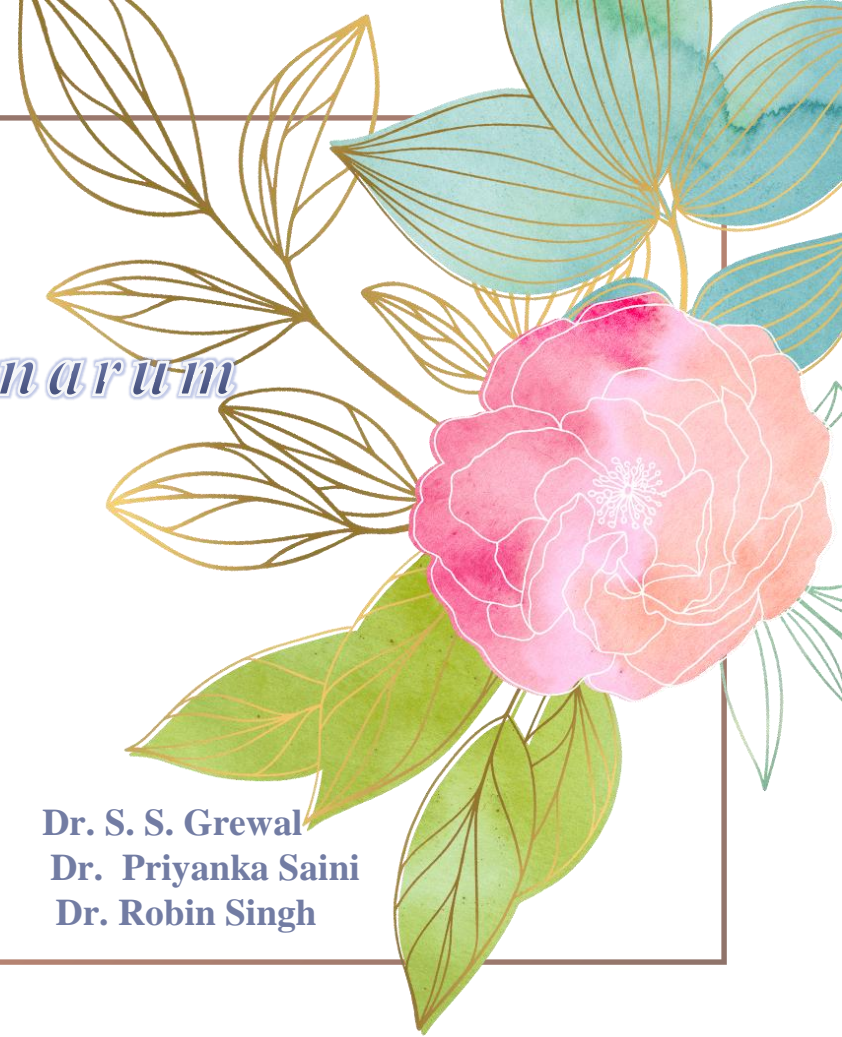




Heterakis gallinarum



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Heterakis gallinarum

Genus	Heterakis
Species	<i>Heterakis gallinarum</i>
Hosts	Fowl, Turkey, Duck and Pea fowl
Location	Caecum
Common name	Caecal worm of poultry

