

## Bovine Infertility Investigation

### Sample collection guidelines for bull preputial washings and/or cow vaginal mucous washings

#### BACKGROUND

*Campylobacter fetus* subsp *venerealis* and *Tritrichomonas foetus* are organisms implicated in infertility in cattle. Freshly collected preputial or vaginal washings can be cultured or examined for these organisms.

#### PURPOSE

Method for the collection of bovine preputial and vaginal mucous samples for examination

#### MATERIALS REQUIRED

Sterile labelled screw-capped bottles approximately 30 ml capacity, each containing 4 ml of sterile, phosphate buffered physiological saline (PBS)

Clean scissors/secateurs

Tricamper sampling Device(s) see illustration below



#### SELECTING ANIMALS FOR TESTING

As female cattle clear infections quickly, best success for testing is achieved by testing bulls.

#### SAMPLING PROCEDURE

##### Collection of Sample from Bull

- Put bull in crush and fasten the nearest hind leg with leg rope.
- To obtain preputial smegma: hold the anterior aspect on the sheath with one hand and insert the Tricamper into the prepuce, with the end adjacent to the penis. Move the tool back and forth, so that it scrapes across the preputial mucosa and the surface of the penis.
- Using a finger, block the end of the sampler to prevent any of the collected material from being suctioned out, and once the material is collected remove device from the sheath.
- Place the head of the Tricamper device into the PBS tube and cut off, using **clean** scissors/secateurs.
- Secure the lid of the PBS container firmly, and swirl several times.
- Label each specimen container clearly with animal identification details, time and date of collection.

#### TRANSPORTING SAMPLES

- The labelled bottles containing the samples should be placed in an esky and delivered to the laboratory within 6 hours of collection.
- If delivery takes longer than six hours, the use of *Campylobacter* Enrichment Transport Medium (CETM) is necessary.
- During transport avoid sunlight and extremes of temperature below 4°C or above 30°C.
- Please **do not** send samples on ice.

## Collection of Sample from Cow

- a) To obtain vaginal mucous: open the vulva with one hand and insert the sampling tool in a dorso-cranial direction with the leading edge of the tool in contact with the dorsal vagina.
- b) Once there is no risk of the sampling tool entering the urethra continue in a cranial direction until the Tricamper reaches the cervix.
- c) Move the Tricamper gently backwards and forwards.
- g) Using a finger, block the end of the sampler to prevent any of the collected material from being suctioned out, and once the material is collected remove device from the vagina.
- h) Place the head of the Tricamper device into the PBS tube and cut off, using **clean** scissors/secateurs.
- i) Secure the lid of the PBS container firmly, and swirl several times.
- j) Label each specimen container clearly with animal identification details, time and date of collection.

## Collection of Sample from aborted foetus and placenta

Foetal stomach content should be collected aseptically from a freshly aborted foetus using a sterile syringe before transferring the fluid into a sterile container.

Other tissues (lung, liver, spleen and placenta) can also be collected for direct culture.

When placenta is available, additional material should be collected for microscopic examination.

As *C. fetus* subsp *fetus* can be present in the faeces of healthy animals, care should be taken to avoid any faecal contamination.

## TRANSPORTING SAMPLES

- a) The labelled bottles containing the samples should be placed in an esky and delivered to the laboratory within 6 hours of collection.
- b) During transport avoid sunlight and extremes of temperature below 4°C or above 30°C.
- c) Please do not send samples on ice.

## SUBMITTING SAMPLES

Submit samples to:

Animal Health Laboratory  
NRE Tas  
165 Westbury Road  
Prospect TAS 7250

P: 03 6777 2111

E: [specimenreception@nre.tas.gov.au](mailto:specimenreception@nre.tas.gov.au)