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Cuticle scale measurement of animal fibers by SEM and AFM

Notayi M, Engelbrechts JAA, Lee ME, Goosen WE, Hunter L and Botha AF

Abstract

Mohair belongs to a class of animal fibers collectively called speciality fibers, due to the fact that these fibres are luxurious, rare and often expensive relative to sheep wool. South Africa produces more than 50% of the world total mohair production. The price differences between speciality fibers and wool is believed to be the major factor causing adulteration and mislabeling of textile products. The textile industry hence needs evaluation of the fiber composition of a fiber blend used in a textile product. This requires the development of a fast and reliable technique for the evaluation of fibre technique.