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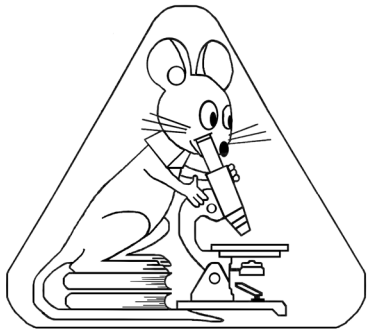

TUCUMAN BIOLOGY ASSOCIATION

(Asociación de Biología de Tucumán)

Abstracts from the

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

93.

GORDIIDA (NEMATOMORPHA) DIVERSITY IN WATER STREAMS OF CAPAYAN (CATAMARCA, ARGENTINA)

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The objectives of this work were to survey Gordiida diversity in water streams of Catamarca, and to provide information about the geographical distribution of the species collected. 10 water streams were sampled in Capayan and they were given geographical reference in the field. Adults were collected by two persons who combined manual techniques, strainers, and wire nets, while walking along a 200m distance in each water stream, covering both stream banks. 11 species were reported: *Chordodes brasiliensis; Neochordodes meridionales; Noteochordodes achosmosus; N. cymatium; N. desantisi; N. saltae; N. talensis; Paragordius esavianus; P. varius; Pseudochordodes bedriagae* and *P. dugesi*. The species common to the 10 water streams was *Noteochordodes talensis,* while *Paragordius esavianus* was collected in only one water stream. Reports of *Neochordodes meridionales, Noteochordodes achosmosus, N. cymatium, N. saltae* and *Paragordius esavianus* represented new records, thus expanding the geographical distribution of these species in the province of Catamarca. These results contribute to the knowledge of Gordiida diversity and distribution in Catamarca, and in Argentina, which can be increased with future collection campaigns.

94.

FUNGAL DIVERSITY IN RESERVA HORCO MOLLE AND PARQUE BIOLOGICO SIERRA DE SAN JAVIER (TUCUMAN, ARGENTINA)

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Reserva de Horco Molle and Parque Biológico Sierra San de Javier are protected natural areas located in the Yerba Buena Department, Tucumán. Phytogeographically, they belong to the "Yungas" Province, an ecosystem with a high biodiversity of flora and fauna. Studies on fungal diversity in the region are scarce and indicate that it is the reservoir of a large number of species not yet known. The aim of this study was to document the diversity of fungi in the protected area. Seasonal samplings were carried out in the study sites. The material was incorporated into the LIL herbarium and studied macro and microscopically for identification. We present the first listing of the mycobiota identified so far that includes 40 species. *Cercophora ambigua*, *Cosmopora pseudepisphaeria*, *Rosellinia dingleyae*, *Helicoma dennisii* are cited for the first time for Argentina. *Bactridium flavum*, *Endophragmiella pallescens*, *Cordyceps polyarthra*, *Trametes cfr. cingulata* are new reports for northwestern Argentina. These results are important because they allow us to know fungal diversity in protected areas and thus contribute to their conservation.

95.

SENSITIVITY OF ENVIRONMENTAL FUNGI TO EXTRACTS OF THE GENUS *Baccharis*

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The interest in finding biologically active molecules against fungi is on the increase, not only because of their usefulness in the treatment of diseases but also to control their proliferation. Vegetables are an important source of antimicrobial agents. The species *Baccharis boliviensis* (*Bb*) and *Baccharis tola* (*Bt*), which grow in the Puna Argentina in extreme environments, could be a source of metabolites of antifungal action. The present work determines the antifungal effect of both plant species against environmental fungi belonging to different genera. Ethanol extracts (3.200 mg/ml of phenolic compounds) and 2 µl of spore suspension ($5x10^3$ spores/ml) were used. The values of fungal growth were converted to their equivalent in inhibition percentage (%). Subsequently, we determined the Minimum Inhibitory Concentration (MIC) of the extracts (100-3200 µg/ml of phenolic compounds) and 2 µl of each ($5x10^3$ spores/ml) spore suspension. *Scopulariopsis brevicaulis* was most sensitive, showing 100% inhibition with *Bb* and lower with *Bt*. Similar results were obtained with *Alternaria* sp. *Absidia* showed strong inhibition. The remaining strains had lower sensitivity. The extracts had MIC values between 1600 and >3200 mg/ml. The results show that both extracts might be used 6 as antifungals against environmental fungi.

96.

ANTIFUNGAL ACTIVITY OF *ANACARDIACEAE* EXTRACTS ON EAR ROT FUNGI

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The aim of this work was to quantify the antifungal activity of leaf extracts from *Schinopsis* on *Fusarium* species causing ear rot disease. Leaves from *S. haenkeana* and *S. lorentzii* were extracted with dichloromethane and ethyl acetate. The extracts were evaporated to dryness. The dry powders were dissolved in methanol and filtrated. The fungicidal activity of the methanolic extracts was evaluated by the liquid broth microdilution method. Inhibitory concentration of 50% (IC50) was calculated. Leaf extracts from *S. lorentzii* had IC50s of 42 µg/ml (dichloromethane, *F. verticillioides* and *F. graminearum*), 100 µg/ml (ethyl acetate, *F. graminearum*) and 35.7 µg/ml (ethyl acetate, *F. verticillioides*). Extracts from *Schinopsis haenkeana* were less inhibitory of fungal growth. The isolation and structural elucidation of the antifungals from the dichloromethane extract of *S. lorentzii* are under way.