SOIL COMPACTION PATTERNS BY CONVENTIONAL AND ON-BOARD MODULE BUILDING SYSTEMS

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Abstract

On Board Module Builder (OBMB) technologies have been introduced by Case IH (Module Express 625) and John Deere (7760 Cotton Picker). The present study was made to measure soil compaction caused by wheel traffic by OBMB technologies relative to the conventional cotton harvest system. Three different grower's fields in Eastern Arkansas were selected to evaluate the cotton pickers. Bulk density, soil moisture content, and soil resistance at different depths up to 18 inches using digital cone penetrometer were being measured under these three cotton picking systems. It is important to know if the OBMB systems will change soil compaction over our current harvest system as this will need to be considered in evaluating the overall economic impact of these systems.