Variation in blood serum proteins and association with somatic cell count in dairy cattle from multi-breed herds

T. Bobbo, E. Fiore, M. Gianesella, M. Morgante, L. Gallo, P.L. Ruegg, G. Bittante and A. Cecchinato

**Supplementary Table S5** *Descriptive statistics of milk yield and composition by breed of cows on 41 mixed breed farms in north-eastern Italy1*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | HF | BS | JER | SI | REN | AG |
| Number of cows | 471 | 663 | 40 | 158 | 103 | 73 |
| Milk yield, kg/d2 | 28.4±9.8 | 25.0±7.7 | 21.1±4.8 | 20.2±6.8 | 16.9±5.7 | 13.1±4.8 |
| Milk composition2 |  |  |  |  |
|  Fat, % | 4.02±1.00 | 4.12±0.84 | 6.04±0.65 | 4.17±1.12 | 3.28±0.64 | 3.57±0.76 |
|  protein, % | 3.51±0.56 | 3.80±0.44 | 4.09±0.74 | 3.49±0.43 | 3.26±0.36 | 3.49±0.38 |
|  Casein, % | 2.75±0.42 | 2.98±0.33 | 3.23±0.54 | 2.74±0.32 | 2.57±0.28 | 2.75±0.28 |
|  Casein/protein ratio | 0.79±0.01 | 0.78±0.01 | 0.79±0.02 | 0.79±0.01 | 0.79±0.01 | 0.79±0.02 |
|  Lactose, % | 4.83±0.26 | 4.84±0.22 | 4.77±0.19 | 4.83±0.21 | 4.91±0.28 | 4.89±0.22 |
|  Urea, mg/100g | 21.5±7.9 | 25.8±9.8 | 37.5±11.0 | 27.7±10.9 | 25.2±6.8 | 30.5±9.7 |
|  pH | 6.51±0.09 | 6.51±0.10 | 6.48±0.09 | 6.49±0.13 | 6.53±0.09 | 6.52±0.10 |
|  SCS3, units | 3.05±1.94 | 2.89±1.80 | 2.70±1.73 | 2.37±1.78 | 2.61±1.75 | 2.60±2.12 |
| 1Holstein Friesian (HF), Brown Swiss (BS), Jersey (JER), Simmental (SI), Rendena (REN) and Alpine Grey (AG).2Mean±SD.3SCS = log2 (SCC/100000) + 3 |