Grain legume species evaluation.

M. Seymour

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TITLE: Grain Legume Species Evaluation
PERSONNEL: Seymour, M. (RO) and Burgess, P. (TO)
DATE: 1990
EX FILE: 6355
TRIAL NUMBER: 90ES19, 90ES22
DOS FILENAME: SEYM90g.xls
Trial No. 90ES19

Title. Grain legume species evaluation

Aim. To evaluate the response of 6 grain legume species over a range of environments and soil types.

Treatments.

6 species. L. angustifolius (Gungurru) L. albus (Kiev Mutant), chickpeas (Amethyst), lentils (ILL57288), peas (alma), faba beans (Hb-24)

Site Details

Location: David and Val Hoskings, Mt Ridley

Soil type: Shallow duplex. 5-10cm of grey sand over alkaline clay

Paddock history: 1988 = lupins, 1989 = cereal

Site preparation:

20/4/90 Roundup @ 350 ml/ha + Simazine @ 1.51/ha by farmer
8/4/90 S/seed @ 2.01/ha + Bladex 31/ha

Sowing details:

24/5/90 sown as per schedule
@ 195 kg/ha of super-Mn, placed with seed

Post sowing treatments:

9/7/90 Fusilade @ 500ml/ha + wetter @ 2% vol.
9/8/90 300 g/ha Pirimor.
12/10/90 150 ml/ha Karate

Harvest date: 2/11/90 peas, 9/11//90 rest

Comments:

Lentils hand harvested. Lupins were affected by bladex, neighbouring trials where simazine was used were much better (see 90ES4). Plots were uneven, but grew well where density was high. Peas outperformed others easily.
Trial No. 90ES22

Title. Grain legume species evaluation

Aim. To evaluate the response of 6 grain legume species over a range of environments and soil types.

Treatments.

6 species. L. angustifolius (Gungurru) L. albus (Kiev Mutant), chickpeas (Amethyst), lentils (ILL57288), peas (alma), faba beans (Hb-24)

Site Details

Location: Alan and Lorraine Jones, Mt Ridley

Soil type: Shallow duplex. 15cm of grey sand over alkaline clay

Paddock history: 1988 = lupins, 1989 = cereals

Site preparation:

28/4/90 S/seed @ 2.01/ha + Bladex 31/ha

Sowing details:

23/5/90 sown as per schedule
@ 195 kg/ha of super-Mn, placed with seed

Post sowing treatments:

9/7/90 Fusilade @ 500ml/ha + wetter @ 2% vol.
9/7/90 Brodal 150ml/ha
9/8/90 300 g/ha Pirimor.
12/10/90 150 ml/ha Karate

Harvest date: 2/11/90 peas, 9/11/90 rest

Comments:

Lentils hand harvested. Chickpeas affected by brodal. Lupins were affected by bladex, neighbouring trials where simazine was used were better (see 90ES3). Plots were uneven, but grew well where density was high. Peas outperformed others easily.
### 90ES19 Machine harvest yields, D. Hoskins Species trial

<table>
<thead>
<tr>
<th>Species</th>
<th>Seed yield kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUNGURRU</td>
<td>485</td>
</tr>
<tr>
<td>FABA BEAN (HB-24)</td>
<td>705</td>
</tr>
<tr>
<td>CHICKPEA (AMETHYST)</td>
<td>531</td>
</tr>
<tr>
<td>PEA (ALMA)</td>
<td>1213</td>
</tr>
<tr>
<td>LENTIL (1LL57288) *</td>
<td>1028</td>
</tr>
</tbody>
</table>

P < (Species) 0.002
LSD 95% = 328.1

### 90ES22 Machine harvest yields, A. Jones Species trial

<table>
<thead>
<tr>
<th>Species</th>
<th>Plant counts pl/sqm</th>
<th>Seed yield kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUNGURRU</td>
<td>27.9</td>
<td>524</td>
</tr>
<tr>
<td>KIEV MUTANT</td>
<td>16.2</td>
<td>438</td>
</tr>
<tr>
<td>FABA BEAN (HB-24)</td>
<td>38.0</td>
<td>730</td>
</tr>
<tr>
<td>CHICKPEA (AMETHYST)</td>
<td>21.9</td>
<td>228</td>
</tr>
<tr>
<td>PEA (ALMA)</td>
<td>27.7</td>
<td>1103</td>
</tr>
<tr>
<td>LENTIL (1LL57288) *</td>
<td>47.4</td>
<td>895</td>
</tr>
</tbody>
</table>

P < (Species) 0.001 0.001
LSD 95% = 10.8 293

* hand harvest