UF-IFAS Tropical Research and Education Center in Homestead Receives a $3.45 million grant from USDA NIFA to research Laurel Wilt Disease in Avocado.

The U.S. Department of Agriculture’s National Institute of Food and Agriculture (NIFA) recently awarded a $3.45 million grant to the University of Florida – IFAS, Tropical Research and Education Center to study Laurel Wilt an important disease of avocados. Dr. Randy Ploetz, the project director, and other scientists in Florida and Minnesota will investigate this important disease. “Laurel wilt of avocado is a complex and difficult problem, as it involves unknown beetle vectors, a virulent and unusual pathogen, Raffaelea lauricola, and a susceptible host,” said Ploetz. “The disease is threatens Florida’s avocado industry and may threaten avocado production in California and areas outside the USA.”

Ploetz said this project will fill critical data gaps on laurel wilt and the ambrosia beetle vectors, develop novel and cost-effective measures to manage the disease and vectors direction and assess the economics of control measures and their adoption by producers.

An industry advisory committee has been formed to provide and maintain close linkages among the project research and extension faculty and stakeholders in Florida. Stakeholders in Florida and California will be advised on the disease’s status, consulted on project objectives, and informed on advances in its management; information will be presented in diverse formats in both English and Spanish.
UF-IFAS Tropical Research and Education Center in Homestead Receives a $3.45 million grant from USDA NIFA to research Laurel Wilt Disease in Avocado.

The U.S. Department of Agriculture’s National Institute of Food and Agriculture (NIFA) recently awarded a $3.45 million grant to the University of Florida – IFAS, Tropical Research and Education Center to study the impact of Laurel Wilt, and important new disease of avocados. In 2002 the redbay ambrosia beetle and its pathogenic symbiont was detected in Port Wentworth, Georgia. By 2003 numerous native trees in the Laurel Family were dying; by 2004 it was determined the redbay ambrosia beetle was the source of a pathogenic fungus that caused laurel wilt. During 2012 laurel wilt was detected in a commercial avocado grove in Homestead, Florida. Since 2006 UF/IFAS has been the lead research-extension institution developing control strategies for the pathogenic fungus and ambrosia beetles.

Dr. Randy Ploetz, the project director, and other a group of scientists in Florida and Minnesota will investigate this important disease lead this grant. “Laurel wilt of avocado is a complex and difficult problem, as it involves unknown ambrosia beetle vectors, a virulent and unusual pathogen, Raffaelea lauricola, and a highly susceptible host,” said Ploetz. “Florida’s has 7,500 acres of avocado with an economic impact of about $100 million (Dr. Edward Evans, Ag-Economist, TREC). “To date the disease is has resulted in the loss of about 1% of the commercial avocado trees threatening Florida’s avocado industry and may threaten eventually impact significant avocado production in California and areas outside the USA,” said Dr. Jonathan Crane, Tropical Fruit Extension Specialist, located in TREC and heading the industry outreach program for the project.

Ploetz said this project will fill critical data gaps on the laurel
wilt pathogen and its ambrosia beetle insect vectors, develop novel and cost-effective measures to manage the disease and ambrosia beetles, extend to the industry comprehensive control strategies and assess the economics of control measures and their adoption by producers.

“An industry Advisory Committee has been formed to maintain close linkages among the project research and extension and stakeholders in Florida. Stakeholders in Florida and California will be advised on the disease’s status, consulted on project objectives, and informed on advances in its management; information will be presented in diverse formats in both English and Spanish,” said Dr. Jonathan Crane, Tropical Fruit Extension Specialist located in TREC.

Several ambrosia beetle species transmit the laurel wilt pathogen to avocado trees, killing most of them, threatening an industry with a $100 million-a-year economic impact on Florida. The original ambrosia beetle vector of laurel wilt was discovered in the U.S. in Georgia in 2002 and since that time has spread to seven additional states. Laurel wilt has begun to slightly affect commercial avocado production in Florida.

This USDA NIFA grant is going to assist University of Florida scientists to do research to find a solution to this terrible plight to the Florida Avocado Industry.