



TELSEN®

นายชนินทร์ ทิพปภาสมิทธิ

นายสัตวแพทย์ชำนาญการ

กลุ่มพัฒนาสุขภาพสัตว์ สำนักงานปศุสัตว์จังหวัดยะลา

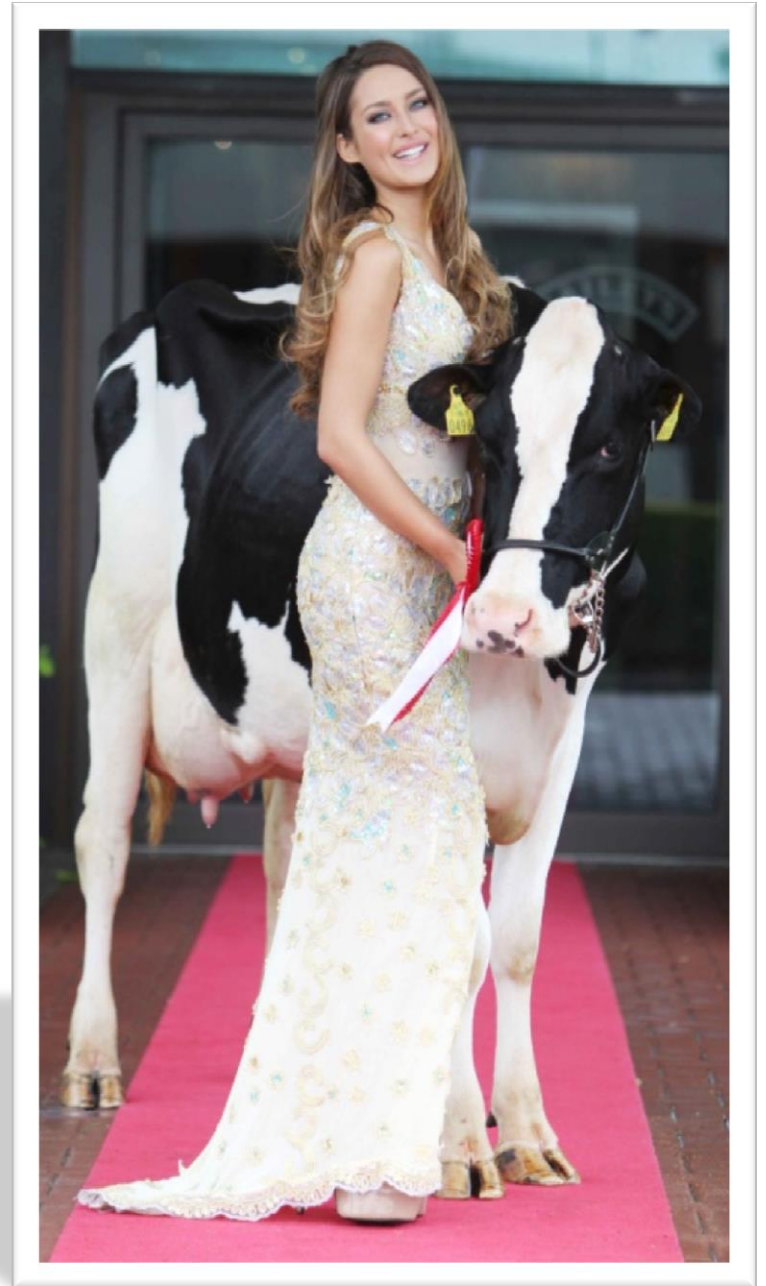
กรมปศุสัตว์



