

Synthesis of piperitone-derived halogenated lactones and their effect on aphid probing, feeding, and settling behavior.

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Streszczenie

Five racemic and five enantiomeric pairs of new halolactones with the p-menthane system were obtained in two or three step synthesis from racemic and optically active cis- and trans-piperitols. The key steps of the syntheses were the Claisen-Johnson rearrangement of piperitols to γ,δ -unsaturated esters and halolactonization of γ,δ -unsaturated esters or acids. The structures of the compounds were confirmed by spectroscopic and crystallographic data. Antifeedant activity of all iodo-, bromo- and chlorolactones and racemic piperitone against *Myzus persicae* was examined. The effect of these compounds on probing, feeding, and settling behavior of *M. persicae* in vivo was studied.

Adres publiczny

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