

Conference Summary

Fiber Quality and Ginning

Dr L Hunter

CSIR Division of Manufactory and Materials Technology, Port Elizabeth SOUTH AFRICA

Ultimately everything revolves around the cotton fiber, its sustainable production, quality, yield and competitive price. Out of a total of some 350 papers fewer than 60, i.e. 16%, specifically dealt with, or referred to, the cotton fiber properties as such.

Aspects covered include the effects of environmental, harvesting, ginning and genetic factors on cotton fiber properties, and ways in which the quality and yield of cotton can be improved through appropriate breeding and genetic modification systems. Improving the quality of the cotton fiber through traditional and molecular breeding and genetic modification received particular attention. Of specific importance are the attempts to gain a better understanding of which genes affect or determine the fiber properties, and their specific functions. Undoubtedly this will be one of the

technologies of the 21st Century for improving cotton fiber properties, in spite of the genetic complexity of the cotton fiber, and the need to develop appropriate genetic models. The measurement of fiber properties, such as short fiber, and their effect on processing behavior and neps were also reported as well as the processing and comfort properties of cotton and hemp blends.

The Quick-Spin assessment of cotton quality was discussed, so too the dismantling (or de-spinning) of a cotton yarn into its constituent fibers so as to enable the fiber properties to be determined.

Bio-chemical characterization of cotton fiber and its relationship to fiber properties also received attention.