

Perennial ryegrass yields - NZ

Summary

- The combination of multiple trials provides more reliable information on variety performance. This data combines the nine perennial ryegrass AYT's to date throughout NZ.
- In the diploids, *Alto* and *Arrow* show excellent overall performance, with consistent yield through all seasons.
- The tetraploids are presented separately as their higher palatability may mean they were harder grazed in trials, and disadvantaged in yield. *Bealey* performs well year round, with higher summer, autumn and total yield.

Yield diploids over all trials

2003-09 AYT diploid ryegrass yields, with trial mean = 100%*

| Entry | Winter | Early spring | Late spring | Summer | Autumn | Total |
|---------------------|---------|--------------|-------------|---------|---------|--------|
| | Jun-Jul | Aug-Sept | Oct-Nov | Dec-Feb | Mar-May | |
| <i>Alto AR1</i> | 106 a | 102 a | 105 a | 103 a | 100 a | 104 a |
| <i>Extreme AR6</i> | 101 ab | 102 a | 99 a | 103 a | 106 a | 103 ab |
| <i>Arrow SE</i> | 105 a | 101 a | 100 a | 103 a | 102 a | 102 ab |
| <i>Matrix SE</i> | 106 a | 97 a | 99 a | 101 a | 105 a | 101 ab |
| <i>Bronsyn AR1</i> | 95 ab | 100 a | 98 a | 98 a | 100 a | 99 ab |
| <i>Commando AR1</i> | 87 b | 97 a | 99 a | 92 a | 86 b | 93 b |
| 100 = kg DM/ha | 1175 | 2171 | 3825 | 4803 | 2888 | 14,859 |

Yield tetraploids over all trials

2003-09 AYT tetraploid ryegrass yields, with trial mean = 100%*

| Entry | Winter | Early spring | Late spring | Summer | Autumn | Total |
|--------------------|---------|--------------|-------------|---------|---------|--------|
| | Jun-Jul | Aug-Sept | Oct-Nov | Dec-Feb | Mar-May | |
| <i>Bealey NEA2</i> | 107 a | 106 a | 105 a | 114 a | 110 a | 109 a |
| <i>Banquet SE</i> | 110 a | 105 a | 102 a | 104 a | 104 a | 104 a |
| <i>Quartet SE</i> | 83 b | 89 b | 93 a | 82 b | 87 b | 87 b |
| 100 = kg DM/ha | 1164 | 1902 | 3398 | 4172 | 2669 | 13,215 |

* Both tables combined data from the nine AYT trials: 2003-06 Cambridge Waikato; 2003-06 Massey University Manawatu; 2003-06 Kirwee Canterbury; 2003-06 Courtenay Canterbury; 2004-07 Whareroa Taranaki; 2005-08 Newstead Waikato; 2005-08 Massey University Manawatu 2005-08 Burnham Canterbury; 2006-09 Whareroa Taranaki. Varieties must be in at least three of the trials to be included. Significance lettering is given at the LSD 5% level, varieties with the same letter are not statistically different.