TELCEN



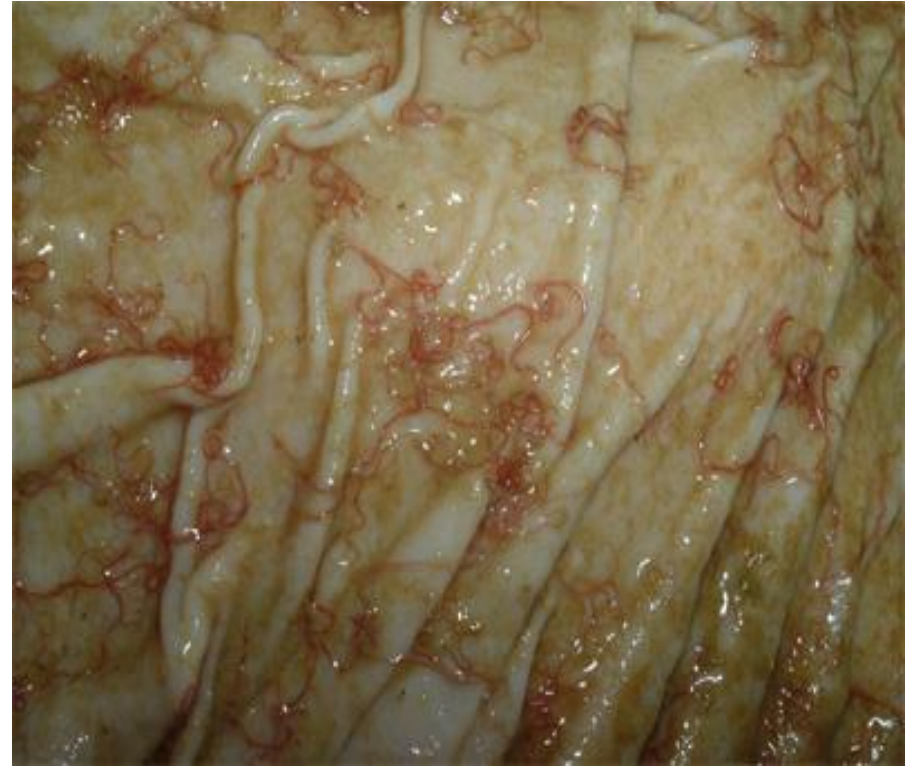






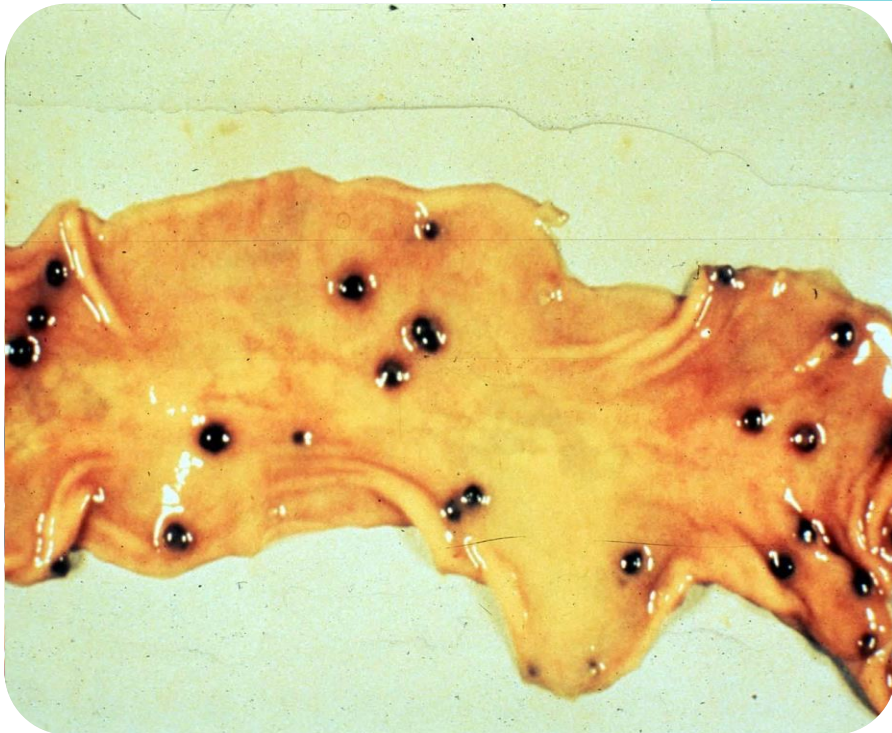
fasciola hepatica

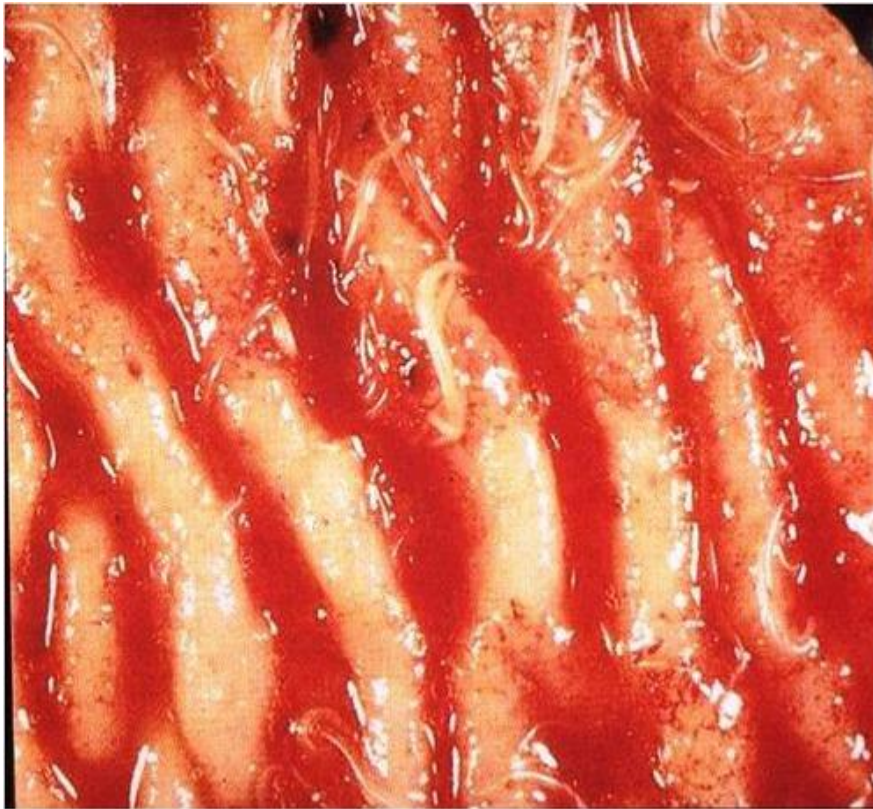




