MULTIBAR SAWLESS LINT CLEANER: FIELD TESTING RESULTS

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Abstract

The Multibar Sawless Lint Cleaner (MBSLC) is a prototype spiked-tooth lint cleaner initially designed to replace the first stage lint cleaning in a cotton gin. Previous studies conducted in the ginning laboratory in Lubbock, Texas, demonstrated improvements in some fiber properties, as well as minimizing lint waste when using select spiked-tooth patterns. The first field study of the MBSLC was conducted in a commercial cotton gin during the 2010-11 ginning season. Early in the season, seven modules, of differing varieties, were randomly ginned in one to two bale lots using the same model gin stand. The MBSLC replaced the first stage saw-type lint cleaner behind one of the gin stands. Lint and mote samples were obtained for each gin line. Results indicated significantly less moting (6.6 lb/bale) and higher bale value ($21.19) for the MBSLC. The MBSLC had higher leaf (0.7), more short fiber (1.3%), and large Nep Size than the saw-type lint cleaner. A second series of tests were run at the end of the season on fourteen modules of a single variety from a single producer. Data from the second test is still being analyzed.