

# LOW BUT MODERN TECH CAN IMPROVE PEACH YIELD

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**Question:** What can be accomplished in five minutes with one tree, some plastic and a pair of pliers?

**Answer:** BIGGER, SWEETER PEACHES!

Research conducted at the University of Georgia has shown that girdling peaches with plastic cable-ties is effective in increasing fruit size and increasing fruit total sugars without negatively impacting tree health.

The traditional girdling method involves removing a thin strip of bark from around the trunk or scaffold of a fruit tree to keep the sugars made by the leaves in the upper portion of the tree where the fruit is borne. The potential problem with this method (besides carpel tunnel syndrome) is the formation of wounds that can be infected or infested by disease or insects. With the application of cable ties to girdle the tree, no injury occurs. Other effects of the cable tie girdling method have included an advancement of maturity and possibly the improvement of the quality of fruiting wood for next year's crop . Refining the best method for this practice is still a work in progress and the researchers in Georgia are continuing their work to learn as much about the effectiveness of the technique. For example, the method relies on having sufficient time after placing the cable tie for the tree's girth to increase enough for the cable tie to cause a constriction of sugar movement down the tree's axis. So it appears that it doesn't work as well for early maturing cultivars as later ones.

This is how the technique works. Cable ties are placed on the trunk or scaffolds about 4-6 inches below or above the crotch. Application is made using a rolling motion with pliers to completely tighten the ties. The initial research used two 3/16 th inch plastic cable ties per scaffold or trunk but subsequent tests and observations have switched to a single ? to 1/2 inch cable tie. Black ties appear to withstand breakage better than white ties. Studies have only been performed with application of ties to fully dormant trees (during the winter). Studies are underway to determine if tie application during the fall, prior to leaf fall will improve effectiveness on early varieties. Ties must be removed at or just after harvest so that the tree can recover. The method appears most effective when the tree trunks are not damaged or otherwise misshapened, preventing tight contact across the whole circumference of the girdled area. The method appears most effective in Georgia on varieties that ripen early June and later and the method appears to be more effective when trees are irrigated.



Cable-Tie Girdling: Trunk girdling (left) and scaffold girdling (right) of 7-year old trees. Southeastern Fruit and Tree Nut Research Laboratory, Byron, GA.