

Abstract

Flavonoids are polyphenolic compounds, which are abundant in nature and demonstrate a range of biological effects. Included in this thesis is a brief summary of the effects of flavonoids a description of their typical syntheses and a discussion of challenges faced by scientists studying these substances.

Luteolin, also a flavonoid, displays inhibitory activity of some disease endonucleases. This thesis focuses on the preparation of a library of C-8 arylated derivatives of luteolin using palladium-catalyzed coupling reactions. Effects of different protecting groups on said coupling reactions are discussed as well.

Key words: flavonoids, arylation, coupling reactions, Pd catalysis