Antibacterial Activity of Coumarins

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The antibacterial activity of coumarin *per se* and other 45 coumarin derivatives was tested against strains of *Bacillus cereus* MIP 96016, *Escherichia coli* ATCC 25922, *Pseudomonas aeruginosa* ATCC 27853, and *Staphylococcus aureus* ATCC 25923. The inhibitory effects of coumarins were affected by their substitution patterns. Osthenol (**44**) showed the most effective antibacterial activity against Gram-positive bacteria with MIC values ranging between 125 and 62.5 μg/ml. These results suggested that the prenyl chain of **44** at position 8 and the presence of OH at position 7 of the benzenic ring are required for the antibacterial activity against these strains.

Key words: Coumarins, Osthenol, Antibacterial Activity, Structure-activity Relationships (SAR)