Haemonchus spp.

Haemorrhagic nodules as seen in *Oesophagostomum radiatum* infection



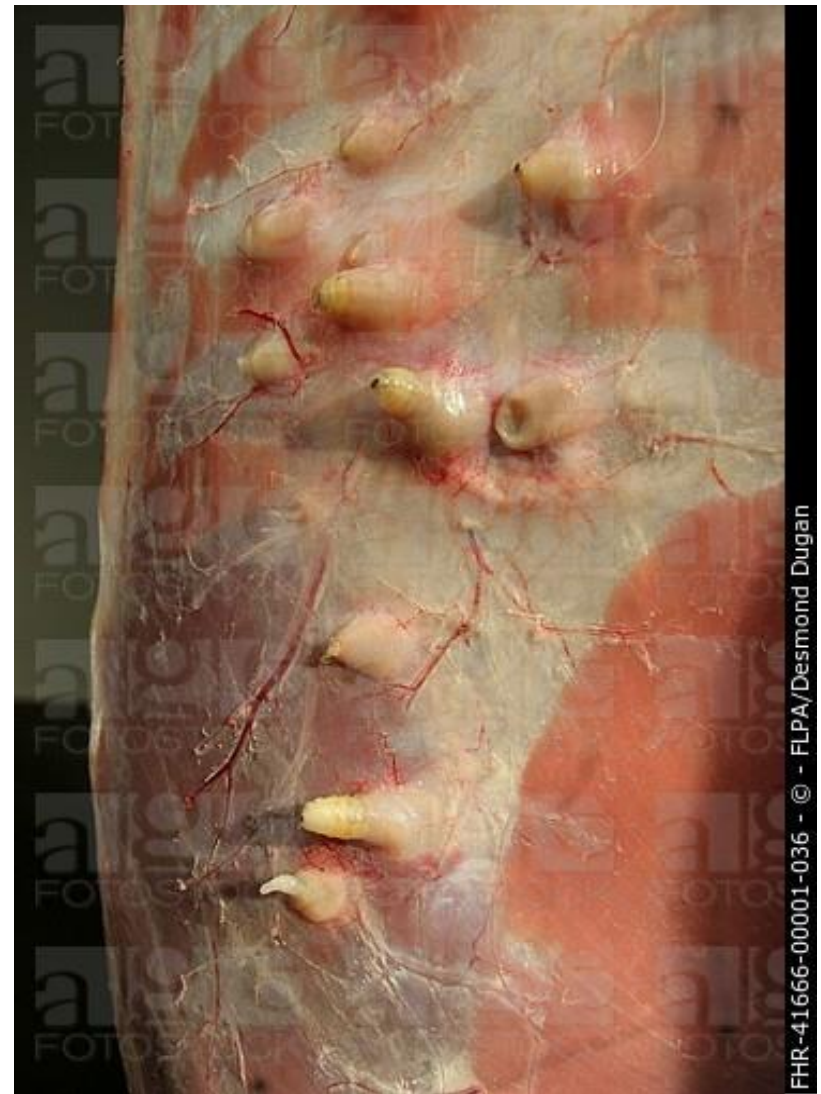
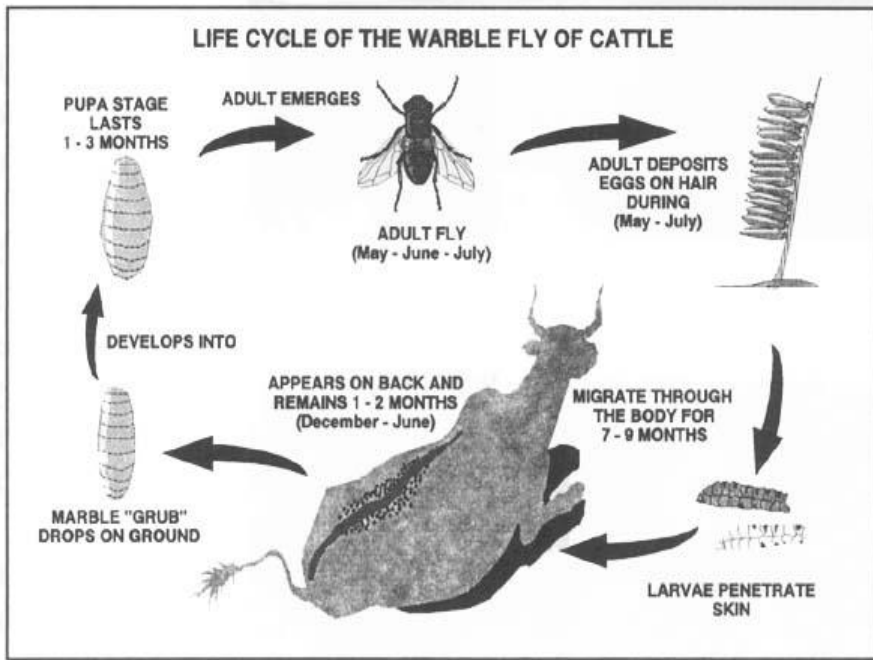


