

AN EXPENSIVE BALE OF COTTON**Emerson E. Tucker****Plains Cotton Cooperative Association****Lubbock, TX****Abstract**

A foreign textile mill customer of Plains Cotton Cooperative Association (PCCA) mailed a package to PCCA that contained fabric from their customer. The fabric was contaminated in several places. PCCA started an investigation to determine if man-made fibers from a colored duster could be spun into yarn to create a yarn similar to the ones in the fabric. The test yarns were then woven and knitted into fabric. A fabric was made that was contaminated very similar to the samples from the textile mill.

Shortly afterwards another textile mill in a different foreign country sent to PCCA pieces of fabric with similar contamination. PCCA then focused their attention on what materials could cause the type of contamination found in the actual bales of cotton.

The International Textile Center at Texas Tech University was aware of the investigation by PCCA. During one of their spinning tests their technician observed similar contamination in yarns being ring spun in a test program. Further investigation found contamination in the roving and a very small amount of contamination was found in the bale of cotton being used for the test.

A piece of the fiber from the bale and fiber from hay bale binder twine were compared using a Spectrometer. The wave length curves were very similar in the polypropylene portion of the curve.

The conclusion was made that the contamination in the bales was polypropylene material from binder twine or similar rope. The material had probably been used for tie downs for module covers. Pieces of the material were accidentally ginned and thus became contamination in the bales of cotton.

It was emphasized to keep foreign material from contaminating bales of cotton. Any contamination that ends up in the fabric can cause the material to be off-quality and reduce the value of the fabric as well as create problems for the textile mill and the supplier of the cotton.