

2003 Quicksand Pumpkin Cultivar Trial
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Introduction

As a fall crop, pumpkins allow Kentucky growers to extend their marketing season and take advantage of labor used to cut and house tobacco. Both wholesale and direct market pumpkin acreage has increased dramatically during the past five years. Howden has been the predominate cultivar grown for Jack O'Lantern sale. However, problems with fruit set during high temperatures and Fusarium fruit rot have created a need for better cultivars.

A pumpkin cultivar trial was conducted at the University of Kentucky Robinson Substation, Quicksand, Kentucky. Ten cultivars, two of which were small or miniature pumpkins, were evaluated in replicated plots. Thirteen other cultivars were planted as observational plots.

Materials and Methods

The soil was tested before planting; results are shown in Table 1. Seeds were planted directly in the field on June 6. Each cultivar was replicated four times in a randomized complete block design. Each replication was a single row 16 feet long containing eight plants (2/hill). Each plot was separated by 4 feet. Four seeds/hill were planted and thinned after emergence to two plants/hill. Seeds were hand-sown 4 feet apart in the row with 14 feet between rows. The seed was planted about 1 in. deep. The total plot area was 0.37 acres (185 x 80 ft.).

Soil was amended with two tons of lime, 50 lb N, 120 lb P₂O₅ and 200 K₂O (all per-acre rates). One hundred lbs/acre of N as (ammonium nitrate) was applied as two side dressings - three weeks after planting, and when the vines began to run. Command 4EC (1 pt/A) was applied pre-plant and incorporated. Curbit 3EC at 2 pt./A was applied on June 9. Disease and insect control sprays were applied during the growing season as conditions warranted. Trickle irrigation was used as needed. Growing conditions during the season were cooler than normal with early periods of excess rain.

Discussion

Despite a very wet summer pumpkin yield and quality were good. Results of the replicated and observation trials are shown in Tables 2 and 3. In the replicated trial only the small fruited cultivar (RPX 03103) produced significantly more fruit/A than other varieties. Differences between the large fruited (14-24 lb) pumpkins were not significant (Table 2). Autumn King yielded more than Magic Lantern and RPX03102. However it was not significantly different from the other cultivars. Autumn King fruit size was similar to Gold

Medal but was significantly larger than the other cultivars (Table 2). In the observation trial Gold Standard, Howdy Doody and Appalachian were high-yielding, attractive varieties for the Jack O'Lantern market. Grower choice might depend on whether they were paid by the pound or the fruit.

Wee-B-Little did not produce very well. Little October and Wee-B-Little also had 100% of their plants infected with virus. Hybrid Pam was a productive small (5-6 lb.) pumpkin. Autumn Buckskin produced high yielding, attractive, light brown, oblate fruit that looked nice in fall displays.

Table 1. Soil test results, 2003 pumpkin cultivar evaluation, Quicksand, Ky.

pH	Buf-pH	P	K	Ca	Mg	Zn
5.97	6.68	45	233	2960	195	8.1

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