

Early and dry sowing practices for wheat in Australia

CSIRO's role in supporting the Australian wheat industry.

Australia's wheat yields have plateaued since 1990 due to reduced rainfall and increasing temperatures. The production forecast has been its lowest since 2007–08 with an increase in biosecurity concerns.

The challenge

There is a need for farmers to sow crops earlier than they have been due to erratic opening seasonal rains and larger farms, relative to sowing machinery capacity and labour availability.

The response

CSIRO's work has provided Australian wheat growers with the tools, awareness and implementation support needed to adapt to long-term, climate-related changes by contributing towards:

- increasing Australian wheat yields
- addressing the needs of consolidated farms.

The impact

The uptake and adoption of work has led to greater wheat yields and efficient management practices for wheat growers. With global climate change expected to exacerbate and accelerate the occurrence of drought, the scientific community foresees greater adoption of this work by wheat growers in the coming years.

The cost-benefit analysis (including dead weight loss) suggests a benefit-cost ratio of 9.2. The work has a prospective net present value of greater than \$36 million (assessed for financial years 2012–24).

Greater wheat yields and more efficient management practices for wheat growers.



Heads of wheat in a field.

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