HP-39: A comparative study between *Argas persicus* found in eastern Algeria andChina

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Subject description: *Argas persicus* (the fowl tick) is a soft tick, often found in and around the nesting areas of birds, particularly in poultry farms with a worldwide distribution.

Objectives: In the current study, we performed morphological and molecular analyses to identify ticks collected in poultry farms from Algeria and East China.

Methods: Ticks were collected from farms sites including walls, nests, cracks and crevices. All these sites were searched for finding of all ticks stages including nymph, larvae and adult. All the collected tick specimens were identified morphologically by microscope and then confirmed by molecular and phylogenetic analysis.

Results and discussion: In total 30 ticks from poultry in Algeria, comprising 5 larvae, 12 nymphs, 12 adults, and 14 ticks comprising 12 Larvae and 2 adults from Gansu province in China were morphologically identified as *A.persicus*.

Molecular analysis of 30 ticks from Algeria and the 14 Chinese samples based on PCR, sequencing, and phylogenetic analysis of the gene 16S rRNA confirmed morphological results. However, through phylogenetic analysis, it was revealed that all Algerian samples, along with two Chinese samples, were classified under *Argas persicus* sensu stricto (s.s.). Meanwhile, the remaining Chinese samples were identified as part of *Argas persicus* sensu lato (s.l.), constituting a distinct lineage due to their genetic divergence.

Conclusion: The current research affirms the presence of *A. persicus* s.s. in both Algeria and China. Additionally, it presents new molecular data regarding a separate Chinese lineage of *A.persicus*.

Keywords: *Argas persicus*, Fowl tick, Morphology, Molecular analysis, 16s rRNA, Algeria.