

## Propagation:

**Sticking:** Stick each cutting in an individual hole in the propagation cell (i.e., three-hole dibble). For multi-liner combos, begin with the smallest cutting and finish with the largest cutting. Group Kwik Kombos™ vegetative mixes into species with little, medium and long misting times. For combinations with more than one species mist according to slower rooting species. Depending on the size of the propagation cell and species, the rooting time will be around five weeks.

**Pinching:** Pinch cuttings at about 2.5 - 3 weeks after sticking. Use proper sanitation practices when pinching.

**Growth Regulation:** B-Nine® plant growth regulator (PGR) at 2,000-2,500 ppm can be sprayed before and after pinching to keep the cuttings compact and well-branched. Trial a combination spray of Florel® plant growth regulator (350 ppm) + B-Nine (1,500-2500 ppm) before pinching.

**Temperatures and Light:** Maintain media temperatures above 72°F (22.5 °C) until roots are well-developed. After liners are well established, reduce temperatures to help tone plants and control growth and increase light levels.

**Fertilization:** Maintain moderate EC levels of around 2.0mS/cm, except for impatiens combos (EC of 1.5 - 1.8 mS/cm).

## Finishing:

**Planting:** Transplant one liner into 4.5", 6" and gallon pots and three liners into 10-12" baskets. A second pinch can be given to plants in large pots and baskets (trimming branches along the edge of the containers) to increase branching and control growth.

**Temperatures:** Until plants get established, grow at average daily temperatures (ADT) of at least 68F (20C). Depending on the Kwik Kombos (KK's) species, temperatures can be dropped to 60 - 65 F ADT in the second part of the crop cycle for "cool" crops like Magalena™ verbena, Sanguna® petunia, Techno® Heat lobelia, etc. Cooler temperatures will produce plants with better tone and compact growth, but will delay flowering. If growing at warmer temperatures, multiple applications of PGRs will be needed to keep growth in check and to help tone plants.

**Growth Regulation:** B-Nine plant growth regulator sprays at 2,500 - 3,500 ppm work well on most crops. For Bandana® lantana mixes, Bonzi® plant growth regulator sprays of 15 - 20 ppm are recommended. Sprays of Florel at 350 - 500 ppm can be used early on, especially on Callie® calibrachoa, verbena and petunia combinations. Do not apply Florel on Carita™ angelonia. If crop times are short, Florel sprays should be applied in propagation. Bonzi plant growth regulator drenches work well about three to four weeks before finishing. Start with drench rates between 2-3 ppm for KK's containing Lanai® verbenas, Sanguna petunias, and Callie calibrachoa and 0.5-1 ppm for KK's containing Mexican Gold™ bidens, Bombay® scaevola, Techno® Heat lobelia, Magalena verbena, Silhouette® impatiens and Butterfly® impatiens.

**Crop times:** Finish time for compact to medium size plants will vary from 4 - 7 weeks depending on time of the year, temperatures, light conditions and container size. The production time for large plants (especially if a second pinch is done) will be between 7 - 10 weeks. Add one to two weeks production time for Bandana lantana mixes.



Well regulated and pinched Kwik Kombos™ vegetative mix liner - Primary Perfection™ Improved Mix



Well regulated and pinched Bombay® Summer Sparkler™ Kwik Kombos™ vegetative mix



Good time for trim and drench with Bonzi® plant growth regulator - Lanai® Passion™ Kwik Kombos™ vegetative mix

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