Comparison of Meat Quality Parameters Between Local Goats and Jamunapari Goats Reared Under Semi-Intensive Management System

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Abundant and reliable information on physicochemical properties and sensory attributes of meat from Sri Lankan goat breeds are scarce for the enhancement of goat meat production under semi intensive management system in Sri Lanka. Thus, the aim of this study was to compare the physicochemical and sensory properties of thigh meat from Jamunapari and local goat breeds reared under semi intensive system. Thigh meat from four animals were collected from each breed and used for the analysis. Determination of proximate composition, meat quality parameters and sensory evaluation were conducted and data were statistically analyzed. The results revealed that protein and fat contents of thigh meat were significantly different (p < p0.05) between the two breeds, but not the moisture and ash contents (p > 0.05). Accordingly, thigh meat of Jamunapari showed a higher protein content, and a lower fat content than those of local goats. However, meat quality parameters such as pH, meat color, cooking loss and water holding capacity and textural characteristics of thigh meat were comparable between the two breeds (p > 0.05). Thigh meat of local goats had better sensory properties than that of Jamunapari goats. In conclusion, Jamunapari goat meat showed better proximate composition than local goat meat whereas other meat quality traits are comparable between the two breeds.

Keywords: Jamunapari, Local goat, Meat quality, Semi intensive, Sensory evaluation