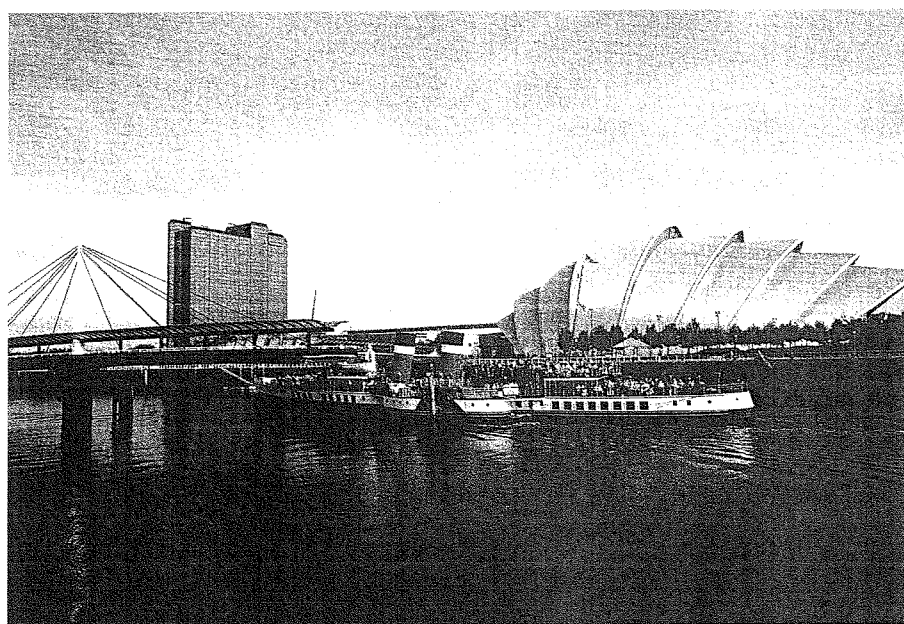


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A new Strategy for the Synthesis of 3-Cinnamoyl-2-styrylchromones and their Transformation into new Xanthenodione Derivatives

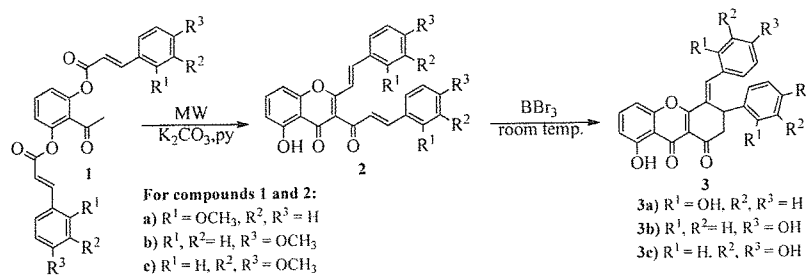
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Chromones are a class of oxygen heterocyclic compounds widely distributed in Nature. 2-Styrylchromones are, however, a small and rare naturally occurring chromones; only three derivatives have been isolated, two from the marine blue green algae *Chrysothamnium taylori*¹ and one from the rhizomes of *Imperata cylindrical*.² Even so, 2-styrylchromone derivatives are associated with noticeable biological activities.³ Our group has also been interested in the synthesis⁴ and biological evaluation of 3-aryoylflavones and found that 3',4',5,7-tetrahydroxy-3-(3,4-dihydroxybenzoyl)flavone is a potential antioxidant agent.⁵ Taking into account this potential biological applications, we set up a program aiming the synthesis of 3-cinnamoyl-2-styrylchromone **2** under microwave irradiation and its cyclization into xanthenodiones **3** (Scheme). In this communication, we discuss the synthesis and preliminary antioxidant activity results.



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