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allowed determining the presence of IgY in the sample. These findings will be important in the evaluation of the antigenicity of plant proteins used as immunogens that provide protection against opportunistic pathogens, being a promising biotechnological product.

052- ACTINOBACTERIA RESISTANT TO CONTAMINANTS OF EMERGING CONCERN

Gonzalez Holc VG¹, Aparicio JD^{1,2}, Raimondo EE^{1,2}, Costa Gutierrez SB¹, <u>Polti MA^{1,3}</u> ¹Planta Piloto de Procesos Industriales Microbiológicos (PROIMI-CONICET), S. M. de Tucumán, Argentina. ²Facultad de Bioquímica, Química y Farmacia, Universidad Nacional de Tucumán (UNT), S. M. de Tucumán, Argentina. ³Facultad de Ciencias Naturales e Instituto Miguel Lillo, Universidad Nacional de Tucumán (UNT), S. M. de Tucumán, Argentina. *e-mail:marta.polti@conicet.gov.ar*

The Contaminants of Emerging Concern (CECs) are synthetic or naturally occurring chemicals that are not commonly monitored in the environment, but have the potential to enter the environment and cause adverse ecological and/or health effects. A promising technology to clean up environments contaminated with CECs is bioremediation using actinobacteria, which are microorganisms with great metabolic diversity and ability to detoxify different organic and inorganic compounds. In this context, the objective of the present work was to select actinobacteria resistant to CECs of regional relevance. The resistance to CECs of 12 actinobacterial strains, previously isolated from contaminated environments, was qualitatively evaluated. The CECs studied were Diclofenac (DIC), Sildenafil (SIL) and Ivermectin (IVE). These CECs were selected because they were detected in several domestic and hospital effluents in the northwestern region of Argentina, and they belong to different chemical groups. The qualitative screening assay was carried out in Petri dish plates containing 20 ml of casein starch agar medium (CSA). For the DIC and SIL assays, rectangular troughs (1.5 x 6 cm) were cut in the centre of plates and filled with 1 mL of the solution to be tested. For the IVE assays, due to its insolubility, the solution was added directly to the CSA medium. The concentrations tested were: 1, 5 and 10 mg/mL. The strains were inoculated perpendicular to the rectangular troughs (DIC, SIL) or equidistant (IVE). Plates were incubated at 30 °C for 7 days. Control plates were also performed, using sterile distilled water instead of CECs. For each strain, growth, spore formation and pigment production were evaluated in comparison to that observed on control plates. For DIC and SIL, 2 strains, different for each CEC, were able to grow, form spores and produce pigments, at levels comparable to their corresponding controls. For IVE, 12 strains were able to grow and produce pigments, but only 9 of them formed spores. None of the strains studied showed tolerance to the three CECs, although several strains showed tolerance to 2 CECs. These results demonstrate the great potential of actinobacteria to grow in presence of several types of CECs, also indicating that the metabolic pathways involved in each type of tolerance may be different. The strains with the highest resistance to each CEC were selected for degradation tests in liquid culture media, in order to evaluate their ability to use the CEC as the only source of carbon and energy.

053- THE VEGETATION IN THE SURROUNDINGS OF THE RAMÓN CARRILLO HOSPITAL AND ITS POTENTIAL ALLERGENIC VALUE

*Gambluch Negre X*¹, Marchevsky KE^{1,2}, Moyano² FM and Moglia MM^{1,2} ¹PROICO 03-1320- (FMN-UNSL) ²PEIS 02-0320- (FQByF-UNSL)

e-mail: <u>mmmoglia@unsl.edu.ar</u>

The presence of green areas favors the physical and mental health of the population. However, some plants can also cause health problems. In this sense, the management of urban green spaces is of great importance, especially in the vicinity of health centers. Many trees, and also some shrubby and herbaceous plants, can cause pollen allergies. Among the herbaceous area The Chenopodiaceae-Amaranthaceae, which include plants common in disturbed areas such as quinoa, Russian thistle and morenita, implicated in summer and autumn allergies, and Poaceae such as Lolium spp. and Cynodon dactylon, which cause spring and summer allergies. The objectives of the work were to carry out an evaluation of the Value of the Allergenic Potential (VPA) of the species, both cultivated and spontaneous, from the surroundings of the East zone of the Ramón Carrillo Hospital, where its main entrance is located, and to make suggestions regarding to the types of plants used and their management. The methodology included: a. the exploration of the area through satellite images, using Google Earth Pro, for the delimitation of differentiated zones of vegetation, b. carrying out censuses of species in situ and identifying specimens in the laboratory and c. calculation of the VPA. The results indicated that the woody plants used in afforestation, both shrubs and trees, are for the most part appropriate; since they have low VPA. Among them are Robinia pseudoacacia (VPA: 4), Brachychiton acerifolius (VPA: 2) and Albisia julibrssin, among others. However, male specimens of Acer buergerianum (VPA: 8), Fraxinus excelsior (VPA:18) and Salix sp. (VPA: 18), with moderate to high VPA, were also recorded. On the other hand, the disturbed areas of the circuit that surrounds the hospital are invaded by Chenopodiaecae-Amaranthaceae and species of the Lolium genus were used as lawns in the landscaping near the hospital entrance (VPA: 27). Finally, it is recommended to avoid the cultivation of allergenic plants detected in the area and to carry out appropriate management practices for established species, both cultivated and spontaneous.