

## FORMATO ABSTRACT

**Gli abstract devono avere il seguente formato (vedi esempio qui sotto):**

Margini: 2.5 cm  
Lingua: Inglese  
Titolo: Times New Roman, 12 pt, grassetto  
Autori: Iniziali Nome. Cognome, Times New Roman 11 pt, grassetto  
Affiliazione(i): Times New Roman 10 pt, corsivo, incluso l'indirizzo e-mail dell'autore corrispondente  
Testo: Times New Roman 11 pt, un paragrafo, 250 parole max, nomi scientifici in corsivo, giustificato  
Letteratura citata: non ammessa  
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### Esempio di abstract

#### **A novel methoxychromone derivative from *Trichoderma harzianum* M10**

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Fungi of the genus *Trichoderma* are characterized by a high versatility and some selected species are plant symbionts, capable of producing multiple positive effects on plants, such as disease control, growth promotion, increased resistance etc. Several strains of *Trichoderma* are well-known producers of bioactive secondary metabolites (SMs). Recently, it has been demonstrated that *Trichoderma* produces natural compounds that can be involved in the beneficial interactions directly established with the plants. In the course of an ongoing search for bioactive secondary metabolites from *T. harzianum* M10, a methoxychromone derivative has been isolated. After growing M10 in an inductive liquid media for 21 days, the cultural filtrate was exhaustively extracted with ethyl acetate and the crude extract was fractionated by direct phase column chromatography (silica gel, atmospheric pressure). A compound, obtained as pure crystal from one of the fractions, was identified as 5-hydroxy-2,3-dimethyl-7-methoxychromone by X-ray analysis (from data collected at the XRD1, Elettra Synchrotron, Trieste) and spectroscopic studies. The compound, isolated for first time from a *T. harzianum* culture, was tested at different concentrations for antifungal activity against the phytopathogenic agent *Rhizoctonia solani*. The methoxychromone showed a 45% of growth inhibition after 24 h of incubation at a concentration of 100 ng plug<sup>-1</sup> whereas the maximum inhibition percentage was found to be 61% at 200 µg plug<sup>-1</sup>. These results suggest a possible role of 5-hydroxy-2,3-dimethyl-7-methoxychromone in antibiosis mechanism of *T. harzianum* M10 against fungal pathogens.

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