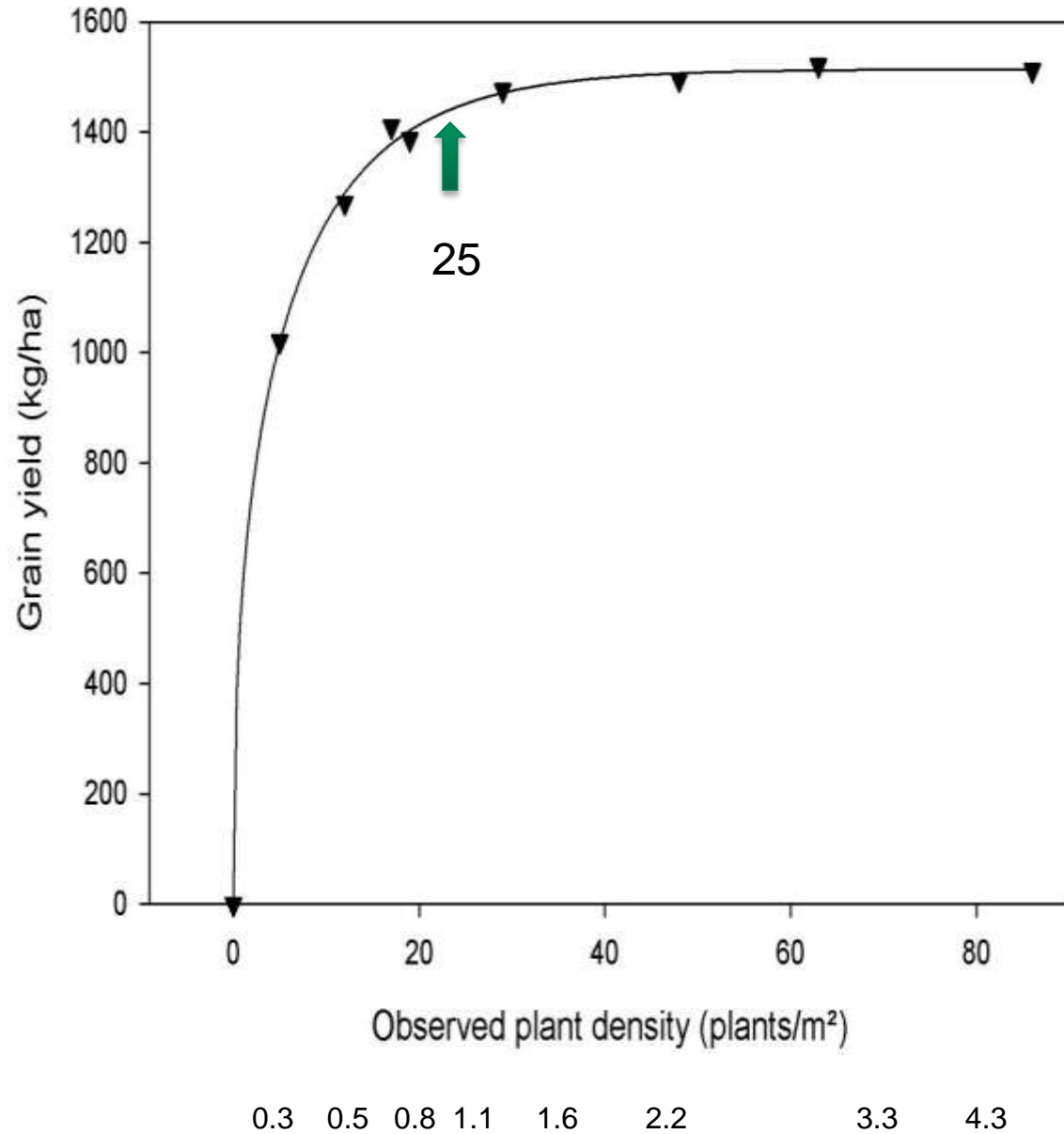
Seed
rate:

