A NOVEL METHOD FOR MEASURING COTTON SEED COMPRESSION AS AN INDICATION OF PROPENSITY TO CREATE SEED COAT FRAGMENTS Zach Hinds, Suman Lamichhane Brendan Kelly Texas Tech University Lubbock, TX

Abstract

A universal tensile machine was used to break cotton seeds. The measured compression force was used to observe differences between 18 cotton varieties. Indeed, differences in compression force were observed between varieties. This method should give cotton breeders a convenient method to predict the propensity of a variety to have issues with seed coat fragments. Currently, cotton breeders give very little thought to the possibility of seed coat fragment producing varieties. A better understanding of a varieties ability to withstand processing, and ultimately produce a yarn free of seed coat fragments, would allow breeders to avoid costly downstream issues associated with production scale operations.