allied academies

Joint Event

Sharada Mallubhotla, Plant science & Natural Medicine 2018, Volume 2

DOI: 10.4066/2591-7897-C1-001

International Conference on

Plant Science

&

Natural Products,Medicinal Plants and Traditional Medicines

November 15-16, 2018 | Paris, France

Sharada Mallubhotla

Shri Mata Vaishno Devi University, India

Medicinal Plant Biotechnology in India

Therapeutic compounds derived from herbs have become a major part of medical prescriptions across the world. Today's medicinal plants are important to the global economy, as approximately 80% of traditional medicine preparations involve the use of plants or plant extracts. However, pharmaceutical industry cannot always depend on natural botanical sources of drugs due to limited availability, genetic instability and consequent fluctuation in the yield. In addition to this, indiscriminate use of plants for extraction of the valuable compounds can lead to mass destruction, even leading to loss of biodiversity. The plant secondary metabolites also referred to as phytochemicals are low molecular weight compounds which are generally organ, tissue and cell specific and are usually classified according to their biosynthetic pathways and possess a range of therapeutic properties, including antibacterial, anti-inflammatory, anti-carcinogenic, antioxidant and acetylcholinesterase inhibitory activities, hence their use in phytomedicine for centuries.

The use of plant cell, tissue and organ culture for the production of natural compounds is an area of intense research by virtue of its biotechnological and economic implications. Extensive efforts have been made in recent years for the production of phytochemicals from medicinal plants using *in vitro* techniques. The details of strategies being exploited including rapid multiplication, enhancement in the yield of drug component, and more importantly, metabolic engineering shall be discussed and presented using few indigenous medicinal model plants of India, viz. *Withania somnifera, Bacopa monnieri, Boerhaavia diffusa, Argyrolobium roseum, Crocus sativa, Kickxia ramosissima*, etc.

Speaker Biography

Sharada Mallubhotla PhD from Punjab University, Chandigarh, India, is presently Academic Coordinator for School of Biotechnology at Shri Mata Vaishno Devi University, India. She has authored 26 publications, two books well cited over 175 times, and is serving as editorial board member of reputed Journals. Her research interests include production and manipulations of bioactive phytochemical metabolites from cell and organ cultures, micropropagation, medicinal plant conservation Biotechnology, Genetic engineering of medicinal plant species and Orchid Biotechnology. Currently she is working on application of bioreactor systems for production of plant bioactives, value additions through biotic and abiotic elicitation in plant cultures.

e: sharda.p@smvdu.ac.in

Notes: