Regioselective Tandem [4 + 1]–[4 + 2] Synthesis of Amino-Substituted Dihydroxanthones and Xanthones

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A highly convergent and operationally simple approach to mycotoxin-related 4-amino-substituted 1-hydroxydihydroxanthones is described. The target compounds are obtained in one pot by the multicomponent reaction of 3-carbonylchromones, isocyanides, and nonsymmetric dienophiles. The reaction, which involves a tandem [4 + 1]–[4 + 2] cycloaddition, efficiently affords a variety of both monomeric and dimeric polysubstituted dihydroxanthones structurally similar to bioactive ergochromes. Further aromatization to the corresponding xanthones is readily achieved by treatment with DBU under microwave irradiation.

Fuente de la publicación:

- Regioselective Tandem [4 + 1]–[4 + 2] Synthesis of Amino-Substituted Dihydroxanthones and Xanthones [1]

Proyectos relacionado:

- Estudios computacionales en Reacciónes Multicomponentes [2]

Noticias relacionadas:

- Investigadores de la UEx publican en revista internacional sobre química orgánica gracias a LUSITANIA [3]

Links
[1] http://pubs.acs.org/doi/abs/10.1021/acs.joc.5b00658 [2] http://www.cenits.es/proyectos/estudios-computacionales-reacciones-multicomponentes-0 [3] http://www.cenits.es/noticias/10062015-investigadores-uex-publican-revista-internacional-sobre-quimica-organica-gracias