

FEATURE – TURNING ORANGE PEELS INTO ETHANOL

INTRO: USDA researchers have figured out how to turn orange peels into ethanol and now the private sector wants to take it to the next level. The USDA's Bob Ellison has more from Winter Haven, Florida. (1:45) (refeed from 3-08)

U-S DEPARTMENT OF AGRICULTURE RESEARCHERS ARE PROCESSING THE SUGARS AND CARBOHYDRATES IN CITRUS PEEL INTO ETHANOL. THIS SYSTEM WAS DEVELOPED AT THE U-S-D-A AGRICULTURAL RESEARCH SERVICE LAB IN WINTER HAVEN FLORIDA.

Wilbur Widmer, Research Chemist USDA ARS: The citrus industry in Florida produces between three and a half and five million tons of waste from the production of orange juice per year. Approximately half of an orange is waste. We pump the peel...into a jet cooker that we use to heat the peel up and pressurize it...and then we suddenly release the pressure...and the sudden release of pressure literally makes the peel explode...and the steam is driven off...and cooked peel that drops down to the bottom...is pumped into a tank where it's cooled...we add enzymes...to allow... the fermentation process to take place which converts those sugars into ethanol.

RIGHT NOW MOST CITRUS PEEL IS FED TO CATTLE. BUT OWNERS OF A FLORIDA ETHANOL COMPANY BELIEVE IT WILL BE GOING INTO GAS TANKS SOON.

Thomas Endres, Xethanol Corporation: We're testing their many years of research, their noble efforts in taking citrus waste and turning it into fuel and we're going to scale it up and see if it's commercially viable.

COMPANY OFFICIALS SAY A-R-S RESEARCH IS CRUCIAL TO THEIR EFFORT.

David Ames, Xethanol Corporation: What's good is that these kinds of labs have long years of experience in this market place and they're really maximizing the benefit of a waste material.

Bob Ellison, USDA: Florida could some day produce close to sixty million gallons of ethanol a year. In Winter Haven Florida, I'm Bob Ellison for the U-S Department of Agriculture.