Synthesis of 3,4-Dihydropyrimidin-2(1H)-one-5-carboxamides

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The synthesis of various dihydropyrimidinone derivatives bearing carbamoyl moieties in 5-position under reflux conditions and microwave irradiation is described. An efficient three-component Biginelli reaction using catalytic amounts of zirconium(IV) chloride as an efficient catalyst leads to the formation of these compounds.

Key words: Biginelli Reaction, 3,4-Dihydropyrimidine-5-carboxamides, Microwave, ZrCl₄, Zirconium Salts