

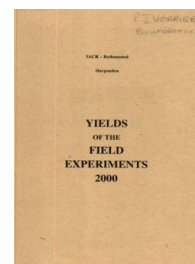
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 2000

[Full Table of Content](#)



00/R/CS/499 Panicum Virgatum and Nitrogen - Grass

Rothamsted Research

Rothamsted Research (2001) 00/R/CS/499 *Panicum Virgatum and Nitrogen - Grass* ; Yields Of The Field Experiments 2000, pp 96 - 97 - DOI: <https://doi.org/10.23637/ERADOC-1-55>

00/R/CS/499

PANICUM VIRGATUM AND NITROGEN

Object: To test cultivars of *Panicum* with and without nitrogen for biomass production - Road Piece West.

Sponsors: D.G. Christian.

The third year, grass.

Design: 3 randomised blocks of 5 x 2 + 3 + 1.

Whole plot dimensions: 5.0 x 8.0.

Treatments: All combinations of:-

1. **CULTIVAR**

| | |
|----|--------------|
| B | Blackwell |
| CT | Carthage |
| CR | Cave-in-Rock |
| P | Pangburn |
| S | Summer |

2. **NITROGEN** Kg N:

| | |
|----|------|
| N- | None |
| N3 | 75 |

EXTRA Cultivar Cave-in-Rock, nitrogen kg N:

| | |
|----|-----|
| N1 | 25 |
| N2 | 50 |
| N4 | 150 |

Plus an extra plot per block for destructive sampling, no yields

Experimental diary:

01-Apr-00 : T : : Alpha Glyphogan at 4.0 l in 220 l, spot sprayed canary grass.
: T : : Duplosan at 2.0 l in 220 l, spot sprayed nettles.
08-May-00 : T : : Spannit at 1.5 l in 200 l, spot sprayed phalaris volunteers.
12-May-00 : B : : tm)Gesaprim at 3.0 l in 200 l.
: B : : tm)Toil at 5.0 l in 200 l.
19-May-00 : B : : Muriate of potash at 262 kg.
25-May-00 : T : N1 : 34.5% N at 72.5 kg.
: T : N2 : 34.5% N at 144.9 kg.
: T : N3 : 34.5% N at 217 kg.
: T : N4 : 34.5% N at 434.8 kg.
23-Jun-00 : B : : Dow Shield at 1.0 l in 220 l, spot sprayed thistles.
13-Feb-01 : B : : Cut.

NOTE: Soil water was sampled during the winter for nitrate and ammonium content. Harvest samples were analysed for chemical content.

00/R/CS/499

TOTAL DRY WEIGHT TONNES/HECTARE

**** Tables of means ****

| NITROGEN CULTIVAR | N- | N3 | Mean |
|------------------------------|-------|-------|-------|
| B | 16.35 | 10.79 | 13.57 |
| CT | 17.20 | 12.03 | 14.61 |
| CR | 14.94 | 12.79 | 13.86 |
| P | 11.39 | 11.15 | 11.27 |
| S | 12.64 | 13.39 | 13.02 |
| Mean | 14.50 | 12.03 | 13.27 |

| EXTRA | N1 | N2 | N4 | Mean |
|--------------|-------|-------|------|-------|
| | 12.10 | 11.06 | 9.80 | 10.99 |

Grand mean 12.74

*** Standard errors of differences of means ***

| CULTIVAR | NITROGEN | CULTIVAR NITROGEN & EXTRA |
|-----------------|-----------------|--|
| 1.824 | 1.154 | 2.580 |

***** Stratum standard errors and coefficients of variation *****

| Stratum | d.f. | s.e. | cv% |
|---------------------|---------|-------|------|
| BLOCK.WP | 24 | 3.160 | 24.8 |
| GRAIN MEAN DM% | 74.3 | | |
| PLOT AREA HARVESTED | 0.00108 | | |