



## AEC SOP 9.15 Oestrus synchronisation in ewes and does: CIDR/sponge insertion.

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### Purpose

- (1) The objective of this standard operating procedure is to provide guidance to the Charles Sturt University staff on:
  - a. The synchronisation of oestrus in ewes and does for reproductive purposes.

### Scope

- (2) This procedure applies to any person who is involved in AEC approved projects involving synchronising ewes or does for reproductive purposes.
- (3) All researchers and teaching staff using animals for scientific purposes must be competent. For definition of competency refer to Charles Sturt University's Policy on 'Animal Care Competency Training and Assessment'

### Details of procedure

#### Use of prostaglandin F2 $\alpha$ for synchronising cycling small ruminants

- (4) Appropriate doses of prostaglandin F2 $\alpha$  (typically 100-250mcg cloprostenol; 10mg dinoprost) to mobs of cycling ewes will assist in synchronising oestrus, especially when using two doses approximately a week apart.

#### Administration of progestogen containing intravaginal implants

- (5) The insertion of intravaginal implants (IVI's) of progestogen (e.g., CIDR containing progesterone and proprietary (Chronogest®) sponges containing flugestone) for 12-14 days in ewes and up to 21 days in does. The IVI is aseptically inserted into the animal's vagina with bespoke insertion devices. Animals should be in good body condition (>3/5) and have reached puberty. The treated animals should come into oestrus and ovulate between 48-66 hours post IVI removal. The IVI is removed by firm traction on the string or cord attached to the relevant device. The efficacy of synchronisation is enhanced by the administration of 100-600IU equine chorionic gonadotrophin (eCG) at IVI removal, depending on breed and season. Human chorionic gonadotrophin (hCG) might be used in some protocols.

### Drugs, chemicals, or biological agents

- (6) Dinoprost, cloprostenol, progesterone, flugestone, eCG, hCG, prostaglandin F2 $\alpha$ .



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### **Impact of procedure on wellbeing of animals**

- (7) Induces oestrus.

### **Animal care**

- (8) Transport, handling, and caging will be conducted in accordance with the Australian Animal Welfare Standards and Guidelines for Cattle 2014.
- (9) Care should be exercised when inserting IVI devices. The devices should be clean and lubricated appropriately to facilitate ease of insertion of the IVI. Devices will likely induce some form of vaginitis.
- (10) IVI devices do not have an adverse effect on pregnancy. PGF2 $\alpha$  can induce abortion in goats at any time during pregnancy, and up to 50 days gestation in ewes.

### **Pain relief**

- (11) None required.

### **Reuse and repeated use**

- (12) Regular synchronising can occur throughout the breeding season.

### **Qualifications, experience or training necessary to perform this procedure**

- (13) Demonstrators should have been trained for this procedure.

### **Record requirements**

- (14) Completion of AEC approved daily monitoring forms.

### **Associated documentation (including pictures if available)**

- (15) None required.

### **Glossary**

- (16) eCG= Equine chorionic gonadotrophin
- (17) hCG= human chorionic gonadotrophin
- (18) PGF2 $\alpha$ = prostaglandin F2 $\alpha$ .
- (19) IVI = intravaginal implants



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### **References and relevant links**

- (20) Australian Animal Welfare Standards and Guidelines for Cattle 2014, Animal Health Australia, version 1. [www.animalwelfarestandards.net.au](http://www.animalwelfarestandards.net.au)
- (21) <https://www.dpi.nsw.gov.au/animals-and-livestock/animal-welfare/animal-care-and-welfare/livestock/livestock-files/national-model-codes-of-practice-for-the-welfare-of-livestock>
- (22) <https://www.dpi.nsw.gov.au/animals-and-livestock/animal-welfare>