

ECO-breeds

Participation of the

Centre for Organics Research (COR)

as an Australian partner?

Carlo Leifert





- > Established in November 2017
- First organic farming focused R&D and training centre in Australia
- > Joint Research Centre of the
 - New South Wales Department of Primary Industries (NSW-DPI) and
 - Southern Cross University (SCU)
- > COR collaborates closely with the
 - Plant Science Department at SCU (Prof Graham King; Prof Bronwyn Barkla)
 - Cereal Breeding Group at NSW-DPI (Dr Livinus Emebiri)







COR contribution to ECO-breeds activities?

1. Farmer-participatory evaluation/benchmarking of new wheat varieties

- Years 1&2 Evaluation of varieties from Australian wheat breeding programmes on certified organic farms in the 2-4 major wheat growing regions/environments in Australia (WA, Riverina, NSW/QL borders, Central Queensland)
- Year 3 Transfer of 3-4 selected genotypes from EU-breeding breeding programmes through quarantine in Australia
- Years 4&5 Evaluation/benchmarking of promising wheat genotypes from Southern European and AU (years 1&2) variety trials on certified organic farms in the 2-4 major wheat growing regions/environments in Australia

2. Factorial field experiments at DPI Yanco

- Years 2&3 Effects of contrasting fertilisation and irrigation protocols on the performance of selected varieties from Australian wheat breeding programmes
- Years 4&5 Effect of contrasting fertilisation and irrigation protocols on the performance of selected varieties from EU and AU wheat breeding programmes

Assessments: Yield parameters, pest and disease severity, competitiveness against weeds, nutrient and water use efficiency, nutritional composition (phytochemicals, mineral)





