

# FAMILY: OESTRIDAE

1. Larvae of this flies cause the condition known as **host specific myiasis**.
2. The adults are quite large in size with thick hair covering the body and have vestigial mouth part and they do not feed.
3. The only activity of this flies are restricted in mating, laying eggs or larvae on their specific host and then die.
4. Larvae have a comparatively longer life span and the nutrition required for the adults are also acquired in the larval stage.
5. The flies are very important as animal pest in different parts of this country.

**FAMILY:**

**OESTRIDAE**



GENUS

***OESTRUS***

***HYPODERMA***



Species

*O. ovis*

*H. lineatum*

*H. bovis*

*H. crossi*

**Genus:**

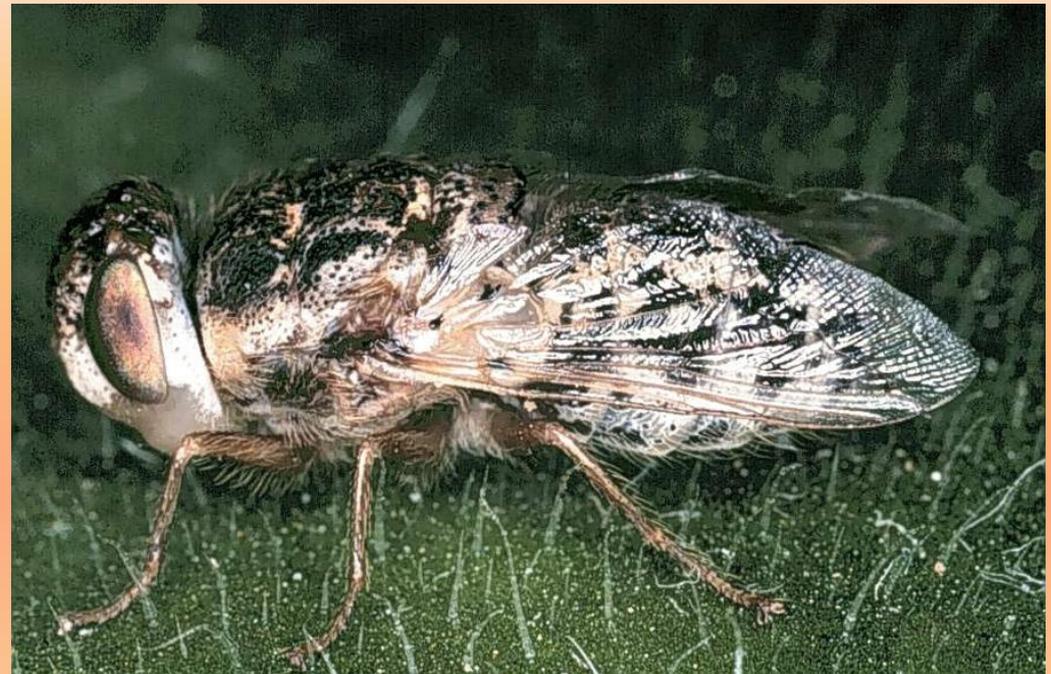
**Species:**

**Common Name:**

***OESTRUS***

***O. ovis***

**Sheep nasal fly**



# Characters:

1. Larvae of this fly parasitized the nasal and adjoining sinuses of sheep and rarely of goat.
2. They are larvaeperous flies and lay first stage larvae in and around the nasal opening of the host.
3. This flies also attack human being some time and sometime become great problem for shepherd.

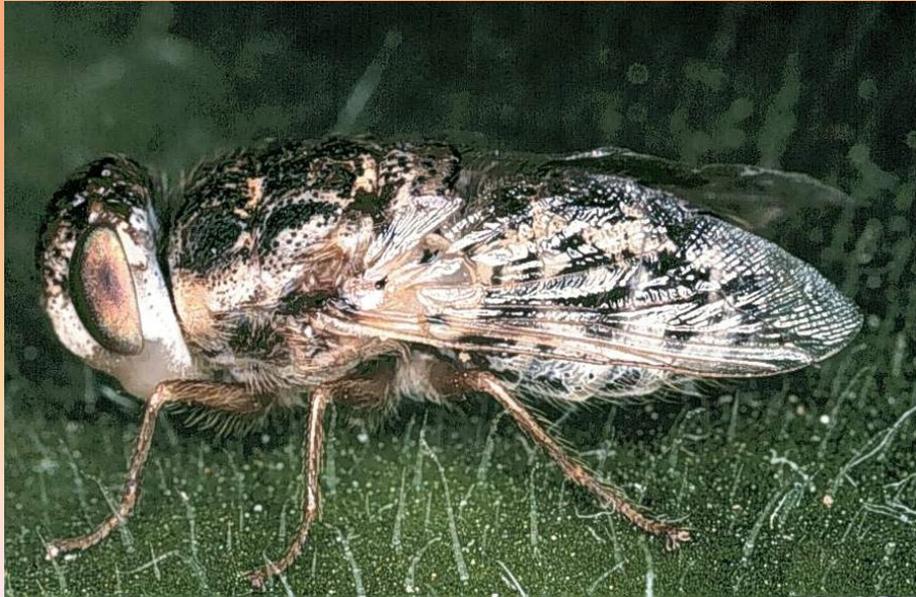


## **Distribution:**

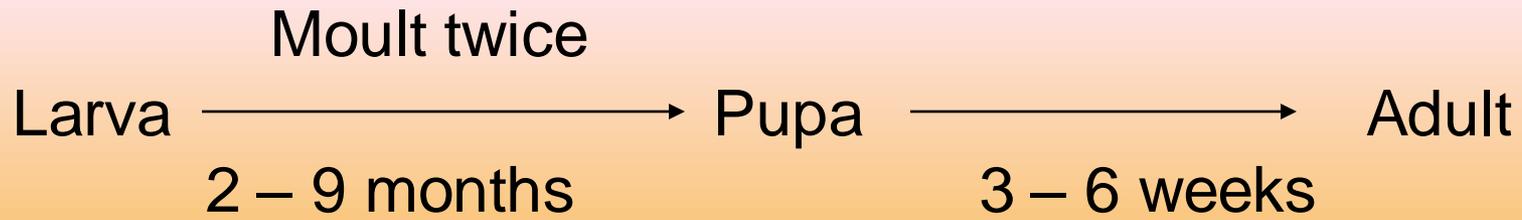
They are found all over the country and are very common in sheep growing area of this country.

## **Morphology:**

1. Medium size flies with large eyes about 14 mm in length, grayish brown in colour and cover with light brown hair.
2. Thorax has number of dark spot. Mouth part vestigial antennae with bear arista.



# Life cycle:



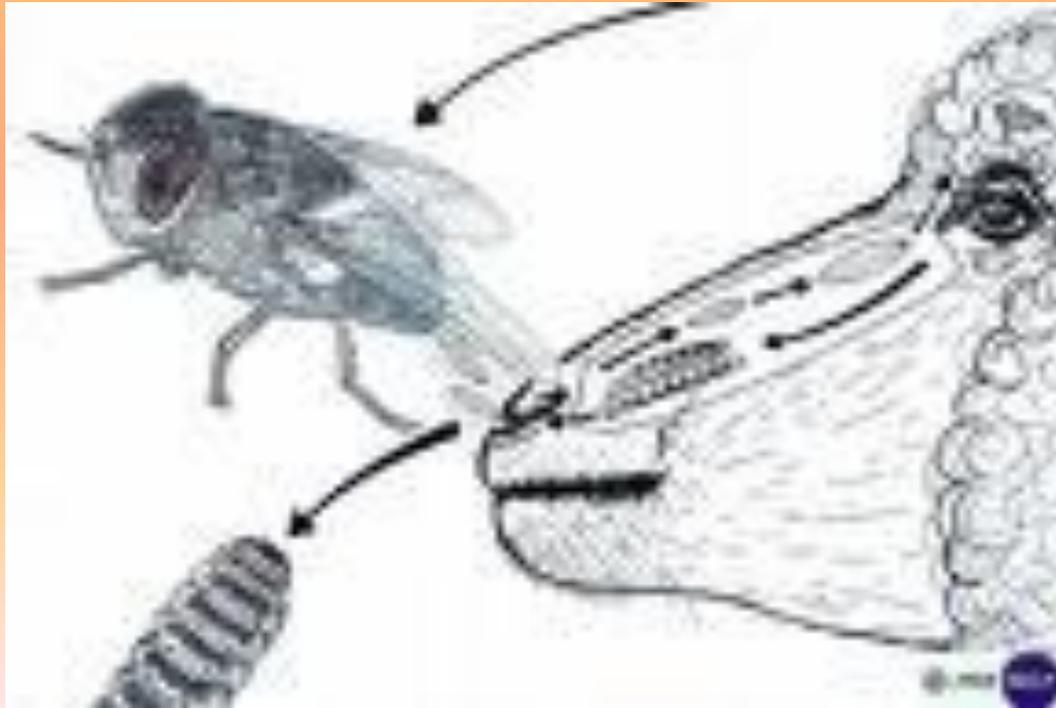
1. Flies are very active during warm days and are found almost all over the year excepting very cold months.
2. During cold months they are found in warm sunny days.
3. They deposit larvae around the nostril of the host, which crawl, into the nasal cavity and more upward.
4. They remain in the nasal cavity and moult twice.



5. Larvae have eleven-visible segmented (12 segmented, the anterior two segments are fused) maggot, yellowish in colour when freshly laid with a brownish band on the dorsal surface and number of spines on the ventral surface.

