Integrative Biology-2013
OMICS Group Conferences
Accelerating Scientific Discovery
International Conference on
Integrative Biology Summit
August 5-7, 2013 Embassy Suites Las Vegas, USA

Secondary metabolites production: Use of integrative biology

Natalia Gutierrez Calle

International Park of Creativity Laboratory, USA

Abstract

Described herein are devices and methods for enhancing the physiological properties of plants for increasing of secondary metabolites including antioxidans and antitumor. For example, the biological devices and methods described herein increase the production of the antioxidant/antitumorlycopene having also an industrial and economic value. The denoted technology is the result of integrating different scientific fundamentals with synthetic biology, so enhancing production of lycopene many-folds than conventional methods. In addition, it is cos-effective as compared to conventional methods. This technology is able to induce production of lycopene and other secondary netabolites within three weeks of growth of the plant. The lycopene produced by the devices and methods do not require ultra purification, which is common in conventional or commercial methods. The biological devices and methods described herein also enhance the growth rate of plants.