



## **CO10087-4RU**

**Pedigree:** CO03367-1RUsto x Mercury Russet

**Developer:** Colorado State University

**Plant Variety Protection:**

**Seed Availability:** San Luis Valley Research Center

## **Incentives for Production**

- ★ High percentage US No.1 tubers
- ★ High solids
- ★ Processing potential

## **General Characteristics**

**Usage:** Dual purpose Russet

**Plant:** Medium vine size and white flowers.

**Maturity:** Semi-early

**Tubers:** Long tubers with russet skin and white flesh.

**Yield Potential:** Medium (avg. 307 cwt/acre) and 91% US No. 1 tubers

**Specific Gravity:** High (1.091)

Detailed data summary for CO10087-4RU.

| Variable                         | # Trials | Mean  | Range         |           |
|----------------------------------|----------|-------|---------------|-----------|
| Total Yield (Cwt/A)              | 4        | 307   | 262 - 330     |           |
| Yield US #1 (Cwt/A)              | 4        | 279   | 220 - 311     |           |
| % US #1                          | 4        | 91    | 84 - 94       |           |
| Yield >10 oz (Cwt/A)             | 4        | 68    | 14 - 108      |           |
| Yield <4 oz (Cwt/A)              | 4        | 24    | 14 - 40       |           |
| % External Defects <sup>1</sup>  | 4        | 1.0   | 0.4 - 1.4     |           |
| % Hollow Heart <sup>2</sup>      | 4        | 1.0   | 0.0 - 3.9     |           |
| % Stand                          | 4        | 95    | 90 - 99       |           |
| Emergence Uniformity             | 4        | 3.6   | 3.3 - 4.0     |           |
| Vine Vigor <sup>3</sup>          | 4        | 3.5   | 2.5 - 4.3     |           |
| Stems/Plant                      | 4        | 2.7   | 2.1 - 3.3     |           |
| Vine Size <sup>4</sup>           | 4        | 2.8   | 2.0 - 3.5     |           |
| Vine Type <sup>5</sup>           | 4        | 2.5   | 2.0 - 3.0     |           |
| Vine Maturity <sup>6</sup>       | 4        | 2.4   | 2.0 - 3.0     |           |
| Blackspot <sup>7</sup>           | Bud End  | 5     | 4.9           | 4.6 - 5.0 |
|                                  | Stem End | 5     | 4.5           | 4.1 - 4.9 |
|                                  | Average  | 5     | 4.7           |           |
| Weight Loss <sup>8</sup>         | 5        | 3.7   | 3.2 - 4.3     |           |
| Dormancy <sup>9</sup>            | 5        | 86    | 67 - 110      |           |
| Enzymatic Browning <sup>10</sup> | 5        | 4.0   | 3.6 - 4.2     |           |
| Specific Gravity                 | 5        | 1.091 | 1.088 - 1.097 |           |
| Fry Color <sup>11</sup>          | Harvest  | 5     | 1.6           | 1.0 - 3.0 |
|                                  | Storage  | 5     | 1.2           | 1.0 - 2.0 |
| Fry Texture <sup>12</sup>        | Harvest  | 5     | 4.2           | 3.0 - 5.0 |
|                                  | Storage  | 5     | 4.2           | 3.0 - 5.0 |

Refer to footnotes on next page.

**Footnotes for Table on previous page:**

<sup>1</sup>Percent external defects based on the proportion of the total sample weight with significant defects.

<sup>2</sup>Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.

<sup>3</sup>Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.

<sup>4</sup>Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.

<sup>5</sup>Vine type is rated on a 1 to 5 scale, with 5 indicating very upright vines.

<sup>6</sup>Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.

<sup>7</sup>Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.

<sup>8</sup>Tubers were stored at 45F for approximately 3 months.

<sup>9</sup>Days from harvest to first visible growth. Tubers were stored at 45F.

<sup>10</sup>Degree of darkening rated at 60 minutes after slicing tubers lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.

<sup>11</sup>Reconditioned samples were stored at 60F for three weeks. Fry color was rated on a 0 to 4 scale, with 0 being the lightest or best color. Color ratings of  $\leq 2.0$  are acceptable.

<sup>12</sup>Fry texture was rated on a 1 to 5 scale, with 5 indicating the cooked flesh was dry and mealy and 1 representing a soggy, wet texture.