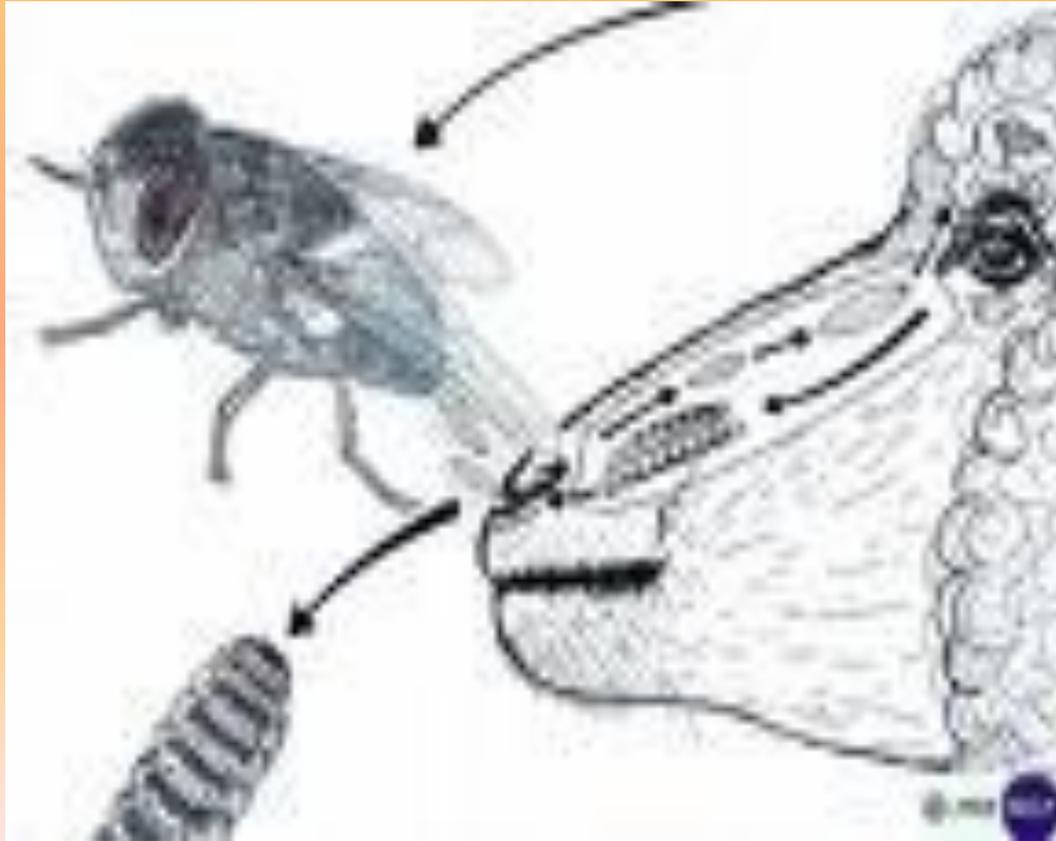


6. The larvae crawl up the nasal cavity and remain attached to the nasal mucosa and feed there on the nasal discharge and exudates as well as on the nasal mucosa.
7. Some of the larvae enter the different nasal and adjoining sinuses and increase in size.
8. Some of them even reach the turbinate bone of skull and perforate it and even damage the brain.



9. Depending on outside temperature the larvae remain there for 2-9 months and then crawl down the nasal cavity and drop on the ground and puped almost immediately.

10. Depending on atmospheric temperature the adult emerges in 3-6 weeks.



## **Habits:**

1. Adults hide in warm corner and crevices of animal shed and are very often in the morning they can be seen sitting against walls or any other object in the sun.
2. They come in large swamps and attack animals both in animal shed as well as in pasture.
3. Adults do not feed and have a very short life span of about 2-4 weeks.

# Pathogenesis:

When the flies approach the host for laying larvae the animal become very nervous and press their nose against the ground or in between other sheep.

Animals become rest less, stop feeding and shake their head vigorously.



Larvae irritate the mucous membrane with their hooks and spines causing viscous nasal discharge and exudates on which the larvae feed.

Erosion of the bones of skull is not uncommon and even injury to the brain showing symptoms of incoordination in movement, high stepping gait, which may sometimes be confused with other infection and is called “**false gid**”



Nasal discharge containing blood and frequent sneezing are common symptoms. The larvae that enter the small sinuses are ultimately could not come out as they increase in size, die there and cause great problem.



## **Diagnosis:**

Clinical symptoms (excluding lungworm infection and other pulmonary diseases)

## **Treatment:**

It is difficult because of difficulty in reaching the drug at the proper site. High-pressure nasal injection called instillation with insecticide in oil while keeping the animals on its back on the ground, which give good result.

With the development of non-toxic insecticide a mixture of 2 gm Neguvon + 0.2 gm Asuntol at the rate of 55-88 mg/sheep gave good result in Australia and some European countries.

## **Control:**

It is difficult because of the peculiar site of laying the larvae. The only old method is still in use is to feed the sheep in narrow trough. The side of which are smeared in the inner side with coal tar and the animals get themselves tar while feeding around their nostril and this may act as a very good repellent.