EFFECT OF THE TRASH CONTENT ON THE QUALITY OF AFIS DATA

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Abstract

To evaluate the impact of the trash content on the quality of AFIS data we selected 702 research samples from several breeding programs representing a range of visible foreign matter content (determined with the AFIS). The samples were first tested with the regular AFIS protocol (3 replications of 3,000 fibers), then with an expedited protocol (1 replication of 3,000 fibers). Then, the samples were separated into several lots (from relatively low to high visible foreign matter contents as determined by the AFIS). The results obtained shows that the correlation coefficients between AFIS 3 replications and AFIS 1 replication depend on the lint trash content, i.e., when cotton samples have excessive trash contents the correlation coefficients between the two protocols decrease drastically. This confirms the need for improved ginning facilities for cotton breeders.