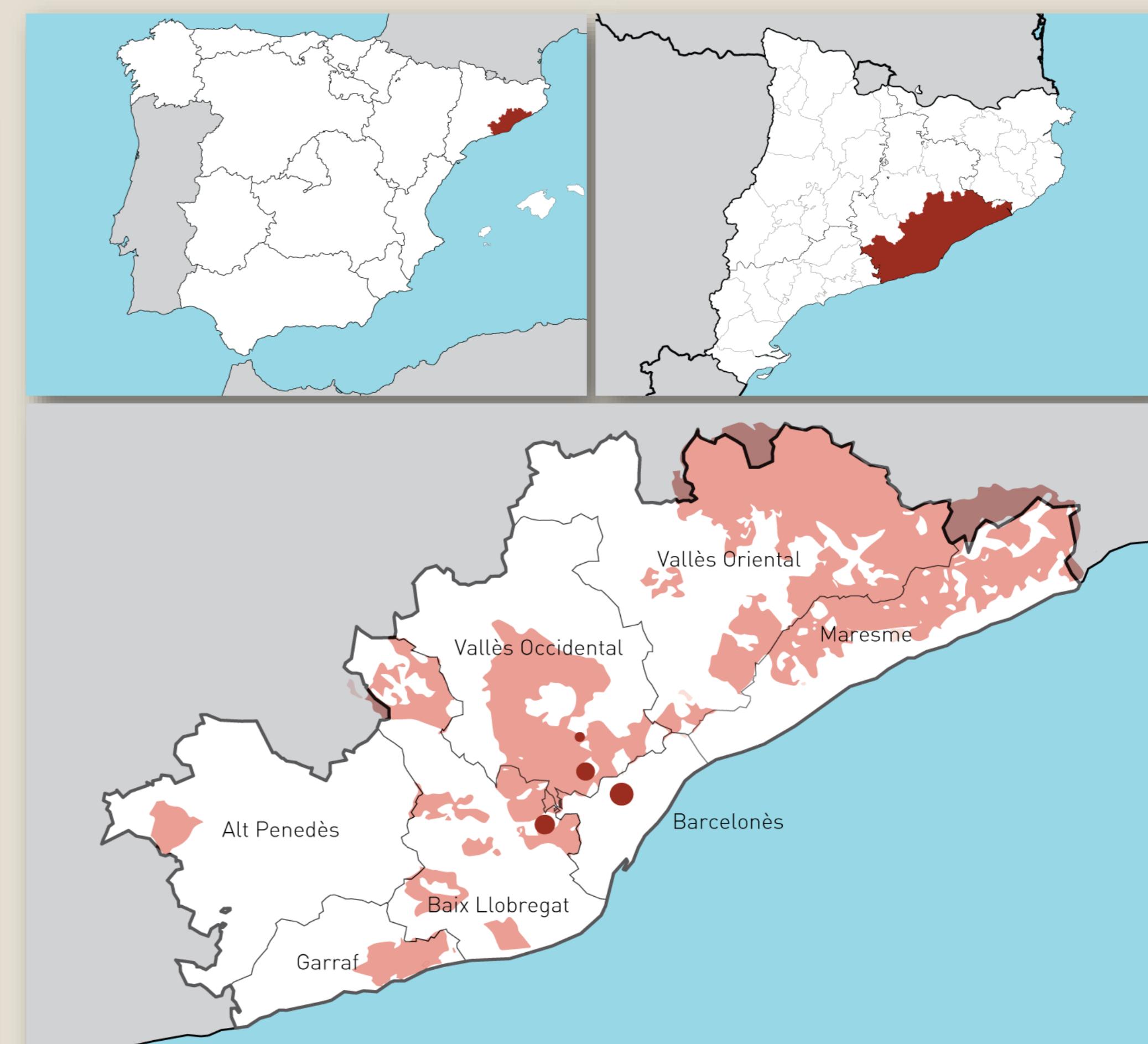


1. INTRODUCTION

The overpopulation of wild boars (*Sus scrofa*) that there are in some zones of Catalonia (Region of Spain) involves some risks. So is crucial the scientific knowledge about health, behaviour, population dynamics and ecology of that species.

This present study consists on an investigation and analysis of the status of helminth infection on wild Boars. Developed from June of 2015 until February of 2016. The samples were compiled by veterinarians of SEFas (Servei d'Ecopatologia Salvatge de la Facultat de Veterinària UAB) and the animals were captured from periurban zone of Barcelona. The studies on the status of parasitic infection in wildlife are important to evaluate the extent to which wild animals serve the sources of infectious agents transmitted to cattle and humans, even more if the study focuses on a peri-urban population of animals, which move closer and closer to citizens.



2. OBJECTIVES

- (I) Determinate the prevalence, intensity of helminth gastrointestinals and respiratory species compared with other studies
- (II) Determinate significative effects of sex and age on the parasitic infections

3. MATERIALS & METHODS

In individual bags were obtained the lungs and the digestive tracts (stomach, small and large intestine) and placed to freeze at -20°C to perform the subsaunce analysis. The samples of lungs and digestive tracts were dissected and washed to obtain adults worms.

Then, were collected in 55cc sives, replaced in 70% ethanol solution for conservation. Then, were identified under stereo microscope throught morphological characteritsts of helminths. (Gassó et al 2014 and Frontera et al. 2009). The procedure is presented in Figure I. The last step was the parasite count to do the stadistic analysis using Rstudio statistic program.



