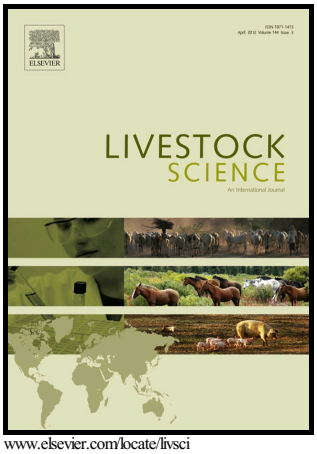

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Flow cytometry sex sorting affects bull sperm longevity and compromises their capacity to bind to oviductal cells

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Abstract

This study assessed the effect of flow cytometry sexing on sperm longevity and the capacity of sperm to bind to oviductal cells. Each ejaculate from four bulls was divided into two fractions: the first was immediately frozen as non sexed sperm (NS) and the second was sexed originating X- and Y-bearing sperm. The fourth treatment had sex-sorted X and Y sperm (XY) combined. Sperm from each group was assessed for sperm characteristics after thawing, after washing and at 2, 4, 8 and 12 h of incubation at 39°C in 5% CO_2 in air. For the binding test, sperm were incubated in sp-TALP medium for 30 min or 24 h with oviductal explants. Percentages of motility (58.1 ± 4.3 and 35.2 ±