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Synthesis of 6-Thiaellipticine and Related Compounds via Heterocyclic *o*-Quinodimethane Intermediates

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複素環上の *o*-Quinodimethane 中間体を経由する 6-Thiaellipticine および関連化合物の合成

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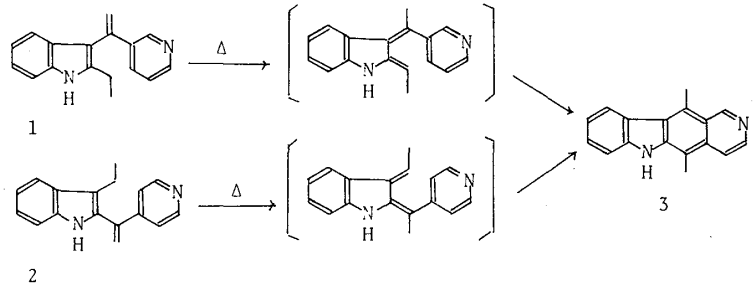
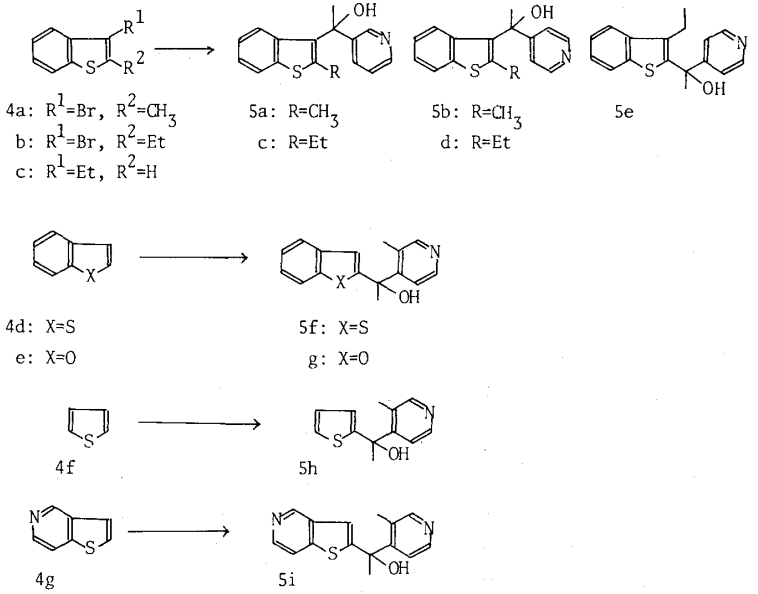
ABSTRACT

Indole-2,3-quinodimethane intermediates from (1) and (2) by way of thermal suprafacial [1,5] sigmatropy have been applied to the synthesis of the antitumor carbazoelalkaloid, ellipticine (3) (Scheme I). We have now used this approach for the synthesis of 6-thiaellipticine and congeners as shown in Scheme II and III. The thermal cyclization have been examined about a series of tertiary alcohols in the expectation that dehydration followed by sigmatropy would occur to yield the cyclization products. This would provide a short synthesis of some linear polynuclear heterocyclic compounds.

Scheme I



Scheme II



Scheme III