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# Discerning of Antimicrobial Potential of Phenylpropanoic Acid Derived Oxadiazoles

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**Abstract :** 2-Phenyl propionic acid and oxadiazoles possess antimicrobial potential. 2-Phenyl propane hydrazide (1), on cyclization with aromatic acids offered 2-aryl-5-(1-phenylethyl)-1,3,4-oxadiazole derivatives (1A-E). The PPA derived oxadiazoles were characterized by elemental analysis and spectral studies. The compounds were screened for antimicrobial potential. The compound 1D bearing strong electron withdrawing group showed maximum antimicrobial potential. Other compounds also displayed antimicrobial potential to a certain extent. The SAR of newer oxadiazoles indicated that substitution of strong electronegative group in the PPA derived oxadiazoles enhanced their antimicrobial potential.

**Keywords :** antimicrobial, imines, oxadiazoles, PPA
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