

3rd Global Summit on

Plant Science

August 07-09, 2017 | Rome, Italy



Vanderlan da S Bolzani

Sao Paulo State University, Brazil

Natural products from Brazilian biodiversity, a source of new templates for medicinal chemistry

Plant species biosynthesize a wide variety of secondary metabolites, which play a vital role in the survival of the species themselves as well as in the preservation of ecological equilibrium of the ecosystems. They are also very important to regulate several functions that are fundamental to the plant/plant and plant/insect interaction, resistance against pests and diseases; attraction of pollinators, and interaction with symbiotic microorganisms. Therefore, natural compounds are treasure for synthesis and drug discovery new leads. The vast and biologically-rich Brazilian biodiversity represents an outstanding opportunity for the development of biology and chemistry sciences in many different research areas, including drug discovery species existing in Brazil. Within this scenario, the BIOTA/FAPESP Program was created in March 1999. Among the several objectives of this program, one goal is the search for bioactive compounds from Cerrado and Atlantic Forest biomes, aimed to find new lead molecules. Some examples of lead molecules obtained in NuBBE Lab will be highlight showing the importance of tropical biodiversity for drug discovery. The 1st natural products data base from the Brazilian biodiversity also has been organized and we have used these data. Some natural products were identified to be synthesized that aimed at major concentration of the compound for further pharmacological and toxicological assays, or to prepare synthetic derivatives that aimed to improve the active already detected.

Biography

Vanderlan da S Bolzani is full Professor at Sao Paulo State University (UNESP). She is a Fellow of the Royal Society of Chemistry (UK), Member of the Brazilian Academy of Science (ABC) and São Paulo Academy of Science (ACIESP) and TWAS, CNPq Fellow (level 1A). She has received several awards, including: 2015 ABIQUIM Award on research innovation; 2014 CAPES-Elsevier Award for the contributions to science in Brazil, Distinguished Woman in Science Chemistry and Chemical Engineering, conceived by ACS and IUPAC (2011); Simão Mathias Medal, the highest honor conferred by Brazilian Chemical Society (2011). She has completed her PhD in Organic Chemistry, under guidance of Prof. Otto R Gottlieb, at University of São Paulo. In 1990 she was awarded with a fellowship from DAAD for a short training at University of Hannover. After a Post-doctorate at Virginia Polytechnic Institute (VPISU-USA) under guidance of Prof. David Kingston, she has joined to the UNESP, and since 2003, she is the Member of the Biota-FAPESP Program Coordination. She has published > 270 papers, 7 patents, and 5 book chapter. Since 2011, she is the Member of the Scientific Advisory Board of L'Oréal in Paris.

bolzaniv@iq.unesp.br

Notes: