# An-Najah National University Department of Veterinary Medicine



# Occurrence of Gastrointestinal Parasite in Rabbits

Ibraheem Dawabsheh, Ahmed Hussein, Odai Ali, Adnan Fayyad

Department of Veterinary Medicine, An-Najah National University

## Introduction:

In recent years the mortality in rabbits increased significantly. Many infectious agents can cause death in rabbits, with the parasitic and protozoal causes are the largest.

# **Objectives:**

The aim of this study is to determine the gastrointestinal parasite species carried by rabbits in Palestine and to determine the effect of management systems and age on the occurrences of gastrointestinal parasite.

**Materials and Methods:** In this study, fecal samples of clinically healthy crossbred rabbits (n: 30) were collected from selected rabbits farms. The fecal samples were examined by sedimentation and flotation techniques using distilled water and saturated salt solution.

#### Results:

The parasite infestation rate was (66.67%) in cross breed rabbits (20/30), *Eimeria* eggs were the most prevalent in the feces (46.6%), *Trichostrongylus* infestation reach (26.6%), *Obeliscoides cuniculi* was the least infestation (3.3%).

**Fig. 1.** Egg of nematode *Trichostrongylus*. Magnification =60x

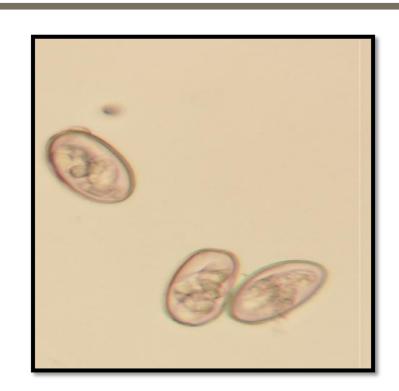


Fig. 2. Larva of nematode
Trichostrongylus.
Magnification
=40x



**Fig.3.** Oocyst of *Eimeria*. Magnification = 40x



Fig. 4.
Segmented Egg
of nematode
Obeliscoides
cuniculi.
Magnification
=60x



Table 1: Prevalence of parasite species in rabbits

| Infected animal | Parasite species |                       |                            |
|-----------------|------------------|-----------------------|----------------------------|
|                 | Eimeria spp.     | Trichostrongylus spp. | Obeliscoides cuniculi spp. |
| (20) 66.67%     | (14) 46.6%       | (8) 26.6%             | (1) 3.3%                   |

### Summary:

- ➤ Parasite infestation rate was (66.67%) in cross breed rabbits (20/30).
- > Eimeria eggs were the most prevalent in the feces (46.6%).
- Trichostrongylus infestation reach (26.6%), Obeliscoides cuniculi was the least infestation (3.3%).
- The mixed infestation *Eimeria* and *Trichostrongylus* were found in 3 cases.

#### Conclusion:

Depending upon the results of this study, rabbits in Palestine were found to be infected by several parasites species among them *Eimeria* were the most prevalent. There was no age effects on infection rate. However, managements system was found to affect on occurrence of gastrointestinal parasite in rabbits.