A NEW CASE REPORT OF CHIGGER MITES (TROMBIDIFORMES: TROMBICULIDAE) PARASITIZING HUMANS IN BRAZIL

JACINAVICIUS F.C.[1], COSTA E.N.[1], PESENATO I. P.[1], DORNELAS JÚNIOR L.F.[3,4], CAMARGO L.M.A.[4,5,6], BASSINI-SILVA R.[2]

[1] UNIVERSIDADE ESTADUAL DE CAMPINAS, CAMPINAS, SP, BRAZIL, [2] INSTITUTO BUTANTAN, SÃO PAULO, SÃO PAULO, BRAZIL, [3]LEÔNIDAS AND MARIA DEANE INSTITUTE, MANAUS, AMAZONAS, BRAZIL, [4]UNIVERSITY OF SÃO PAULO, MONTE NEGRO, RONDÔNIA, BRAZIL, [5]RESEARCH CENTER OF RONDÔNIA, PORTO VELHO, RONDÔNIA, BRAZIL, [6]NATIONAL INSTITUTE OF TECNOLOGY AND RESEARCH EPIAMO, PORTO VELHO, RONDÔNIA, BRAZIL

Abstract

Chigger mites, known as “mucuim” or “trombiculídeo” in Brazil, includes three active stages, and only the larvae are parasites, while the other stages are free-living predators. Once attached to a host, the larvae feed on the host’s epithelial tissue for several days, gradually forming the stylostome. An inflammatory reaction can be formed during this feeding process, known as trombiculiasis or trombiculosis. In Brazil, two forms of trombiculiasis can occur in humans: the nodular form, caused by the parasitism of *Apolonia tigipioensis* Torres & Braga, and the superficial form, caused by the parasitism of species from the genus *Eutrombicula* Ewing. One of these species, *Eutrombicula batatas* Linnaeus, has been recorded in the states of Amazonas, Maranhão, Mato Grosso, Pernambuco, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, and São Paulo, associated with different species of birds and mammals. Parasitic mites with low host specificity, such as *E. batatas*, can exhibit anthropophilic behavior. This has been observed in other parts of the Neotropical region, where this species has been recorded biting humans, including in Brazil (Maranhão State). The material analyzed in the present study was obtained from case reports of individuals who had been bitten in a region of the Amazon Forest in the Monte Negro municipality, Rondônia State. The specimens were cleared, slide-mounted, and identified as *E. batatas*. The slides were deposited at the Acarological Collection of the Instituto Butantan (IBSP) under the number IBSP 18658. Here, we provide the first record of *E. batatas* in Rondônia state and the second record of superficial trombiculiasis by *E. batatas* in humans in Brazil. Identifying this species in a new region highlights the widespread distribution of *E. batatas* and its potential to cause human parasitism in the Neotropical region, further emphasizing the importance of monitoring and studying parasitic mite species to understand their impact on human health better.

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