SOP No: ATT 062

SUBJECT: Artificial Insemination in Pigs

POLICY: This procedure may only be carried out by operators competent in the technique.
Overall, steel capped boots, gloves

PRECAUTIONS: All equipment must be kept clean
Do not use soap or detergents to clean equipment

EQUIPMENT: Melrose or suitable catheter
Plastic insulated flask (250mL)
Diluted semen

PROCEDURE: Successful insemination depends on:
- detecting oestrus in the sow
  Although oestrous may last up to 60hr, the sow is only fertile for 24-32hr. A sow in oestrus will mount other sows and will display a reddening and swelling of the vulva with a clear discharge. They may “honk”, lose their appetite and appear nervous. Peak fertility occurs in the “middle” 24hrs. Swelling of the vulva has subsided and the mucous becomes more copious and greyish looking. The sow will “stand” to back-pressure from the operator.
- correctly timing the insemination
  Test the sow for the “standing” reaction twice daily.
  Inseminate twice (8-12hr after first “standing” reaction and 8-16hr later).
- using the right technique
  Clean the sow’s vulva with a damp cloth or paper towel.
  Manually stimulate the sow in the presence of a mature boar (in an adjacent pen) to induce the mating stance.
  Apply pressure between the shoulders and mid-back, knee pressure to the flanks and massage the vulva and udder.
  Lubricate the tip of the catheter with a small amount of semen.
  Part the lips of the vulva and insert the catheter upwards into the vagina. Ensure that the catheter does not enter the urethra. If urine is observed in the catheter, discard and replace with a new catheter. If blood is detected in the catheter, do not proceed - blood will inactivate sperm.
  Push the catheter gently through the vagina until resistance is felt at the cervix. Rotate the spiral tipped catheter anticlockwise to “lock” the cervix.
- correct storage and handling of semen
  Warm the semen before use by placing in a pocket and gently agitate to resuspend sperm.
  Cut the tip off the inseminating bottle with a clean knife.
  Grip the bottle by its cap and firmly fit the tip into the inserted catheter.
Raise the bottle over the sow’s back and gently squeeze to
remove the airlock in the catheter.
Allow gravity to draw semen into the catheter as the
sow’s uterus contracts.
Once all of the semen has been delivered, leave the
catheter in place for 5min to assist stimulation.
Remove the catheter ensuring that the free end is higher
than the vulva to prevent semen from siphoning out.
Continue sexual stimulation to promote uterine
contractions.

RECOMMENDATIONS:
Handle sow’s gently to encourage the flow of oxytocin. Rough
handling will result in adrenalin release and prevent the
natural contractions of the uterus.
AI results with chilled semen are optimal if done within 72hr
of collection.

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REFERENCES
http://www.dpi.nsw.gov.au/agriculture/livestock/animal-welfare/general/other/livestock/sop/pigs/artificial-
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