

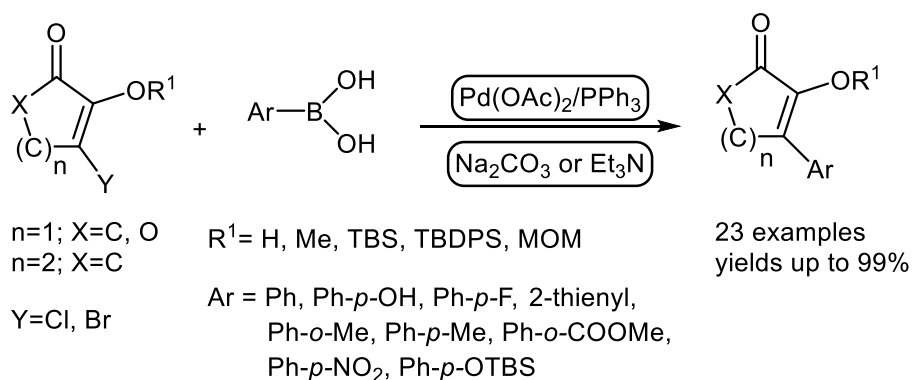
# SYNTHESIS OF CYCLIC 3-ARYLSUBSTITUTED 1,2-DICARBONYL COMPOUNDS BY USING SUZUKI CROSS-COUPLING REACTION

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In present work a method for the synthesis of cyclic 3-aryl- and heteroaryl-substituted 1,2-dicarbonyl compounds by using Suzuki cross-coupling reaction was developed. [1] This work is an addition to the previous work of our group on development of procedures for the synthesis of 3-alkyl- and 3-alkynylsubstituted 1,2-cycloalkanediones [2] and completes the study of using cross-coupling reactions as a simple and general route for the preparation of a wide range of 3-substituted 1,2-dicarbonyl compounds.



*Scheme 1. Synthesis of cyclic 3-arylsubstituted 1,2-dicarbonyl compounds*

Cyclic 3-arylsubstituted 1,2-dicarbonyl compounds are used as starting compound in organic synthesis, for example in asymmetric oxidation to get  $\gamma$ -lactone carboxylic acids. [3] Also, cyclic 3-arylsubstituted 1,2-dicarbonyl structural units are present in biologically active compounds, as butyrolactones. [4]

## References

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