

EC<sub>50</sub><125 µg/ml, and *Sorghum halepense* at EC<sub>50</sub>=3% and EC<sub>50</sub>=500 µg/ml. Both showed an interesting selectivity against the leguminous alfalfa (*Medicago sativa*) and soybean (*Glycine max*). The EC<sub>50</sub> for (-)HAA was only achieved at 1500 µg/ml in both species. Even at the highest concentration tested, 6%, AqE did not reach EC<sub>50</sub>, and germination was only inhibited up to 30% in alfalfa and 20% in soybean. Essential oils from FR (hydrodistillation, ca. 0.4% v/w), did not show phytotoxic effects at 500-1500 ppm, discarding their involvement in the phytotoxic effects present in AqE. Through GC-MS, from 32 volatiles detected, only 10 were identified, which represented 70% of the total oil: 6 hydrocarbon (50%) and 2 oxygenated (10%) sesquiterpenes, plus 2 non terpene compounds (10%). No monoterpenes were found. Overall results, especially the selectivity shown against leguminous species, signal the potential of (-)HAA and other compounds present in the AqE of *Flourensia* for weed control in crop systems.

### A132

#### MORPHOANATOMICAL CHANGES IN LEMON FRUIT INFECTED WITH *Phytophthora citrophthora*, THE CAUSAL AGENT OF BROWN ROT

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Brown rot caused by *Phytophthora* spp. (Stramenopila: Oomycota) is a major citrus postharvest diseases. The aim of this study was to determine the structural changes that occur in the peel of infected lemons. Tissues from healthy and infected fruit, artificially inoculated in the styler area with zoospores of *P. citrophthora*, were compared. For the morphoanatomical study, peel sections (flavedo and albedo) of equatorial and styler zones were used. Transverse and longitudinal sections were analyzed in 4 samples: M1-Styler infected, M2 Equatorial infected, M3- Styler healthy, M4-Equatorial healthy. Observations and measurements were made with optical microscopes. Tissues M1 and M2 differ from M3 and M4 controls. This difference is evidenced by inter and intracellular hyphae development that reach the albedo and the formation of lenticular subepidermal structures with tearing of the epidermis; thinner cuticle; cell walls of collenchyma and parenchyma thinner; reduction of calcium oxalate crystals and increase in phenolic compounds deposits. The anatomical changes showed no significant differences between the styler and equatorial areas. These structural changes may be used to characterize the initial stage of infection of *P. citrophthora*, when symptoms of the disease are not yet visible.

### A133

#### FIRST CATALOGUE OF THE PHYCOLOGICAL COLLECTION, CRYPTOGAMIC HERBARIUM OF MIGUEL LILLO FOUNDATION.

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The Phycological Collection has preserved more than 1000 algal species with historical relevance donated by museums and collectors of international prestige. The cataloguing of algal specimens donated by the Herbarium of The New York Botanical Garden (NYBG) was performed under the computerization project of the Phycological Collection. The methodology applied consisted in the review of algal materials, the control of their condition and the simultaneous review of historical inventories. In addition, photographs were taken and the information contained in labels was loaded on the database DATA-LIL. The taxonomy of the species was completed according to AlgaeBase and a search of information regarding the history of the collections, biography of collectors and preservation techniques was carried out. 576 species of 190 genera were cataloged, distributed among: Charophyta (13), Chlorophyta (46) Cyanobacteria (26), Ochrophyta (32) and Rhodophyta (73). These species mainly represent the algal Flora of North America and the Caribbean and belong to collections of The NYBG such as Phycoteca Boreali-Americana, Characeae Americana Exsiccatae of TF Allen and North American Marine Algae, among others. There are eighty collectors represented, the most relevant being Collins (115), Durant (66) Hervey (56), Howe (49), Allen and Gardner (26). Finally we highlight the presence of two duplicates of types *Caulerpa lentillifera subsessilis* and *Symploca howei*.

