

# Sunflower Variety Trial – 2024

Kansas State University – John C. Pair Horticultural Center

Ornamental sunflowers have become popular options for florist use in cut-flower arrangements. Our goal was to evaluate commercially available ProCut® varieties in a field plot in South-Central KS.

## Methods

- Mixed turf and vegetation was terminated with glyphosate (2.5 oz/gal) and the plot was tilled to prepare for planting
- July 18 – seed were hand planted to 1-inch depth
- Seed of ProCut® Orange, Plum, Red, and Red Lemon were planted in rows 8- or 16-inches apart and 2- or 4-inches apart in-row
- Pre-emergent herbicide applied over the top after planting
  - Pendimethalin (Prowl) @ 2.4 pt/A and irrigated to activate
- Plot was irrigated twice weekly until plants reached 2 ft in height
- Urea (46-0-0) at 1.0 lb N/1,000 ft<sup>2</sup> applied when plants were 3-inch tall
- Frequent scouting to detect insect pests and disease
- August 20 – Bifenthrin applied to control leaf feeding larvae
- Mole trap was employed to prevent uprooting of young seedlings
- 50% bloom was reached the first week of September
- Plant height and flower face diameter were recorded on Sept 10
- Remaining varieties were planted the same day for observation only
  - 2-rows per variety, 16-inches apart, and 4-inches apart in-row



Painted Lady larvae defoliating young sunflower plants.



Skunks excavating young seedlings searching for June Bug larvae.

### Pest control:

- Bifenthrin for Painted Lady larvae control
- Mole traps for control of moles excavating plants
- Chicken wire fence to prevent skunks from excavating plants
- No disease presence was observed

## Results

- Plants at the highest planting density were 6-inch taller (6.0 ft) than plants at the least dense spacing (5.5 ft)
- Face diameter of flowers at lowest planting density was approx. 1-inch greater than the diameter of flowers at the greatest planting density (2¾ to 3¾ inch diameter)
- Plant height and flower diameter at intermediate planting densities were in between the height and flower diameter of plants at the highest and lowest planting densities

## Observations

- ProCut® varieties were mostly true to type with a single flower at the distal end of a single stem
- The exceptions were Gold Lite and Horizon which both produced flowers from axillary buds

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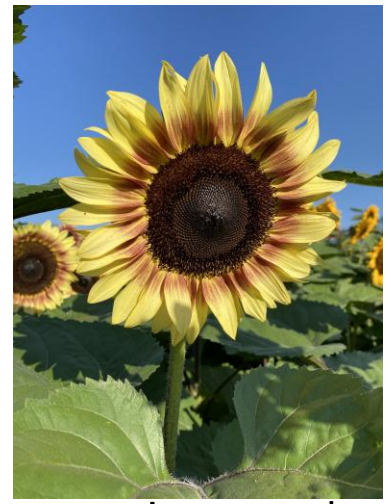
Orange\*



Plum\*



Red\*



Red Lemon\*



White Nite\*



White Lite\*



Horizon\*#



Gold Lite\*#



Lemon\*



Gypsy Charmer#



Terracotta#



Brilliance\*