

BIFLAVONES FROM THE LEAVES OF HIMALAYAN YEW: *TAXUS WALLICHIANA*

NAZNEEN PARVEEN, H.M. TAUFEEQ, and NIZAM UD-DIN KHAN*

Department of Chemistry, Aligarh Muslim University, Aligarh-202001, India

The occurrence of antitumor taxanes (1), molting hormones (2, 3), alkaloids (4, 5), and other physiologically important compounds (6, 7) in *Taxus* (Taxaceae) stimulated our interest in *Taxus* species. A number of biflavones have been reported from *Taxus baccata* (8, 9), *Taxus cuspidata* (10), and *Taxus floriana* (10). Ecdysone (3), lignins (11), taxane terpenoids, and alkaloids (1) have been isolated from *Taxus wallichiana* Zucc. (Himalayan Yew). In the present communication, we report the presence of biflavones isolated by the method of Khan *et al.* (12). Amentoflavone, sciadopitysin, and two partially identified biflavones (mono- and di-*O*-methyl-amentoflavones) were isolated from the leaves of *T. wallichiana*.

EXPERIMENTAL

PLANT MATERIAL.—*T. wallichiana* was collected from the Royal Botanical Garden, Godawari, Lalitpur, Nepal, in October 1983, and identified by Dr. K.R. Rajbhandari (taxonomist).

ISOLATION AND IDENTIFICATION.—Dried and powdered leaf material of *T. wallichiana* (1 kg), after being defatted with light petrol, was extracted with Me₂CO. The Me₂CO extract was concentrated, and the residue was refluxed with light petrol, C₆H₆, and CHCl₃. Yellow, solid undissolved residue (2 g) yielded four chromatographically homogeneous fractions, TW-I to TW-IV after purification by column chromatography on silica gel and preparative tlc (silica gel, C₆H₆-pyridine-HCOOH; 36:9:5). TW-I and TW-IV were identified as amentoflavone and sciadopitysin, respectively, by comparison of their mp, Rf values, and ¹H nmr with authentic samples. TW-II and TW-III, being minor constituents, were only partially identified as mono- and di-*O*-methyl-amentoflavone, respectively, by comparison of their Rf values and characteristic colors in uv light with authentic samples (12).

Full details are available on request to the senior author.

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