SYNTHESIS OF QUINOXALINE 1,4-DI-N-OXIDE DERIVATIVES ON SOLID SUPPORT USING ROOM TEMPERATURE AND MICROWAVE-ASSISTED SOLVENT-FREE PROCEDURES

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Abstract:

We describe the synthesis of 12 new ethyl and methyl quinoxaline-7-carboxylate 1,4-di-N-oxide derivatives on solid supports with room temperature and microwave-assisted solvent-free procedures. Results show that solid supports have good catalytic activity in the formation of quinoxaline 1,4-di-N-oxide derivatives. We found that florisil and montmorillonite KSF and K10 could be used as new, easily available, inexpensive alternatives of catalysts. Additionally, room temperature and microwave-irradiation solvent-free synthesis was more efficient than a conventional procedure (Beirut reaction), reducing reaction time and increasing yield.