

ABSTRACT

Tropolone and benzotropolone are both naturally occurring motifs with broad spectrum of bioactivities and interesting properties that are connected to these structures. This bachelor thesis explores preparation of 3,4,6-trihydroxy-5*H*-benzo[7]annulen-5-one, so called purpurogallin and its possible preparation by enzyme catalyzed reactions and further synthetic use of these products. The study is mainly focused on synthesis of 3,4-benzotropolon-carboxylic acid, specially its amides. First part deals with choosing the optimal reaction conditions for formation of these amides. In the next part palladium catalyzed carboxylations were performed on prepared bromoderivate of dehydroxypurpurogallin.

Key words

tropolones, benzotropolones, dehydroxypurpurogallin-4-carboxylic acid, amides, optimization, enzymatic catalysis, carboxylation