

QUINONES FROM ARISTEA ECKLONII (IRIDACEAE)

Kumuduni M. Meepagala, Vijaya Kumar, M. Uvais, S. Sultanbawa
(Department of Chemistry, University of Peradeniya)

and

Sianathamby Balasubramaniam
(Department of Botany, University of Peradeniya)

Aristea ecklonii (Iridaceae) is a perennial herb growing in the hill country. The major quinonoid compound present in the rhizomes of this plant has been reported to be plumbagin.

The cold dichloromethane extract of the dried rhizomes and the roots of *Aristea ecklonii* after chromatographic separation afforded plumbagin and another hydroxy quinone which was identified as 3,3' biplumbagin.

SECTION E

Plumbagin (m.p. 75-77°C) was identified by comparison with an authentic sample (m.p. mixed m.p., ¹H NMR IR).

Acetylation of plumbagin was carried out using acetic anhydride in pyridine. This afforded pale yellow crystals m.p. 110-111°C, the identity of which was established by comparison with an authentic sample (m.p., mixed m.p. and co TLC).

3-3' biplumbagin obtained as dark yellow crystals (mp. 215-216°C) was characterised by comparison of spectroscopic evidence (UV, IR ¹H NMR and MS).

A tetralone (mp 158-160°C) was also isolated and identified as isoshinanolone, the structure of which was confirmed by comparison of spectral data and by the DDQ oxidation in dioxane which yielded plumbagin.

Structural studies on another quinone (dark red crystals m.p. 193-195°C) (which indicates it to be a hydroxy quinone) are in progress.