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“Development on the margin”

Cashmere of Nomadic Raeini Goat: Assessment of Quality, Comparative Advantage, Development Options for Industry

HAMID REZA ANSARI-RENANI¹, BARBARA RISCHKOWSKY², JOAQUIN MUELLER³

¹*Animal Science Research Institute, Animal By-product, Iran*

²*International Center for Agricultural Research in the Dry Areas (ICARDA), Syria*

³*National Institute for Agricultural Technology (INTA), Animal Production, Argentina*

Abstract

This experiment aimed to identifying characteristics and comparative advantage of cashmere of Raeini goat kept by nomads in Kerman province of Iran for development of industry. In April 2010 a total of 709 male and female cashmere goats of 1, 2 and 3 years of age belonging to 30 nomadic herds within 20 kilometers of Baft city were studied. Samples of fibre were taken from the left midside of goats and analysed using standard objective measurements for mean fibre diameter (MFD), coefficient of variation of fibre diameter (FDCV), staple length (SL), fibre curvature (FC), cashmere fibre, and (CF) percentage. Fleece was shorn and weighed to measure fleece weight (FW). A general linear model was used to analyse the data and measure the relationships between cashmere and fleece attributes. The mean (s.d) for FW, MFD, FDCV, SL, FC and CF were 506.90 ± 7.08 gm, 19.65 ± 0.05 μm , 22.7 ± 0.11 %, 54.26 ± 0.26 mm, 63.08 ± 0.32 °/mm and 56.49 ± 0.45 % respectively. 22 % of all cashmere samples were finer than 18.5 μm suitable for worsted and semi-worsted knitwear. Of these cashmere samples, 27 % was finer than 17.5 μm totaling to 6 % of all samples. A further 78 % of the cashmere was coarser than 18.5 μm . All samples were longer than 40 mm with 38 % between 40 and 50 mm, 46 % between 51 and 60 mm and 16 % between 61 and 80 mm. All samples had a curvature greater than $40^\circ/\text{mm}$ with 17 % between 40 and $55^\circ/\text{mm}$, 61 % between 56 and $70^\circ/\text{mm}$ and 22 % between 71 and $94^\circ/\text{mm}$. There is substantial scope to improve the commercial value of fibre produced by Raeini goats kept by nomads which produce high value classification cashmere equivalent to international standard quality.

Keywords: Cashmere, curvature, fibre diameter, fleece weight, goat, staple length