I
n an ideal world, plants are promptly shipped, marketed and sold once they reach their desir
able market stage. Unfortunately, circumstances outside our control can delay shipping. The most
common delay is probably poor weather: A rainy
weekend can slow down sales, forcing stores to reject
additional shipments of plants. Often, shipping delays
are a week or less, but they're sometimes longer.

If held too long, plants may become unmarketable,
and growers may be forced to dump them. Fortu
nately, there are steps growers can take to extend the
holding time of their crops.

Lower the Temperature
By far, the most effective strategy to hold crops is to
lower the growing temperature. Plant development is
primarily related to temperature, so lowering the set
point slows down growth. Flowers also last longer at
cooler temperatures. How low should you go? If we
think only about the crops that are being held and ignore
other crops that are in the same greenhouse zones,
then a desirable temperature is 45-50° F for many cold
tolerant crops and 55-60° F for many cold-sensitive crops.

Examples of cold-tolerant crops include ageratum,
alyssum, campanula, dianthus, nemesia, petunia
and pansy. Examples of cold-sensitive crops include
blue salvia, celosia, hibiscus, New Guinea impatiens,
purple fountain grass, vinca and most tropic
als.

Unfortunately, marketable crops that are being
held are often in the same greenhouses as crops that
were planted later and are not yet marketable, so you
may have to weigh the consequences of adjusting
the temperature.

Apply a PGR or Use Negative DIF
Some plants pass their prime partially because
they have become elongated and floppy in their con
ainers. To help prevent this problem, a plant growth
retardant can be applied to inhibit subsequent elon
gation of leaves, stems and flowers. For bedding
plants, perennials and tropicals intended for planting
in the landscape, sprays or light drenches are recom
mended. Drenches should be avoided because the
effect may be too persistent, potentially preventing
plants from growing when planted outdoors. For
potted plants, drenches are acceptable and poten
tially desirable because a more long-term effect may
extend their attractiveness in the home.

As an alternative, consider using a negative DIF
(-DIF) temperature regimen to reduce elongation. This
means adjusting the temperature setpoints so that
crops receive a lower day temperature and warmer
night. When the day is cooler than the night, the math
ematical difference between the day and night tem
peratures is negative, creating a condition that inhibits
stem elongation of most plants. For example, if a desir
able average daily temperature is 65° F and the photo
period is 14 hours, then a 60° F day temperature and
a 72° F night temperature could be used. Attaining a
negative DIF can be difficult at best in the South once
temperatures outside become warm during the day.

When Desperate, Pinch Plants
If you know that plants can or will need to be held
for several weeks, you may consider pinching or cut
ting the plants back to remove flowers and elongated
shoots. There are several downsides to this, including
the labor required to cut and remove plant debris and
the several weeks required for plants to flower again.
Some plants, such as seed impatiens, lend themselves
to being cut back more than others.

Generally, crops with short production times can
more readily be pinched because their rebloom time is
short compared to crops with longer production times.

Usually, pinching plants once they’ve flowered is a last
ditch effort to save a crop before going to the dumpster.

Consider whether the effort involved, space required
and delay in flowering time — as well as the risk of
potentially shipping lower-quality plants to their mar
ketplace — is worth pinching to save the crop.

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