

# Grower's Guide to Strawberries

---

**Temperature:** 20/12 °C day/night (optimal range 20-24 °C/10-12 °C)

**Relative Humidity:** 55/65% day/night (optimal range 40-60%)

**Light:** A 16-hour photoperiod of  $348 \mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$  [daily light integral (DLI)  $\approx 20 \text{ mol}\cdot\text{m}^{-2}\cdot\text{d}^{-1}$ ] (optimal range  $20\text{-}25 \text{ mol}\cdot\text{m}^{-2}\cdot\text{d}^{-1}$ ); everbearing cultivars are facultative long day plants. The photoperiod optimum is 16 hours.

**Fertigation:** Water-soluble fertilizer providing  $100 \text{ mg}\cdot\text{L}^{-1}\text{N}$  (Jack's 8-10-26 K Strawberry Part A and Jack's 15-0-0 Calcium Nitrate Part B) drying down between waterings. Nutrient solution was maintained with an EC target: 1.0 and pH target: 5.5-6.0.

**Pollination:** Hand-pollinated daily using a soft-bristled brush

**Harvesting:** From the time of planting, our first berries were ready for harvest after 10 weeks of growth. Plants were harvested thereafter weekly for the next 7 weeks.

**Pest:**

Spider Mites, Thrips, Aphids, Fungus Gnats



**Results Based on 7 weeks of CO<sub>2</sub> Enrichment**

	Fruit Number	Average Fruit Weight (grams)	% USDA Grade 1	Average Firmness (N·m <sup>-2</sup> )
<b>Albion</b>				
Ambient	233	23.0	82%	200.0
Enriched	280	25.6	84%	199.2
<b>Ozark Beauty</b>				
Ambient	242	10.1	81%	136.1
Enriched	386	10.3	78%	135.9

This guide was developed for indoor fruit production of two cultivars of everbearing strawberry (*Fragaria ×ananassa* ‘Albion’ and ‘Ozark Beauty’). ‘Albion’ bareroots from Johnny’s seeds must be ordered ahead of their distribution date in March as they are unavailable for the rest of the year. ‘Ozark Beauty’ plants are available in 2.5-inch pots from local nurseries. Both cultivars are off patent and can be propagated from vegetative runners. Other cultivars that are available and have been successful indoors include ‘Seascape’, ‘San Andreas’, ‘Portola’, and ‘Monterey’.

This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2023-38640-39571 through the Western Sustainable Agriculture Research and Education program under project number GW24-001. USDA is an equal opportunity employer and service provider. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.