0.3 0.5 0.8 1.1 1.6 2.1 3.2 4.2

Hyola 450TT

\$24/kg

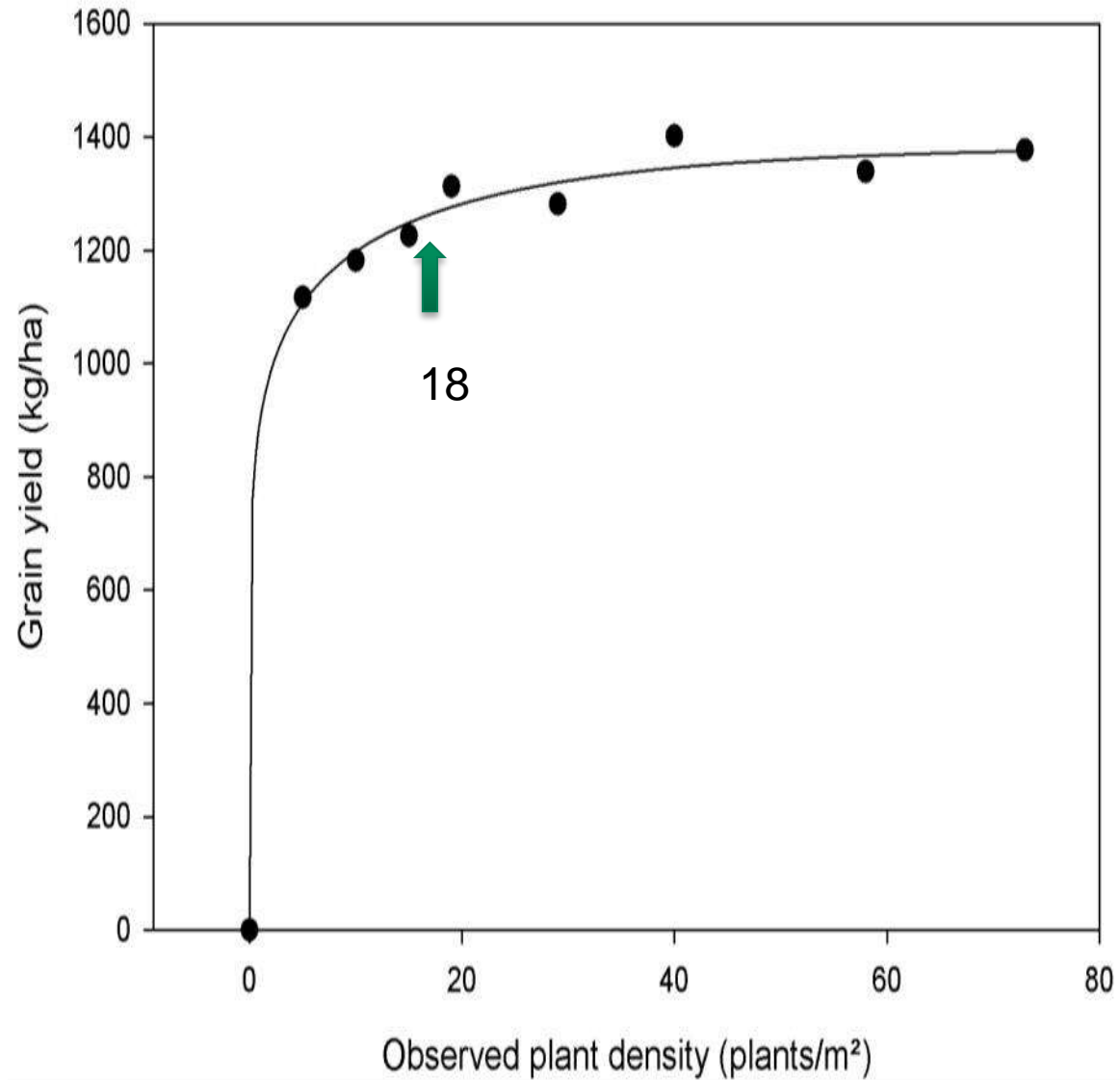
Costs \$1.5/ha to increase
plant density by 1





