

## HIGHLY DIASTEREOSELECTIVE SYNTHESIS OF AZA-DIELS-ALDER REACTION OF DANISHEFSKY DIENE WITH GLYOXYLATE IMINES

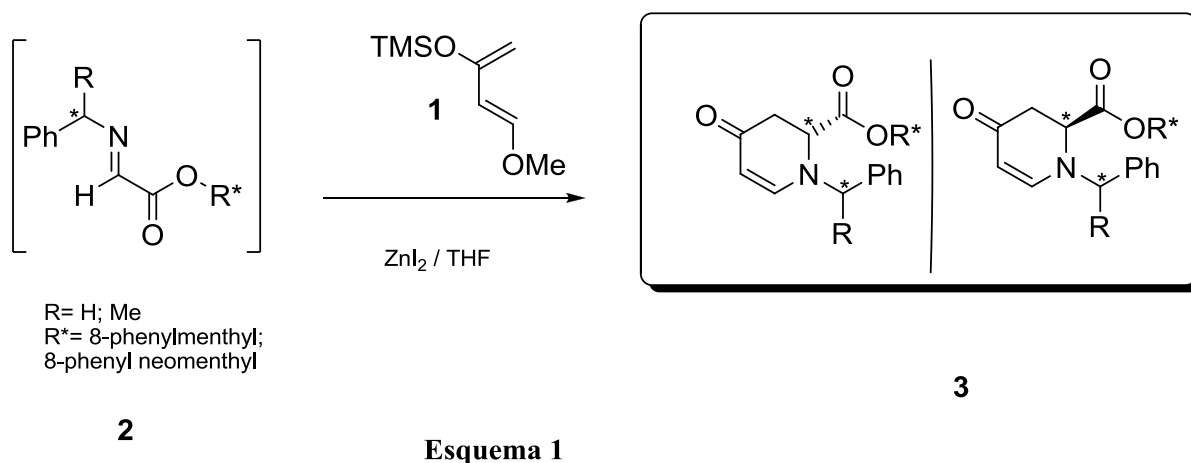
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Aza-Diels-Alder reaction is an exceptionally powerful synthetic method for the construction of six-membered nitrogen-heterocycles.<sup>[1-3]</sup> The reaction of Danishefsky's diene **1** with iminoacetates **2** (imines of glyoxylates) provides a convenient protocol for the synthesis of piperidone adducts **3** (Scheme 1). In this context, we have performed the synthesis of various cycloadducts, precursors of a wide variety of chiral piperidines with potential use as non-natural amino acids or as precursors of biologically active compounds, including iminosugars (glycomimetics).<sup>[1-4]</sup>



In this communication we report the diastereoselective synthesis of 1,2,3,4-tetrahydro-4-oxopyridine-2-carboxylic esters (**3**). These compounds represent an important group of synthons, useful in the preparation of six-membered ring iminosugars derived from 4-oxopipelic acid.<sup>[5]</sup>

### References:

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