

Pinching Techniques for Poinsettias

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Poinsettias are pinched to induce branching. Stock plants are pinched, often repeatedly, to increase cutting production. Poinsettias grown for Christmas sale are pinched to produce a full appearance and multiple flowering shoots.

Pinching the poinsettia stimulates branching by removing apical dominance. Apical dominance is a hormone mediated inhibition caused by the growing point on a stem. In the case of the poinsettia, the immature leaves also play an important role in apical dominance. By removing both the growing point and the immature leaves, lateral buds can develop into branches.

There are a number of pinching techniques that a grower can use to stimulate branching including hard pinch, medium pinch, soft pinch and soft pinch in combination with removal of the immature leaves. Depending on the circumstances involved, one technique may be more desirable than another.

The **hard pinch** involves removal of up to 1" of stem, including at least one fully expanded leaf. The hard pinch is reliable in that it will release apical dominance and allow lateral branches to develop. However, in order to use a hard pinch, plants must be large enough to remove all immature leaves (plus one fully expanded leaf) and still leave a desirable number of lateral buds on the plant. On a late planted Christmas crop, cuttings may not

be sufficiently large to use a hard pinch. Uneven branch development may occasionally occur when a hard pinch is used, resulting in poor canopy shape.

The **medium pinch** involves removing the growing tip and some but not all of the immature leaves. With a medium pinch, the desired number of lateral buds can be left on the plant (as opposed to the late-hard pinch). However, immature leaves which remain on the plant will inhibit branching. This technique will generally result in an uneven crop, since the degree of apical dominance will vary from plant to plant as either more or less immature leaves remain.

The **soft pinch** involves removing only the growing point and leaving the young, expanding (immature) leaves on the plant. With this technique more lateral buds remain on the plant but poor break development results. This method is not very desirable for either the stock plant or the Christmas crop.

Removal of immature leaves in combination with the soft pinch is a technique which will induce branching even on small plants. This technique involves removing only the young growing tip plus the leaf blades (but not the petioles or leaf stems) from the immature leaves. With this method, more lateral buds are left to develop on the plant. The leaf removal technique will result in uniform canopy development. However, the technique is tedious (i.e. it takes a lot of labor), and a slight delay (two to three days) in flower development can be expected.

Growers may wish to try the leaf removal technique on late planted (and pinched) poinsettias or on cultivars and under environmental conditions where they have experienced problems with poor break development in the past.

