Released in 2006, this round-oblong, yellow-fleshed variety is very similar to its parent, *Yukon Gold*. However, *Yukon Gem* has higher yield potential and is resistant to PVY° and more resistant to scab than *Yukon Gold*. Merit rating for fresh pack characteristics including post harvest evaluations for boiling, baking, and microwave qualities were comparable to *Yukon Gold*. Tubers of *Yukon Gem* exhibit good chip color, but its lower specific gravity may limit its use for this purpose. *Yukon Gem* has a moderately low specific gravity and good resistance to tuber malformation and most internal and external defects; its tubers exhibit little or no after-cooking darkening. *Yukon Gem* has a low to medium tuber set, with optimal size profile.

**Fertilization**

Nitrogen response studies were conducted using five application rates (0, 90, 180, 270, 360 lb N/acre) with half of total N applied pre-plant with the remainder divided into three equal applications at 2 week intervals starting at tuber initiation with pre-plant available soil nitrate 20 lb N/acre in 2007 and 30 lb N/acre in 2008. Results indicated that 270 N/acre total gave the best USNo.1 yield response. *Yukon Gem* yield response is about 10%
more than Russet Burbank. Excessive nitrogen can lower yield and quality and prolong maturation. Higher nitrogen levels can also lower specific gravity. Yukon Gem has moderately low Specific Gravity levels.

**Spacing**
Total and U.S.No.1 Yield of Yukon Gem is optimized at the 8-10” in-row spacing with 36” between row centers and a planting depth of 5-6 inches. Smaller tuber size is desired for fresh market yellow fleshed tuber types.

Yukon Gem also has good resistance to stress-related tuber defects such as growth cracks, second growth and hollow heart.

**Weaknesses:**
- Low specific gravity

**Other Notes:**
Metribuzin resistance for **Yukon Gem** is good at normal application rates.