



TUCUMAN BIOLOGY ASSOCIATION
(Asociación de Biología de Tucumán)

Abstracts from the
XXXIII ANNUAL SCIENTIFIC MEETING

October 27 – 28, 2016
Tafí del Valle, Tucumán, Argentina

*The abstracts have been revised and evaluated by the Scientific Committee
of the Tucumán Biology Association*

A78

SURVEY OF ARTHROPOFAUNA FROM RIPARIAN AREAS IN A SECTOR OF THE TAPIA AND VIPOS RIVERS (TAPIA-TRANCAS WATERSHED, TUCUMAN, ARGENTINA)

Hill JG1; Luft Albarracin EB1; Alderete MC2

1PROIMI – Biotecnología (CONICET). Pje. Caseros y Av. Belgrano. Tucumán. 2Cát. Ecología Gral. Fac. de Cs. Nat. e IML. UNT. Miguel Lillo 205. Tucumán. Argentina. E-mail: jorgehb7@hotmail.com

Riparian habitats allow the maintenance of water quality, protecting wildlife and the formation of natural corridors. Currently, terrestrial arthropofauna is poorly known in these kinds of habitats and, even more, the lack of information is higher for riparian areas belonging to the Semi-arid Chaco ecoregion. Therefore, the aims of this study were to conduct a survey of arthropods present in habitats associated with Tapia and Vipos rivers (Tucuman); and to identify at the family level the two most abundant orders within the Insecta class, diversity for each group being estimated. Sampling was conducted during the months of April and May 2014, in two sections of the Tapia and Vipos rivers. Specimens were collected with Moericke traps (yellow pan traps). A total of 1,861 individuals were surveyed, Collembola being the most numerous taxa (37.5%). Within the Insecta class, 994 individuals belonging to nine orders were collected, out of which the most abundant ones were the Hymenoptera (38.9%) and Diptera (31.7%) orders. In the Hymenoptera, a total of 24 families were recorded, Formicidae being the prevalent frequent family (96 individuals followed by Encyrtidae (52 individuals). In the Diptera order, a total of 23 families were identified, the Phoridae family being the best represented (96 individuals), followed by Dolichopodidae (59 individuals), and thirdly Sciaridae (50 individuals). This study represents the first descriptive work for terrestrial arthropofauna associated with riparian ecosystems of Semi-arid Chaco ecoregion of the Tucuman province.

A79

COMPOSITION AND ABUNDANCE OF UNDERGROWTH BIRDS AND BATS AND FLESHY-FRUITED PLANT RICHNESS IN A SECONDARY FOREST OF THE SOUTHERN YUNGAS

Varela O^{1,2}, Palacio FX^{1,3}

¹Fundación Miguel Lillo, Miguel Lillo 251, Tucumán (4000). ²UNdeC, 9 de Julio 22, Chilecito, La Rioja, ³ Unidad Ejecutora Lillo, FML-CONICET. E-mail: omarvarela1@gmail.com

Secondary forests are important sites for biodiversity of birds and bats and are increasingly common in contemporary landscapes of the Yungas. This study describes bird and bat composition and abundance, and fleshy-fruited plant richness in a secondary mountain forest of "Reserva Provincial La Florida", Tucumán. In 2007, birds and bats were monthly captured with mist nets (12 x 2.6 m) between 7-20 hs and 20-3 hs. Sampling effort was 2,320 net-hour-day and 1,820 net-hour-night. In addition, fleshy-fruited plants (FFP) in fruit were recorded in an area of $\approx 4 \times 0.6$ km. A total of 663 birds of 18 species and 50 families, and 454 bats of 6 species of 2 families were captured. 59% of the captured birds belonged to the families Tyrannidae (11 sp), Thraupidae (8 sp) and Turdidae (5 sp), *Thraupis sayaca* accounted for most of the captures. 98% of captured bats belonged to the genus *Sturnira* (Fam. Phyllostomidae), with strong dominance of *S. erythromos*. The proportion of species observed with respect to the expected theoretical (completeness) was 67% for birds and 91% for bats. FFP included 40 species of 24 families, with Solanaceae as the dominant family (11 sp). The abundance of nectarivorous and frugivorous birds was highest in spring and summer, respectively. The abundance of frugivorous birds and bats were positively related to FFP richness. Multivariate analysis (NMDS) revealed that the higher the FFP richness, the higher the proportion of frugivorous birds and bats. The diversity of birds and bats is an important component of secondary forests of the RPLF.

A80

EVALUATION OF WATER QUALITY OF THE VALLEY RIVER, COLLAGASTA SEGMENT, THROUGH THE ASSEMBLY OF BENTHIC MACROINVERTEBRATES

Lencina I; De Bonis M; Barros J; Ávalos Álamo M; Sarría O; Vuirli Saragusti B; Salas L.

Proyecto SECyT. UNCa.-FACEN. E-mail: lilianasalas17@hotmail.com

Macroinvertebrates (>300 μ m) are used as biological indicators of water quality of river ecosystems. The objective of this research was to make a list of the benthic macroinvertebrates in a stretch of the Valley River and use the assembly to evaluate water quality. The sampling station was at Collagasta (28°21'18.8"S-65°42'41.5"W; 547m a.s.l.). The water there is normally collected for human consumption, irrigation and recreation. Sampling was conducted in June 2015. The samples (n = 3) were obtained with "Surber" type sampler (0.09m²; 300 μ m mesh width), integrated for analysis. Taxonomic determinations were made down to the taxon family. The Shannon-Wiener (log₂) (H') and biotic indices were obtained: IBMWP' (Iberian Biological Monitoring Working Party) was set for the NOA; ASPT '(Average Score per Taxon) and IBF (Family Biotic Index). In addition, we obtained morphometry data of the river: width of dry bed, wet bed width, current velocity, depth: The following were determined *in situ*: water physico-chemical parameters: temperature, electrical conductivity and pH, with digital multimeter. 3,172 bodies were collected. The faunal wealth was 16 families. H' reached a value of 2.71 (2-3) Condition: Light Pollution. IBMWP' was 111, Class I (101-120): unpolluted waters or altered sensitively.