

DIPSACACEAE

SWERTIAJAPONIN FROM *CEPHALARIA LEUCANTHA*

M. L. BOUILLANT and J. CHOPIN

Laboratoire de Chimie biologique, Université Claude Bernard (Lyon 1) 69-Villeurbanne, France

and

V. PLOUVIER

Laboratoire de Chimie, Museum d'Histoire Naturelle, Paris, France

(Received 4 December 1971)

Leucanthoside was isolated by one of us¹ from acetone extracts of *Cephalaria leucantha* Schrad. leaves and considered to be a new *C*-hexosyl trihydroxymethoxyflavone. Re-examination of the UV spectrum in the presence of AlCl_3 , $\text{AlCl}_3\text{-HCl}$, NaOAc and $\text{NaOAc-H}_3\text{BO}_3$ showed² that the 5,3' and 4'-hydroxyls were free and the 7-hydroxyl was blocked: λ_{max} (nm) 266, 358 (MeOH); 278, 302 (sh), 332, 428 (AlCl_3); 265 (sh), 279, 296 (sh), 375 ($\text{AlCl}_3\text{-HCl}$); 266, 392 (NaOAc); 266, 389 ($\text{NaOAc} + \text{H}_3\text{BO}_3$). These spectral data suggest that leucanthoside is a *C*-hexosylluteolin 7-methyl ether. Similarities in m.p. and $[\alpha]_{\text{D}}$ led us to compare leucanthoside with authentic swertiajaponin (6-*C*-glucosylluteolin 7-methyl ether) from *Swertia japonica*.³ The two compounds were found to be identical (m.m.p., UV and IR spectra, co-chromatography). The name leucanthoside must therefore be abandoned.

Acknowledgements—We thank Dr. M. Komatsu, Taisho Pharmaceutical Co., Tokyo, for a sample of swertiajaponin.

¹ V. PLOUVIER, *Compt. Rend.* **265D**, 516 (1967).

² T. J. MABRY, K. R. MARKHAM and M. B. THOMAS, *The Systematic Identification of Flavonoids*, Springer-Verlag, Berlin (1970).

³ M. KOMATSU and T. TOMIMORI, *Tetrahedron Letters* 1611 (1966).

Key Word Index—*Cephalaria leucantha*; Dipsacaceae; swertiajaponin; *C*-glycosylflavone.