‘Paulk’ Muscadine

Dr. Patrick Conner
UGA-Tifton
‘Paulk’ Muscadine

- Tested as Ga. 6-2-26.
- ‘Supreme’ x ‘Tara’ progeny.
- Named for Mr. Jacob Paulk, founder of Paulk Vineyards.
### Berry quality of ‘Paulk’ muscadine at Tifton Ga., (2012-2016)

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Flower type</th>
<th>Berry color</th>
<th>Berry weight (g)</th>
<th>Berry diameter (mm)</th>
<th>Percent soluble solids of all harvests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paulk</td>
<td>SF</td>
<td>Black</td>
<td>15.5 a</td>
<td>30.2 a</td>
<td>14.2</td>
</tr>
<tr>
<td>Supreme</td>
<td>F</td>
<td>Black</td>
<td>15.1 a</td>
<td>29.9 a</td>
<td>14.3</td>
</tr>
<tr>
<td>Fry</td>
<td>F</td>
<td>Bronze</td>
<td>11.7 b</td>
<td>27.4 b</td>
<td>14.0</td>
</tr>
<tr>
<td>Hall</td>
<td>SF</td>
<td>Bronze</td>
<td>10.2 cd</td>
<td>26.0 cd</td>
<td>14.5</td>
</tr>
<tr>
<td>Lane</td>
<td>SF</td>
<td>Black</td>
<td>9.6 d</td>
<td>25.6 d</td>
<td>15.3</td>
</tr>
<tr>
<td>Tara</td>
<td>SF</td>
<td>Bronze</td>
<td>10.8 bc</td>
<td>26.4 c</td>
<td>13.9</td>
</tr>
</tbody>
</table>

**Sig.**  <0.001  <0.001  NS
• Similar appearance to Supreme.
• More prominent lenticels.
• Slightly redder color.
• More consistent berry size, few small berries, few giants.
## Harvest date of ‘Paulk’ Muscadine

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Avg. day of first harvest</th>
<th>Percent of total yield of first harvest</th>
<th>Percent soluble solids (Brix) of first harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paulk</td>
<td>Aug. 20</td>
<td>65</td>
<td>14.3</td>
</tr>
<tr>
<td>Supreme</td>
<td>Aug. 16</td>
<td>60</td>
<td>14.8</td>
</tr>
<tr>
<td>Fry</td>
<td>Aug. 15</td>
<td>64</td>
<td>14.3</td>
</tr>
<tr>
<td>Hall</td>
<td>July 31</td>
<td>47</td>
<td>14.9</td>
</tr>
<tr>
<td>Lane</td>
<td>Aug. 1</td>
<td>56</td>
<td>14.6</td>
</tr>
<tr>
<td>Tara</td>
<td>Aug. 2</td>
<td>61</td>
<td>14.2</td>
</tr>
</tbody>
</table>

* Early berries of ‘Supreme’ could have been picked, ‘Paulk’ does not have early ripening berries.
Yield (pounds per 10 foot vine) in Tifton 2010-2016

- Paulk
- Fry
- Hall
- Lane
- Supreme
- Tara

Dr. Patrick Conner
Notes on Yield of ‘Paulk’ Muscadine

• Good yields in tests.
• Can overproduce with lower quality and delayed harvest.
• Too heavy yield in Wray test in 2015, ‘Supreme’ had a lot of vine death, no death in ‘Paulk’.

Need to thin crop to keep quality and flavor up in some years.
### ‘Paulk’ Muscadine Berry Quality Tifton, Ga.

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>% Rot</th>
<th>% Split</th>
<th>% Tear</th>
<th>% Dry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paulk</td>
<td>8 b</td>
<td>4 c</td>
<td>11 d</td>
<td>85 ab</td>
</tr>
<tr>
<td>Supreme</td>
<td>4 c</td>
<td>13 b</td>
<td>29 b</td>
<td>59 c</td>
</tr>
<tr>
<td>Fry</td>
<td>16 a</td>
<td>18 a</td>
<td>34 a</td>
<td>48 d</td>
</tr>
<tr>
<td>Hall</td>
<td>17 a</td>
<td>3 c</td>
<td>8 d</td>
<td>90 a</td>
</tr>
<tr>
<td>Lane</td>
<td>4 c</td>
<td>22 a</td>
<td>23 c</td>
<td>55 c</td>
</tr>
<tr>
<td>Tara</td>
<td>10 b</td>
<td>5 c</td>
<td>12 d</td>
<td>83 b</td>
</tr>
</tbody>
</table>

* Sig. <0.001 <0.001 <0.001 <0.001

* More rot in ‘Paulk’ than most black muscadines, fungicides may be needed.
‘Paulk’ has long stems, helping to pick clean berries.

‘Supreme’

Ga. 6-2-26

Short pedicel

Long pedicel

7.1 mm

11.5 mm
## ‘Paul’ Berry Firmness

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Firmness (g•mm⁻¹) Day 0</th>
<th>Firmness (g•mm⁻¹) Day 10+1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paulk</td>
<td>240 a</td>
<td>203 b</td>
</tr>
<tr>
<td>Supreme</td>
<td>248 a</td>
<td>228 a</td>
</tr>
<tr>
<td>Fry</td>
<td>199 b</td>
<td>178 c</td>
</tr>
<tr>
<td>Sig.</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Larger numbers = More firm.
Prominent features of ‘Paulk’ muscadine.

• First self-fertile cultivar where berry size has continued to be large over time.
• Excellent yield potential.
• Good vigor, much better than ‘Lane’, but still can be overcropped.
• Overcropped berries will lack flavor and be later.
Prominent features of ‘Paulk’ muscadine.

- Skin and flesh texture similar to traditional muscadines.
- No early berries, you need to have an early black cultivar. ‘Lane’ or ‘Supreme’
- Much less berry split and tearing than ‘Supreme’.
- More disease susceptibility than most blacks, still much better than bronze cultivars.
- Unknown cold-hardiness.
‘Paulk’ recommendation

‘Paulk’ is a potential self-fertile replacement for ‘Supreme’ for mid to late season. I would plant and prune or thin crops as needed to maintain ideal fruit set. Keep enough ‘Supreme’ to pick over for early sales and perhaps to keep for longer term storage.
Availability

‘Paulk’ is patented and available from the following nurseries:

Bottoms Nursery
Ison’s Nursery
Agri-Starts
Lakeview Daylily, Koi& Plant Farm