

# Organic Potato Variety Trials 2007

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For the summer of 2007, three organic potato trials were conducted in eastern NY. These trials have been conducted since 2003. The goal of the trials is to find varieties that will consistently yield well under organic conditions. The trials were held at the Jean Paul and Jody Cortens's Roxbury Farm in Kinderhook, NY, at Paul and Sandy Arnold's Pleasant Valley Farm in Argyle, NY and at the Roots and Wisdom Community Gardens in Schenectady.

2007 started out with high potato leaf hopper populations. For the first time in the variety trials, organic insecticides were used against the leafhopper by two of the growers. Jean Paul Cortens used Pyganic twice and Rotenone once. Sandy Arnold used Pyganic twice as well. Pyganic gives good leafhopper control but it does not last very long. Leafhopper populations needed to be continually monitored during the summer as they can come back into a field even after control measures have been employed.

## Comments on varieties

**Keuka Gold** – Consistently high yielding variety. Pale yellow flesh. Good disease resistance, especially scab. Round tuber. Highly recommended

**King Harry** – (Formerly L-235) High yielding but not a very attractive looking tuber. Non uniform shape. Very resistant to leafhopper

**Kadahdin** – Old standard. Developed in the 1930's and still performs well in trials. Does consistently well even with high leafhopper pressure. Good table stock variety.

**Salem** – Does well with adequate moisture. Flat tuber. Good tasting and good table stock variety

**Adirondack Blue** – Medium yields under organic conditions. Very attractive blue flesh and taste good. Good variety for direct marketing. Something different.

**Adiroondack Red** – Medium yields under organic conditions. Attractive red flesh and again, good for direct marketing situations.

**Carola** – Good yield with a bright yellow flesh. If you are looking for a good yielding yellow, this is a good variety. Large round tubers

**Reba** – Early sizing tubers. Medium yielding in organic trials.

**Yukon Gold** - Very nice potato but does not yield well in organic conditions. Consistently at the bottom of yields in our trials.

**Red Norland** – Good red variety. Consistent high yields

**Red Lasoda** – Good yields in both 2007 organic trials. Bright red skin with white flesh.

**NY 126 Lehigh** – Large tubers. A high moisture potato good for boiling.

**Nordonna** – Dark red skin with oval tuber. Scab resistant. Medium organic yields.

As every grower knows, scab can be different from field to field. There was very little scab in the trial field in Washington County. The Columbia county location had medium

scab in that trial field. This was good to evaluate scab resistance on the different varieties.

Roots and Wisdom is a community garden program involved in educating people about agriculture, and supporting local farmers. They work with school groups and sell potatoes to all 5 of Niskayuna's elementary schools in October for "baked potato day". The potatoes were enthusiastically enjoyed and the meal was publicized on the school's website. Niskayuna food service director Debbie Mahan is very interested in promoting New York agriculture. Roots and Wisdom co-sponsored a farm to chef week with the Schenectady Chamber of Commerce last summer has applied for a grant to do another. New York Potatoes will possibly be next year's theme.

Leslie Wiedmann-Herd, Director of Garden Programs for Roots and Wisdom has quite an interest in growing and promoting New York potatoes and they hope to continue doing trials.

In the Roots and Wisdom trial, 10 varieties were evaluated which included 20 pieces( about 2 pounds) of each variety. Potatoes were planted on May 3rd, 2007 into raised beds fertilized with rock phosphate, greensand, and North Country Organic's 10-0-0 organic fertilizer. Beds were watered as needed. Very few Colorado potato beetles were found. Harvesting was done on July 25th and July 31st.

## Results

If a potato variety does well under organic conditions, it will do well for conventional growers. Even though there were different results at the different locations, there is a general trend for the varieties that do better.

**Paul + Sandy Arnold – Pleasant Valley Farm, Argyle, NY, Washington County.**

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60 pieces each, planted 8" apart, approx. 40 feet long

| <b>VARIETY BY<br/>YIELD</b> | <b>YIELD<br/>RANK</b> | <b>TOTAL<br/>WT</b> | <b>AVE<br/>YIELD<br/>/ PLANT<br/>#</b> | <b>AVE YIELD<br/>/ ACRE #</b> | <b>RETAIL VALUE /<br/>ACRE @\$1.50 / #<br/>*</b> |
|-----------------------------|-----------------------|---------------------|--|-------------------------------|--|
| Red LaSoda                  | 1                     | 168.20              | 2.80                                   | 51301                         | \$76,952   |
| Adk Red                     | 2                     | 128.20              | 2.14                                   | 39101                         | \$58,652   |
| Katahdin                    | 3                     | 118.80              | 1.98                                   | 36234                         | \$54,351   |
| Dk Red Norland              | 4                     | 118.40              | 1.97                                   | 36112                         | \$54,168   |
| Keuka Gold                  | 5                     | 117.20              | 1.95                                   | 35746                         | \$53,619   |
| Adk Blue                    | 6                     | 109.00              | 1.82                                   | 33245                         | \$49,868   |
| Carola                      | 7                     | 107.00              | 1.78                                   | 32635                         | \$48,953   |
| Eva                         | 8                     | 105.40              | 1.76                                   | 32147                         | \$48,221   |
| NY 131                      | 9                     | 95.20               | 1.59                                   | 29036                         | \$43,554   |
| Dk Red Norland RC           | 10                    | 94.60               | 1.58                                   | 28853                         | \$43,280   |