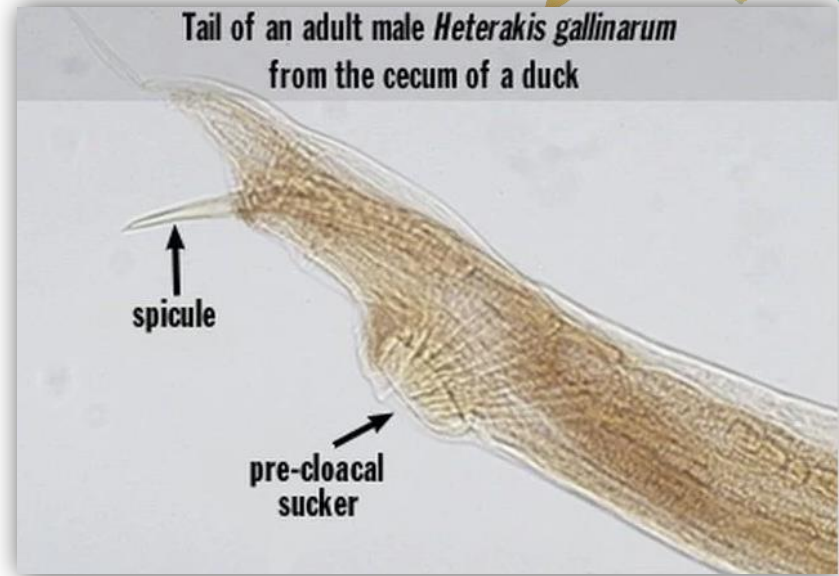


General Characters

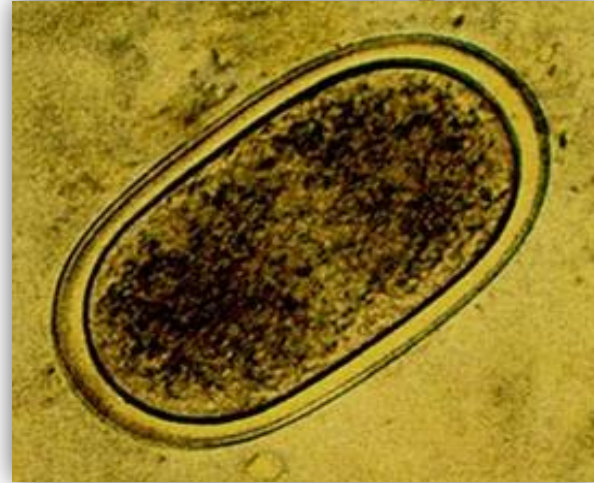
- ▶ Whitish small sized worm, Males are 7-13 mm whereas Females are 10-15 mm long
- ▶ Large lateral alae extending down the side of the body.
- ▶ Oesophagus has strong posterior bulb having valvular apparatus.



- ▷ Male worm has 12 pairs anal papillae.
- ▷ Precloacal sucker is present in male worm.
- ▷ Spicules are unequal, right one is slender and long. Left one is short and broad.



- ▶ Eggs are ellipsoidal with smooth thick shelled.



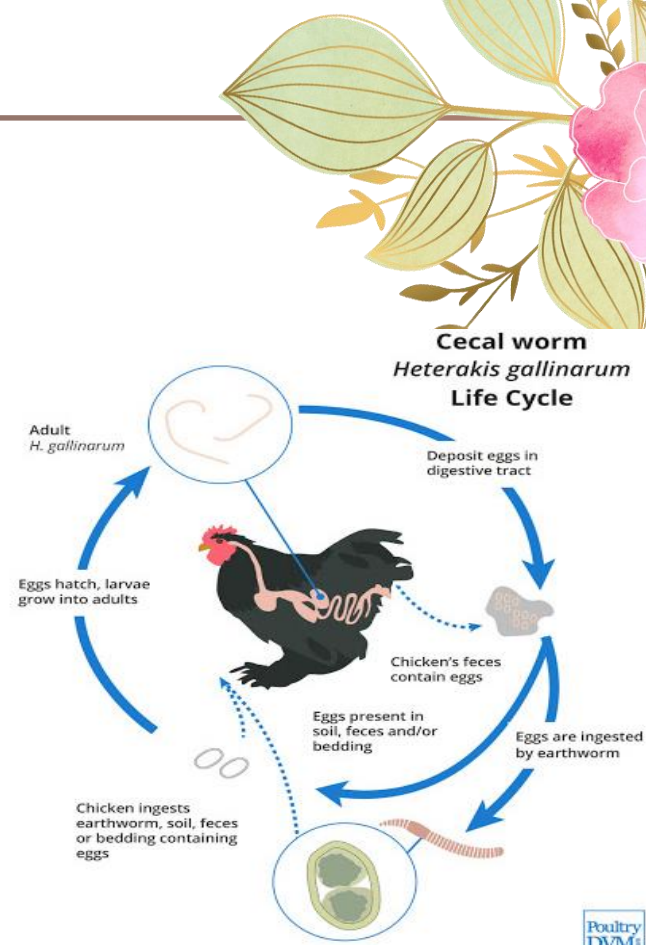
Life cycle

- ▷ **Infective stage:** egg containing 2nd stage larvae
- ▷ **Transmission :**
 1. Ingestion of infective egg containing L₂ with food or water.
 2. Ingestion of earthworm containing L₂ larva

Transport host: Earthworm

Prepatent period: 4 weeks

- ▷ Is direct, eggs developed into infective stage in 14 days. Infection of chicken by ingestion of egg containing L2 stage.
- ▷ L2 hatch in the intestine move to caecal mucosa and remain there for 2 to 5 days and moult to L3 in the lumen of caecum on 6th day of infection.
- ▷ L4 in 10 days and L5 in 15 days.



Pathogenesis & Clinical signs

- ▷ Usually non pathogenic, but heavy infection cause thickening of caecal mucosa with petecheal haemorrhage on the surface.
- ▷ It's important role is transmission of *Histomonas meleagridis* (protozoa).
- ▷ *Histomonas meleagridis* causes **entero-hepatitis or black head disease in turkey.**
- ▷ This protozoan organism are transmitted through the eggs of this worm.
- ▷ Nodular typhalitis, anaemic, emaciation and diarrhoea.


Diagnosis

- ▷ On the basis of clinical signs
- ▷ Microscopic faecal examination
- ▷ Small adult worms are found in the caeca during necropsy






Treatment

- ▷ Phenothiazine is effective at the dose rate of one gram per bird.
 - ▷ Phenothiazine + Piperazine mixture is used to eliminate the mixed infections of *Heterakis gallinarum* and *Ascaridia galli*.
 - ▷ Hygromycin B - 0.25% mix in feed is highly effective.
 - ▷ Mebendazole is also be used.
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Control

- ▷ Treatment of infected birds.
 - ▷ Regular deworming.
 - ▷ Regular cleaning of floor, feeding and watering utensils etc.
 - ▷ Segregation of adult and young birds.
 - ▷ Strict sanitation of poultry houses is essential.
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**THANK
YOU**