Genetic correlations between combined claw health traits measured at claw trimmings of Swedish Holsteins and Swedish Red dairy cows

S. *Naeslund[1], J.H. Jakobsen[1], J.-Å. Eriksson[2] and E. Strandberg[1],*

[1]Dept of Animal Breeding and Genetics, SLU, Uppsala, Sweden, [2]Swedish Dairy Association, Stockholm, Sweden

e-mail: Sandra.Naslund@hgen.slu.se; session 35, abstract no 2672

Hygiene-related diseases

Laminitis-related diseases

Digital Dermatitis

Heel Horn Erosion

Sole Haemorrhage

Sole Ulcer

Background

• High genetic correlations between digital dermatitis (DD) and heel horn erosion (HH), and between sole haemorrhage (SH) and sole ulcer (SU).

Aim

To estimate genetic parameters for combined traits: digital dermatitis and heel horn erosion (DDHH); and sole haemorrhage and sole ulcer (SHSU), and to compare these estimates to the estimates of the individual traits.

Material and Methods

• Claw trimming records from 65 816 1st (24 121 2nd) lactation Swedish Holstein cows

•Claw trimming records from 58 457 1st (22 282 2nd) lactation Swedish Red dairy cows

• Claw trimmings scored as absent (0), slight (1) or severe (2)

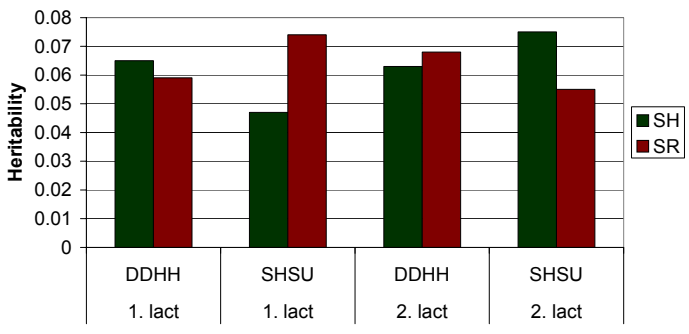
• Linear Animal Model

CONCLUSION:

• Higher heritabilities for combined claw health traits compared to mean heritabilities for individual traits

• Almost unity correlations between combined traits in first and second lactation

Heritability for DDHH and SHSU for SH and SR in first and second lactation



Genetic correlations between DDHH and SHSU in first and second lactation for SH and SR