

Winter cropping following drought

Extensive Industries Development (Broadacre Cropping)

Introduction

Winter cropping is a traditional investment following a drought, aimed to generate cash flow into the farm business.

The potential for a good season following drought is an opportunity for recovery which should be taken to best advantage. The following points will assist in making decisions on winter cropping.

Marketing

Markets for all grades and types of grains may not fall to traditional relationships, because specific market needs, such as local intensive livestock industries, need to replenish or increase grain reserves. Therefore it will be important to watch market trends.

Rotations

Follow planned rotations and get paddocks back into sound agronomic rotations as quickly as possible in line with your property management plan. Taking shortcuts by sowing successive winter cereal crops may well prove costly because of a build-up of diseases and weeds and an increased risk of erosion.

Yield maximisation

Give your crop the best chance, with careful attention to weed control (see Primefact 365 *Weeds – a threat to drought recovery*), phosphorus applications, timely sowing, and choice of variety.

Soil

See Primefact 367 *Soil management following drought*.

Soil phosphate

Soil phosphate levels usually increase only slightly during droughts, due to low utilisation and possibly unused phosphorus from previous failed crops. Soil phosphorus testing is useful.

Soil nitrogen

During droughts, soil nitrate nitrogen increases by mineralisation and may be quite high. In addition, most of the fertiliser nitrogen applied to the previous year's failed crops should be available in the current year. However, prolonged heavy rains will move this soil nitrogen down the soil profile where it may not be readily available to young winter crops.

If weeds are allowed to grow abundantly, they may well use the available soil nitrogen, leaving little for winter crops.

Consider deep (rooting depth) soil tests to assess the available nitrate.

Acid soils

Soil manganese is likely to increase following droughts, so avoid sowing susceptible crops like canola on problem acid soil paddocks.

Sowing time

Aim to optimise yield and capitalise on accumulated soil nitrogen by sowing as early as possible within the recommended sowing period for the particular variety. Of course, you must pay special attention to possible take-all infections in early-sown wheat by maintaining sound rotations.

Varieties

Ensure that the purchased seed is true to the variety claimed by the vendor, so that the variety can be sown within the sowing time available. Select only those varieties suited to your area.



Diseases

Select varieties with good disease resistance. Diseases, particularly leaf diseases like stripe rust in wheat, are usually more prevalent and may even be devastating in good seasons which commonly follow drought.

Seed quality

All grain legume seed and all cereal seed from previous harvests should be germination tested to ensure that it is satisfactory.

Crop establishment

There may be opportunities to establish crops with minimum tillage; however, to ensure successful crop establishment, plan to carry out weed control before sowing. (See Primefact 367 *Soil management following drought*.)

Further information

- Drought recovery
www.dpi.nsw.gov.au/reader/drought
- Cereals
www.dpi.nsw.gov.au/reader/cereals
- Oils
www.dpi.nsw.gov.au/reader/oils
- Seeds
www.dpi.nsw.gov.au/reader/seeds
- Pulses
www.dpi.nsw.gov.au/reader/pulses

Publications:

- Weed Control in Winter Crops 2007
- Winter Crop Variety Sowing Guide 2007

Further assistance

Contact your local NSW Department of Primary Industries District Agronomist for further assistance.

Acknowledgment

This Primefact is based on information contained in NSW Agriculture's (now NSW DPI) publication, the *Drought Recovery Guide*.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (January 2007). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.

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