

PENTAS ALERT



Pentas lanceolata is a crop that needs warm temperatures, and when exposed to temperatures below 60°F (15°C), may exhibit chilling injury. Although some plants will exhibit cold or freeze damage when exposed to too-low temperatures, this type of damage on *Pentas* is technically a *chilling injury*. Freezing damage kills the plant entirely. Chilling injury, on the other hand, means only the affected cells break down and these cells can appear necrotic or develop into white spots on the foliage, but unaffected tissues will resume normal growth. The non-damaged leaf areas will continue to develop normally after plants are placed in warm (>62°F [16°C]) growing conditions, and the new foliage will develop normally as plants continue to grow.

Based on an initial study, the majority of the *Pentas* varieties do not experience chilling damage. This problem appears to be isolated to several red varieties. In trials with Graffiti® OG Red Velvet, BeeBright™ Red, and Lucky Star® Dark Red, only Graffiti OG Red Velvet did not show chilling injury. The chilling injury on other varieties tested appeared shortly after 4-day exposures at 55 or 60°F.

Plug Production

Produce *Pentas* seedlings at night temperature above 65°F (18°C) to maintain growth and prevent chilling injury. When holding plugs, hold at temperatures above 62°F (16°C) to minimize chilling. We have observed that when plugs are watered before subjecting to 50°F (10°C) temperatures, less chilling injury occurs.

Shipping

At this time there is no clear solution to prevent chilling injury when shipping at reduced temperatures.

Finishing

Grow *Pentas* at night temperatures above 62°F (16°C) to prevent chilling injury. If you see chilling injury, raise the air temperature to promote leaf expansion and mask the symptoms.

During times of the year when low temperature conditions may occur, consider using non-sensitive varieties. If you see chilling damage on plug shipments, allow the plugs to grow out for 5-7 days at temperatures >62°F (16°C) to resume normal growth.