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ARTICLE

An efficient synthesis of novel isoxazole bearing pyrazole derivatives via [3 + 2] heteroannulation using cupric acetate

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Abstract

The synthesis of novel 3-(4,5-dichloro-2-fluorophenyl)-1-phenyl-4-(3-phenylisoxazol-5-yl)-1*H*-pyrazole(**7a–p**) has been achieved via [3 + 2] heteroannulation reaction 3-(3-[4,5-dichloro-2-fluorophenyl]-1-phenyl-1*H*-pyrazol-4-yl)-1-phenylprop-2-en-1-one(**6a–p**) and hydroxylamine hydro chloride using cupric acetate as homogenous precatalyst. Pyrazole derivatives were prepared by using etidronic acid as catalyst followed by Vilsmeier-Haack reaction. An efficient green synthesis of isoxazole derivatives bearing pyrazole ring has been demonstrated with excellent yields. Structures of novel isoxazole derivatives were confirmed by elemental analysis and ^{1}H NMR, ^{13}C NMR, Mass, IR spectral studies.

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DATA AVAILABILITY STATEMENT

No data available for this research work paper.

Supporting Information

Filename	Description
jhet4388-sup-0001-supinfo.docx Word 2007 document , 2.3 MB	**Data S1.** Supporting Information.