COMPARATIVE INVESTIGATION OF FIBER MATURITY IN SEED COTTONS BY COTTONSCOPE AND FOURIER TRANSFORM INFRARED SPECTROSCOPY MEASUREMENT Yongliang Liu Christopher Delhom USDA-ARS, Southern Regional Research Center New Orleans, LA

Abstract

This study measured Cottonscope fiber maturity on 10 randomly selected locules (or sub-samples) from each of 10 seed cotton samples from different cultivars grown in 3 states and 2019 crop year, together with attenuated total reflection Fourier transform infrared (ATR FT-IR) maturity analysis on identical locule material. Cottonscope maturity increased with ATR FT-IR maturity in general for all samples. Further examination of 10 sub-samples in individual seed cottons showed the difference for some cotton cultivars between two maturity measurements.