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GLUCOSIDES IN CORNUS CAPITATA AND C. KOUSA

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Plant. Cornus capitata Wall. (Subgen. Benthamia Lindl.)¹ Source. The Botanic Garden of the University of Copenhagen. Previous work on iridoid glucosides. None. Present work. The glycoside fraction from leaves (48 g) and twigs (12 g), obtained as previously described,² was separated by chromatography on a silica gel column (CHCl₃-MeOH, 3:1). Two major fractions were studied: (a) one (114 mg), purified by preparative TLC and recrystallization from EtOH to give a homogeneous specimen of cornin (44 mg) identified by m.m.p., co-chromatography, and NMR; and (b) another (225 mg), not obtained in crystalline form, but identified as phlorin by undergoing emulsin-catalyzed hydrolysis to glucose (co-chromatography) and phloroglucinol (triacetate; m.m.p., and NMR). Hexacetate of phlorin, m.p. 154–155·5°, [a]_D²¹ –26·0° (c 2·0, CHCl₃); lit.³: m.p. 156–158°, [a]_D¹⁷ –25·5° (c 1·8, CHCl₃).

Plant. Cornus kousa Hance var. chinensis (subgen. Benthamia Lindl.). Source. As above. Previous work on iridoid glucosides. None. Present work. 50 g of frozen leaves were treated as above. Column chromatography as described above afforded solely cornin (233 mg) (m.m.p., co-chromatography, and NMR).

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¹ WANGERIN, W. (1910) in Das Pflanzenreich (ENGLER, A., ed.), Vol. IV, p. 229, Engelmann, Leipzig.

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