

EFFECT OF BLEND RATIO ON YARN EVENNESS OF THE UAS SHEEP BREED WOOL AND ITS BLENDS

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ABSTRACT

Wool is natural protein fibre which is highly extensible, flexible and resilient in nature. The natural crimp and resilience of wool fibres help to maintain high loft and thermal insulation of fabrics. UAS sheep breed, a product of crossing Southdown, Bannur and Deccani breeds developed at University of Agricultural Sciences (UAS), Dharwad was selected for the study. The UAS breed wool has very low tensile strength and elongation, to enhance the optimum utilization and improve the properties of UAS sheep breed fleece was blended with other synthetic and natural fibres. The scoured and pre-carded UAS sheep breed fleece was blended with acrylic, r-PET and jute fibres in varied proportions *viz.*, 70/30, 60/40 and 50/50 through sandwich/stack blending technique. The blended fibres were subjected to woolen carding system and spun on hand charaka and friction machine. Control and nine blended yarns were subjected to Uster evenness tester to assess the total yarn imperfections. The results revealed that among the test samples, both hand spun and friction spun wool/ jute blends in varied proportions exhibited significantly less unevenness percentage, thin places, thick places than the r-PET and acrylic.

KEYWORDS: Neps, Thick Places, Thin Places, Total Yarn Imperfections, UAS Sheep Breed Wool and Unevenness Percentage