

Phyllanthus species for anti-human hepatitis B virus in

vitro

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Abstract

Using an HBV-producing cell line and inhibition of the expression of the HBsAg and HBeAg as antiviral indicators, a study was conducted on 25 compounds isolated from four Phyllanthus (Euphorbiaceae) plants, including *P. amarus* Schum. & Thonn., *P. multi florus* Willd., *P. tenellus* Roxb. and *P. virgatus* Forst. f. It was found that niranthin (1), nirtetralin (3), hinokinin (5) and geraniin (13) at the non-cytotoxic concentration of 50 micro m, suppressed effectively both HBsAg and HBeAg expression, with the highest inhibition at 74.3%, 45.3%; 69.6%, 33.9%; 68.1%, 52.3%; 32.1%, 46.6%, respectively. Of these, niranthin (1) showed the best anti-HBsAg activity, while the most potent anti-HBeAg activity was observed with hinokinin (5). Copyright 2003 John Wiley & Sons, Ltd.