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# Microwave -assisted solid-phase synthesis of some heterocyclic compounds via palladium-mediated heteroannulation

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**Abstract** The facile heteroannulation of trimethylsilylalkynes with the resin-bound *o*-iodoaniline provided useful resin-bound precursors to 2-unsubstituted and other 2-substituted indole derivatives via desililation or other silyl function transformation. The resin-bound 2-haloindoles can be converted to different 2-substituted indoles derivatives via Suzuki, Stile, Heck or Sonogashira palladium-mediated coupling reactions. These reactions were accomplished in good yields and short times with microwave irradiation and continuous temperature control (Synthewave S402 reactor).

*Keywords*: Indoles derivatives, palladium coupling, solid-phase, microwave irradiation.

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