Title: Prevalence of Enterobacteriaceae genres in fecal samples of *Hydrobates hornbyi* (Gray, 1854) during rehabilitation.

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Abstract

Hydrobates hornbyi is one of the pelagic seabirds species which is distributed by the Humboldt Current. The biology of this species is poorly known, since the exact nesting sites are unknown and so far only fallen fledglings were reported in cities along the coast of Peru due to the attraction by the excess of artificial lights in urban areas, known as light pollution. This Storm petrel is categorized as "Data Deficient" by the International Union for Conservation of Nature (IUCN). As part of a rescue and rehabilitation program, these seabirds have direct contact with people, representing a potential risk of zoonosis because of the presence of likely pathogenic bacteria undescribed for the species. This research sought to determine the presence of enterobacteriaceace genres by Bergey's Manual, in fecal samples during their stay in rehabilitation perform by the “Ringed Storm Petrel Project" from April to May 2015 in Lima, Peru. Were evaluated a total of 49 samples held in a Cary-Blair transport medium at 4c – 6c until microbiological test. The preserved sample was isolated in selective medium for Enterobacteriaceae and Selenite broth, selective for Salmonella, only to be re-isolated on selective medium for Salmonella and Shigella. Subsequently, the biochemical tests were performed suspect colonies, considering the decarboxylation or deamination of lysine (LIA); degradation of sugars (TSI); Indole production and motility (SIM); and degradation of citrate (Citrate Simmons). It was obtained prevalence 57.14% of bacteria in the samples; of which 9 genera of Enterobacteria was Serratia sp. with 21.27% prevalence, and *Escherichia coli* and *Klebsiella sp.* with 17.02% respectively. In addition, the abundance of genres presents a remarkable change compared with the most prevalent and least prevalent ($\mu = 4.07$, $\sigma^2 = 10.01$, $\sigma = 3.16$). We conclude that the *Hydrobates honrbyi's* microbiome consists of enterobacteriaceae with possible zoonotic potential such as *E. coli* and *Klebsiella sp.*

Key words: *Hydrobates hornby*, Prevalence, enterobacteriaceae.

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