Bunostomum phlebotomum

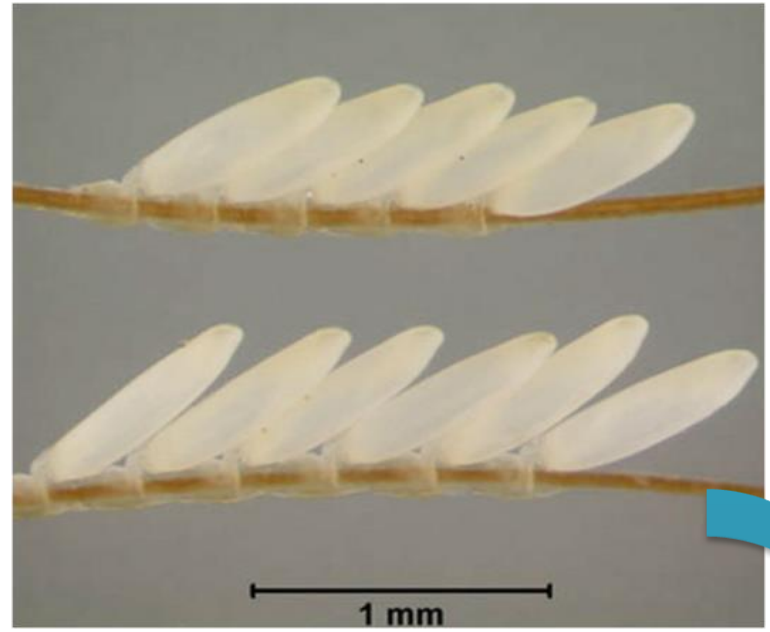
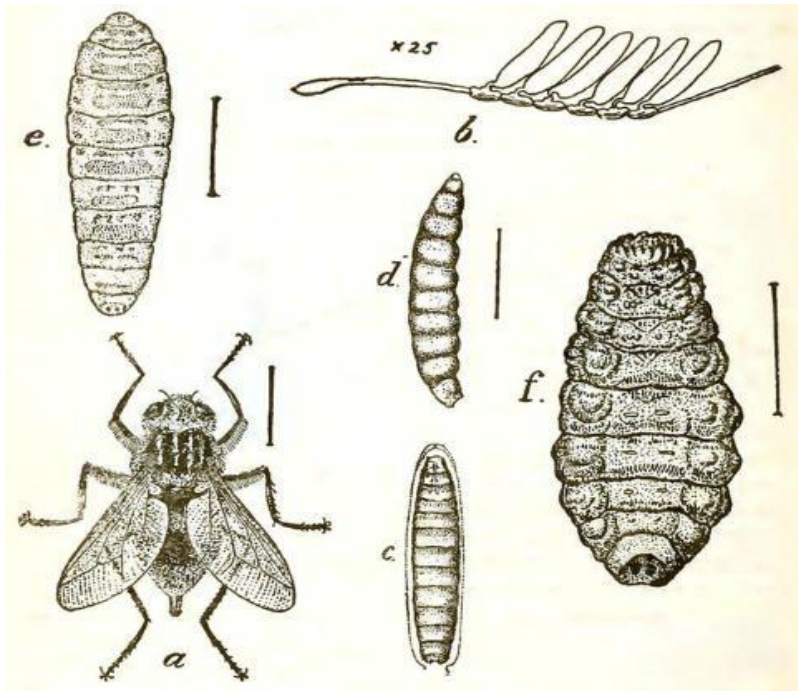
Bunostomum phlebotomum may be a serious threat to cattle, especially in warm, moist areas. If heavily infected, animals, especially the young, grow poorly and will not thrive.



