

Antitumor flavonoids from Cephalotaxus koreana Nakai

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Cephalotaxus koreana Nakai is an endemic species in Korea. The EtOH extract of leaf and branch from the plant showed potent antitumor activity in Teruhiro's method. The tumor volume inhibition ratio value is 25.2% with 20mg/kg in the BDF1 mouse injected LLC cell. We isolated one flavone, sciadopitysin (1), two flavone O-glycosides, quercetin 3-O- β -D-glucuronide 6"-ethyl ester (2), apigenin 7-neohesperidoside (3) in comparison with literatures data. Compounds 1-3 showed stronger antitumor activity than Taxol used as positive control. The inhibition ratio values of compounds 1-3 is 34.9, 31.6, 34.0%, respectively, and Taxol is 27.0 % compared with control group.

Phytochemical Constituents from the Stems of Acanthopanax senticosus

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Six compounds were isolated from the stems of Acanthopanax senticosus (Araliaceae). Their structures were elucidated as iso-fraxidin, (-)-sesamin, 5-hydroxymethylfurfural, eleutheroside B, eleutheroside E and an unknown compound by spectral analysis. Of them, 5-hydroxymethylfurfural was isolated for the first time from A. senticosus.

Antioxidant and Hyaluronidase Inhibition Activities of Prunus persica Batsch var. davidiana Maximowicz

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Reactive oxygen species(ROS) are produced at a high rate continuously as a by-product of aerobic metabolism. Several lines of evidence provided that ROS appears to cause to develop aging and various diseases. High level of hyaluronic acid with decreased molecular weight has been detected in patients with inflammatory diseases including rheumatoid arthritis. Hyaluronidase is an endohexosaminidase that initiates the degradation of hyaluronic acid with high molecular weight. Prunus persica Batsch var. davidiana Maximowicz has been known as a korean folk medicine for treatment of neuritis and rheumatism. In this study, we have investigated the antioxidant and hyaluronidase inhibition activities of Prunus persica Batsch var. davidiana Maximowicz in order to screen the bioactive substances which can be developed as possible antiinflammatory agents. As a result, EtOAc extract of Prunus persica Batsch var. davidiana Maximowicz exhibited the strongest effect on antioxidant and hyaluronidase inhibition experiment.

Phytochemical Constituents from the Whole Plants of Diodia teres

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