### A134

#### CYANOBACTERIA OF HIGH WETLANDS FROM NORTHWESTERN ARGENTINA

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The latitudinal and altitudinal variability of our country allows the existence of a diversity of wetlands that, in the broadest sense, includes marsh, fen, peatland or flowing or static water-covered surfaces, permanent or temporary, natural or artificial, brackish or

salt, as well as areas of marine water with a depth no greater than six meters at low tide. The objective of this paper was to contribute to the knowledge of Cyanobacteria in the High Wetlands of northwestern Argentina. An interdisciplinary sampling was realized in the summer, from January 21st to February 1st, and twenty-six lakes were studied corresponding to Jujuy, Salta and Catamarca provinces. The qualitative samples were collected with a 20 µm plankton net, filtering 25 litres of water. These samples were fixed in situ with formaldehyde 4% and observed with binocular microscopy and drawing camera in the laboratory. According to the results obtained, the taxocenoses was formed by 23 taxa, most of them cosmopolites and from brackish environments, belonging to Chroococcales (5), Nostocales (3) and Oscillatoriales (15). We described for the first time *Phormidium inundatum* in the Northwest of Argentina and, apart from this species, *Merismopedia glauca*, *M. punctata*, *Synechococcus elongatus*, *Anabaena variabilis*, *Nodularia spumigena*, *Nostoc linckia*, *Leptolyngbya fragilis*, *Spirulina major*, *Phormidium autumnale*, *P. breve* and *P. Molle* for the Catamarca Province.

### A135

#### COMMON NAMES OF THE FLORA OF SANTIAGO DEL ESTERO: AN ETYMOLOGICAL APPROACH

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The common names of plants are part of the traditional knowledge of the rural population. Thus, they serve as a practical reference for action and communicate scientific knowledge about plants. The increasing loss of this knowledge leads to the need to safeguard its connotation and origins. The aim of this study is to collect names assigned to local species of our native flora, their meaning and etymology. The information was obtained through literature review and field work consisting of semi-structured interviews with key informants and rural residents of the provincial interior. Plant materials were collected for further identification by following conventional methods. A catalog with 396 local names and popular meanings assigned to 220 plant species belonging to 69 botanical families was created. Popular botanical names registered are associated with the quichua (tacko yuraj, paaj puca), diaguita (sina-sina, huacla), native languages of other regions (aguaribay -guaraní-, tala -aymará-), Spanish (algarrobo, sauce, meloncillo) or conjunctions of different languages (sacha sandía, tala pishpita). The contribution of native languages is highlighted in the construction of vernacular names of plants; they serve as a tool for recognition. Many of these names are assigned in relation to popular uses, properties of the species, morphological characteristics and local legends, and this information may contribute to the rescue of traditional knowledge of the flora of Santiago del Estero.

### A136

#### SALINITY OF PHREATIC WATER IN WETLANDS OF SAN LUIS (ARGENTINA).

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Wetlands are environments frequently flooded and with groundwater levels close to the surface. Particularly in our region, these groundwaters are saline, which determines the development of hydromorphic soils and halophyte vegetation. Our objective was to confirm the salinity contents and the groundwater levels and compare them with those obtained in 2011 in a saline wetland in the center-east of the province of San Luis. The study area is located at 33 ° 37' S and 65° 25' W, with a height of 505 meters above sea level. We determined the water level and chemical characteristics of their waters according to the types through previously established physiognomic studies. The sampling was compared to one previously made in the same place and at the same time of the year. The results indicate that in both samplings each physiognomic type presents different groundwater levels such as salinity, from the halophytic forest (higher sector) down to the beach saline (lower area). The phreatic water rose between 48 and 103% for different physiognomic types in May, while in June the increase was between 36 and 86%. General chemical parameters of the water show a general increase: pH (4 to 19 %), EC (Electrical conductivity, 2 to 25%) and SAR (Sodium Adsorption Relation, 64 to 91%). In regard to the anions, CO<sub>3</sub><sup>2-</sup> and CO<sub>3</sub>H<sup>-</sup> decreased their values between 83 and 87%, while Cl<sup>-</sup> and SO<sub>4</sub><sup>2-</sup> increased between 4 and 50% and between 145 and 158% respectively. The cations Na<sup>+</sup> and Ca<sup>2+</sup> increased between 82 and 124% and between 49 and 106%, while K<sup>+</sup> and Mg<sup>2+</sup> were dissimilar. We concluded that the increase in phreatic water and the parameters studied show a higher salinity for each physiognomic type in the sector.

### A137

#### MAMMALIAN DIVERSITY IN TWO SALINE WETLANDS OF SANTIAGO DEL ESTERO, ARGENTINA.

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Lagunas Saladas and Huyamampa constitute two of the largest saline wetlands of the Prov. of Sgo. del Estero, covering an area of 400,000 ha. Saladas is a protected area of the provincial system. Huyamampa is a site of high biodiversity conservation value as