

Improving bioavailability of nanomaterials in plant systems

Swadeshmukul SANTRA & Jorge PEREIRA - *University of Central Florida, USA*

Nanomaterials hold a great promise to significantly improve conventional crop protection practices by reducing chemical load in the environment while also boosting productivity. Two decades of innovative academic and industry research have led to significant development of this area. Some of the advantages of these novel materials include improved agrochemical efficiency, systemic activity, enhanced foliage adherence and lower phytotoxicity. These advancements have resulted in the introduction of new nano-enabled agrochemicals to the marketplace. This presentation will cover some of the basic principles of nanoscience and nanotechnology, which hold promise to increase bioavailability of nanomaterials in plant systems.