Die IR-Überlagerungsspektren von DF-F_2 mit auth. Hispidulin (5,7,4′-Trihydroxy-6-methoxyflavon) sind deckungsgleich und im Mischschmp. keine Depression.

DF-F_3. Hellgelbe Nadeln aus MeOH. Trotz mehrmaliger Polyamid-SC nicht in ganz reiner Form, Schmp.-Bereich 242–250°. UV: (MeOH)λ_{max} 276, 335; (NaOAc) λ_{max} 278, 353; (NaOAc–H_3BO_3) λ_{max} 276, 335. IR: (KBr) Hydroxyl 2750–3600 cm^{-1}, Carbonyl 1650 cm^{-1}. NMR: (DMSO) δ = 3,78 (3H, *s*, $-OCH_3$), δ = 3,86 (3H, *s*, $-OCH_3$), δ = 6,59 (1H, *s*, H-8), δ = 6,82 (1H, *s*, H-3), δ = 7,08 (2H, *d*, H-3′ u. H-5′, *J* 9), δ = 8,00 (2H, *d*, H-2′ u. H-6′, *J* 9), δ = 12,80 (1H, *s*, C_5–OH). Nach NMR-Daten handelt es sich bei DF-F_3 um einen Dimethyläther des Scutellareins (5,6,7,4′-Tetrahydroxyflavon) und UV-Verschiebungen deuten auf die Struktur 6,7-Dimethoxyscutellarein (*Cirsimaritin*, Schmp. 258–259°)[3] hin.

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NEW ISOFLAVONE GLYCOSIDES FROM *IRIS FLORENTINA*

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Key Word Index—*Iris florentina*; Iridaceae; isoflavone glycoside; irilone-4′-glucoside; irisolone-4′-bioside.

Recently the presence of irilone (5,4′-dihydroxy-6,7-methylenedioxy-isoflavone)[1] has been described from *Iris germanica* L. We wish to report the isolation and structure determination of two new isoflavone glycosides, irilone-4′-glucoside (I) and irisolone-4′-bioside (II), from the rhizomes of *I. florentina* L. (white flowered variety, cultivated in Kobe City). Isoflavones previously reported from the rhizomes of the species include irigenin, iristectorigenin-*B*, irisolone, irisflorentin[2] and irifloside.[3] Isolation of the acetates of the new glycosides from the EtOH extract was accomplished by a conventional acetylation, followed by column chromatography on silica gel. GLC estimation on the content ratio of I or II to iridin, the major isoflavone, was *ca.* 0·1 or 0·3, respectively.

Irilone-4′-glucoside (I). Penta-acetate: colorless needles from $CHCl_3$–MeOH, m.p. 233–235°; MS *m/e* 670 (M^+), 340·0576 (Calc. for $C_{18}H_{12}O_7$: 340·0583; aglycone monoacetate), 331·1033 (Calc. for $C_{14}H_{19}O_9$: 331·1029; tetraacetyl pyronium ion), 271 (331-HOAc), 211 (331-2HOAc), 169 (211-CH_2CO); UV (EtOH) nm 260, 320 (infl.), unshifted by NaOAc, $AlCl_3$ or NaOH; IR ($CHCl_3$) cm^{-1} 1750, 1234 and 1040 (acetate), 1646 (C=O), 923 (OCH_2O); NMR ($CDCl_3$) δ ppm 2·03*s* and 2·06*s* (12H, 4OAc), 2·40*s* (3H,

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arom. OAc), 3·7–5·4 (7H, glucose), 6·12*s* (2H, OCH_2O), 6·80*s* (1H, C_8–H; a typical down-field shift in the 5-acetoxy flavonoids),[2,4] 6·9–7·6 *AA'BB'* type ($J_{AB} \simeq J_{A'B'} \simeq 8{\cdot}8$ Hz; 4H, $C_{2',3',5',6'}$-H), 7·80*s* (1H, C_2–H); acid hydrolysis produced glucose (GLC and Glucostat reagent) and the aglycone irilone (m.p., UV, IR, NMR, MS; TMSi ether, NMR, GLC).

Irisolone-4'-bioside (II). Hepta-acetate: colorless crystals from MeOH, m.p. 173–175°; MS *m/e* 930 (M^+), 629 (M^+-301),[5] 619·1843 (Calc. for $C_{26}H_{35}O_{17}$: 619·1874; hepta-acetyl glucosyl pyronium ion), 331·1020 (Calc. for $C_{14}H_{19}O_9$: 331·1029; tetraacetyl pyronium ion), 312·0620 (Calc. for $C_{17}H_{12}O_6$: 312·0634; aglycone), 284 (312-CO), 271 (331-HOAc), 211 (331-2HOAc), 169 (211-CH_2CO); UV (EtOH) nm 263, 322 (infl.), unshifted by NaOAc, $AlCl_3$ or NaOH; IR ($CHCl_3$) cm^{-1} 1750, 1234 and 1040 (acetate), 1644 (C=O), 926 (OCH_2O); NMR ($CDCl_3$) δ ppm 1·89*s*, 1·99*s*, 2·02*s*, 2·05*s* and 2·07*s* (21H, 7OAc), 4·08*s* (3H, OMe), 3·7–5·4 (14H, biglucose), 6·08*s* (2H, OCH_2O), 6·66*s* (1H, C_8–H), 6·95–7·7 *AA'BB'* type ($J_{AB} \simeq J_{A'B'} \simeq 8{\cdot}6$ Hz; 4H, $C_{2',3',5',6'}$–H), 7·92*s* (1H, C_2–H); acid hydrolysis produced glucose (GLC and Glucostat reagent, no indication of any other sugar) and the aglycone irisolone (m.p., UV, IR, NMR, MS; TMSi ether, NMR, GLC).

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