

P36

## Highly cytotoxic triterpenes from the roots of *Tripterygium regelii*

Seo Woo Duck, Lee Byong Won, Min Suk Yang,  
Yea Hwang Moon<sup>1</sup> and Ki Hun Park\*

Division of Applied Life Science (BK 21 Program), Department of Agricultural  
Chemistry, Gyeongsang National University, Jinju, 660-701, South Korea

<sup>1</sup>Department of Animal Science & Biotechnology, Jinju National University, RAIRC,  
Jinju 660-758, Korea

The five triterpenes having quinone methide moiety were isolated from the roots of *Tripterygium regelii*. The structures were clearly defined as celastrol (1), pristimerine (2), Tingenone (3), 22- $\beta$ -hydroxytingenone (4), Iguesterine (5) and the aid of NMR spectroscopic technique and X-ray crystallography. All compounds showed extremely high cytotoxicities ( $IC_{50}$  0.44-0.66  $\mu$ M) against A549, SK-OV3, MCF7, and HCT-15. They also showed strong antibacterial activities (MIC 1.1-1.3  $\mu$ M) against Gram-positive bacteria such as *Bacillus subtilis*, *Bacillus cereus*, *Staphylococcus aureus*.

