Recent Advancements on the Role and Analysis of Volatile Compounds (VOCs) from Trichoderma

Abstract

Fungi of the genus Trichoderma are soil-borne, green-spored ascomycetes that can be found all ecosystems. In this book chapter is highlighted the variety of volatile compounds isolated from species of Trichoderma, to emphasis their biological activities and general classes of these compounds. Trichoderma are produced various mixtures of gas-phase and carbon-based volatile compounds (VOCs). These compounds comprised chemically diverse classes of low and high molecular weight organic compounds having an appreciable vapor pressure under ambient conditions. In this chapter reviewed approximately 479 of VOCs by all the literatures in this field up to present, and also include the detailed study of biological activity of these compounds, especially the role of biological control mechanism. The compound profiling's are intended to facilitate future chemical work on Trichoderma species by providing an arrangement references to these compounds are categorized and a biosynthetic framework within known classes compounds, can be allocated and to focus intriguing findings as well as promising applications.