Storage Cabbage Variety Evaluation 2009-2010

HIGHLIGHTS

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Evaluation Key

**YR:** Yellows resistant

**Plant size**
- **S** – small
- **M** – medium
- **L** – large
- **VL** – very large

**Uniformity**
- **G** – good
- **VG** – very good
- **E** – excellent
- **Var:** trait is variable across replicates

**Plant Growth**
- **U** – upright
- **ST** – slightly tipped
- **T** – tipped

**Letter combinations**
- For letter combinations, describing plant characteristics, the first trait listed is the strongest.
- **Examples:** *SM* = more small than medium, *ML* is smaller than *LM*
Evaluation Key

Onion Thrips Damage

- **Depth**: number of leaves deep that have thrips damage.
- **Severity**
  - 0 = no damage
  - 3 = maximum commercial acceptability
  - 5 = severe.

( ): trial average or rank score

5-Point Rating Scale

- **Perfect**: ★★★★★
- **Very Good**: ★★★★
- **Average**: ★★★
- **Below Average**: ★★
- **Unacceptable**: ★

Underlined values indicate best result per variable.
Trial Average

For each variable (i.e. % total loss, marketable yield, etc.), all heads in the entire trial are averaged to give a “trial average”. Individual varieties are compared to the trial average to see if they perform at, below or above average.

This diagram illustrates the “trial average” for head size prior to storage and after common and cold storage.

<table>
<thead>
<tr>
<th>Wt in: 5.7 lb</th>
<th>% shrink</th>
<th>% trim</th>
<th>% total loss</th>
<th>Final head wt (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common</td>
<td>15.5</td>
<td>9.5</td>
<td>25.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Cold</td>
<td>8.3</td>
<td>15.9</td>
<td>24.2</td>
<td>4.5</td>
</tr>
</tbody>
</table>

diagram drawn to scale
Rank Score

• For each trait/variable (e.g. head size, % shrink, yield, etc.), except plant size and split cores, the entries were ranked from best (=1) to worst (=17) (data not shown).
• Total rank score = rank score (field) + rank score (common storage) + rank score (cold storage)
• Low rank scores indicate that a variety is performing very well across several traits/variables.

Trial Average Rank Score

(field + common + cold): 51 + 40 + 40 = 131.

Note: rank score does not exclusively determine rating scale
B2792 [Bejo 107 YR]

Field Info:
Plant size: **L (1st)** Uniformity: **VG (6th)**
Growth Habit: **U-ST (3rd)**
Off-types: Small: **2.6%** Unmarketable: **0.0%**
Head size: **8.3 lbs (largest!)**
Marketable yield: **925 cwt/A (largest!)**
Thrips (depth/severity): **1.7/0.2**
**B2792: Cold Storage**

<table>
<thead>
<tr>
<th>Wt in:</th>
<th>% Shrink Loss</th>
<th>% Trim Loss</th>
<th>% Total Loss</th>
<th>Final Average Head Wt (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3 lb</td>
<td>16.7 (15.5)</td>
<td>8.7 (9.5)</td>
<td>25.4 (25.0)</td>
<td>6.0 (4.4)</td>
</tr>
<tr>
<td></td>
<td><strong>Cold</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.6 (8.3)</td>
<td>12.9 (15.9)</td>
<td>19.5 (24.2)</td>
<td>7.1 (4.5)</td>
</tr>
</tbody>
</table>

- At harvest, 32.5% of heads had split cores, but did not look over mature.
- This variety does well in long term storage!
B2792: Common Storage

**Head size:** *Common* - 2\(^{nd}\) largest in trial; *Cold* - largest in trial!

**Heads:** nice round heads, looks good!

**Shrink loss:** *Common* - above average; *Cold* - lowest/best in trial

**Trim loss:** *Common* - below average; *Cold* - 4\(^{th}\) best

**Total loss:** *Common* - average; *Cold* - lowest, best in trial

**Green color:** *Common* - below average; *Cold* - best green color in trial

**Rank Score:** 2\(^{nd}\) overall
Huron [Seminis 115 YR Standard]

Field Info:
Plant size: L (4th) Uniformity: VG-G (9th)
Growth Habit: ST (10th worst in trial)
Off-types: Small: 6.4% Unmarketable: 2.4%
Head size: 6.4 lbs (5th best in trial)
 Marketable yield: 692 cwt/A (5th best in trial)
Thrips (depth/severity): 0.2/0.01 (best tolerance)
### Huron: Cold Storage

