Derivation of Gentianin from Gentiopicrin

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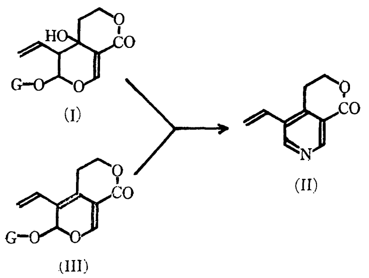
In a previous communication⁽¹⁾, it was reported that swertiamarin (I)⁽²⁾, the bitter principle of *Swertia japonica* Makino, was transformed into gentianin (II), a concomitant alkaloid, under mild conditions. It was found that the same reaction was applicable to gentiopicrin⁽³⁾ (III) also. A solution of gentiopicrin (178 mg.) in ethanol was saturated with ammonia and allowed to stand overnight. The solvent was removed and 1 N hydrochloric acid (20 ml.) was added. The solution was then heated under reflux for 30 min. The acidic solution was made alkaline with ammonium hydroxide and extracted with chloroform. The resinous product (50 mg.) was adsorbed on a silica gel column and eluted with acetone-chloroform (1 : 9). Recrystallization from petroleum ether gave colorless needles (19 mg.), m. p. 83~84°C. This substance was found to be identical with gentianin (II) (mixed melting point and infrared absorption spectrum).



G = glucose

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[1] T. Kubota and Y. Tomita, This Bulletin, **34**, 1345 (1961).

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