Evaluation of milking attitude and milk quality in native Ciuta sheep breed

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The Ciuta sheep is a small, local breed native to the Central Italiaùn Alps. While primarily raised for meat production, there is historical documentation of its traditional use for cheese production. This aspect could provide valuable insights into the sustainable utilization of this local breed in Alpine farms. Consequently, this study aimed to characterize for the first time the quality of Ciuta's milk. The experiment was conducted at one sheep farm located in Valtellina, Lombardy. A flock comprising 11 ewes and their lambs was utilized and housed in a single barn equipped with a catch feeder. All ewes were subjected to the same management system, involving lambing in late December-January followed by lamb suckling until the initiation of the trial (February), when ewes were at 49 ± 8 days of lactation on average. The ewes were manually milked once a day in the morning, and following the morning milking, lambs were allowed to remain with their mothers until late afternoon. Throughout the day, the flock grazed on native pasture, while during the night, they were housed in shaded open pens. Additionally, the ewes were provided with local hay ad libitum and supplemented with 200g/sheep/day concentrate during milking. Sheep behaviour was recorded during milking sessions twice a week, aligning with the days designated for milk sample collection. Furthermore, udder conformation scores, encompassing udder suspension, udder height, and teat placement, were documented for each ewe. Milk production was recorded and individual samples of milk was dispatched to the accredited laboratories of ARAL (Regional Association of Farmers) for compositional analysis, conducted in accordance with official methods (ISO 9622:2013, IDF141). Additionally, the fatty acid profile of milk samples was determined by gas chromatography in our laboratory. Preliminary findings revealed average values of 3.9g/100g for fat, 5.5g/100g for protein (including 4.1g/100g of casein), 4.8g/100g for lactose, 91.7×103 somatic cell count (SCS), and 35.6 mg/dl for urea.