Strongyloides spp are a major cause of economic losses in the livestock industry because they impair weight gain and increases mortality in cattle, especially in temperate areas



hypoderma bovis





paramphistomum spp

They infect **cattle, sheep, goats** and other livestock as well as a number of wild ruminants



Chabertia ovina - anterior end

Mouth opening



Buccal capsule



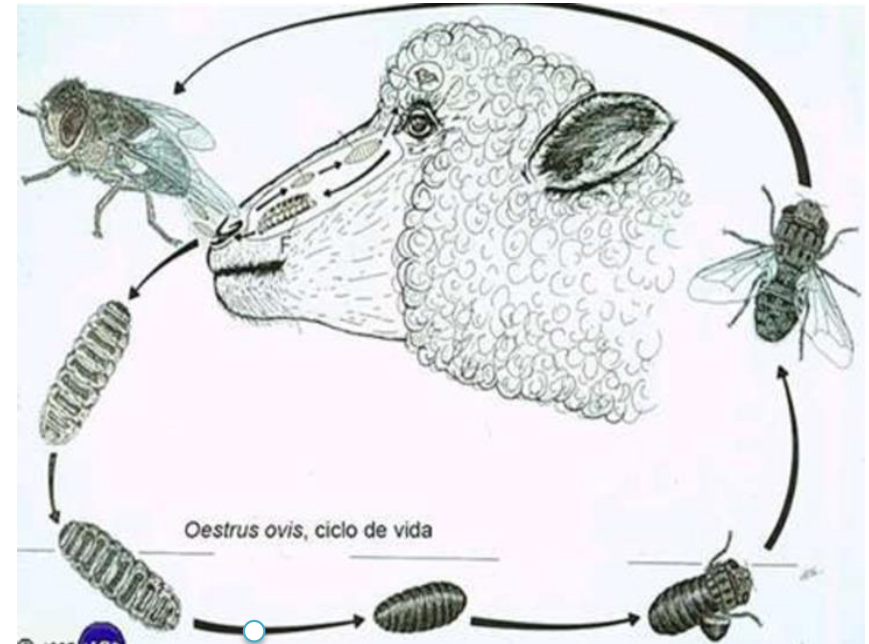
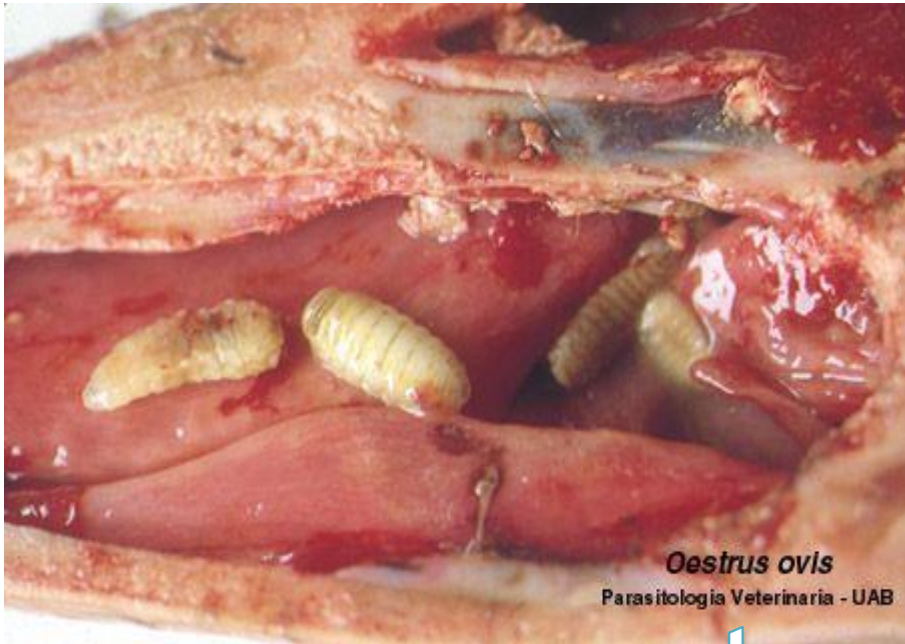
Cuticle