|               |    |       |      |       |          |
|---------------|----|-------|------|-------|----------|
| Bake King     | 11 | 92.20 | 1.54 | 28121 | \$42,182 |
| Nordonna      | 12 | 92.20 | 1.54 | 28121 | \$42,182 |
| Superior R.C. | 13 | 90.60 | 1.51 | 27633 | \$41,450 |
| Salem         | 14 | 86.40 | 1.44 | 26352 | \$39,528 |
| Andover       | 15 | 83.00 | 1.38 | 25315 | \$37,973 |
| Genessee      | 16 | 79.00 | 1.32 | 24095 | \$36,143 |
| NY 126=Lehigh | 17 | 74.80 | 1.25 | 22814 | \$34,221 |
| Reba          | 18 | 66.20 | 1.10 | 20191 | \$30,287 |
| Yukon Gold    | 19 | 59.60 | 0.99 | 18178 | \$27,267 |

\* If 100% Number  
1's

**Jean Paul + Jody Cortens – Roxbury Farm, Kinderhook, NY, Columbia County**  
Organic Potato Trials  
60 pieces each, planted 8" apart, double row beds, approx. 22 feet long

| Variety       | 2"   | 3"    | 4"<br>Chefs | Total<br>Wt. | Lbs/row<br>foot | Ave Yield<br>/acre # | # of 50<br>lbs<br>bags | Comments               |
|---------------|------|-------|-------------|--------------|-----------------|----------------------|------------------------|------------------------|
| Keuka gold    | 32.5 | 56.75 | 4           | 93.25        | 2.3             | 30088                | 602                    | Low scab               |
| King Harry    | 20.5 | 65.75 | 0           | 86.25        | 2.2             | 27829                | 557                    | Med Scab               |
| Salem         | 18   | 52    | 10.5        | 80.5         | 2.0             | 25974                | 519                    | Med Scab               |
| NY 126        | 12   | 56.5  | 11.5        | 80           | 2.0             | 25813                | 516                    | Hi Scab                |
| Red<br>Lasoda |      | 54    | 11.5        | 65.5         | 1.6             | 21134                | 423                    | Med Scab               |
|               | 30.2 |       |             |              |                 |                      |                        |                        |
| Bake King     | 5    | 30    |             | 60.25        | 1.5             | 19440                | 389                    | Low Scab               |
| Reba          | 21   | 37    | 2           | 60           | 1.5             | 19360                | 387                    | Med scab               |
| Katahdin      | 22   | 35    | 1.5         | 58.5         | 1.5             | 18876                | 378                    | Low scab               |
| Genessee      | 17   | 36.5  | 4           | 57.5         | 1.4             | 18553                | 371                    | Hi Scab,<br>Bact Rot   |
| Carola        | 13   | 41    | 2.5         | 56.5         | 1.4             | 18230                | 365                    | High Scab,<br>Bact Rot |
| Ad Red        | 27.5 | 27    |             | 54.5         | 1.4             | 17585                | 352                    | Low scab               |
| Yukon gold    | 12   | 40    | 0           | 52           | 1.3             | 16778                | 336                    | Low scab               |
| Andover       | 22.5 | 22    |             | 44.5         | 1.1             | 14358                | 287                    | bact rot               |
| Nordonna      | 27.5 | 15    |             | 42.5         | 1.1             | 13713                | 274                    | Low scab               |
| Eva           | 9    | 27.5  | 5.5         | 42           | 1.1             | 13552                | 271                    | Low scab               |
|               | 13.2 |       |             |              |                 |                      |                        |                        |
| Ad Blue       | 5    | 14    |             | 27.25        | 0.7             | 8792                 | 176                    | Low scab               |

**Leslie Wiedmann-Herd, Director of Garden Programs, Roots and Wisdom Program**

Schenectady, NY

20 seed pieces, 8" apart

|                    | Yield<br>Rank | Total<br>Yield | lbs. Yield/<br>Row foot |
|--------------------|---------------|----------------|-------------------------|
| Dk Red<br>Norland  | 1             | 22.8           | 1.7                     |
| Chieftain          | 2             | 20.25          | 1.5                     |
| Reba               | 3             | 19             | 1.4                     |
| NY 126 -<br>Lehigh | 4             | 17.5           | 1.3                     |
| Adirondack<br>Blue | 5             | 17             | 1.3                     |
| Keuka Gold         | 6             | 13             | 1.0                     |
| Adirondack<br>Red  | 7             | 11.25          | 0.8                     |
| Carola             | 8             | 11.25          | 0.8                     |
| Yukon gold         | 9             | 9.75           | 0.7                     |
| Eva                | 10            | 4.5            | 0.3                     |