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Synthesis of New Thiazole Anchored N'-Benzylidene Carbohydrazide and 1,3,4-Oxadiazole Derivatives by Conventional and Microwave Irradiation Methods

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ABSTRACT The 2-(4-chlorophenyl)-4-methylthiazole-5-carbohydrazide (**3**) and aromatic aldehydes (**4**) were heated together in alcohol under reflux and microwave (MW) irradiation, to get new series of thiazolyl benzylidine carbohydrazides **5A-K**, which in turn under the influence of reflux and MW irradiation, cyclized with acetic anhydride and propionic anhydride to achieve thiazolyl 1,3,4-oxadiazole derivatives **6A-K** and **7A-K**, respectively. The structures of newly synthesized compounds were confirmed by spectral and elemental analysis.

KEYWORDS Benzylidinecarbohydrazide, Oxadiazole, Thiazole, MW irradiation.

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