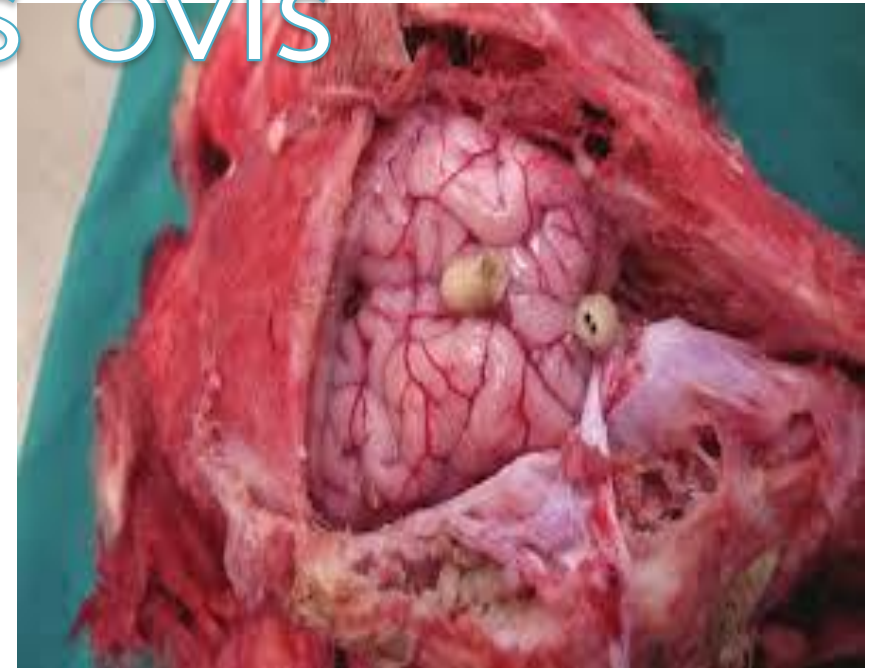
Esophagus



Large Mouth Bowel Worm



oestrus ovis



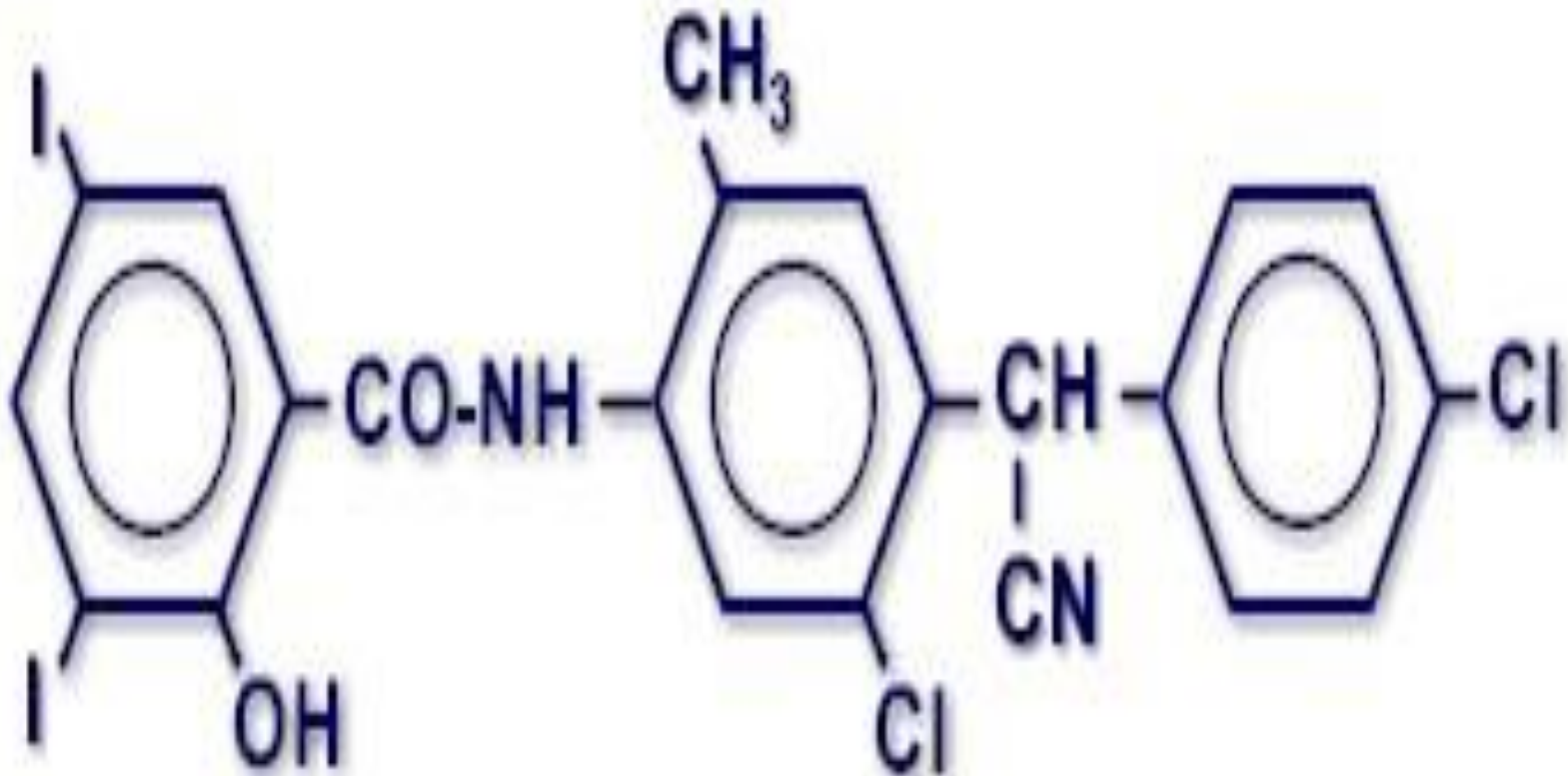
CLOSANTEL for veterinary use on CATTLE, SHEEP and GOATS against flukes, roundworms and myiases

Common name: CLOSANTEL_

Type: veterinary medicine

Chemical class: salicylanilide

CHEMICAL STRUCTURE



EFFICACY AGAINST PARASITES

Type of action: Anthelmintic [endoparasiticide](#), and [ectoparasiticide](#)

Main veterinary parasites controlled: [liver flukes](#), certain gastrointestinal [roundworms](#) (= nematodes), various **myiases** (= parasitic maggots)

Efficacy against a specific parasite depends on the **delivery form** and on the **dose** administered. National regulatory authorities determine whether a product is approved for a given **indication**, i.e. use on a particular **host** at a specific **dose** and against a specific **parasite**. **Check the labels** of the products available in your country.

[Click here](#) for general information on features and characteristics of PARASITICIDES. **SAFETY**

Oral LD50, rat, acute*: 342 mg/kg

Dermal LD50, rat, acute*: not found

* These values refer to the active ingredient. Toxicity has to be determined for each formulation as well. Formulations are usually significantly less toxic than the active ingredients.

MRL (maximum residue limit) established for either beef, mutton pork or chicken meat*:

CODEX: Yes

EU: Yes

USA: No

AUS: Yes

* This information is an indicator of the acceptance of an active ingredient by the most influential regulatory bodies for use on livestock.

Withholding periods for meat, milk, eggs, etc. depend on delivery form, dose and **national regulations**.

Check the product label in your country.

Learn more about [closantel safety](#) (poisoning, intoxication, overdose, antidote, symptoms, etc.).

General safety information for antiparasitics is available in specific articles in this site (click to visit):

General safety of antiparasitics [for domestic animals](#)

General safety of antiparasitics [for humans](#)

General safety of antiparasitics [for the environment](#)

MARKETING & USAGE

Decade of introduction: 1970

Introduced by: JANSSEN

Some original brands: FLUKIVER, SUPAVERM, SEPONVER

Patent: Expired (particular formulations may be still patent-protected)

Use on LIVESTOCK: Yes, abundant in ruminants<

Use on HORSES: NO

Use on DOGS and CATS: No

Main delivery forms:

Drenches

Injectables

Pour-ons

Use in human medicine: No

Use in public/domestic hygiene: No

Use in agriculture: No

Generics available: Yes, a lot

PARASITE RESISTANCE
On livestock: Yes, reported for Haemonchus roundworms and liver flukes (Fasciola hepatica) in sheep, but so far seems not to be widespread in most countries.

