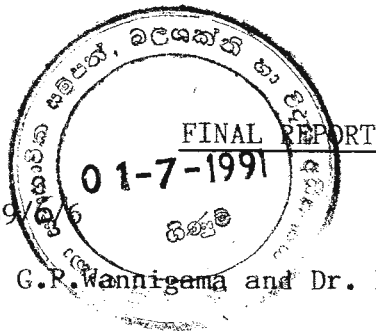


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#### ABSTRACT

A new synthetic route to zingiberene has been projected. This could be extended to the syntheses of the potent juvenile hormone, juvabione using the same synthon, 8,9-dihydro-9-(toluene-p-sulphonyl) carvone. Attempts were made to use this synthon as well as a related synthon in elimination reactions leading to the formation of an intermediate with the system of conjugated double bonds as in zingiberene. These attempts proved to be unsuccessful. The conjugated diene unit obtained in all cases had a position different from that in zingiberene.

In order to obtain the conjugated diene unit as in zingiberene, the Shapiro reaction was tried out. This reaction was successful with carvone itself. With the synthon indicated, a compound with the required position of the diene unit was obtained in low yield. This was however unstable and could not be used for further reactions.

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