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Title:	Palladium-Catalyzed 8-Aminoquinoline-Aided sp ² δ-C-H Intramolecular Amidation/Annulation: A Route to Tricyclic Quinolones
Authors:	Padmavathi, R. (/jspui/browse?type=author&value=Padmavathi%2C+R.) Babu, S.A. (/jspui/browse?type=author&value=Babu%2C+S.A.)
Keywords:	Catalyzed 8-aminoquinoline directing group Carboxamides
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Citation:	Asian Journal of Organic Chemistry, 8(6), pp. 899-908.
Abstract:	Systematic investigations of a Pd(II)-catalyzed, 8-aminoquinoline directing group (DG)-aided sp ² δ-C-H amidation (C-N bond formation) of different biaryl carboxamides are reported. Various biaryl carboxamides with suitably positioned sp ² δ-C-H bond with respect to the DG were assembled via β-C-H arylation and then they were subjected to Pd(II)-catalyzed sp ² δ-C-H intramolecular amidation/annulation reactions. While the intramolecular amidation of the sp ² δ-C-H bond of some carboxamides was not fruitful, several biaryl carboxamides underwent intramolecular amidation of their sp ² δ-C-H bonds to afford various tricyclic quinolone motifs such as, phenanthridin-6(5H)-ones and thieno-furo-pyrrolo-[2,3-c]quinolin-4(5H)-ones. The assembly of the required biaryl carboxamides possessing the sp ² δ-C-H bond via the β-C-H arylation and the successive intramolecular amidation (C-N bond formation) of the resulting biaryl carboxamides were also performed in one-pot reaction conditions to afford tricyclic quinolones.
URI:	https://onlinelibrary.wiley.com/doi/full/10.1002/ajoc.201900109 (https://onlinelibrary.wiley.com/doi/full/10.1002/ajoc.201900109) http://hdl.handle.net/123456789/2005 (http://hdl.handle.net/123456789/2005)
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