Learn more about parasite resistance and how it develops.

SPECIFIC FEATURES

Closantel is a real endectocide, i.e. a compound that controls several endoparasites and ectoparasites at the usual therapeutic dose. However it is only a narrow-spectrum and not a broad-spectrum endectocide such as the macrocyclic lactones. Closantel is the most used salicylanilide.

It is used moderately in cattle, sheep and goats, mainly in the form of drenches and injectables, and there are a few pour-ons as well. Although it is a veteran anthelmintic, its use is increasing because it is often a valid alternative where resistance of gastrointestinal roundworms (to benzimidazoles, macrocyclic lactones, and/or levamisole) or liver flukes (to benzimidazoles) is a problem.

Closantel is often used on in mixtures with large spectrum endectocides (e.g. ivermectin, abamectin, etc.) or nematicides (e.g. benzimidazoles, levamisole).

In contrast with many other anthelmintics (e.g. imidazothiazoles, benzimidazoles, tetrahydropyrimidines), closantel has a residual effect, i.e. it not only kills the parasites present in the host at the time of treatment, but protects against re-infestation for a period of time (up to several weeks) that depends on the dose and the specific parasite. Closantel is not used on dogs and cats.

Efficacy of closantel

Closantel is highly effective against adults and larvae (6 to weeks old) of **liver flukes** (*Fasciola hepatica*), and against several important **gastrointestinal roundworms** (e.g. *Bunostomum*, *Haemonchus*, *Oesophagostomum*, *Ostertagia - Teladorsagia*, *Strongyloides*, *Trichostrongylus*), as well as against **screwworms** (maggots of *Cochliomyia* spp and *Chrysomya* spp), **sheep nasal bots** (*Oestrus ovis*), and **sheep keds** (*Melophagus ovinus*).

Closantel has **no efficacy** against non-gastrointestinal roundworms such as **lungworms** (e.g. *Dictyocaulus* spp) and **eyeworms** (e.g. *Thelazia* spp), or **tapeworms**.

Pharmacokinetics of closantel

After oral administration closantel is readily absorbed into the bloodstream. Four days after treatment up to 60% of the injected and 30% of the drenched closantel is absorbed to blood. In the blood, unchanged closantel binds strongly and almost completely (>99%) to plasma albumins. Peak plasma levels are reached 10 to 48 hours after administration, both after oral or intramuscular administration. Half-life in plasma is 3 to 4 weeks.

Due to the strong binding to plasma albumins, closantel residues in the tissues are rather low; the highest ones were found in the lungs and the kidneys. Closantel is poorly metabolized. About 80% of the administered dose is excreted through the feces, >98% in the form of the parent molecule. Excretion 48 hours after oral administration reached ~45% of the administered dose, but only ~10% after intramuscular injection. Excretion half-life in the organism is 2 to 3 weeks.

In dairy cows about 1% of the administered dose is excreted unchanged through the milk.

Influence of the diet. In ruminants, fasting slows the passage of food through the stomach and the gut, which increases the time for absorption of closantel into blood and hence its plasma concentration and bioavailability. Consequently it is recommended to keep healthy animals off food for up to 24 hours before treatment with closantel. This should not be done with heavy pregnant, stressed, or weak animals. Fasting animals should have access to drinking water.

TELCEN

Antiparasitic PHARMACEUTICAL FORM

Injectable Solution

COMPOSITION

Composition per ml:

Closantel

50 mg

Excipients, n.q.

TARGET SPECIES

Cattle / Sheep

DOSAGE

Calves: Distomatosis and nematodiasis: 0.5 ml /10 Kg l.w. single dose.

Hypodermosis (screw worm): 1 ml /10 Kg l.w. single dose.

Ovine / caprine: Oetrosis (nasal botflies) and Nematodiasis: 0.5 ml /10 Kg l.w., single dose.

Distomatosis: 1 ml /10 Kg l.w., single dose.

Intramuscular via in bovine.

Subcutaneous via in ovine.

PRESENTATION

Vials containing 100 ml.

and 250 ml.

C.P 10x100 ml

and 10x250 ml





จบการนำเสนอ
ขอบคุณครับ
Terima Kasih