

The presence or absence of alkenes was determined by examining the peaks of the mixture before and after treatment with a few drops of Br₂ in CCl₄. The data for each species are listed in Table 1.

Reference mixture The *n*-alkanes from *A. verticillata* were separated and collected with a Varian 90P G C. The detector was at 310°, the collector at 290°, the injection port at 300°, and the column at 210° for the C₂₃–C₂₈ alkanes and at 235° for the C₂₉–C₃₂ alkanes. A 5 ft 1/4 in. SS column packed with 3% SE-30 on 100/120 Varaport 30 and a helium flow rate of 60 ml/min were used.

Each individual peak was trapped in a capillary tube and subjected to mass spectral analysis. The formula for each alkane was obtained from the parent ion peak. The spectra were typical for *n*-alkanes and were devoid of any spurious peaks attributable to isoalkanes.

Acknowledgements—This work was partly supported by a grant from the Illinois Division-American Cancer Society. We wish to thank Dr. P. Sorensen of the NIU Biological Science Department for helpful discussions.

Key Word Index—*Asclepias*, Asclepiadaceae, alkanes

Phytochemistry, 1972, Vol. 11, pp. 438 to 439. Pergamon Press. Printed in England.

BIGNONIACEAE

CHRY SIN-7-RUTINOSIDE FROM THE LEAVES OF *DOLICHANDRONE FALCATA*

S. SANKARA SUBRAMANIAN, S. NAGARAJAN and N. SULOCHANA

Department of Chemistry, Jawaharlal Institute of Postgraduate Medical Education and Research,
Pondicherry-6, India

(Received 5 August 1971)

Plant *Dolichandrone falcata* Seem. **Source.** Annamalai University Campus, South India. **Occurrence.** Distributed throughout India.¹ **Uses.** Medicinal.¹

Present work. Dried leaves extracted with 80% hot ethanol, and the aq. concentrate fractionated into petrol (40–60°), ether, EtOAc and MeCOEt.

Ether extract Luteolin (acetate, m.p. and mixed m.p.) and chrysin (*R_f* and co-chromatography with authentic samples).

TABLE 1. *R_f*s OF THE FLAVONOIDS OF *Dolichandrone falcata*

Flavonoid	<i>R_f</i> (Whatman No. 1, ascending 28 ± 2°)							
	H ₂ O	15% HOAc	30% HOAc	60% HOAc	BAW	H ₂ O satd phenol	Forestral	TBA
Chrysin-7-rutinoside	12	29	53	76	40	70	83	68
Chrysin-7-glucoside	04	16	39	66	54	50	75	49
Chrysin	—	02	20	79	97	93	88	96

¹ *Wealth of India, Raw Materials*, Vol. III, p. 100, C S I R, New Delhi (1952).

MeCOEt extract. Chrysin-7-rutinoside, yield, 0.4%, m.p. 248–250°, λ_{\max} (EtOH) 269, 308 nm, λ_{\min} 235 nm, λ_{AlCl_3} 281, 322, 382 nm, no shift with NaOAc in either band, IR (KBr) 3465, 2920, 1658, 1610, 1590, 1495, 1455, 1250, 769, 680, 665 cm^{-1} ; R_f —Table 1, acetate, m.p. 247–250° (EtOH), glycoside sparingly soluble in usual organic solvents, soluble in pyridine. On boiling with 10% H_2SO_4 in HOAc for 4 hr, hydrolysed to chrysin (R_f , Table 1, co-chromatography with authentic sample, acetate, m.p. 192–194°) and glucose and rhamnose (R_f and co-chromatography) in equal proportions. Further, on partial hydrolysis (N HCl, 100°, 5 min), chrysin-7-glucoside (R_f —Table 1) and rhamnose were obtained.

EtOAc extract Chrysin-7-rutinoside identified (PC)

Comment This is the first report of chrysin-7-rutinoside; chrysin and its glucuronide are known to occur in *Oroxylum indicum*² and *Scutellaria*³ of the same family

Acknowledgements—We thank Dr T. R. Govindachari, Director, CIBA Research Centre, Bombay-63 for the spectral data and Prof K. Rangaswami Ayyangar, Annamalai University for the authenticated plant material. Our thanks are due to the Principal, J. I. P. M. E. R. for encouragement.

² P. K. BOSE and S. N. BHATTACHARYA, *J. Indian Chem. Soc.* **15**, 311 (1938)

³ C. A. MARSH, *Biochem. J.* **59**, 58 (1955)

Key Word Index—*Dolichandrone falcata*, Bignoniaceae, flavones, chrysin-7-rutinoside

Phytochemistry, 1972, Vol. 11, pp. 439 to 440 Pergamon Press Printed in England

FLAVONOIDS OF THE LEAVES OF *OROXYLUM INDICUM* AND *PAJANELIA LONGIFOLIA*

S. SANKARA SUBRAMANIAN and A. G. R. NAIR

Department of Chemistry, Jawaharlal Institute of Postgraduate Medical Education and Research,
Pondicherry-6, India

(Received 5 August 1971)

Plant *Oroxylum indicum* Vent.¹ *Uses* Medicinal.¹ *Previous work* Chrysin, baicalein and oroxylin-A from the bark of stem and root,¹ baicalein-7-glucoside from seeds.¹

Present work Fresh leaves extracted with hot 80% alcohol and the aq. concentrate fractionated into petrol, ether, EtOAc soluble fractions and the aq. mother liquor.

Ether fraction. Baicalein and scutellarein (R_f , colour reactions, co-chromatography with authentic samples).

EtOAc fraction. Flavone glycoside—0.1%, yellow needles (MeOH), m.p. 198–200°, λ_{\max} (EtOH) 215, 281, 332 nm, (NaOAc) 281, 330 nm and (AlCl₃) 292, 349 nm. IR bands at

¹ *Wealth of India, Raw Materials*, Vol. VII, pp. 107, 211, C. S. I. R., New Delhi (1966)