\$31/kg

Costs \$3/ha to increase
plant density by 1



0.4 0.8 1.2 1.6 2.4 3.2 4.8 6.5



Mullewa

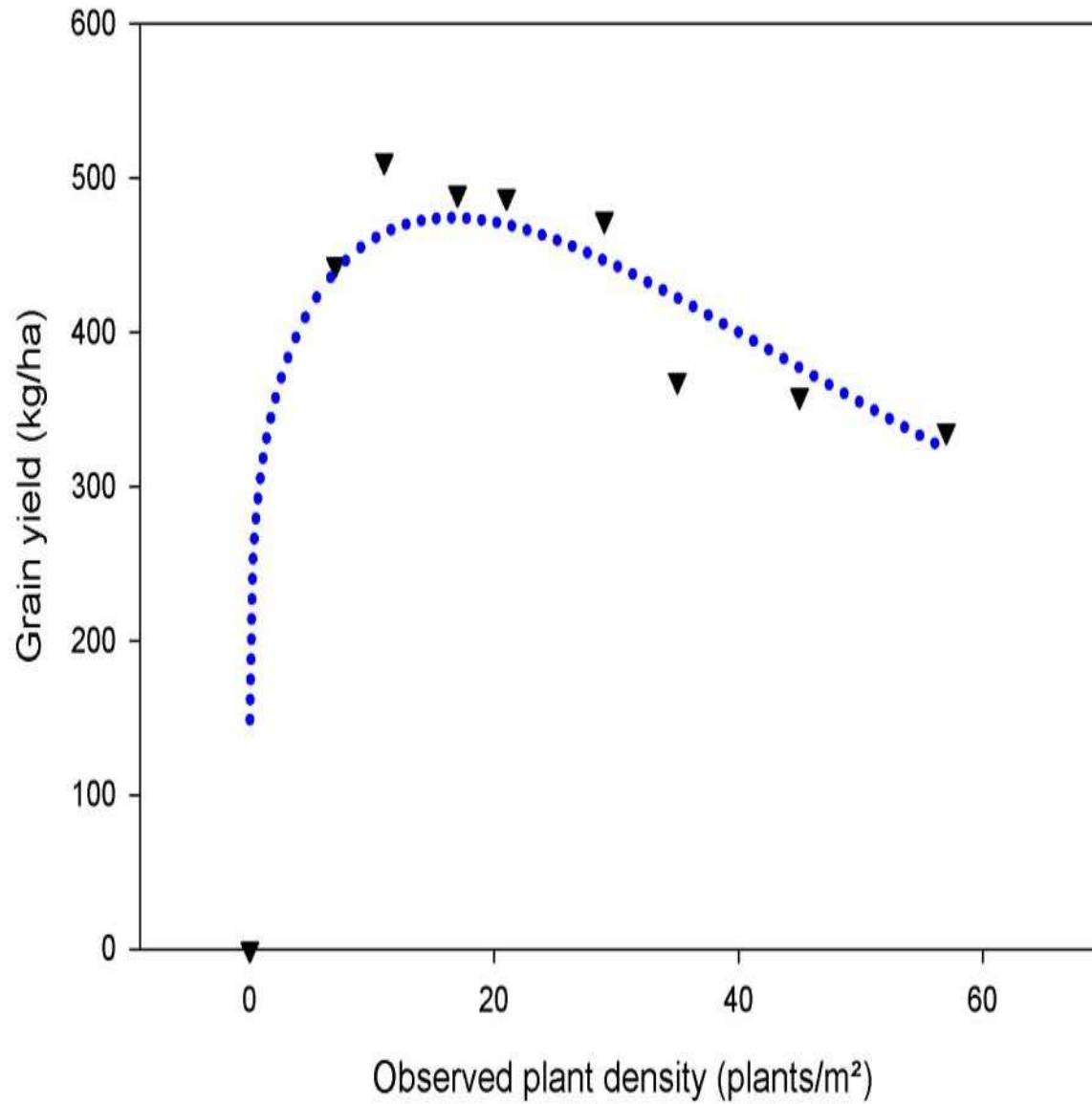


CB Telfer

30

CB Telfer

80



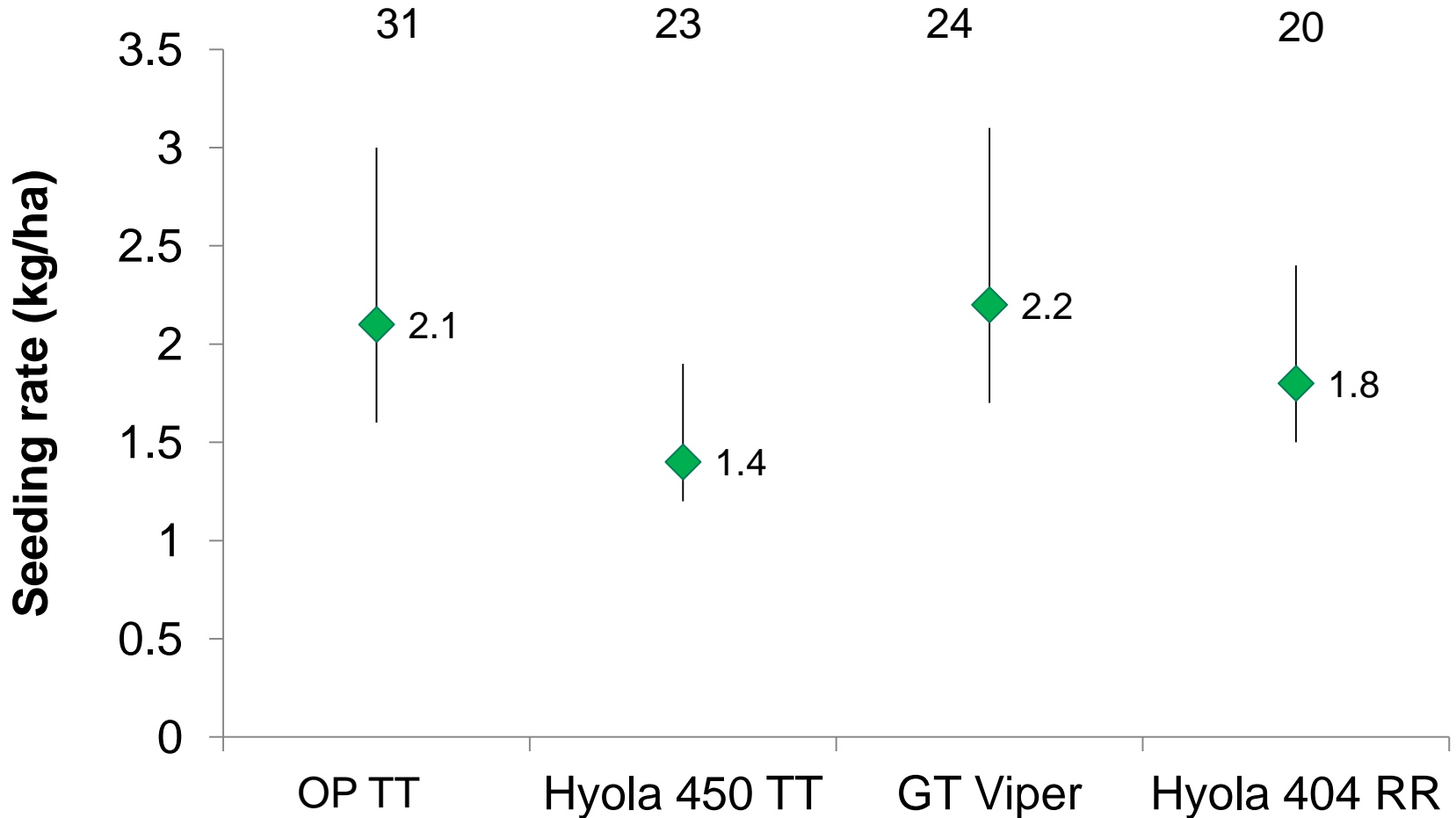


Establishment rates

Conditions	OP varieties	Hybrid varieties
Excellent	65	80
Normal	50	65
Dry sown, tough start	35	50
Dry sown but ok start	45	60



Suggested target densities and seed rate ranges





Timing of N

Most WA farmers apply some N at seeding and then top-up N at 6-8 weeks

Can you delay the decision to put on N until 12 weeks – when the crop is starting to flower