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<tr>
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<th>% Trim Loss</th>
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<th>Final Average Head Wt (lb)</th>
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</thead>
<tbody>
<tr>
<td>Common</td>
<td>13.3 (15.5)</td>
<td>12.4 (9.5)</td>
<td>25.7 (25.0)</td>
<td>4.5 (4.4)</td>
<td></td>
</tr>
<tr>
<td>Cold</td>
<td>7.6 (8.3)</td>
<td>15.2 (15.9)</td>
<td>22.8 (24.2)</td>
<td>5.3 (4.5)</td>
<td></td>
</tr>
</tbody>
</table>

At harvest, 10% of heads had split cores.
Huron: Common Storage

Head size: Common- average; Cold- 5th best
Heads: Some odd shaped heads
Shrink loss: Common- 2nd best; Cold- 5th best
Trim loss: Common- above average; Cold- avg
Total loss: Common- average, 5% rot; Cold- below average
Green color: Common- 3rd best; Cold- below average
Rank Score: 8th overall
Amtrak [Bejo 115 YR Standard]

Field Info:
- Plant size: **L (1st)**
- Uniformity: VG (9th)
- Growth Habit: ST (10th)
- Off-types: Small: 2.6%
- Unmarketable: 1.4%
- Head size: 7.4 lbs (4th best in trial)
- Marketable yield: 808 cwt/A (4th best in trial)
- Thrips (depth/severity): 1.0/0.4
Amtrak: Cold Storage

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<tr>
<td><strong>Common</strong></td>
<td>15.6</td>
<td>9.9</td>
<td>25.5</td>
<td>5.4</td>
<td>(15.5) (9.5) (25.0) (4.4)</td>
</tr>
<tr>
<td><strong>Cold</strong></td>
<td>7.9</td>
<td>14.0</td>
<td>21.9</td>
<td>6.0</td>
<td>(8.3) (15.9) (24.2) (4.5)</td>
</tr>
</tbody>
</table>

At harvest, 7.5% of heads had split cores.
Amtrak: Common Storage

Head size: Common & Cold - 4th best in trial
Heads: solid heads, some long cores
Shrink loss: Common - average; Cold - below avg
Trim loss: Common - average; Cold - below avg
Total loss: Common - average; Cold - below avg
Green color: Common - 5th best; Cold - 4th best
Rank Score: 5th overall
**Rona** [Seminis 115 Standard]

**Field Info:**
- Plant size: L (2nd) Uniformity: VG (11th)
- Growth Habit: ST-U (8th)
- Off-types: Small: 3.7% Unmarketable: 2.9%
- Head size: 4.2 lbs (2nd lowest)
- Marketable yield: 457 cwt/A (2nd lowest)
- Thrips (depth/severity): 0.7/0.04 (3rd best)
**Rona: Cold Storage**

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<tr>
<td><strong>Common</strong></td>
<td>14.6</td>
<td>6.3</td>
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<td>3.7</td>
</tr>
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<td></td>
<td>(15.5)</td>
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<td><strong>Cold</strong></td>
<td>9.5</td>
<td>10.7</td>
<td>20.2</td>
<td>3.1</td>
</tr>
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<td></td>
<td>(8.3)</td>
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</table>
Rona: Common Storage

Head size: *Common & Cold*- Below average
 Heads: Generally nice, round
 Shrink loss: *Common & Cold*- Best of reds
 Trim loss: *Common & Cold*- Best in trial
 Total loss: *Common*- Best in trial; *Cold*- 2nd best in trial
 Rank Score: 7th overall