Calving ease in beef heifers depending on selected body dimensions

Summary
The study involved 97 heifers, including 42 of the Charolaise breed and 55 of the Limousine breed. Calving ease and calf viability were evaluated. Inner and outer pelvic dimensions and pelvic angle were determined. Inner pelvic sizes were estimated rectally with the Rice pelvimeter. The aim of the present study was to evaluate calving ease and to determine differences in the body measurements of Charolaise and Limousine heifers, in order to account for the high frequency of difficult calving in the former. In the herds of Charolaise and Limousine cattle, no assistance was provided during parturition to 45.24% and 85.45% of heifers respectively. The total percentage of stillbirths was 10.31%, and they were recorded three times more frequently in Charolaise than in Limousine heifers. A more advanced age and bigger body measurements of heifers had a positive influence on calving ease. The high frequency of difficult calving reported for Charolaise heifers could be a consequence of the high birth weight of calves, a lower (in comparison with Limousine heifers) pelvic area to calf weight ratio, and that they are generally big-boned. The relationships between inner pelvic sizes and the course of parturition may provide a basis for predicting calving ease and for determining the optimum body size of heifers used for reproduction purposes.