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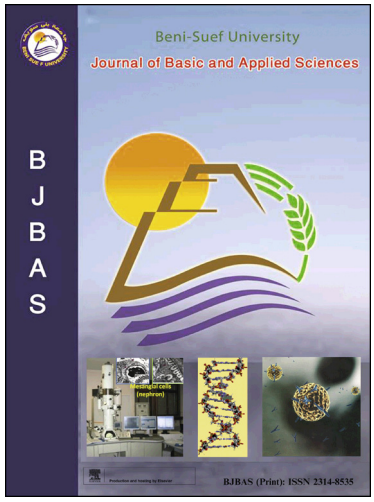


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# Title

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**Ultrasound assisted one Pot expeditious synthesis of new pyrido[2,3-*d*]pyrimidine analogues using mild and inexpensive 4-dimethylaminopyridine (DMAP) catalyst**

**Abstract**

The one-pot three-component reaction for the synthesis of pyrido[2,3-*d*]pyrimidine derivatives has been reported via initial Knoevenagel, subsequent addition and final heterocyclization of substituted aromatic aldehydes, cyanoacetamide and 6-aminouracil in N,N- dimethylformamide (DMF) solvent using 4-dimethylaminopyridine (DMAP) as new organocatalyst under ultrasound irradiation. The results showed that a series of aromatic aldehydes were successfully used to prepare the targeted pyrido[2,3-*d*]pyrimidine derivatives with good to excellent yields (**81-93 %**) and there is no major effect on the yield of product by electron donating/withdrawing substituents. Short reaction time, environment friendly procedure, excellent yields, inexpensive