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Title:	Organophosphine-Catalyzed Intramolecular Hydroacylation of Activated Alkynes
Authors:	Mondal, A. (/jspui/browse?type=author&value=Mondal%2C+A.)
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	Organophosphine
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	Cyclopentanes
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Abstract:	We present the details of an organophosphine-catalyzed Morita–Baylis–Hillman-type reaction of activated alkynes. The outcome is an intramolecular hydroacylation of α,β-ynones leading to the formation of 1,3-cyclopenta-, cyclohepta-, and cyclooctadione-fused arenes and heteroarenes. In addition, during the course of the investigation, a phosphine-catalyzed intramolecular aldol reaction of keto-ynones via δ′[C(sp3)-H]-functionalization was discovered, and a new annulation event comprising of a ω′[C(sp3)-H]-functionalization of α,β-ynones was also uncovered. The mechanisms governing these processes have been thoroughly elucidated.
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