

## **CHLAMYDIA PSITTACI, CHLAMYDIA AVIUM AND PSITTACIDAE HERPESVIRUS IN THE BURROWING PARROT (*CYANOLISEUS PATAGONUS*) COLONY OF ARGENTINE PATAGONIA**

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The Burrowing Parrots (*Cyanoliseus patagonus*) colony at Balneario El Cóndor (Patagonia, Argentina) is the largest colony of Psittaciformes in the world. However, little is known about the pathogens that circulate among them. *Chlamydia* spp. and Psittacid Herpesvirus (PshVs) have been found in wild and captive parrots and *C. psittaci* it is considered endemic in many wild bird populations. So, the aim of this study was to detect the presence of *Chlamydia* spp. and PshVs in Burrowing Parrots within the context of a mass mortality event between December 2020 and February 2021. Were collected 16 parrots: 11 adults and 5 youngs. A necropsy was performed on each. Samples were taken for histopathology and trimucosal swab for molecular studies. Detection of *Chlamydia* spp. was performed with a qPCR (23srRNA). The positive samples were rechecked with two qPCR specific for *Chlamydia psittaci* (*ompA*) and *Chlamydia avium* (*incA*). Also, an endpoint PCR (*ompA*) were performed. For the detection of PshVs a specific qPCR (UL16) and a semi-nested PCR (UL17/16) were performed. *Chlamydia* and PshVs positive samples were sequenced. Five Burrowing Parrots were positive for Chlamydiaceae: four *C. psittaci* and one *C. avium*. One of the positive samples for *C. psittaci* was sequenced and characterized as genotype B. Six Burrowing Parrots were PshVs positive, two characterized as PshVs 1. Also, histological lesions compatible with PshVs were observed in six Burrowing Parrots. *C. psittaci* and PshVs have been identified as significant pathogens of parrots with possible negative impact on bird conservation, production and public health. These results report for the first time the presence of chlamydial agents and PshVs in Burrowing Parrots from the largest colony in the world. Molecular studies on the organs and on more Burrowing Parrots will allow us to determine the role of the pathogens in the mortality event.