

Recovery After the Drought - Reducing the Risks

GUIDELINES ON CROP-RELATED ISSUES

TECHNICAL INFORMATION PROVIDED BY
GRAINS INDUSTRY
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COORDINATED AND DISTRIBUTED BY GRDC

Contributing research organisations include:

NSW Agriculture

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SARDI

CRC Weed Management

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Birchip Cropping Group

with valuable assistance from industry consultants

NUTRITION

"The need for nutrient inputs will vary from paddock to paddock and the capacity to supply the required fertilisers will differ from farm to farm."

Some farms have bigger financial buffers following a good year in 2001. Others have had low returns for several years in a row.

The amount of late summer and autumn rainfall (or stored water) will also impact on input decisions.

The following are guidelines on likely nutrient dynamics following a drought. Wherever possible growers should seek independent advice.

Nitrogen

Paddock N status is commonly underestimated following a drought.

There is likely to be some carry-over of fertiliser N from 2002 crops into the 2003 growing season.

Expect increased mineralisation following break of the drought, but the impact of this on subsequent N supply will depend on when substantial rainfall occurs. Mineralisation will be greater with good autumn rains than after winter rainfall because of warmer soil temperatures in autumn.

N decisions for the 2003 crop should be based on deep soil N tests, particularly if aiming for malting barley.

Do an N budget as normal.

Growers should consider spreading risk by minimising N inputs at sowing and topdressing in response to how the 2003 growing season develops.

Phosphorus

There is likely to be some carry-over of fertiliser P from 2002 crops into the 2003 growing season.

Use some P at sowing, but consider reducing rates provided there is a reasonable history of applied P over the past five years and a Colwell soil test indicates more than 15ppm P.

Growers should seek specific advice but general rules-of-thumb suggest:

- apply half the normal P rate following failed crops (crops with little growth yielding less than 0.5 t/ha)
- use two thirds the normal rate following drought crops yielding more than 0.5 t/ha
- normal rate of P on fallow paddocks.

These reduced P rates apply to cereals, canola and most pulse crops except faba bean, which tends to be more sensitive to P supply than other species.

Zinc and Sulphur

On paddocks with good Zn and S history there may be no need to apply these nutrients in 2003.

Other nutrients

Apply as normal.