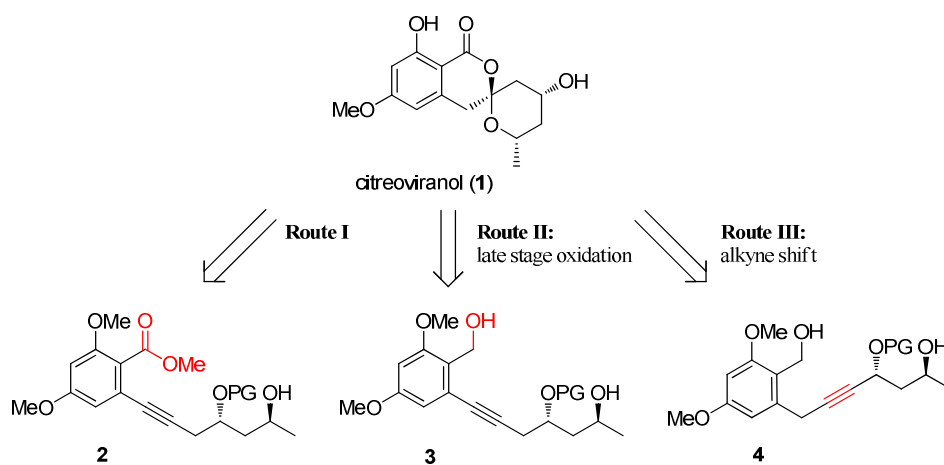


Synthetic Studies Towards Citreoviranol

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Citreoviranol (**1**) is a member of the biologically active resorcyclic lactone family, isolated from the fungus *Penicillium citreoviride*,¹ in addition to the characteristic resorcyclic lactone moiety, citreoviranol also contains a very rare 6,6-spiroketal lactone. To date, a total synthesis, and biological evaluation, of this unique molecule has yet to be undertaken. Herein, we endeavour to employ gold catalysis for construction of the spiroketal lactone core of citreoviranol from a functionalised alkyne precursor (**2-4**). Gold catalysis has proven to be a mild and efficient method for the synthesis of acid-sensitive spirocyclic heterocycles.²



(1) Shizuri, Y.; Shigemori, H.; Sato, R.; Yamamura, S.; Kawai, K.; Furukawa, H. *Chem. Lett.* 1988, 17, 1419.

(2) Quach, R.; F. Chorley, D.; Brimble, M. A. *Org. Biomol. Chem.* 2014, 12, 7423.