

# NEWS

## From GEORGIA TECH'S ENGINEERING EXPERIMENT STATION

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TROPICAL TREES FOR ENERGY

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For Immediate Release

ATLANTA, GA...Whether or not certain tropical trees can be used to produce energy is currently the topic of research at Georgia Tech's Engineering Experiment Station.

Funded through the U.S. Forest Service, the research is centered around two trees which are found in Florida--the Melaleuca, or punk tree, and the Eucalyptus grandis, or rosewood eucalyptus. Both of these trees are native to Australia and are distant cousins of one another.

According to Dr. James Knight of EES, the trees will be pyrolyzed to yield char, wood oil and gas. Pyrolysis is the decomposition of solid organic waste brought about through the action of heat in the absence of oxygen, or with limited amounts of oxygen. Tech has developed a pyrolysis system over the past several years as a means of converting agricultural and forestry residues to alternate energy sources.

Knight hopes to find out sometime this summer whether this process will be successful with the Melaleuca and Eucalyptus. If results are positive, the Tech chemist says there would then be available a fast-growing forestry species for conversion to alternate, clean-burning fuels. It would then be a matter of whether or not sufficient quantities will be available to make the process economically feasible.

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If the characteristics of these trees are any indication, Knight won't have to worry about the quantity. According to a spokesperson for the U.S. Forest Service, both the Melaleuca and the Eucalyptus are extremely fast-growing, making them attractive as a renewable, non-polluting energy source.

The Melaleuca has grown so fast since its importation into South Florida in the early 1900's that it is now considered a pest or weed tree. The rapid growth of the Eucalyptus has led Floridians to cultivate the tree in large acreages as a source of paper fibre. There are now 6,000 acres of this tropical ornamental tree planted in Florida and some private concerns in the state would like to expand this to 500,000 acres.

Other types of organic materials that have been successfully pyrolyzed into char, oil and gas include paperboard, sawdust, peanut shells, leather goods and carpet scraps.