Table S1. Significance of fixed effects fitted in the animal models used for the univiariate analyses of the mastitis and udder conformation traits, at mid-lactation.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mid-Lactation |  |  |  |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| Trait | SCS | cmtSUM | cmtMAX | | UD | | UA | | UL | | UW | | TA | | TP | | TL | | TW | |
| Ewe Parity | \*\*\* | \*\* | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | |
| Litter size born x litter size reared | \*\*\* | \*\*\* | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \* | | ns | | \*\*\* | | \*\*\* | |
| Days in milk | ns | ns | ns | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | ns | | ns | | \*\*\* | | \*\*\* | |
| Scorer | - | ns | ns | | ns | | \*\* | | \* | | \*\*\* | | \*\*\* | | \* | | \*\*\* | | \*\*\* | |
| Farm x lambing month x year | \*\*\* | \*\*\* | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | |

Where \*, \*\* and \*\*\* represent: *P*<0.05, *P*<0.01 and *P*<0.001 respectively

ns = not significant

Somatic Cell Score (SCS), Sum of California Mastitis Test (cmtSUM)1, Maximum California Mastitis Test (cmtMAX), Udder Depth (UD), Udder Attachment (UA), Udder Length (UL), Udder Width (UW), Teat Angle (TA), Teat Placement (TP), Teat Length (TL), Teat Width (TW)

Table S2. Significance of fixed effects fitted in the animal models used for the univiariate analyses of the mastitis and udder conformation traits, at late-lactation.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Late-Lactation |  |  |  |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| Trait | SCS | cmtSUM | cmtMAX | | UD | | UA | | UL | | UW | | TA | | TP | | TL | | TW | |
| Ewe Parity | \*\* | \*\*\* | \*\*\* | | \*\*\* | | ns | | \*\*\* | | \*\*\* | | \*\*\* | | \*\* | | \*\*\* | | \*\*\* | |
| Litter size born x litter size reared | \* | \*\*\* | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\* | | \*\* | | ns | | \* | | \*\*\* | |
| Days in milk | ns | ns | ns | | \*\* | | \*\* | | \*\*\* | | \* | | ns | | ns | | ns | | ns | |
| Scorer | - | ns | ns | | ns | | ns | | \*\*\* | | ns | | \*\*\* | | ns | | \* | | \*\*\* | |
| Farm x lambing month x year | \*\* | \*\*\* | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | | \*\*\* | |

Where \*, \*\* and \*\*\* represent: *P*<0.05, *P*<0.01 and *P*<0.001 respectively

ns = not significant

Somatic Cell Score (SCS), Sum of California Mastitis Test (cmtSUM)1, Maximum California Mastitis Test (cmtMAX), Udder Depth (UD), Udder Attachment (UA), Udder Length (UL), Udder Width (UW), Teat Angle (TA), Teat Placement (TP), Teat Length (TL), Teat Width (TW)