OMICS Group Conferences
Accelerating Scientific Discovery

International Conference on
Animal & Dairy Sciences

July 23-24, 2013 Embassy Suites Las Vegas, NV, USA

Breed characterization of Colombian Holstein cattle and its association with reproductive traits

Stephania Madrid
National University of Colombia, Colombia

Conformation traits have been related with reproductive parameters and can be use as indicators of these. These traits appears earlier in life than reproductive, thus may allow faster selection of most prolific animals. In order to perform a Colombian Holstein breed characterization by evaluatingconformation traits and estimating their phenotypic correlation with reproductive parameters, 8037 records from Holstein cows were analyzed. Data were obtained from a milk control program conducted between 2008 and 2011. Breed characterization was made by contingency tables. Association with reproductive traits was made by generalized linear model, regression analysis and determination of Pearson correlation coefficient. Results showed that most population(89.41%) presentedan excellent body conformation. The major proportion, 43.46 and 44.85% showed regular or good legs conformation. Regarding udder conformation the 82.2% of Holstein had an excellent or very good qualification. Linear characteristics that showed a significant effect on reproductive traits werebody and udder compound, angularity, stature and rear udder width.The highest regression coefficient was for calving interval and body compound (-43.13 days), the lowest wasfor services per conception and rear udder width (-0.063 services). Phenotypic correlations were low (0.00 to 0.04). Highest correlation was for service per conception and foot angle (0.04), lowest was for calving interval and rear legs rear view (0.00). These results indicate that conformation traits can be use in animal breeding programs as an additional element of analysis in selecting superior individual, and perhaps would help to reduce involuntary culling by unfavorable physical characteristics.

Biography

Stephania Madrid has finished her bachelor's degree at 22 years of age from National University of Colombia. She was recognized for her successful academic performance in the Animal Science program. She was accepted as a Colciencias Young Researcher and currently pursuing a master's degree in Agricultural Sciences. Since 2011 she is an active member of BIOGEM group (Biodiversity and Molecular Genetics).

smadridg@unal.edu.co