

Coppicing Evaluation in the Southeast of the U.S. to Determine Harvesting Methods

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Renewable fuels are being tested as an alternative for fossil fuels. For the Southeast of the U.S., the use of woody biomass has been proven to be an excellent source of renewable energy in terms of cost-benefit and availability. Short rotation woody crops (SRWC) are timber plantations with exclusive characteristics that greatly meet intensive wood demand due their fast growth and ability to coppice. Generally, SRWC require more maintenance than other popular woody crops, which might cause elevated costs for the establishment of each new cycle of rotations. However, due to the coppicing ability, the same plantation may be harvested up to 5 times with no need of establishing a new one. There are still uncertainties related to the best silviculture treatments at the harvesting stage and after the sprouting period in order to optimize the volume and vigor of the coppiced stems. The species used on this experiment are Eucalypt (*Eucalyptus urograndis*) (Florida) and Cottonwood (*Populus deltoides*) (Arkansas). The original plots were used on an experiment with different felling methods in different seasons of the year. The plots were revisited two years after harvested to examine the sprouts. This study aims to analyze the coppiced stem's development through volume gains, shape of sprouts and mortality rates in order to determine improved methods of harvesting.

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