

## Growing ground cherries for profit as a small farm

### Utilizing inverted V beds

By Serenity Grove Farm in Mount Airy, MD



Ground cherries are in the nightshade family with a husk protecting the prized golden fruit. Ground cherries grow low to the ground and drop their fruit when ripe and ready for harvest. Ground cherries have a 3+ week shelf life making them an attractive crop for small growers that have inconsistent flows of customers. This unique crop is also great for marketing as many people are amazed at this novel experience.

Approximately 0.5 pounds (0.47lbs when husked) of ground cherries was equivalent to 1.5 cups of husked ground cherries, about the amount needed for a standard 9 inch pie.

During the SARE experiment, we tested experimental conditions of 4, 8, and 12 inch high inverted V beds with black plastic mulch compared to flat, no plastic mulch ground cherry beds. Beds were 30 inches with 18-inch aisle spacing. The harvest off black plastic mulch was simpler than the control with no plastic. The 4-inch high inverted V bed provided both the highest yield per plant (0.51 lb/ plant of sellable ground cherries) and fastest harvest labor (5.4lb harvested in 1 hour). The 2<sup>nd</sup> best was 8 inches.

Ground cherry grading and sorting individual ground cherry is inefficient and too costly for profitable growing. However, unsellable ground cherries represented about 25% of harvested crops. Reasons why ground cherry would be unsellable: pest damage, cracked, and green. Green ground cherries did not ripen further with enough to make it worth holding till ripe. A quick sort should remove the worst defects; keeping cost down while reducing bad customer experience. Ground cherry sorting can take just as long, if not longer than harvest if doing individual

Based on these initial findings (small scale), it is recommended that beds be approximately 4 inches tall (error on the slightly taller side than shorter) and be covered with black plastic mulch. When laying the plastic, care should be taken to not have wrinkles allowing rain water to collect with ground cherries. Aisles wider than in the experiment (18 inches) would be preferred; during the experiment, ground cherries grew wider and taller than expected.

Ground cherry production starts slowly approximately when tomato season begins and takes about three weeks before production is worth harvesting. Peak Harvest appears to be in the end of August with Yields rapidly declining towards the end of Sept. Rapid decline is likely the result of pest and weather.

More information can be found at [https://projects.sare.org/sare\\_project/fne22-016/](https://projects.sare.org/sare_project/fne22-016/) or email SerenityGroveFarm@gmail.com.

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