

New Record of *Haemaphysalis flava* (Acari: Ixodidae) in the Imperial Palace, Tokyo, Japan

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Abstract During the survey of "Flora and Fauna of the Imperial Palace, Tokyo II" made by the National Museum of Nature and Science, Japan, in 2009–2013, *Haemaphysalis flava* Neumann, 1897 (Acari: Ixodidae) was newly collected from the Imperial Palace. This is the first record of the suborder Ixodida (tick) from the Imperial Palace.

The Imperial Palace covers an area of 1,150,000 square meters in the center of Chiyoda-ku, Tokyo, Japan. Although many species of Arthropoda have been recorded in the Imperial Palace (Kuramochi *et al.*, 2014), there is no formal tick record there. We report herein an ixodid tick (Acari: Ixodidae) collected in the survey of "Flora and Fauna of the Imperial Palace, Tokyo II" made by the National Museum of Nature and Science, Japan, in 2009–2013. This is the first record of the suborder Ixodida (tick) from the Imperial Palace.

Haemaphysalis flava Neumann, 1897
[Japanese name: Ki-chi-madani]

Specimens examined. 1 adult male (NSMT-Ac14207), 7 Jul. 2012, the Imperial Palace, Fukiage Ohmiya-Gosho Seimon, S. Shimano leg.

The adult male was collected on an acorn on the ground.

Haemaphysalis flava has wide host range including mammals and birds (Yamaguti *et al.*, 1971; Yamauchi, 2001). Adults of *H. flava* are especially depending on the medium-to large-sized mammals (Asanuma *et al.*, 1955). Occasionally, *H. flava* possesses pathogenic microorganisms such as *Francisella tularensis*, *Rickettsia japonica*, *R. canadensis*, *Ehrlichia muris* (Takada *et al.*, 2019).

Haemaphysalis flava is distributed in Japan, China, and Russia (Takada *et al.*, 2019). In Tokyo Metropolitan, *H. flava* has been recorded in the mainland part of Tokyo (Tsunoda *et al.*, 2001; Yoshino *et al.*, 2003), Hachijo Island (Nakatsudi, 1942), and Miyake Island (Yamaguti *et al.*, 1971). In the present study, *H. flava* is newly recorded from the Imperial Palace, Tokyo. It is possible for *H. flava* to be distributed in the Imperial Palace, because the raccoon dogs, *Nyctereutes procyonoides*, inhabit there (Sako *et al.*, 2008).

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