

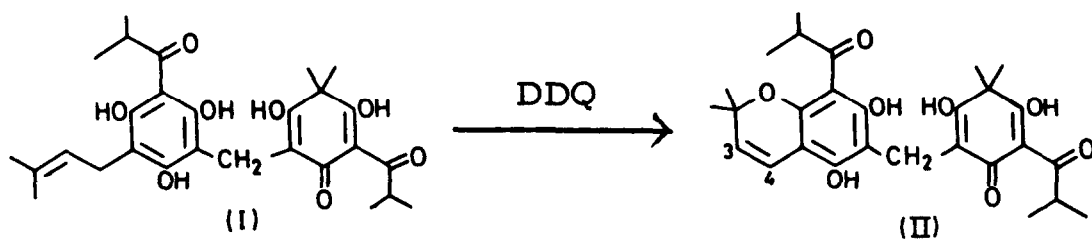
SYNTHESIS OF ULIGINOSIN B.

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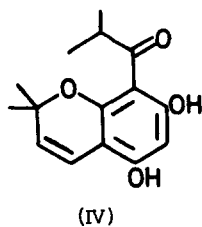
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Uliginosin A (I) and uliginosin B (II) are two antibiotics produced by the mexican herb Hypericum uliginosum HBK.<sup>1</sup> Their structures were assigned on the basis of spectroscopic evidence<sup>2</sup> and a crystal structure analysis of bromouliginosin B<sup>3</sup>. We have previously reported<sup>4</sup> the synthesis of uliginosin A, dihydrouliginosin B (III) and isodihydrouliginosin B but we were not able to prepare 8-isobutyryl-5,7-dihydroxy-2,2-dimethylchromene (IV) and so achieve the synthesis of uliginosin B.



(III) is 3,4 - dihydro-(II)



We have now found that treatment of uliginosin A with dichlorodicyanobenzoquinone (DDQ) in benzene for 40 min affords uliginosin B with virtually none of the isomeric isouliginosin B. The synthetic uliginosin B was identical (m. p., mixed m. p., n.m.r., and i.r.) with a sample of the natural product kindly supplied by Dr. Francis Johnson of the Dow Chemical Company.

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