Does Planting Date Affect Pumpkin Yield?

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• Minimum for germination: 60°F

• Minimum for growth: 50°F

• Cool temperatures promote female flowers
• High temperatures lead to abortion of female flower buds

Maynard, Purdue University, 2003
• Later planting may escape overwintering cucumber beetles
• Early planting may escape yield loss due to virus

What is the Best Planting Date?

May 25?
May 30?
June 5?
June 10?
June 15?
June 20?

Assumptions:
First fruit set: 35 days after seeding.
Most set: 2 week period after first set.
Fruit set to fruit maturity: 60 days.
Field Trials

- Yield
- Post-harvest shelf life
- Flowering, Fruit Set, Temperature

2002 Trials at Pinney-Purdue

- Cultivars
  - Gold Medal
  - Magic Lantern
- Planting Dates
  - May 31
  - June 10
  - June 20

Maximum and Minimum Temperatures at Wanatah, Indiana in 2002, and 30-year Normals
Gold Medal, PD 3, 10 WAP
Maynard, Purdue University, 2003

Magic Lantern, PD 1, 13 WAP
Maynard, Purdue University, 2003

Magic Lantern, PD 2, 11.5 WAP
Maynard, Purdue University, 2003
Magic Lantern, PD 3, 10 WAP

Gold Medal, PD 1

PD 2

PD 3

Pumpkin Yield by Planting Date, 2002, Wanatah, Indiana

- Cull
- Turning
- Orange

Yield (lbs per plant)
- May 31
- June 10
- June 20
- Planting Date
Number of Pumpkins by Planting Date, 2002, Wanatah, Indiana

<table>
<thead>
<tr>
<th>Planting Date</th>
<th>Cull</th>
<th>Turning</th>
<th>Orange</th>
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</thead>
<tbody>
<tr>
<td>May 31</td>
<td>3</td>
<td>2.5</td>
<td>3.5</td>
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<tr>
<td>June 10</td>
<td>2.5</td>
<td>2.5</td>
<td>3.5</td>
</tr>
<tr>
<td>June 20</td>
<td>2.5</td>
<td>2.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Average Pumpkin Weight by Planting Date, 2002, Wanatah

<table>
<thead>
<tr>
<th>Planting Date</th>
<th>Average Pumpkin Wt. (lb.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 31</td>
<td>16</td>
</tr>
<tr>
<td>June 10</td>
<td>18</td>
</tr>
<tr>
<td>June 20</td>
<td>20</td>
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</tbody>
</table>

Maximum and Minimum Temperatures at Wanatah, Indiana in 2002, and 30-year Normals

For example: For pumpkins planted on day 151 of the year, 12% of orange pumpkin yield was set by day 191 (40 dap) and 65% by day 201 (50 dap).
Orange Pumpkin Yield by Bloom Date for Gold Medal and Magic Lantern Pumpkins Planted on 3 Dates, 2002, Wanatah, Indiana

For example: For Magic Lantern pumpkins planted on June 10, ~5 lb. per plant of the total orange yield was set by 40 dap and another ~14 lb. per plant was set by 50 dap.

Does Planting Date Affect Pumpkin Yield?

- Yes
- In 2002:
  - Second week of June was the best
  - Earliest date had smallest pumpkins
  - Earliest date had highest % culls
- What will happen next year?