Sown April 16

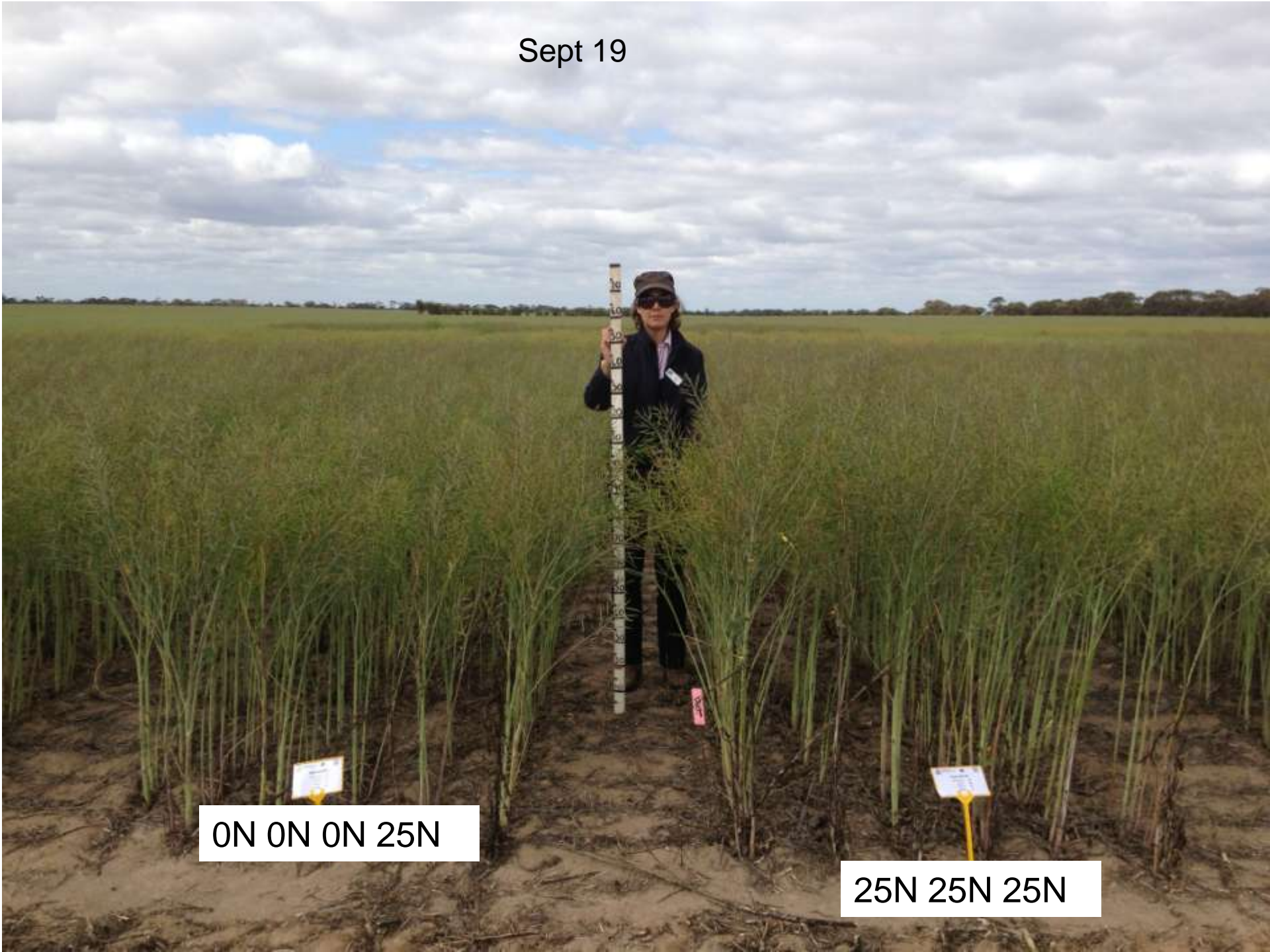
July 9

0N 0N 0N 25N

25N 25N 25N



Sept 19

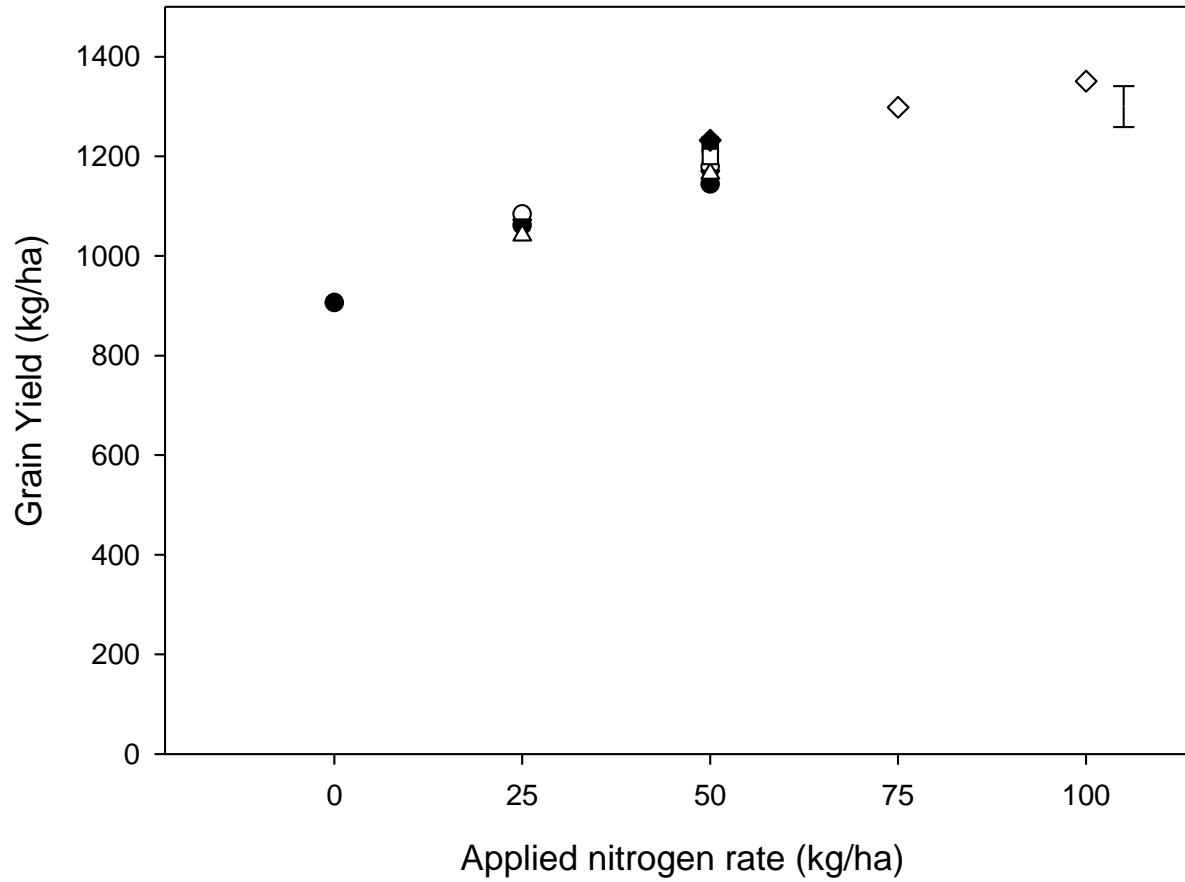


0N 0N 0N 25N

25N 25N 25N

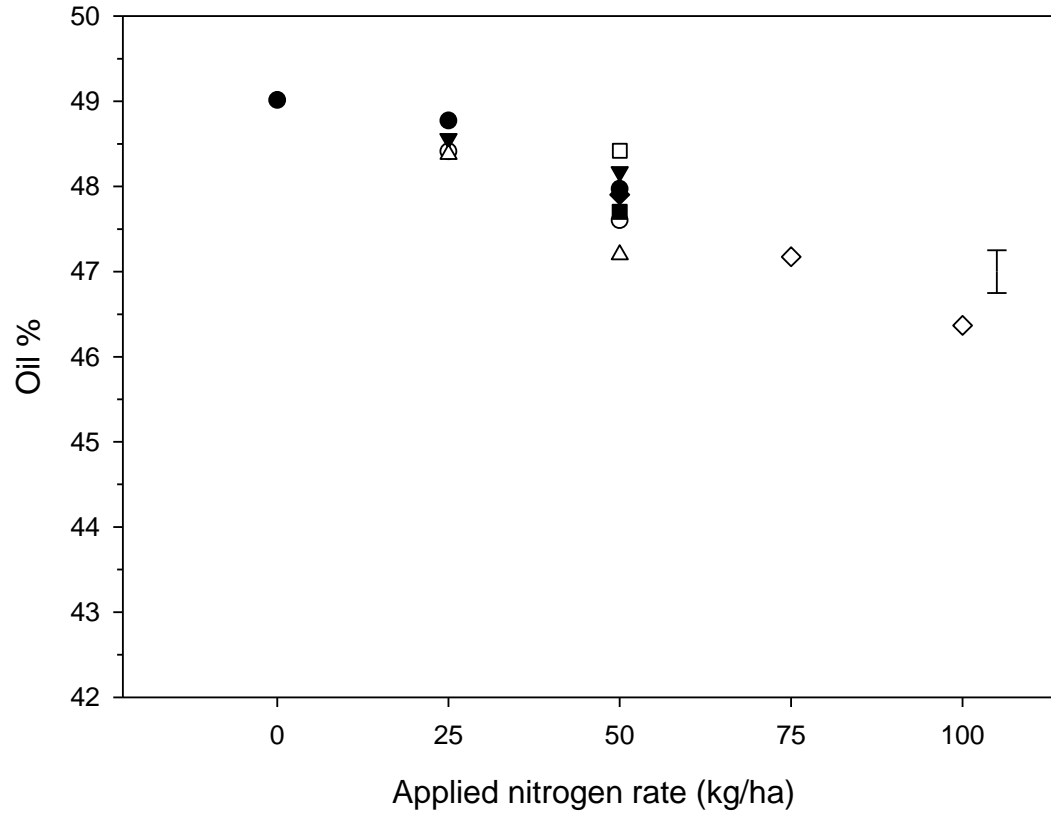


13ED12 Salmon Gums



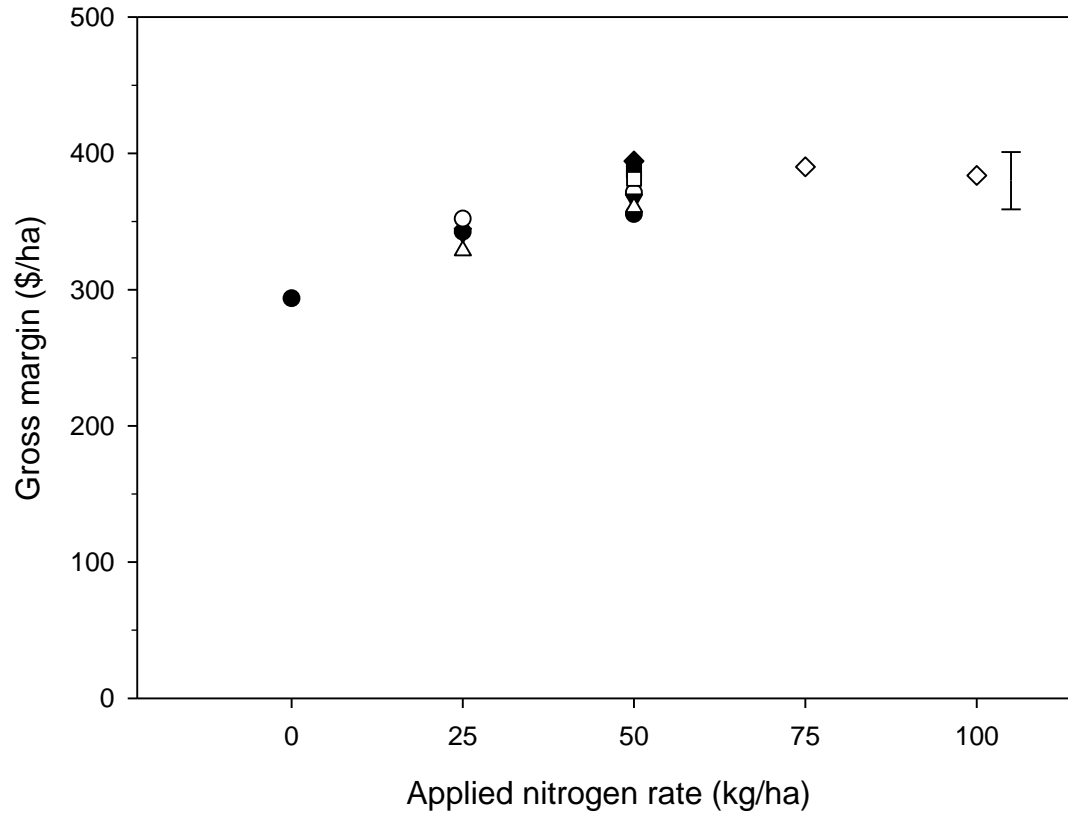


13ED12 Salmon Gums



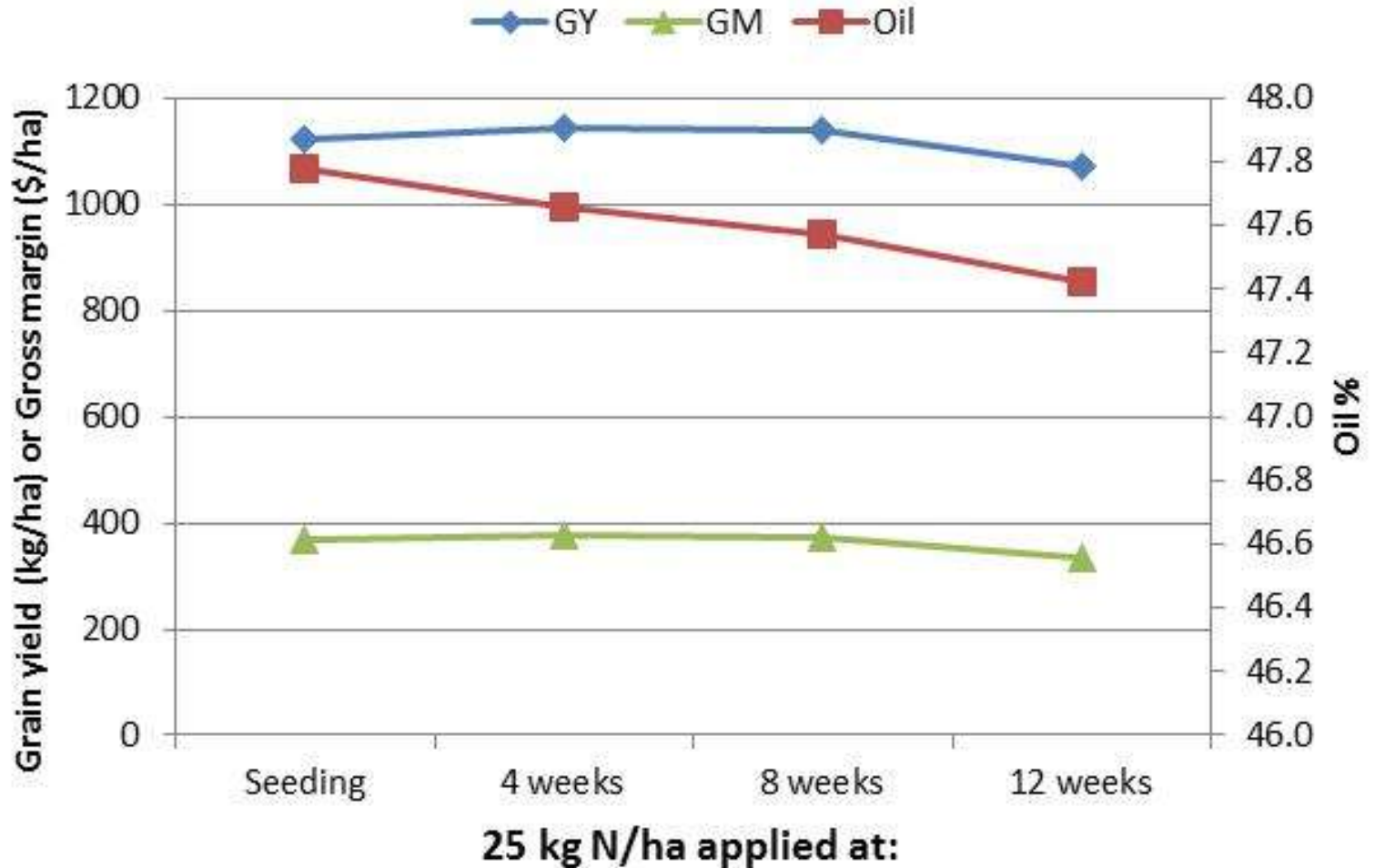


