



Mastitis continues to be one of the greatest health challenges facing the dairy industry. The aim of this study was to identify the prevalence of clinical (CM) and subclinical mastitis (SCM) in grazing cows and associated cow-level risk factors for SCM.

Methods

We visited 48 pasture-based farms in southern Brazil between Feb and Oct 2015. All lactating cows (n=1987) were assessed for CM and SCM using the California mastitis test.

Additional cow level information included breed, BCS, parity, DIM and locomotion score (1 – 5 scale; >2 = lame).

Production system

- Farm total grazing area: 21.3 ± 11.6 ha (mean ± SD)
- Mean herd size: 37 ± 1.4 lactating cows
- Mean milk yield: 17.5 ± 3.6kg/cow/d
- Corn silage: 18.0 ± 7.5 kg/cow/d
- Concentrate: 5.2 ± 1.6 kg/cow/d
- Main breeds: Holstein, Jersey & X-breed

Results

SCM prevalence: 47%
CM prevalence: 4%

Risk factors for SCM (odds ratio; p-value):

- Mid-and late-lactation cows were 1.4 (P<0.01) and 2.2 (P<0.01) times more likely to have SCM than early-lactation cows, respectively
- Primiparous cows were less likely (OR = 0.4; P<0.01) to have SCM than multiparous cows
- Lameness increased the likelihood of a cow having SCM by 1.7 times (P<0.01).
- Cows with BCS >3.5 tended to have increased likelihood (P=0.09) of having SCM.
- Breed was not associated with SCM



Take Home Messages

- There is a high prevalence of CM and SCM in cows kept in intensively managed grazing herds
- Lameness increases the risk of a cow having SCM.
- Breed was not associated with the likelihood of having SCM.