IMPROVING REPRODUCTION: FOCUS ON THE ESSENTIALS

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Introduction

Initial semen quality can certainly affect sow reproductive performance but there are a number of prerequisites to reproductive success that must be managed by the staff at each sow farm. Given a herd of high-health females that are properly managed and a regular supply of highly fertile insemination doses, major processes that influence reproductive success on-farm can be broken down into the four focus areas outlined below. It is important to recognize that deficiencies in any one of these areas can negatively impact reproductive performance and that such a situation cannot be fully corrected by simply increasing some aspect of initial semen quality.

Focus Areas

1. Semen Handling and Storage
   a. Temperature, sperm function and semen shelf-life
   b. Receiving semen and the storage unit
   c. Managing semen inventory (age)
   d. Transport to the breeding barn
2. Detection of Estrus
   a. Physical and behavioral signs of estrus
   b. Selecting and maintaining the right boar
   c. Control and intensity of boar exposure
   d. Gilts vs. sows and pens vs. crates
3. Insemination Process
   a. Estrus and ovulation variation
   b. Timing and number of inseminations
   c. Hygiene and insemination equipment
   d. Insemination quality and semen loss
4. Post-Insemination Management
   a. Moving females
   b. Pregnancy detection
   c. Regular and irregular returns to estrus
   d. Pseudo-pregnancy and failure to farrow

Take-Home Message

Training stockpeople to carry out simple effective processes and teaching them their importance as it relates to both the sow farm’s and their own personal success remains one of the biggest challenges to improving and maintaining reproductive performance.
Identification of neglected processes and practical means to improve them should continue to be our focus.