

# Rio Grande Russet (AC89536-5RU)

**Parentage:**

Butte x A8469-5

**Developer(s):**

Colorado State University  
USDA-ARS

**Plant Variety Protection:**

Yes

**Incentives for Production:** High total yield potential and high percentage of US No. 1 tubers.

## Morphological Characteristics

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**Plant:** Large, semi-erect plant with light purple flowers

**Tubers:** Oblong, medium-heavy russet, white flesh

## Agronomic Characteristics

**Usage:** Fresh market

**Yield Potential:** High total yield (>500 cwt) and a high percentage of US No. 1 tubers (82%, >400 cwt)

**Specific Gravity:** Medium-high (average 1.086)

**Maturity:** Medium

**Tubers:** Resistant to hollow heart, second growth, blackspot bruise, and shatter bruise.

**Suggested Cultural Management:** The use of single drop or healed pre-cut seed is suggested. Fresh cut seed has been shown to be associated with increased soft rot problems in the field. Optimum seed spacing has been found to be 12"+ in-row with 34" rows.

Current recommendations for nitrogen use in the San Luis Valley are to preplant (or at planting) apply 60 to 80 lbs/A. Add 70 to 90 lbs/A more during the growing season in increments of 15 to 20 lbs/A every two weeks starting after tuber initiation, not to exceed 150 lbs/A total including residual soil N and N from irrigation water. Excess N applied prior to tuber initiation has been shown to delay tuber set and often



**Seed Availability:** Certified seed is available from producers in Colorado.

## Agronomic Characteristics (cont'd)

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**Suggested Cultural Management (cont'd):**

leads to decreased tuber size while lengthening the time to appropriate tuber maturity during late season.

Avoid late applications of nitrogen (after July 31). Excessive nitrogen, applied late in the season, may delay maturity sufficiently to cause problems with effective vine killing, subsequent tuber maturity and skin set, and long-term storage.

Field observations have shown that **Rio Grande Russet** is tolerant of metribuzin. No injury has been observed when other commonly labeled herbicides have been used. The large vines of **Rio Grande Russet** will successfully compete with most mid- to late-season weeds. Good skin set typically occurs two to three weeks after vine death.

**Storability:** Dormancy 85 days at 45F (slightly shorter than Russet Norkotah and Russet Nugget).

**Diseases:** Moderately resistant to spread of leafroll and PVY with good expression. Foliar ring rot expression is typical and occurs well within 90 days of planting. Susceptible to blackleg. Vine growth is excellent and risk from foliar early blight is moderate. *Erwinia* tuber rot found on infected tubers is rated similar to Russet Nugget, so growers should make every effort to obtain clean, limited generation certified seed. *Fusarium* rot is rated similar to Russet Nugget and may be of concern under certain circumstances, but early blight tuber decay tends to be low. **Rio Grande Russet** is resistant to powdery scab tuber symptoms and has a very low root galling index.