

## Aspectos da associação entre ácaros foréticos e *Pseudolynchia canariensis* (Macquart, 1839) (Diptera, Hippoboscidae)

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**Abstract.** Aspects of the association between foretetical acari and *Pseudolynchia canariensis* (Macquart, 1839) (Diptera, Hippoboscidae). With the objective of evaluating the ecological aspects of the populations and component communities of mites on the pigeon fly *Pseudolynchia canariensis*, an ectoparasite of the common pigeon, *Columba lívia*, 156 specimens of *P. canariensis* were collected from pigeons captured in Juiz de For a municipality, Minas Gerais, Brazil. The birds were examined manually and the *P. canariensis* specimens were placed in 70°GL alcohol. All the mites and eggs were counted and some were removed for clarifying and mounting on slides. The population and spatial aggregation indices were calculated. In the 156 specimens of *P. canariensis* analyzed, 236 phoretic mites were found, with a prevalence of 47.44% (n = 74). The prevalence for *Myialges anchora* was 23.72% (n = 37), with 54 individuals, mean intensity of  $1.46 \pm 0.90$  and mean abundance of  $0.35 \pm 0.76$ . In 94.44% of the infested flies, *M. anchora* was found on the abdomen (n = 51), 3.70% on the head (n = 2) and 1.85% on the leg (n = 1), and 75.93% (n = 41) were surrounded by ovigerous masses, giving an average of  $16.43 \pm 14.44$  eggs per female and  $21.63 \pm 12.46$  eggs per ovigerous female. For *Myialges lophortyx*, the prevalence was 13.46% (n = 21), with 62 individuals, mean intensity of  $2.95 \pm 2.75$  and mean abundance of  $0.397 \pm 1.41$ . Of these, 41.94% of the specimens were found on the right wing (n = 26) and 58.06% on the left wing (n = 36). The majority of the exemplars (46.77%; n = 29) were adhering to the base  $M_{1+2}$ , 19.35% (n = 12) at the  $M_3+Cu_1$ , 12.90% (n = 8) at the  $R_3$ , 11.29% (n = 7) at the  $R_1$  and 4.84% (n = 3) at the  $Cu_2$ . Of the *M. lophortyx* observed, 72.58% (n = 45) presented ovigerous masses, with an average of  $4.56 \pm 3.42$  eggs per female and  $6.29 \pm 3.04$  eggs per ovigerous female. The prevalence of *Ornithocheyletia hallae* was 23.72% (n = 37), with 120 individuals, mean intensity of  $3.24 \pm 4.47$  and mean abundance of  $0.77 \pm 2.56$ . There were simultaneous infestations on 28.38% (n = 21) of the flies: 66.67% (n = 14) by *M. anchora* and *O. hallae*; 19.05% (n = 4) by *M. lophortyx* and *M. anchora*; the same value for *M. lophortyx* and *O. hallae*. One fly (4.76%) was infested by all three species. The component communities showed an aggregate distribution with a dispersion index (di) > 1. The species *O. hallae* was the most highly aggregated (K = 0,145), *M. anchora* and *M. lophortyx* had the same value of K (0.552). These are the first reports of spatial aggregation of phoretics of this species of mites on *P. canariensis* or any other species of Hippoboscidae.

**Keywords:** Mites, *Pseudolynchia canariensis*, *Myialges* spp., *Ornithocheyletia* spp.