

Antibacterial Constituents from *Magnolia officinalis*

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SUMMARY. Four lignans, magnolol (**1**), streblusol E (**2**), honokiol (**3**), and piperitylmagnolol (**4**) were isolated from *Magnolia officinalis* by an antibacterial activity-guided method and their structures were identified using spectroscopic methods including NMR and MS. This is the first report showing that compounds **1**, **3** and **4** have antibacterial activity against methicillin-resistant *Staphylococcus aureus* (MRSA) with MIC of 16, 8, and 4 $\mu\text{g}/\text{mL}$ and against quinolone-resistant *S. aureus* (QRSA) with MICs of 16, 8, and 8 $\mu\text{g}/\text{mL}$, respectively.

RESUMEN. Se aislaron de *Magnolia officinalis* cuatro lignanos: magnolol (**1**), streblusol E (**2**), honokiol (**3**) y piperitylmagnolol (**4**), mediante un método guiado por la actividad antibacteriana y sus estructuras se identificaron usando métodos espectroscópicos que incluyen RMN y EM. Este es el primer informe que muestra que los compuestos **1**, **3** y **4** tienen actividad antibacteriana contra *Staphylococcus aureus* metilina-resistente (MRSA) con MIC de 16, 8 y 4 $\mu\text{g}/\text{mL}$ y contra *S. aureus* quinolona-resistente (QRSA) con CIM de 16, 8 y 8 $\mu\text{g}/\text{mL}$, respectivamente.

KEY WORDS: antibacterial activity, lignan, *Magnolia officinalis*, piperitylmagnolol

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