

Parasitic Infection Among Calves In Egypt

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Parasitic infection in Egypt represents one of the main factors that affect our livestock. Our climatic conditions which are more or less favourable for the development of internal as well as external parasites play a great part in the existence of the different parasites.

The fauna of parasites infesting our ruminants has received great attention since they constitute the main source of our meat production.

Helminth infection is quite common among our calves. One of the most important parasites that infects our cattle is the liver fluke Fasciola gigantica which constitutes a problem among our cattle and sheep. Its existence for a long time can be explained due to the enormous snail population and distribution. The infection rate differs greatly in different provinces. The average infection rate according to the data given by the Veterinary Department of the Ministry of Agriculture is about 18% in cattle. In Assiut province, the rate was found in 1977 to be 30.0% among cows and 24.34% among buffaloes.

Ruminants in particular suffer from retardation of growth, loss of body weight, lowering the vitality which increases the susceptibility to other diseases, leading to great economic losses. In 1954, it was estimated that the losses due to condemnation of the livers infested with this parasite mounted to 56 thousand pounds, while the total losses due to infestation by the same parasite reached eight million pounds.

Other trematodes that infest our cattle are Paramphistomum cervi and to a less extent Carmyerius gregarius which is more common in buffaloes.

Regarding Cestodes, Monezia spp. and to a less extent Avitellina spp. are found. The infection rate of these cestodes ranges between 3 - 14% among different ruminants. These parasites are not considered highly pathogenic.

Regarding Nematodes, several species infest our cattle. About 90% of our calves are infected with one or more of the following nematodes.

<u>Trichostrongylus axei</u>	++
<u>Haemonchus contorus</u>	++
<u>Ascaris vitulorum</u>	++
<u>Cooperia</u> sp.	++
<u>Oesophagostomum</u> sp.	+
<u>Chabertia</u> sp.	+
<u>Bunostomum</u> sp.	+
<u>Nematodirus</u> sp.	+

As to protozoal infection among our cattle, Theileria annulata is considered the most important parasite. The infection rate in the dormant form is considerably high. The average rate according to the data of the Ministry of Agriculture in the different province, is about 22%. In Assiut province, the latest survey carried by the Department in 1972 - 1973 showed that the infection rate was about 10% among cows and buffaloes.

Onther parasite which is less common is Babesia. Records of the Ministry of Agriculture in 1969 - 1971 have shown that the incidence of bovine prioplasmosis ranged from 17 - 24% in buffaloes, and 22 - 30% in cows. Latest investigation in Assiut province in 1975 has shown that the incidence was 8.6% among buffaloes and 8.7% among cows. Animals infected with Babesia bigemina were mostly heavily infested with ticks that belong

to Boophilus annulata. Few sporadic cases were found infested with Hyalomma excavatum together with B. annulata. The highest peak of the parasitaemia was observed during summer months.

Toxoplasma is another important zoonotic parasite. The incidence of serologically positive cases among farm animals is about 50% in different prov-inces. In Assiut the latest survey in 1975 showed the incidence to be 50.9% in cows and 43.9% in buffaloes. No doubt that such infection in cattle is responsible for the high incidence among human beings due to ingestion of the undercooked meet "kabab".

Sarcocystis: Although studies on this parasite regarding its importance is still needed as cause of death to animals, yet it worth to mention the high incidence of infection among our cows and buffaloes. The percentage of infection was recorded by Ministry of Agriculture to reach up to 80% among buffaloes in different prov-inces. In Assiut, the percentage as a result of survey in 1975 was found to be 59.3 in buffaloes and 39.2 in cattle.