

## SIDERIN FROM CEDRELA TOONA\*

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(Received 27 January 1975)

**Key Word Index**—*Cedrela toona*; Meliaceae; 4,7-dimethoxy-5-methylcoumarin; *Aspergillus glaucus*; kotanin.

In view of a recent publication by Venturella *et al.* [1] on the structure of siderin, a new coumarin from *Sideritis romana* L. (Labiatae), we wish to place on record our findings on the structure of a new coumarin from the wood of *Cedrela toona* Roxb. Based on spectral evidence, degradation studies and synthesis, we assigned to this compound 4,7-dimethoxy-5-methyl coumarin, which is the same as siderin [1]. The identity of the two compounds is fully borne out by comparing the published data (mp, UV, IR, NMR) of siderin with that of our compound. We wish to record here *only* additional evidence for the structure which was not covered by Venturella *et al.* [1].

The new coumarin (mp 191–192°;  $C_{12}H_{12}O_4$ ,  $M^+$  at *m/e* 220) was isolated from the light petroleum cut of the original  $Me_2CO$  extract of the wood of *Cedrela toona* by column chromatography ( $Al_2O_3$ ). On refluxing with alcoholic

$KOH$  (5%, 4 hr) and acidification with  $CO_2$  gas, it yielded a phenol,  $C_{10}H_{12}O_3$  ( $M^+$ , *m/e* 180), mp 79–80°. From its NMR ( $COCH_3$ : 3H, s, 2.55 ppm;  $Ar-CH_3$ : 2H, s, 2.53 ppm;  $OCH_3$ : 3H, s, 3.0 ppm;  $Ar-H$ : 2H, s, 6.15 ppm) and genesis, this compound was considered to be 2-hydroxy-4-methoxy-5 or 6-methylacetophenone and proved to be the latter (IR, NMR) by synthesis of the methylation product [2].

An authentic sample of siderin was prepared via the hydroxy compound [3] and then methylated to yield a product, identical in all respects (mp, m. mp, IR, NMR) with the naturally occurring coumarin from *Cedrela toona*.

It may be pointed out that kotanin, a metabolite of *Aspergillus glaucus* [4] is biogenetically, an 8→8'-coupling product of siderin.

## REFERENCES

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OXOAPORPHINE ALKALOIDS FROM THE CALLUS TISSUE OF *STEPHANIA CEPHARANTHA*

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(Received 7 February 1975)

**Key Word Index**—*Stephania cepharantha*; Menispermaceae; callus tissue; aporphine alkaloids; norcepharanidine; liriodenine; lysicamine.

Cepharanone A and B, and cepharadione A(1) and B(2) have been isolated from the callus tissue

of *Stephania cepharantha* Y. Hayata [1,2]. This paper reports the isolation of a new compound