

Abstract

This thesis deals with the synthesis of polycyclic compounds using tandem cyclisation/Suzuki cross-coupling, by modification of the method developed by our research group. This thesis mainly investigates the scope of the tandem reaction with aliphatic boronic acids or their esters. The products of the palladium catalyzed reaction then underwent electrocyclization to form an aromatic ring. The polycyclic skeleton, containing the aromatic core, is found in a considerable amount of natural substances with biological activity. The structure of the compounds prepared herein is similar to miltiorin D or commiphorane A.