

AGRICULTURAL SCIENCE

SS2

ANIMAL REPRODUCTION

DEFINITION

This is the ability of an animal to give birth to young ones. This purpose of reproduction is to ensure continuity of life. If there is no reproduction in farm animals, they will go into extinction.

Farm animals reproduce sexually and are mostly viviparous because they bear their young ones alive. Poultry birds on the other hand are oviparous because they produce their young ones by hatching eggs after incubation.

MALE REPRODUCTIVE SYSTEM

The male reproductive (organ) system is made up of the primary sexual character and the secondary sexual character. The primary sexual character is made up of the Testes, while the secondary sexual character consists of the scrotum, Cowper's gland, prostate gland, seminal vesicles, urethra, penis, vas deferens and sperm duct.

FUNCTIONS OF THE VARIOUS PARTS OF THE MALE REPRODUCTIVE SYSTEM

1. TESTIS

They are located within the scrotum or scrotal sac. When stimulated by the hormone testosterone it secretes spermatozoa. Removal of the testes is called Castration. The spermatozoa are produced by the process of spermatogenesis.

2. SCROTUM

The scrotum houses the testes. It also regulates the temperature of the testes and when the day is cold, the scrotum shrinks (constricts) and when the day is hot, it drops or falls to a lower level. It does not have hair or very little hair so as to perform its function very well.

3. VAS DEFERENS

This is responsible for conducting or transporting of the sperm from the epididymis to the neck of the urethra. The removal of the vas deferens is known as vasectomy. This can only be done when the animal sexual characters have developed and may be to remove its poor quality. Vasectomy is safer than castration because the animal can still be stimulated but the sperm is not allowed to come down.

4. EPIDIDYMIS

The epididymis ensures the storage and maturation of sperm cells in the testes before it is being used or released.

5. SEMINAL VESICLE

This region secretes a fluid rich in food substances, this fluid helps in feeding the spermatozoa before fertilization takes place.

6. PROSTATE GLAND

This secretes a prostrate fluid which helps to inhibit urine formation during copulation and ejaculation.

7. COWPER'S GLAND

This also secretes the Cowper's fluid which is alkaline and helps to reduce the acidity of the sperm.

8. SEMEN

This is a mixture of the seminal fluid and the spermatozoa. Only about 25% of the quantity of semen ejaculated is spermatozoa the remaining 75% are the seminal fluids.

9. URETHRA

This is a narrow tract a urino-genital organ which helps to inject sperms into the vagina as well as the removal of urine. The urethra ends externally in penis.

10. PENIS

This is the organ which is used to introduce the sperm into the vagina. When it stimulated, the arteries expand, the blood flows into the blood vessels thereby making the penis to be turgid that copulation can takes place.

11. COPULATION

This is mating between the male and female animals.

12. EJACULATION

This is the release of the sperm by the male during copulation.

ASSIGNMENT

1. Draw and label the male reproductive system
2. What are the function of the following Parts of the male reproductive organ.
i. Testes ii. Vas deferens iii urethra
3. Differentiate by Vasectomy and castration.

