NEW PURPLE PIGMENT PRODUCED BY *Brevibacterium fluvum*

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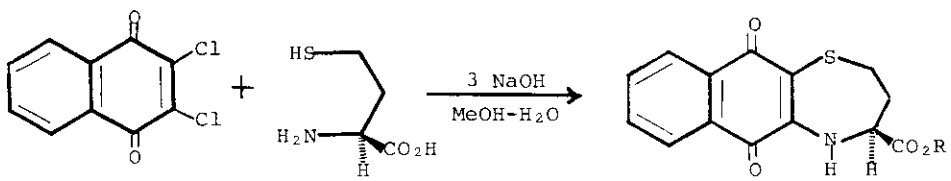
We discovered a new purple pigment in the culture broth of *Brevibacterium fluvum* AJ 3869 and named it Brevinic acid. One hundred eighty five milligram of Brevinic acid was obtained as deep-purple crystals from 120 ℓ of the culture broth by the methods of the ether extraction of the acidified broth, the column chormatography of Sephadex G-25, the silicagel thin-layer chromatography, and the recrystallization from ether-benzene. Brevinic acid was reacted with diazomethane to afford its methylester as wine-red needle crystals. The structures of Brevinic acid and its metyl ester were assumed to (1) and (2) respectively by spectroscopic data, and were established finally by the synthetic method as follows:



(1) R = H, m.p. 168∿172°C (dec.), $[\alpha]_D^{23}$ = +1260 (C = 0.0014, MeOH)

(2) R = Me, m.p. 182∿183 °C, $[\alpha]_D^{24}$ = +1100 (C = 0.0010, MeOH)

(1) $\xrightarrow{CH_2N_2}$ (2)

Brevinic acid was a new natural α-amino acid, and its structure shows the condensed-ring compound of 1,4-naphthoquinone and L-homocysteine. Brevinic acid shows a week antibacterial activity, and a diuretic activity etc. The cysteine analogs of (1) and (2) were also synthesized.