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Pathogens in ectoparasites from free-ranging animals: Infection with *Rickettsia asembonensis* in ticks, and a potentially new species of *Dipylidium* in fleas and lice

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Highlights

1. Presence of *Bartonella clarridgeiea*, *Bartonella henselae* (lineage Marseille and lineage Houston-1), and *Rickettsia* sp. in *Ctenocephalides felis* fleas
2. Presence of *Rickettsia asembonensis* in *C. orientis* fleas and *Rhipicephalus sanguineus* s.l. ticks
3. First documentation on a potentially new species of *Dipylidium* tapeworm infecting *Felicola subrostratus* lice and *C. felis* fleas.

Abstract

Vector-borne infections are persistent public health threats worldwide. In recent years, a number of mosquito-borne viruses have emerged or re-emerged to cause major disease outbreaks. Other vector-borne pathogens, however, remain understudied and much neglected especially in the developing regions of the world including Southeast Asia. In this study, the brown dog tick