4. RESULTS

Out of the 43 samples collected of wild boars from periurban zone of Barcelona, 41 were found to contain helminths parasite. Five nematode species were isolated and indentified. The prevalence of any specie is presented in Graphic and shows *Globocephalus spp* is the most currently parasite in the study population. Comparing with other studies, the varie in periurban wild boars is less, that and the mean number of adults worms is presented Table 1.

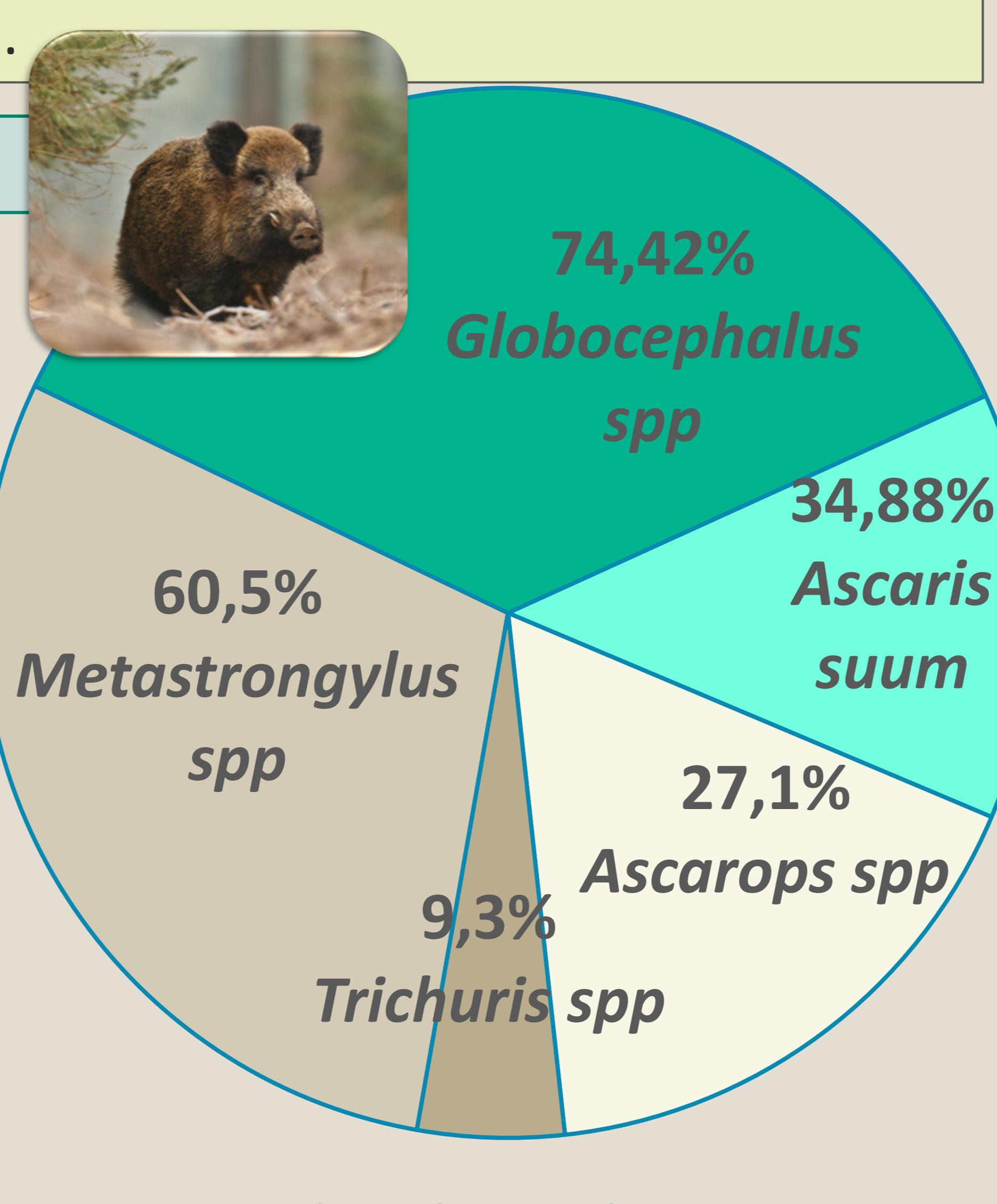


Fig. Helminth prevalence

Fig 3. mean, minimum and maximum intensity of infestation estimated by counting gastrointestinal and lung adult nematodes in 43 wild boar in periurban area of Barcelona, based on post-mortem examination. Localization: lung (L), stomach (S), small intestine (SI), Caecum and colon (LI). NE (Not estimate) intensity of infestation lung and digestive parasite helminths

LUNG HELMINTH SPECIES	Metastrongylus spp	M. Apri	M. pudendotectus	M. salmi
Range	5-625	4-470	1-125	5-35
Mean	145	127	43	19
DIGESTIVE HELMINTH SPECIES	Globocephalus urosubulatus (SI)	Ascarops Strongylina (S)	Ascaris suum (SI)	Trichuris spp
Range	12-350	4-67	1-8	4-95
Mean (Intensity)	94	21	3	32

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5. CONCLUSIONS

- (I) The prevalence of helminths and the variety of parasites detected its less than other studies done in wild boards from natural places in Spain. This could be in part due to the different feeding of this animals.
- (II) No significative results were found betwen the correlation of sex and age host and the parasitic infection. But, it was detected that Sub-adults are the group most infected. This shows that when the animals are still young most of them haven't been in contact with the parasite, and when they are adult the immunologic system could have been adapted.