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AMIDES AND ESTERS OF SUBSTITUTED DIHYDROCINNAMIC ACID AS ANTIRADICAL AGENTS

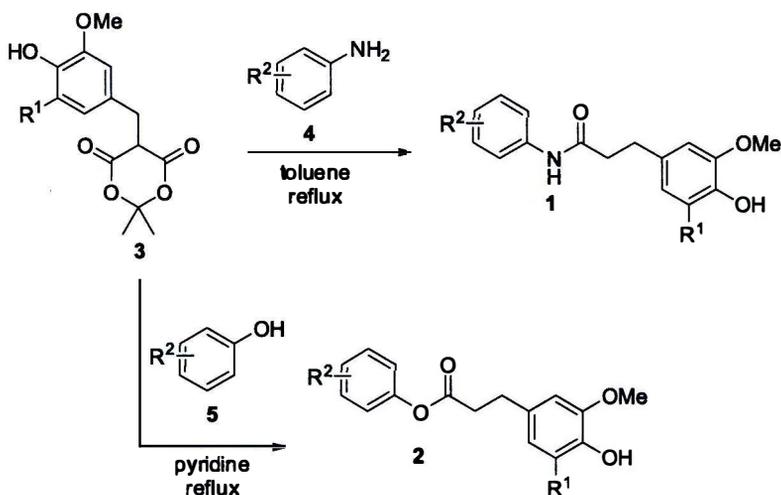
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Amides¹ and esters² of substituted cinnamic acids are well known antioxidants. Herein, we present our results on antiradical properties of partially hydrogenated cinnamic acid derivatives – anilides **1** and esters **2**. The target compounds **1** and **2** were obtained through cleavage of substituted Meldrum's acid **3** with aromatic amines **4** and phenols **5**, respectively. The antiradical activities of the synthesized amides **1** and esters **2** were analysed by 1,1-diphenyl-2-picrylhydrazyl and galvinoxyl tests. Several of the compounds **1** and **2** demonstrated better antiradical activity than e.g., commercially widely used butylated hydroxytoluene.



Supervisors: Doc. Inese Mieriņa, Prof. Māra Jure

References:

[1] Meydani, M. *Nutr Rev.* **2009**, *67*, 731-735.

[2] Kikuzaki, H.; Hisamoto, M.; Hirose, K.; Akiyama, K.; Taniguchi, H. *J. Agric. Food Chem.* **2002**, *50*, 2161-2168.