

**Effectiveness of the sperm quality analyzer version pig (SQA-Vp) for porcine semen in comparison with other methods for semen analysis**

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The aim of this study was to evaluate the SQA-Vp for assessing the quality of porcine semen. Both fresh and extended semen from 50 ejaculates of different boars (7 Large White, 8 Landrace, 35 Piétrain) from a commercial AI-centre were investigated. For fresh samples, the concentration obtained with SQA-Vp was compared with IMV Accucel photometer and Bürker chamber, and for extended samples, results were compared with CASA (Hamilton Thorne) and visual semen analysis.

For fresh semen, high correlations were found between concentration data obtained with SQA-Vp and those obtained with IVM Accucel ( $r=0.97$ ) and with Bürker chamber ( $r=0.70$ ). The mean concentrations of spermatozoa ( $\times 10^6/\text{ml}$ ) measured with SQA-Vp, IVM Accucel photometer and with Bürker chamber were 379.3, 447.2 and 332.8, respectively. The mean % spermatozoa presenting normal morphology measured by SQA-Vp was 83%.

For extended semen, the concentration ( $\times 10^6/\text{ml}$ ) assessed with SQA-Vp, CASA and Bürker chamber were 20.4, 23.2 and 18.8, respectively ( $P>0.05$ ). Only moderate to low correlations were found between the concentration assessed with the SQA-Vp and those assessed with CASA ( $r=0.64$ ) and Bürker chamber ( $r=0.34$ ). The motility assessed by SQA-Vp (65.8%) and CASA (72.2%) and visual assessment (64.1%) was not statistically different. Both the SQA-Vp and CASA showed good repeatability (CV) for measuring concentration (SQA 3.9%; CASA 8.5%) and motility (SQA 3.2%; CASA 6.1%). The study showed that SQA-Vp can be used as a valid device for quick (45s per sample) semen analysis.