Improved Seed Cotton Cleaner

USDA – ARS COTTON TECHNOLOGY TRANSFER

A new design for a bur and stick extractor was developed to utilize three stages of extraction into a single machine that can be located at the most convenient position in a cotton gin's seed cotton cleaning system. The multistage extractor, patent #4,974,293,

utilizes three conventional channel-saw cylinders in series for trash extraction, specially designed grid bar arrangements, a two-saw cotton reclaiming system designed to minimize re-entrainment of trash into the cleaned cotton.

Laboratory studies using stripper harvested cotton indicated that the new machine was substantially more efficient in removing burs and sticks from stripper cotton than was a conventional system composed of two extractors in series. Generally, seed cotton cleaned by the multistage extractor contained about one-half as much total trash at the gin stand as that cleaned by conventional machinery. This difference in trash level was also evident in lint samples taken after ginning.

The multistage extractor technology was developed by Roy V. Baker at the USDA-ARS Cotton Production and Processing Unit, Lubbock, Texas. For additional information about this technology contact Thomas D. Valco, tvalco@ars.usda.gov.



For Other Cotton Ginning Technologies Visit **http://msa.ars.usda.gov/gintech** Or Contact:

Thomas D. Valco, Ph.D. USDA-ARS 141 Experiment Station Rd. Stoneville, MS 38776

Phone: 662 686-5255 Fax: 662 686-5372 Email: tvalco@ars.usda.gov

