

Abstract

Dibenzoxanthene and its derivatives form an important class of heterocyclic compounds particularly in the medicinal field due to their varied biological as well as pharmaceutical properties. So a thorough study of the synthesis of dibenzoxanthene and its derivatives is required. For this purpose we apply a simple, efficient and environmentally benign synthetic methodology to investigate different intermediates formed during this synthesis. In this work we are trying to synthesize dibenzoxanthene derivatives along with reaction intermediates by reacting 2-naphthol with aromatic aldehydes in presence of Lewis/Brønsted acid catalyst in organic solvent (or solvent-free medium) at different temperature. Our synthetic route is greener because we are using eco-friendly, inexpensive catalyst as well as solvent during our work.