Asian Journal of Chemistry Vol. 17, No. 4 (2005), 2853–2854

NOTE

Flavonoid Glycoside From *Leucas lavandulaefolia* Aerial Parts

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In the present note, a flavonoid glycoside from *Leucas lavandulaefolia* aerial parts has been reported.

Key Words: *Leucas lavandulaefolia* (Rees), Chrysoeriol-6''-(O'Ac)-4'-β-glucoside.

Leucas lavandulaefolia (Rees) belonging to the family Labiatae is a herbaceous annual weed found in pastures and wastelands throughout the country. It has a strong flavour and is reputed for its use as sedative, vermifuge, stomachic, dermatosis and is also useful in the treatment of migraine[1–3].

The aerial parts (including leaves, flowers, stem and branches) of *Leucas lavandulaefolia* were collected from Udupi, Karnataka, India and its obtanical identity was confirmed by Dr. Gopalkrishna Bhat, Department of Botany, Poornaprajna College, Udupi. A voucher specimen has been deposited in N.G.S.M. Institute of Pharmaceutical Sciences, Nanthoor, Mangalore.

3 kg of shade dried, powdered arial parts of *Leucas lavandulaefolia* were extracted with 95% ethanol for 30 days. The ethanolic extract (3 L) was concentrated to a brown viscous mass and successively extracted with petroleum ether, diethyl ether and ethyl acetate. The ethyl acetate soluble part on concentration yielded a viscous mass which was subjected to column chromatography of silica gel when ethyl acetate : methanol (95 : 5) yielded flavonoid glycoside (m.p. 246–248°C).

The flavonoid glycoside on hydrolysis with 2 N HCl afforded a genin and a sugar identified as D-glucose. The genin, m.p. 325–327°C, M^+ (+ 2) 302, was obtained as colourless needles.

The genin responded to characteristic colour reaction of flavonoid[4] and was identified as chrysoeriol (by mmp, co-pc, co-tlc with authentic sample) and confirmed by spectral data[5].

When UV spectrum (NaOMe) of flavonoid glycoside was compared with that of chrysoeriol, no shift was observed in band-I indicating glycosylation site at $C_{4'}$. Free hydroxyl group at C_7 is indicated by the bathocromic shift of band-II in UV (NaOAc) in comparison with chrysoeriol. The proton NMR signals at δ 2.004

accounted for 3 protons of acetyl group. The absence of signal at δ 9.942 for $C_{4'}$-OH in chrysoeriol clearly indicated the glycosylation at $C_{4'}$. The 6″ OH group of glucose is found to be acetylated in comparison with the ^{13}C NMR signal at δ 62.736 given for $C_{6''}$ acetylated carbon in literature[6]. Enzymatic hydrolysis of flavonoid glycoside revealed the presence of β-linkage between genin and D-glucose.

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(*Reccived*: 27 January 2005; *Accepted*: 11 August 2005) AJC-4350