# Types and breeds of camels

# **Types of camels:**

There are two different types of camel.

1- Arabian camels (dromedaries) have a single hump. They are found in North Africa as well as Arabia. Also called Arabian or Indian camels

2-Bactrian camels: mostly seen in central Asia. They have two humps and are more efficient.

3- Hybrid Camels: they are of two types are mostly seen in cold climate



# Origin of camels:

- -Kingdom:Animalia
- -Phylum :chordate
- -Class: Mammalia
- -Order :Arthiodactyla
- -Sub -order:Ruminatia
- -Family :Camelidae
- -Genus:Camelus (Old world camels)
- -Species: dromedaries (Arabian camels)



-Species: bacterianus (Asiatic camels)

#### General characters of camels:

Camels have many properties made him faced the desert challenges. These properties are:

1-A camel's hump is a store of fat which the animal can live off when food is scarce.

2-The huge feet of camels help them to walk on sand without sinking into it.

3-There are broad ridges of bone above each eye. These stick out far enough to shield the eyes when the sun is overhead.

4- The ears of camels are small to make it harder for sand to get in them.

5- Camels have long eyelashes that catch most of the sand.

The eyelid is very thin, so a camel can see through it. In sandstorms, camels often close their third eyelid and keep walking. You might say that a camel can find its way through a sandstorm with its eyes closed.

6- Camels can shut their nostrils.

When there is no sand blowing in the wind, a camel can open its nostrils (A) and breathe through its nose. When the wind starts to whip up the sand, the camel just closes its nose (B).

## **Breeding of camels:**

**Puberty in male:** The good nutritional and environmental conditions can assist early sexual development and breeding maturity in dromedary camels. The male camel matures at the

age of 3 - 4 years old. The breeding activity starts at 5 years of age. At 6 years of age they are in full reproductive vigour







The sexual activity can continues until 20 years of age, but this can vary due to breeds, genetics, nutrition and climatic changes. The male dromedary can mate with 20 to 50 females a season, when he is in good condition.

**Puberty In female camels**: Nutrition, season of birth and breed of camel play an important role in the puberty. Female should be bred when they reach at least 70% of their adult body weight otherwise abortion rate is increased. In Arabian camels puberty is attained at 2 years of age but in practice females are not bred until they are 3 or 4 years of age.

# Seasonality of reproduction: Sexual cycle of the male camel

The male camel is a seasonal breeder and normally docile and easily controlled but in the rutting season becomes so aggressive towards other male camels and humans. In the rutting seasons shows:

- Loss of appetite and kicks.

- Protrudes the dulla outside of the mouth, and accompanied by frequent gargling sounds.

- Grinds its teeth and large quantities of foam can be seen in the oral cleft.

The breeding season in male is very variable but generally coincides with the period of low humidity, low temperature, and increased rainfall. In the Middle East from late October to late April. The onset of the rutting season can also be affected by the type of management and the individual male.

Camel is seasonal polyestrous. However, with good nutrition and management, the female can cycle throughout the year. Arabian camels are best bred from November to March.

## **Estrous Behavior**

The signs of estrous behavior in the dromedary as being are

- Mounting other females, restlessness, frequent urination,
- Swelling of the vulva with a very scanty mucus discharge,

- Receptivity to the male,
- Moves her tail up and down in rapid succession.
- Seeks male and stands besides male.

The length of the oestrus cycle is normally 2–3 weeks.

The actual heat lasts for 3–4 days.

#### **Pregnancy in Camels:**

The period of gestation is from 365 to 410 days (average 370 days). 99% of pregnancy occurs in left uterine horn. Fertilization rate reported 82.3% by single mating, which could go up to 100% when animals bred daily for 3 days during estrus.

#### **Diagnosis of pregnancy:**

1- Bedouin method:

On the fourteenth day of post service, the she-camel will be brought to the bullcamel again. If she refuses to kneel and raise the tail and coil. This would be a strong indication of pregnancy.

2- Cervical mucous:

Mucous during estrus is less viscous, become whitish and scanty in early pregnancy, and difficult to collect at 2 months of pregnancy.

3- Rectal palpation:

This can be done in a sitting position or while standing in a stock.

The membrane slip test, described in cattle pregnancy diagnosis, is not possible in Camelidae because of the diffuse type of placentation. Therefore positive pregnancy diagnosis can only be achieved if the CL and fetus are palpated.

## **Parturition (signs):**

In camels the normal signs of parturition are:

-Swelling of vulva,

- -Restlessness,
- Frequent urination,
- Camel finds a corner or a dark place and cleans it with the help of fore legs.

Generally, parturition occurs in sitting position