

Directorate Communication



Livestock improvement terminology

Explaining some technical terms in the Animal Improvement Act, 1998 (Act No 62 of 1998)

Reproductive cells

Male cells (spermatozoa)

· A cattle semen straw will contain a minimum of 7 million spermatozoa.

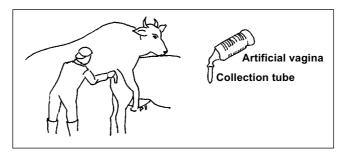
Female cell (ovum)

• The unfertilised cell is also referred to as an egg cell.

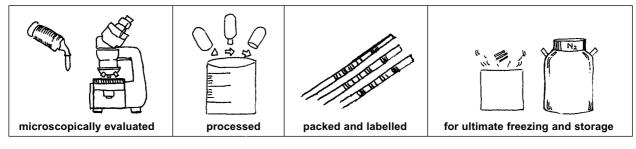
Male cell + female cell = embryo (fertilised ovum)

Collecting semen

Semen is collected from a donor animal.

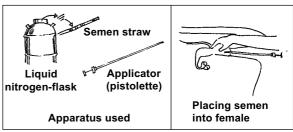


It is then:



Artificial insemination

- Artificial impregnation of a female animal:
 - frozen or fresh semen is placed mechanically into the female
 - normal fertilisation can now take place.

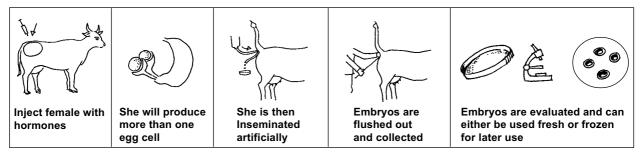






Collecting embryos

· Preparing the donor:

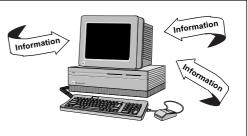


AI centres

- Artificial insemination (AI) centres are registered in terms of Section 9 of the Act.
- These centres undertake the collection, evaluation, processing, packaging and labelling of semen.
- Centres where embryos and ova are collected, evaluated and processed can also be registered.

INTERGIS

• The integrated registration and genetic information system (INTERGIS) is a central computer system developed and maintained by the South African Stud Book and Livestock Improvement Association.



- Registration data and pedigrees of beef cattle, dairy cattle, sheep, goats, pigs and horses are stored on the INTERGIS.
- Data of animals participating in performance testing can be integrated with registration data. This creates a totally integrated database according to which genetic evaluations can be done.
- The INTERGIS is an open system which can be utilised by various users and countries simultaneously.

For further information, contact the Subdirectorate Animal Genetic Resources, Private Bag X138, Pretoria 0001 Tel (012) 319 7448

or

The Resource Centre Tel (012) 319 7141 or 319 7085

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