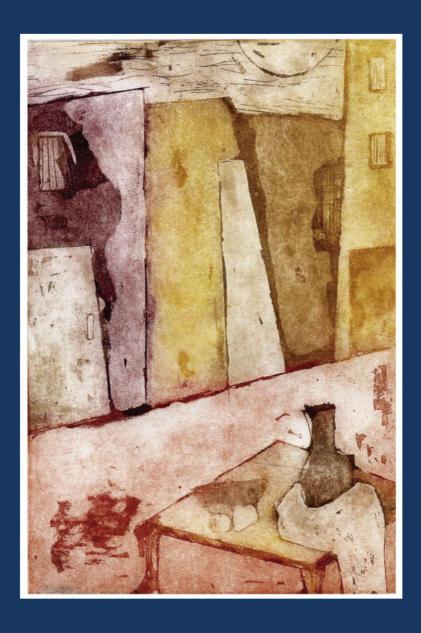
## 80° Aniversario

BUENOS AIRES VOL. 79 Supl. IV - 2019



12 out of 18 samples. To evaluate T. gondii viability, pepsin digested pork material was inoculated in mice (2-3 per sample). Thirty days after inoculation, the animals were euthanized and serum, brain, liver and heart samples were collected. A total of 10 mice were positive for antibodies against T. gondii, measured by indirect ELISA, representing 8 meat samples. On the other hand, molecular detection in DNA extracted from mouse brains showed that the parasite was present and viable in 9 meat samples. Additionally, in order to detect possible variations in T. gondii tropism, we analyzed liver and heart samples by heminested PCR. We confirmed the presence of the parasite in both organs in 7 meat samples. Future experiments will be focused on the characterization of T. gondii strain genotypes to gain insight into the distribution and variability of the parasite in meat products.

## 0963 - COLONIES INITIALIZATION UNDER LABORATORY CONDITIONS OF NYSSOMYIA NEIVAI AND MIGONEMYIA MIGONEI (PSYCHODIDAE: PHLEBOTOMINAE) IN THE NORTH OF SALTA PROVINCE, ARGENTINA.

**Griselda Noemí COPA** (1) | Maria Cristina ALMAZAN(1) | Gabriela Del Valle FLORES(2) | Andrés ESCALADA(3) | Lorena Vanesa ARAMAYO(1) | Ruben CIMINO(4) | Julio NASSER(1) | José Fernando GIL(5)

CÁTEDRA DE QUÍMICA BIOLÓGICA. FACULTAD DE CIENCIAS NATURALES. UNIVERSIDAD NACIONAL DE SALTA (1); INSTITUTO DE INVESTIGACIONES TROPICALES- UNSA - SEDE ORÁN (2); INSTITUTO DE INVESTIGACIONES DE ENFERMEDADES TROPICALES (3); INSTITUTO DE INVESTIGACIONES DE ENFERMEDADES TROPICALES - UNSASEDE ORÁN (4); INENCO-CONICET (5)

Abstract/Resumen: Leishmaniases are vector-borne diseases with sand fly insects (Psychodidae: Phlebotominae) as vectors. In Oran (Salta, Argentina) Nyssomyia neivai is the most prevalent species followed by Migonemyja migonej, they have medical relevance because were found infected with Leishmania sp. in Argentina and Brazil. The establishment and maintenance of sand flies in colonies results key to study their biology, behavior, and relationships with pathogens. The aim of our work was to study the life cycle of Ny. neivai and Mg. migonei under laboratory conditions and to elaborate a horizontal life table for them. For this, sand flies were captured in a peridomiciliary area of Orán city. The blood fed females were captured using manual aspirators both on domestic animals and tree bark. A female with 5 males were maintained in rearing pots at 25  $\pm$  2  $^{\circ}$  C and 85-95 % relative humidity. Larval food consisted of a mixture of rabbit feces, fish feed, rabbit feed, while adult sand fly food provided was sugar solution (30 %). A total of 82 females were conditioned for oviposition, the 41.4 % of them survived and oviposited. Thirty-two specimens were Ny. neivai and two Mg. migonei. The average number of eggs laid per female were 40.81 (Ny. neivai) and 59.50 (Mg. migonei). A total of 78 adults of Ny. neivai and 27 of Mg. migonei (p<0.001) emerged under laboratory conditions. For Ny. neivai and Mg. migonei, the time range occurred between the egg and adult stages was 37 and 36 days, respectively. The proportions of the original surviving cohorts (Ix) in each stage, for both species, were higher in the first stage (L1). The proportion of deaths per stage (dx) for Ny. neivai was higher in eggs and L1, while in Mg. migonei was in L2. Following this protocol, sand fly colonies could be initiated under laboratory conditions, which will allow the development of future projects for incriminating vectors and reservoirs in the north of

0967 - VEGETATION COVER AND HUMIDITY INFLUENCE ON THE ABUNDANCE OF SANDFLIES IN COLONIA SANTA ROSA LOCALITY, NORTHWEST OF ARGENTINA.

