

# Enviro-economic, Ultrasound-assisted One-pot, Three-component Synthesis of Pyrido[2,3-*d*]pyrimidines in Aqueous Medium

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Tetra-*n*-butyl ammonium bromide (TBAB) was found to be an efficient phase-transfer catalyst for the synthesis of pyrido[2,3-*d*]pyrimidines by one-pot reaction of 6-aminouracils, aromatic aldehydes, and malononitrile or ethyl cyanoacetate in water under ultrasonic irradiation. The advantages of this method are the use of an inexpensive and readily available catalyst, short reaction time, easy work-up, improved yields, and the use of water as a solvent that is environmentally benign.

*Key words:* Ultrasound, Uracil, Pyrido[2,3-*d*]pyrimidine, Tetra-*n*-Butyl Ammonium Bromide