The product obtained on methylation with $(Me)_2SO_4$ showed resonance signals at δ 2·10 (3H, *s*, methyl group), δ 2·88 (3H, *s*, acetyl group), δ 3·72, δ 3·78, δ 3·84 (3H, *s*, three methoxyl groups) and δ 6·42 (1H, *s*, aromatic proton).

The chemical and spectral evidence suggests that this compound is 4,6-dihydroxy-2-methoxy-3-methylacetophenone and this was further confirmed by the agreement of its melting point and that of dimethyl ether, respectively, with literature data.[4] It is noteworthy that the product cannot be considered a chemical artefact, as its presence has been shown directly in the crude extract by TLC in comparison with a pure sample.

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[4] WHALLEY, W. B. (1955) *J. Chem. Soc.* **105.**

Phytochemistry, 1974, Vol. 13, p. 1990. Pergamon Press. Printed in England.

BIFLAVONES FROM *PODOCARPUS NERIIFOLIUS*

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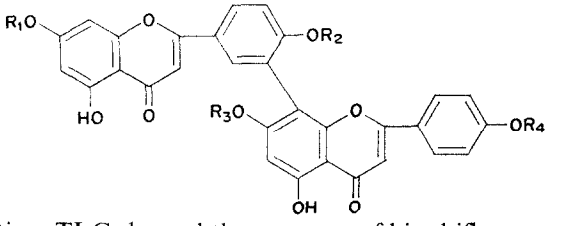
Key Word Index—*Podocarpus neriifolius*; Podocarpaceae; biflavones; amentoflavone, podocarpusflavone A; podocarpusflavone B; isoginkgetin.

Plant. Podocarpus neriifolius D. Don (Podocarpaceae). *Source.* Collected at Sipore, West Bengal, India. *Previous work.* On sister species[1-3] *Present work*: The phenolic extract obtained from the leaves and purified by usual methods gave four biflavones by preparative TLC and counter current distribution methods. They were characterized as amentoflavone (**1**), podocarpusflavone A (**2**), podocarpusflavone B (**3**) and isoginkgetin (**4**) by m.ps, m.m.ps and comparison of NMR spectra of their methyl ether and acetate derivatives with authentic samples respectively.



(1) $R_1 = R_2 = R_3 = R_4 = H$
(2) $R_1 = R_2 = R_3 = H$; $R_4 = Me$
(3) $R_2 = R_3 = H$; $R_1 = R_4 = Me$
(4) $R_1 = R_3 = H$; $R_2 = R_4 = Me$

In addition, TLC showed the presence of hinokiflavone and its monomethyl ether.

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[1] MIURA, H., KIHARA, T. and KAWANO, N. (1969) *Chem. Pharm. Bull. (Tokyo)* **17**, 150; (1968) *Tetrahedron Letters*, 2339.
[2] CHEXAL, K. K., HANDA, B. K., RAHMAN, W. and KAWANO, N. (1970) *Chem. Ind. (London)* **28.**
[3] HAMEED, N., ILYAS, M., RAHMAN, W., OKIGAWA, M. and KAWANO, N. (1973) *Phytochemistry* **12**, 1497.