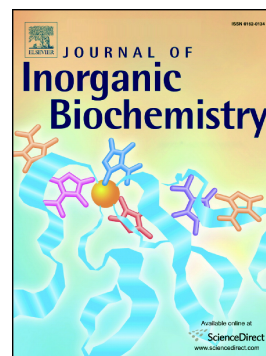


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Triphenyltin derivatives of sulfanylcarboxylic esters

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ABSTRACT

The reaction of 3-(aryl)-2-sulfanylpropenoic acids [H₂xspa; x: p = 3-phenyl-, f = 3-(2-furyl)-, t = 3-(2-thienyl)-] with methanol or ethanol gave the corresponding methyl (Hxspme) or ethyl (Hxspee) esters. The reaction of these esters (HL) with triphenyltin(IV) hydroxide gave compounds of the type [SnPh₃L], which were isolated and characterized as solids by elemental analysis, IR spectroscopy and mass spectrometry and in solution by multinuclear (¹H, ¹³C and ¹¹⁹Sn) NMR spectroscopy. The structures of [SnPh₃(pspme)], [SnPh₃(fspme)] and [SnPh₃(fspee)] were determined by X-ray diffractometry and the antimicrobial activity against *E. coli*, *S. aureus*, *B. subtilis*, *P. aeruginosa*, *Resistant P. aeruginosa* (a strain resistant to 'carbapenem'), and *C. albicans* was tested and the *in vitro* cytotoxic activity against the HeLa-229, A2780 and A2780cis cell lines was determined for all compounds.

Keywords: Triphenyltin(IV); Sulfanylcarboxylato; X-ray structures; Antibacterial activity; Cytotoxic activity

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