

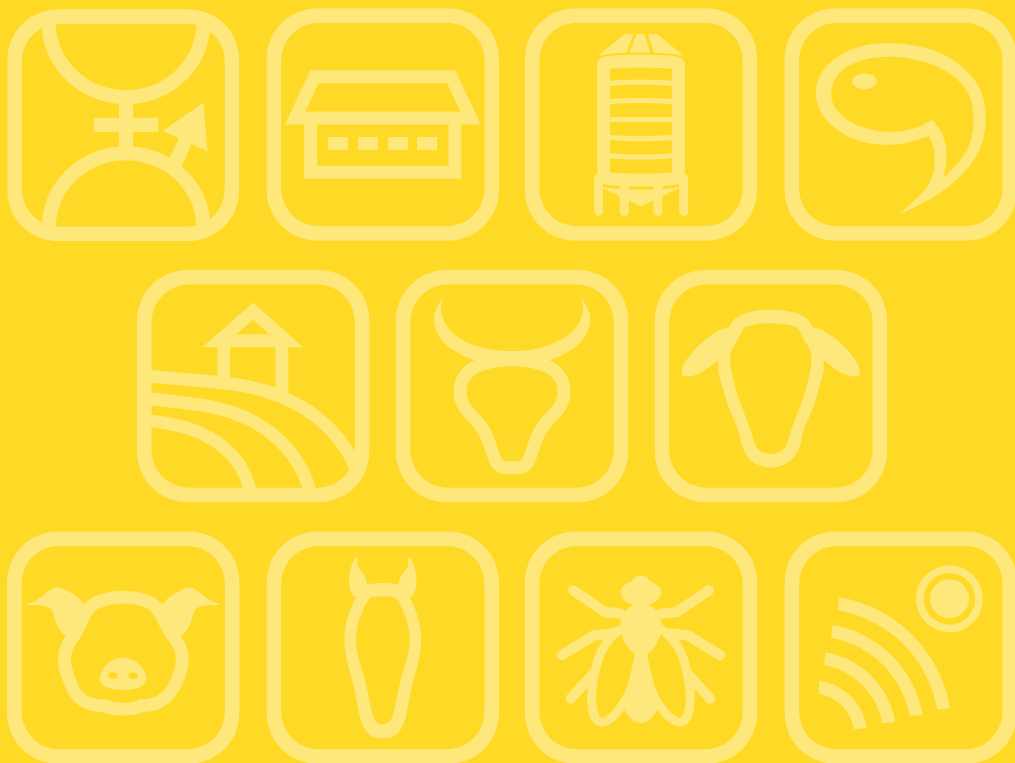
**New insights to predict seminal quality in young Limousine bulls**

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The attainment of sexual maturity in bulls is reflected in testicular and seminal quality traits. Obtaining and analysing seminal samples requires specific techniques that could make it difficult in field conditions. This study aimed to relate testicular and seminal parameters with several traits associated to the performance of young bulls as an indirect indicator of sexual maturity. Nine Limousine bulls (10.4±1.3 months old) were studied. Testicular echogenicity values (Ecotext, Humeco, Huesca, Spain) and intramuscular fat content (MeatQ-Text, Humeco) were obtained by ultrasonography. Sperm samples were obtained by electroejaculation and were processed in fresh and frozen-thawed for assessment by the integrated semen analysis system (ISAS, Proiser, Valencia, Spain). Grade of nervousness was evaluated counting the number of movements of the animal in the scale during 10 sec. Correlation coefficients were calculated by SAS Statistical package. All correlation coefficients presented were significant (P<0.05). Preliminary results indicated that: (1) scrotal circumference was related with intramuscular fat content of longissimus thoracis (r=0.79); (2) sperm concentration was related with the subcutaneous fat thickness at P8 point (r=0.76) and negatively with the animal nervousness (r=-0.76); iii) sperm progressive motility was related with the grey-pixel intensity of testicular parenchyma (r=0.72) and negatively with the diameter of the hypoechoic areas of seminiferous tubes (r=-0.71); iv) rapid-classified spermatozoa were related with the feed conversion ratio (r=0.79) and negatively with the diameter of the hypoechoic areas (r=-0.76); v) sperm progressive motility of frozen-thawed straws was related with the age of bulls (r=0.87). Although performance parameters and non-invasive new techniques cannot be used solely as indicators of sexual maturity for the time being, they can help to determine the period when a bull can be used as a sire. Acknowledgements to PDR RecríaINNOVA.

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