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PALLADIUM-CATALYZED ARYL-ACYLATION OF ALKENE

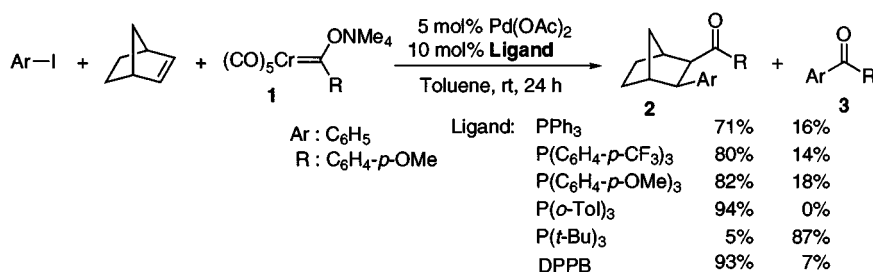
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Palladium-catalyzed aryl-acylation reactions of alkenes proceed by using acylchromates as the acyl donors. The yield of the product considerably depends on the added phosphine ligands.

Keywords: Aryl-acylation; palladium-catalyst; phosphine ligand

When iodoarene and norbornene were treated with an acylchromate complex **1** in the presence of palladium acetate, 2-acyl-3-aryl-norbornane **2** was obtained with the formation of aryl ketone **3**. The yield of the products and the ratio of aryl-acylated product **2** to aryl ketone **3** considerably depended on the phosphine ligands of the palladium catalyst. That is, the use of bulky aryl substituted phosphine ligand gave the aryl-acylated product **2** in high yield.



SCHEME 1

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