

## **Report on the Contamination of *Megninia cubitalis* in the Rock dove (*Columba livia*)**

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### **Abstract**

The rock dove (*Columba livia*) with its grayish blue body is one of the most familiar birds in Iran. Due to the power of flight and life, it can release various types of infectious agents such as worm, protozoa and parasitic epidemics. Four pieces of rock dove were referred to veterinary clinic of Babol Islamic Azad University in 2015 and examined for identification of external parasites. After isolating the parasites, they were prepared for accurate detection of samples and identified using valid diagnostic keys, the species *Megninia cubitalis* was reported for the first time from the rock dove. This mite has no respiratory vent and legs ending up with short stems. These mites are found on birds that cause them to fall. *Megninia cubitalis* is an Analgidae of the family, which is considered to be a full-bodied mite. Considering that this parasite was first reported, further studies are needed to prevent other domestic birds and livestock from occurring and parasitic epidemics and also we tried to help the organization and the environmental organization and the veterinary organization to promote these goals in order to protect the environment and rare species of animals in Iran.

**Keywords:** Rock Dove; Mite; *Megninia cubitalis*

### **Introduction**

A pigeon with its grayish blue body is one of the most famous birds in Iran. This bird makes its nest in the wall of the wells of the aqueducts; thus those pigeons are said to be wells. Their habitat is mostly found in cliffs, deserts, slabs of mountains and aqueducts. Both species are shaped and body-shaped blue-gray. Two broad stripes are seen on the front of the feathers. The neck and chest are violet and glossy with greenishness. The body of this bird is 33 cm. The wells often feed on grains, the diet of pigeon, fruit seeds, vegetables, snails, worms, plant buds and insects. They help emit seeds in distant areas, spread the seeds of plants, in addition to feeding the insects to the balance of their populations in nature. The wells of food Birds are hunted, and humans also use the meat of this bird. In Iran, in addition to pigeons, domestic lunar, or karim, forest pigeons, cucumbers and ordinary lunches are other pigeon wells [1]. *Megninia cubitalis* of the Analogide family (Analgidae), which is considered to be a full-bodied grizzly. The host's infestation with the species of magnesium may lead to a loss in the poultry. In the case of the substance, the size of all the legs is the same. In the male's third leg, the third legs are much taller than the other legs, and in The end of the body has 2 mating ventricular appendages [2]. This parasite is reported for the first time from the pigeon in Iran.

### **Clinical description**

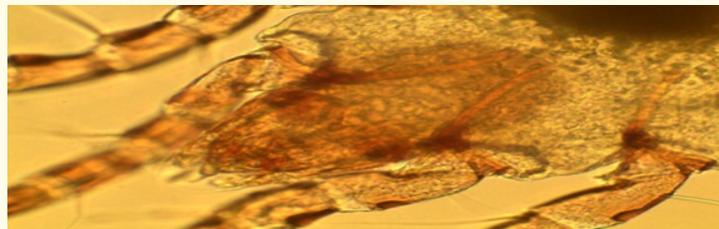
In 2014, four pigeon pits were transferred to the University Veterinary Clinic to identify foreign parasites. The birds were estimated to be around 1 year. First, they were placed in plastic bags containing ether-impregnated cotton. After two hours, each bird was taken out of plastic and placed on a white metallic tray. For complete collection of external parasites, all parts of the skin with magnifying glass were examined. Ingredients isolated in dishes containing 96% alcohol and 5% glycerin were used. In order to identify the parasites, samples were prepared from each sample and detected by parasite species using an optical microscope and valid diagnostic keys (Yamaguti and Walker).

## Discussion and Conclusion

In this study, a total of 4 birds were surveyed, each of the four birds were infected with *Megninia cubitalis*. This cartilage has no respiratory pores and legs end with short stubs (Figure 1 and 2). In the body of the material, the size of all the legs is the same, in the male spider of the third legs are much longer than the other legs, and at the end of the body 2 appendages [2]. There are few studies in the country on the parasites of pigeon wells. In a study by Islamic., *et al.* On the contamination of the gastrointestinal tract of pigeon wells in the city of Ilam, two species of cestode called *Raietina Magno Nomida* and one case of *Tina Tetragonosa* and a nematode called *Kilospiora Hamulosa* [3]. In another study by Borji and colleague in 2010, it was done on domestic pigeons of Mashhad, six species of parasites including: *Columbicola columbae*, *Pseudolynchia canariensis*, *Monocenthus verteminum*, *Menopon gallinae* and *Argas persicus* [4]. In the study of Radfar., *et al.* On pigeons in southern Khorasan in the year 2008, three species of parasites including: *Columbicola columbae*, *Pseudolynchia canariensis*, *Menopon gallinae* [5]. Given the fact that this parasite was first reported, further studies are needed to prevent other birds and livestock Tobacco and parasitic epidemics.



**Figure 1:** Microscopic image of *Megninia cubitalis*.



**Figure 2:** Picture of the balloons.

## Bibliography

1. GalychPour M., *et al.* "Iranian Wildlife". Talaei prees, Tehran (2009).
2. Haddadzadeh HR and P. Khazraenia. "The Arthropods of humans and domestic animals". University of Tehran press, Tehran (2009).
3. Eslami A., *et al.* "Investigation of worm Contamination of rock dove Digestive Tract in Ilam City". *Journal of Veterinary Laboratory Research* 4.1 (2012): 212-212.
4. Borji H., *et al.* "A survey of ecto- and endo-parasites of domestic pigeons (*Columba livia*) in Mashhad, Iran". *Iranian Journal of Veterinary Science and Technology* 4.2 (2012): 37-42.
5. Radfar Mh., *et al.* "A Survey of parasites of Domestic Pigeons (*Columba livia domestica*) in South Khorasan, Iran". *Veterinary Research* 4.1 (2011): 18-23.

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