

Indian Journal of Heterocyclic Chemistry  
Vol. 24, Jan.-March, 2015, pp. 345-348

## **SYNTHESIS OF NOVEL 3-(4-SUBSTITUTEDARYLOXYMETHYL) OXETAN-3-YLAMINES**

**T. Shyamsunder Reddy\*, B. George Vineel, A. Naidu and P.K. Dubey**

Department of Chemistry, College of Engineering, JNT University, Kukatpally, Hyderabad-500 085

E-mail : shyamsunderreddy2002@gmail.com

*Received 22 Sept. 2014; Accepted 28 Feb. 2015*

2,2-Bis (bromomethyl) propane-1,3-diol (**1**) was cyclized in the presence of sodium ethoxide at room temp to obtain (3-(bromomethyl) oxetan-3-yl) methanol (**2**) which was treated with various phenols (**3**) to yield (3-(aryloxymethyl) oxetan-3-yl) methanol (**4**). The latter, on oxidation with  $\text{KMnO}_4$  in aq. NaOH containing dioxan gave the corresponding carboxylic acid derivatives **5.5** with benzyl alcohol containing Diphenyl Phosphoryl Azide (DPPA) gave 3-(4-substitutedaryloxymethyl) oxetan-3-ylamines (**7**) via N-CBz protected aminooxetanes (**6**).