

## New Data on Bird Haemoproteids and Microfilariae in European Blackbird (*Turdus merula*) in Turkey

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**Dear Editor,**

We would like to report presenting a first record of *Haemoproteus fallisi* and *Eufilaria spp.* in European Blackbird in Turkey.

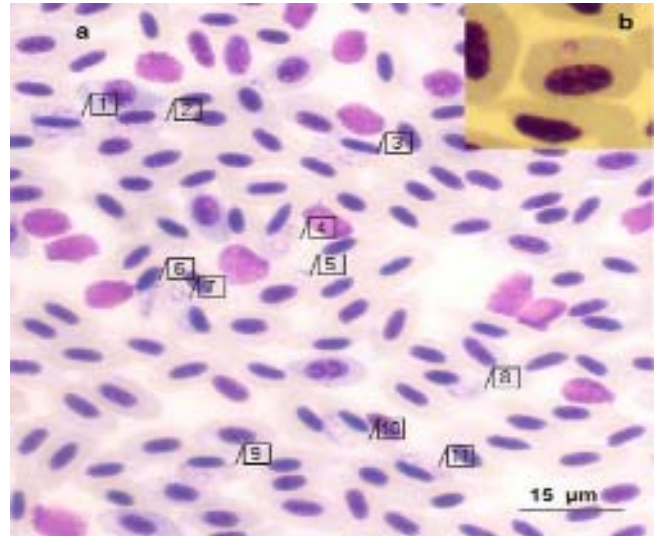
The species of *Haemoproteus* that infect birds are vector-transmitted intraerythrocytic parasites. They are some of the most common and widespread blood parasites of wild birds, yet their potential significance as disease agents in wild bird populations is largely unknown <sup>1</sup>. Filarioids are highly specialized nematode parasites of the tissues and tissue spaces of birds, mammals, amphibians, and reptiles. About 160 species are known from birds. Avian filarioids produce microfilariae that are either blood-borne or skin-inhabiting <sup>2</sup>.

There were no reports in Turkey related to blood parasites which have been carried in the European Blackbird so far.

A European Blackbird was caught into ornithological mist nets by the Observation Station of authorities Samsun, Turkey in April 2009. Blood samples used for smears were collected from heart. The blood smears were air-dried, then fixed by absolute methanol, and dried again. Slides were then stained in Giemsa solution and examined for parasites (*Trypanosoma spp.*, *Haemoproteus spp.*, *Plasmodium spp.*, *Leucocytozoon spp.*, microfilariae) by scanning under immersion objectives <sup>1-3</sup>. The genus and species of blood protozoa and the genus of microfilariae were determined upon their

morphological traits according to Valkiunas <sup>3</sup> and Bartlett <sup>2</sup>, respectively.

Our findings of parasites from genus *Haemoproteus* morphologically matched with *H. fallisi* (Fig. 1). *H. fallisi* is a parasite of species of the Passeriformes whose gametocytes grow along the nucleus of infected erythrocytes and never encircle the nucleus completely. Medium and fully grown gametocytes adhere both to the nucleus and envelope of erythrocytes. Dumbbell-shaped gametocytes are absent or represent less than 10% of the total number of growing gametocytes. The nucleus in fully grown gametocytes is subterminal in position. Fully grown gametocytes do not fill the erythrocytes up to their poles. Pigment granules are of medium and sometimes small size, about 13 per gametocyte on average <sup>3</sup>.



**Fig 1.** Gametocytes of *H. fallisi* a) Numbered arrows b) Young gametocyte

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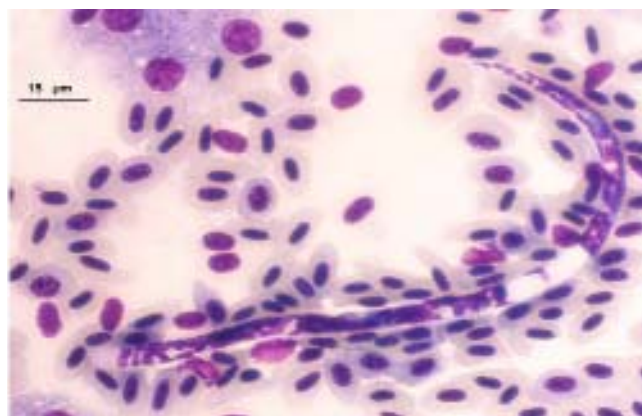
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We identified *Eufilaria* spp. (Fig. 2) with its morphological characteristics. The sheath of microfilariae is absent, tail is sharply pointed and its length is  $\leq 200 \mu\text{m}^2$ .

#### REFERENCES

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**Fig 2.** Microfilariae of *Eufilaria* spp.