ABSTRACT

Sulfonamides are referred as the bacteriostatic agents. A lot of sulfonamides have been synthesized but only a few are used as drugs against various types of bacteria. The main purpose of work was to synthesize *N*-substituted derivatives of *m*-phenetidine and evaluate their enzyme inhibition activity. The parent compound *N*-(3-Ethoxyphenyl)-4-methylbenzenesulfonamide was prepared by the reaction of *m*-phenetedine and 4-methylbenzenesulfonyl chloride in a basic aqueous medium. Further *N*-substituted derivatives of the parent compound were synthesized by treating it with different alkyl halides. The synthesized compounds were characterized from their spectral data and were evaluated against cholinesterases (AChE & BChE), lipoxygenase (LOX), urease, chymotrypsin & tyrosinase enzymes; and found to be the moderate inhibitor against tyrosinase enzyme.