



## OPTIMISING PLANT ESTABLISHMENT, DENSITY AND SPACING TO MAXIMISE CROP YIELD AND PROFIT IN THE SOUTHERN AND WESTERN REGION

**Year:** 2018 - 2021

**Funding Provider:**

Grains Research and Development Corporation (GRDC)

**Lead Organisation:**

University of Adelaide

**Collaborators**

WANTFA and Liebe Group

**Location:**

Kalannie, Watheroo and Buntine

**Aim:**

By June 2022, growers and advisers will have access to sound agronomic knowledge and supporting data allowing them to improve crop establishment and decrease seed costs with conventional air-seeders for canola, lentil and faba bean in the southern region, and canola, wheat and lupin in the western region, and consider the costs and benefits of precision planters.

**Project Information:**

This project was conducted through a range of activities including:

1. Paddock Survey: A survey of 100 paddocks in each of the southern and western regions was conducted in 2018 and 2019.
2. Grower Scale Demonstrations:
  - 2018: Located at McCreery's property in Kalannie.
  - 2019: Located at Keamy's property in Watheroo.
  - 2020: Located at McAlpine's property in Buntine.

The initial target of this project was a 30% improvement in establishment of relevant crops and a 5% yield increase over 200,000 ha across the southern and western regions. This outcome depended upon current crop establishment rates with commercial seeders, and the potential of seeder enhancements (e.g. precision planters) to improve establishment, reduce seed costs, and increase yield and profit. There could have been spillover benefits to other crops - chickpea, field pea and vetch, and barley.

### PROJECT FUNDERS



### REPORTS & LINKS

**Virtual Field Walk**

8th December 2020

<https://tinyurl.com/cropest20>