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Lewis Acid-Promoted Cycloaddition Reaction of Cyclopropanes with Allylsilanes

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The treatment of cyclopropanes having donor and acceptor substituents at the vicinal positions on the cyclopropane ring with a Lewis acid readily generates a 1,3-zwitterion, which reacted with allylsilanes to produce cycloadducts and allylic products. It was found that the yield of the cycloadduct depends on the steric demand of the alkyl substituents on the silicon atom.