Ascaridia galli

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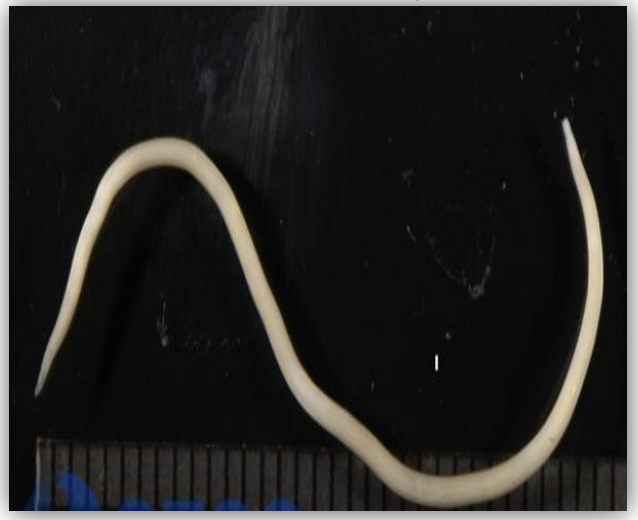
Ascaridia galli

Final Hosts	Domestic & wild birds
Location	Small intestine
Common name	Largest round worm of poultry



Morphology

- Worms are stout and densely white. Males are 50-76 mm whereas Females are 72-116 mm long.
- Oesophagus has no posterior bulb.
- Circular precloacal sucker with a thick cuticular rim.
- Spicules are sub equal.
- Male worm has 10 pairs anal papillae.

- Eggs are ellipsoidal with smooth thick shelled

Life-cycle

- Direct life-cycle
- **Infective stage**: egg containing 2nd stage larvae.
- **Transport host**: Earthworm
- **Transmission through**
    1. Ingestion of infective egg containing L_2 with food or water
    2. Ingestion of earthworm containing L_2 larva

- Is direct, eggs are passed in the droppings developed into infective stage in 10 days or longer.
- Infection of chicken by ingestion of egg having L2 along with food and water.

Eggs hatch in the lumen of intestine and larvae live for 8 days in the lumen.

1. Majority of them enter into intestinal mucosa from 8 to 17th day.
2. Finally the larvae again reenter into the lumen and reach maturity in 6 to 8 weeks.
3. The larvae in their location reach third stage on 8 DPI and to L4 stage on 14-15 DPI.

Pathogenesis & Clinical signs

- The birds below 3 month of age are more susceptible.
- Dietary deficiency such as Vitamin A, B and B12, various minerals and proteins leads to heavy infections.
- Larvae cause catarrhal or haemorrhgaic enteritis whereas the adult worms may cause intestinal occlusion and death.

Haemorrhagic enteritis, anaemia, amaciation and diarrhoea

Diagnosis

- On the basis of clinical signs
- Microscopic faecal examination
- Large adult worms are found in small intestine during necropsy

Treatment

- Piperazine compounds are highly effective.
- Piperazine adipate
- Tetramisole and Mebendazole
- Mixture of Phenothiazine and Piperazine
- Hygromycin – B @ 8 g per tonne of feed. Administered for 8 weeks.

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.

THANK YOU