13ED12 Salmon Gums



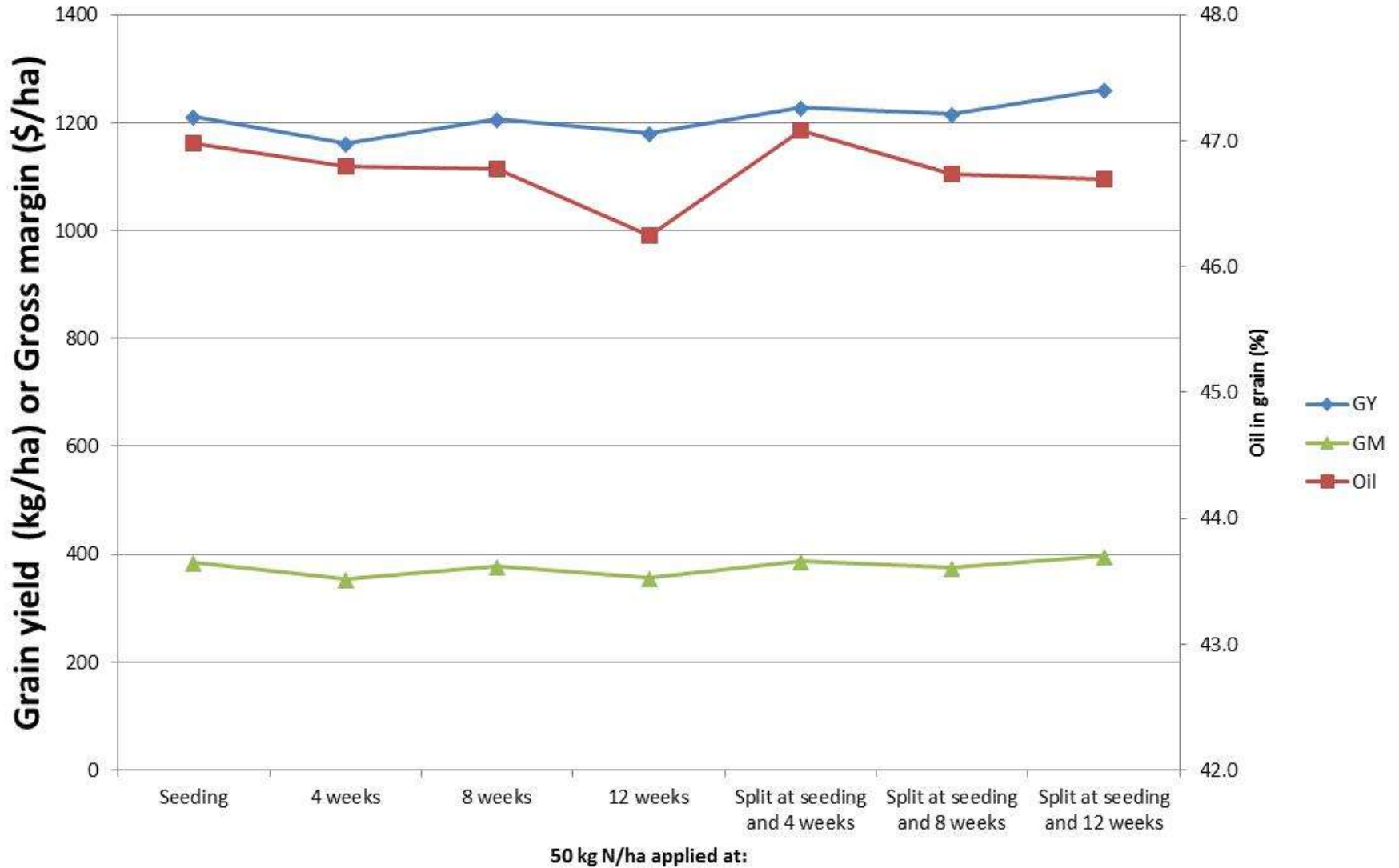


Four WA low rainfall sites, 2013





Four WA low rainfall sites, 2013





- **Density**

- growers of OP TT canola usually retain seed and have low seed costs and routinely sow their crops at 3 to 4 kg/ha.
- If they move into growing hybrid TT or RR varieties they may benefit by reducing target plant densities to less than 25 plants/m², which equates to seeding rates of less than 2.5 kg/ha.

-

- **Nitrogen**

- In low rainfall sites in WA in 2013 delaying application of 25 kg N/ha until 12 weeks after sowing reduced grain yields and led to reduced gross margins.
- However if rates of nitrogen were higher at 50 kg N/ha, and particularly if nitrogen was supplied at sowing and at later times, then delaying the second application until 12 weeks had less effect.
- This opens up the possibility of farmers delaying their second nitrogen application until they are more assured of producing an economic crop.



Thank you