Lorena Vanesa ARAMAYO (1) | Griselda Noemí COPA(2) | Carlos Lorenzo HOYOS(3) | Julio Rubén NASSER(1) | José Fernando GIL(4)

CÁTEDRA DE QUÍMICA BIOLÓGICA Y BIOLOGÍA MOLECULAR - FCN (1); INSTITUTO DE INVESTIGACIONES DE ENFERMEDADES TROPICALES - UNSA- SEDE ORÁN (2); CONSEJO NACIONAL DE INVESTIGACIONES CIENTÍFICAS Y TÉCNICAS (CONICET) (3); INSTITUTO DE INVESTIGACIÓN EN ENERGÍA NO CONVENCIONAL (INENCO-CONICET) (4)

Abstract/Resumen: Tegumentary Leishmaniasis (TL) endemic in northern of Argentina, with a zoonotic transmission pattern in northern of Salta and Oran department is the most affected. The vegetation cover and humidity can influence the presence and abundance of sandflies. The aim of this work was to analyze the potential influence of the vegetation cover and the humidity on the sandflies species captured in Colonia Santa Rosa locality (CSR) from the Salta province. To sandflies capture, CDC traps were placed in 14 sites during four nights in January 2016, between 18 pm and 7 am. The sampling sites were distributed in downtown housing yards, periphery and edges of residual vegetation. The species were determined through identification of spermatheca, cibarios and genitalia. The NDVI (normalized difference vegetation index; estimate the vegetation cover) and NDWI (normalized difference water index; estimate the humidity) for the study area were obtained from Google Engine. Then, using the QGIS 3.6 software, circular buffers of 100 meters of radius were generated whose centroids were the sampling sites. The average of the values of the NDVI and NDWI pixels extracted by means of the circular area were used to perform a correlation analysis with the abundance of the different species of sandflies using the non-parametric Spearman method. A total of 435 sandflies were captured. The species found and their abundances expressed by capture effort were: Nyssomyia neivai (133.33 %), Mygonemyia migonei (5.66 %), Cortelezzii Complex (4 %), Evandromyia sallesi (0.33 %) and sp (2 %). The values of NDVI and NDWI versus the total abundance of sandflies (r= 0.78; r= 0.70; p<0.05) and Nyssomyia neivai (r= 0.76; r= 0.68; p<0.05) showed statistically significant correlations. The effect of vegetation cover and humidity on the abundance of sandflies can be used potentially as a tool to generate interventions for control and prevention of LT in northern Salta.

## 0972 - EVALUATION OF THE IMMUNOGENICITY OF THE RECOMBINANT PROTEIN GSTMU OF FASCIOLA HEPATICA (RFHGSTMU) ADSORBED ON ALUMINUM HYDROXIDE IN SHEEP

Vanesa FERNANDEZ | Javier SOLA | María Celeste MORAN | Silvina GUTIERREZ | Silvia Marcela ESTEIN

## **CIVETAN CONICET**

Abstract/Resumen: Fasciola hepatica is a zoonosis which causes significant economic losses in ruminants. The development of a vaccine emerges as an alternative for the control of this disease. The recombinant protein GST Mu from F. hepatica (rFhGSTMu) adsorbed on aluminum hydroxide (rGSTMu + AI(OH)<sub>3</sub>) conferred 90 % protection against this parasite in the mouse model. The objective of this work was to evaluate the humoral and cellular immune response against this vaccine in the susceptible species. Corriedale female sheeps were immunized twice every 30 days. The humoral immune response was analyzed by an indirect ELISA. Blood was obtained every 15 days from day 0 to 75. The in vivo immune cell response was evaluated on the day 75 by performing the intradermal test with rFhGSTMu. Specific serum IgG antibodies increased after each boost unlike that observed in the control group (without immunization), which maintained baseline levels throughout the trial. The differences were maximum and significative (p<0.05) two weeks after the last immunization. The presence of a cellular immune response was not detected in vivo. This preliminary result indicates that rGSTMu + Al(OH)3 is immunogenic in sheep.