Postharvest Pruning on Southern Highbush Blueberry in Florida

One of the most important activities in May or early June for Florida blueberry growers is postharvest hedging, which is typically done shortly after harvesting is completed. Delaying hedging until mid-to-late summer may negatively impact floral bud differentiation and yield. Hedging promotes the growth of the canopy and new fruiting wood, and is important for vigorous, healthy growth (Figure 1). In addition to promoting vegetative growth, hedging can help reduce disease pressure by removing pathogens such as rust and Septoria from the field. It will also open up the plant canopy to allow for better air flow and sunlight penetration (promoting faster foliage drying and lower levels of fungal disease) and better coverage when spraying pesticides. Hedging can also remove damaging insects from the plant's top growth, including wax scale and blueberry bud mite.

Most growers use mechanical hedgers or sickle bars mounted on tractors to reduce plant height to around 40–48 inches, and also to trim the sides of the plant so they do not grow out into the row middles (Figure 2). This method significantly reduces the cost of hedging compared to hand pruning. Growers on smaller farms may use handheld gas-powered trimmers. While many growers hedge straight across the top of the plant, some growers prefer a cut angled 45–55 degrees up to a point in the center of the plant canopy, referred to as a rooftop cut. Because hedging can create an entry point for disease pathogens such as *Botryosphaeria* (stem blight), it is important to spray a broad spectrum fungicide, such as captan, immediately after hedging to minimize the opportunity for plant infection.



Figure 1. Regrowth following summer hedging and topping (photo taken in mid-June). Credit: D. Phillips, UF/IFAS



Figure 2. Blueberry field following mechanical hedging done soon after completion of the harvest season.

Credits: D. Phillips, UF/IFAS

Cane-Renewal Pruning

As a blueberry plant reaches maturity, around 4 to 5 years old, cane-renewal pruning should be performed each year to stimulate the growth of new canes and open the plant canopy for better airflow and sunlight penetration. This can encourage plant vigor, help lengthen the productive life of the plant, and reduce fruit load if needed on certain cultivars to promote larger fruit and earlier ripening. Typically one to two canes of the oldest canes per plant should be removed each year by cutting them back to the plant crown or to a strong lateral point. At the same time dead, weak, crossing, or low-spreading branches can be removed. Cane-renewal pruning is typically done during December or January in Florida, when plants in the deciduous system are dormant, although it can also be performed at the same time as summer hedging.

Rejuvenation Pruning

If blueberry plants have not been pruned for several years and are unproductive, it may be possible to rejuvenate the plants through aggressive pruning, depending on the cultivar and

overall plant health. With this method, all the plant's canes are hedged back to 1–2 feet, either in early summer or during winter when deciduous plants are dormant. This will significantly reduce the yield on these plants for the next one or two seasons. If growers have this situation and are evaluating this type of pruning, they should consider using it on only a portion of their field in a year to maintain some level of production during this process.

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