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MICROBIOLOGICAL AND PARASITOLOGICAL FINDINGS IN EXOTIC ANIMALS FROM A CITY PARK IN PALERMO (VILLA D'ORLEANS)

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Exotic species are considered as the new companion animals especially in occidental world. Beside the wild bird of prey found mainly in the countryside's, it may happen to cross *Psittacidae* in urban parks, zoo and protected areas and chances of come into contact with some exotic species increase. The aim of the present study was to individuate and identify potential zoonotic pathogens in specimens collected from exotic animals rescued in Villa d'Orleans, a city park in Palermo. Fecal samples collected from 17 different boxes were analyzed for microbiological and parasitological agents. Samples came from 38 recovered animals grouped in 17 boxes: *Cyrcus aeruginiosus, Falco sparverius, Ciconia ciconia, Corvus corax, Ichthyaetus audouinii, Buteo buteo, Parabuteo unicinctus, Streptopelia turtur, Streptopelia decaocto, Pavo cristatus, Carduelis carduelis x Serinus canaria, Testudo hermanni, Testudo graeca, Cacatua galerita, Nymphicus hollandicus, Amazona aestiva,* and *Macaca sylvanus*. Microbiological tests were performed to detect *Salmonella* spp. according with OIE recommended methods and suspect growing colonies were identified by micromethods, and biomolecular tests. Parasitological analysis were also performed using the traditional flotation technique (solution of sodium nitrate and glucose density 1350) and Ritchie and Ziehl Neelsen modified methods for the detection of oocysts of *Giardia* and *Cryptosporidium*. Two out of 17 specimens (11.7%) from *N. hollandicus* and from *C. carduelis* x *S. canaria* were found positive to *Salmonella* spp. (molecular identification is still ongoing). The overall prevalence of gastrointestinal parasitic infections was 58.8% (10/17) in particular, *Capillaria* spp. (5/17), *Dermanyssus gallinae* (5/17), *Heterakis* spp. (2/17) and coccidia (1/17) eggs were found and also larval stages of nematode in 2 boxes (11.7%). Parasitological analysis were negative in 7 specimens (41.2%), coinfestation were found

among *Capillaria* spp., *Eimeria* spp., and *Heterakis* spp. in *P. cristatus* and between *Heterakis* spp. and *D. gallinae* in *A. aestiva*. In our study, 5 pathogens were identified and 3 of them of zoonotic concern. In fact *Salmonella* spp., *Capillaria* spp. and red mites such *D. gallinae* are recognized as causative agents of emerging zoonotic diseases: salmonellosis (1–3), dermatitis (4) and capillariasis (5, 6) as reported also in Europe (3, 4). Due to the strict contact among animals and humans and because of the sharing of the same habitat, prophylactic measures towards environmental contamination especially zoonotic agents, should be undertaken as well as awareness of the risk factors.

1. Kristinsson et al. 2015. Læknablaðið.;101(6):313–9.
2. Jernberg et al. 2015. Euro Surveill Bull Eur Sur Mal Transm Eur Commun Dis Bull.;20(30).
3. Huedo et al. 2015. Genome Announc.;3(5).
4. Marangi et al. 2014. Med Vet Entomol.;28(4):447–52.
5. El-Dib et al. 2015- Exp Parasitol.;154:127–33.
6. Chichino et al. 1992. Am J Trop Med Hyg.;47(1):10–2.
7. J. Euzeby (1958) Vigot Freres Editeurs, Paris