**Metabolites from endophytic *Diaporthe* sp. JC-J7 in**

***Dendrobium nobile* Lindl**

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**Abstract**

*Diaporthe* sp. are living in a wide range of hosts and have often been regarded as plant pathogens[1]. They are known to cause diseases on a wide range of plant hosts including root and fruit rot[2]. *Diaporthe* sp. produce a variety of metabolites with different bioactivities[3]. As a part of our project to searching for new bioactive compounds from endophytic fungi of medical plants in the Yunnan province in China. *Diaporthe* sp. was collected from the stem of *Dendrobium nobile* Lindl. Six known compounds (**1**-**6**) with various structure types were isolated from *Diaporthe* sp. JC-J7. These compounds were elucidated on the basis of their 1D, 2D NMR spectra and mass spectrometric data. Their structures were determined as dothiorelones A (**1**)[4], dothiorelones J (2)[5], 8-O-acetylmultiplolide A (**3**)[6], (4E)-6, 7, 9-trihydroxydec-4-enoicacid (**4**)[6], multiplolide A (**5**)[6] and 4-Hydroxybenzeneethano (**6**)[7]. These compounds were found for the first time in *Diaporthe*.

**Keywords**: *Diaporthe* sp.; Metabolites; Structural elucidation.

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**南五味子属植物的化学成分和生物活性研究**

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五味子科（Schisandraceae）包括五味子属（*Schisandra*）和南五味子属（*Kadsura*）两个属，其中南五味子属全世界共有25种，我国有11种（包括两个变种），主要分布于西南和东南部地区，其药用部位主要是藤茎，根和果实，具有补血活血、祛风除湿、行气止痛的功效；常用于风湿、胃痛、痛经、骨痛及急慢性肠胃炎等症，是一类重要的药用植物1-3。前人的研究结果表明，该属植物主要成分为木脂素类化合物，另外还有三萜酸及三萜酸内酯类化合物，具有较强生物活性的成分主要为木脂素类化合物4-6。

本课题组迄今为止，已对西南地区产的八种南五味子属植物进行了系统的研究，共分离鉴定了406个化合物，其中新化合物154个，涉及三萜、降三萜、木脂素、倍半萜、甾体、黄酮、酚性成分、脂肪酸等各种结构类型，发现了一些新颖结构类型和具有较强生物活性的化合物。共发表研究论文14篇，均为SCI收录论文，IF为43.739，其中学科前15％论文7篇，占总论文50％；申请发明专利两项，均已授权。

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