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**Short Notes**

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**THE *IN VITRO* ANTI-BIOFILM ACTIVITY OF THE ETOAC EXTRACT OF  
*PORIA COCOS* AGAINST *ESCHERICHIA COLI***

**Zaichang Yang<sup>\*</sup>, Runzi Du, Aoshuang Chang, Jian Zhang, Qiang Li**

Department of Bioengineering, School of Chemical Engineering, Guizhou University, Guiyang, PR China

<sup>2</sup>Laboratory of SEM, Guiyang Medical College, Guiyang, PR China

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**ABSTRACT**

*The aim of this study was to evaluate the effects of the EtOAc extract of Poria cocos and pachymic acid on Escherichia coli biofilm formation. At concentrations ranging from 32 µg/ml to 256 µg/ml, the EtOAc extract of Poria cocos and pachymic acid showed activity against Escherichia coli biofilms in a concentration-dependent manner. Scanning electron microscopy (SEM) analysis showed that the Escherichia coli biofilm formation was completely inhibited by the EtOAc extract of Poria cocos. Moreover, the EtOAc extract of Poria cocos was more effective in inhibiting the biofilm of Escherichia coli compared with pachymic acid. So it is difficult to attribute the anti-biofilm activity of Poria cocos to one single component. Future research should therefore concentrate on the investigation of the additional compounds in the EtOAc extract of Poria cocos that involved in anti-biofilm activity. In conclusion, this study suggests that Poria cocos may have a therapeutic potential for urinary tract infections caused by Escherichia coli.*

**Key Words:** Poria cocos, Anti-biofilm, Escherichia coli