

# 3<sup>rd</sup> International Conference and Exhibition on **Traditional & Alternative Medicine** August 03-05, 2015 Birmingham, UK

## Identification of compounds from *Anagallis arvensis* L. with inhibitory activity against *Candida albicans*

Soberon Jose Rodolfo<sup>1,2</sup>, Pastoriza Ana Cristina<sup>1</sup>, Sgariglia Melina Araceli<sup>1,2</sup>, Carrasco Juarez<sup>1</sup>, Maria Belen<sup>1</sup>, Jager Sebastian<sup>2</sup>, Labadie Guillermo<sup>2</sup>, Sampietro Diego Alejandro<sup>1,2</sup> and Vattuone Marta Amelia<sup>2</sup>

<sup>1</sup>Universidad Nacional de Tucuman, Argentina

<sup>2</sup>Consejo Nacional de Investigaciones Cientificas Tecnicas, Argentina

The antifungal activity of *Anagallis arvensis* L. (Primulaceae) extract was evaluated against *Candida albicans* (ATCC 10231), alone and in combinatory experiments. Disk diffusion, checkerboard and viable cell count assays were employed to determine the effect of samples and combinations of fluconazole (FLU) samples against *C. albicans*. The tincture (i.e. ethanolic extract) exhibited the highest antifungal activity among the assayed samples. This extract was subjected to activity guided isolation experiments, including liquid-liquid extraction and column chromatography on Silica Gel, which yielded an antifungal fraction named G5. G5 showed antifungal activity against *C. albicans*, with a Minimum Inhibitory Concentration (MIC) = 500 mg of extracted material (EM) L<sup>-1</sup>. The Fractional Inhibitory Concentration (FIC) = 0.258 indicated synergistic effect for G5 (125 mg EM L<sup>-1</sup>) + FLU (0.5 mg L<sup>-1</sup>) against *C. albicans*. FLU + G5 combination showed fungicidal effect against this strain. Four triterpenic saponins derived from oleanolic acid were identified from G5: Anagallisin A, B, C and deglucoanagalloside A. Anagallisin C was the main constituent of G5. Our findings suggest that these compounds would be of interest for further studies dealing with chemical modifications to increase the activity and diminish the fungal resistance to the commercial antifungal drugs.

### Biography

Soberon Jose Rodolfo has completed his PhD from Universidad Nacional de Tucuman (UNT) - Argentina. He is Adjunct Professor at UNT, and Researcher from CONICET. He has published more than 17 papers in reputed journals and more than 100 communications to scientific meetings.

[jrsrody@yahoo.com](mailto:jrsrody@yahoo.com)

### Notes: