

List of All Chemicals

P Dillenia retusa (Dilleniaceae)

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Part	Low PPM	High PPM	StdDev	*Reference
BETULIN	Leaf	--	680.0	-0.18	Jim Duke's personal files.

Activities (13)

AntiHIV 6.1 uM
Anticarcinomic
Antifeedant
Antiflu
Antiinflammatory
Antitumor
Antiviral 6.1 uM
Aphidifuge
Cytotoxic 600 ppm
Cytotoxic 8.6 uM
Hypolipemic
Prostaglandin-Synthesis-Inhibitor IC50=119 uM
Topoisomerase-II-Inhibitor IC50=38.6 uM

BETULINIC-ACID	Leaf	--	8500.0	1.1	Jim Duke's personal files.
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Activities (22)

Anthelmintic
AntiHIV EC50=2.0 ug/ml
AntiHIV IC50=6.5 ug/ml
AntiHIV 14.8 uM
Antibacterial
Anticancer
Anticarcinomic
Antiedemic
Antiinflammatory
Antileukemic
Antimalarial IC50=19-26 ug/ml
Antimelanomic
Antinociceptive
Antiplasmodial IC50=19-26 ug/ml
Antitumor
Antiviral 14.8 uM
Apoptotic
Cytotoxic 50-100 ppm
Cytotoxic 16.4 uM
Phospholipase-A2-Inhibitor
Prostaglandin-Synthesis-Inhibitor 200 ug/ml
Prostaglandin-Synthesis-Inhibitor IC50=101 uM

BETULINIC- Fruit -- 1600.0 -0.48 Pavannasasivam, G., & M.U.S. Sultanbawa. 1974. Betulinic acid in the Dilleniaceae and a review of its ACID natural distribution. *Phytochem.* 13:2002-2006.

Activities (22)

Anthelmintic

AntiHIV EC50=2.0 ug/ml Kashiwada, Y., et. al. 1998. *Anti-AIDS Agents*. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. *J. Nat. Prod.*, 61 (9): 1090-1095.

AntiHIV IC50=6.5 ug/ml

AntiHIV 14.8 uM

Antibacterial

Anticancer Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Anticarcinomic Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antiedemic

Antiinflammatory Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from *Diospyros leucomelas**. *Planta Medica*, 61: 9.

Antileukemic

Antimalarial IC50=19-26 ug/ml

Antimelanomic *New York Times*, 3/28/95.

Antinociceptive

Antiplasmodial IC50=19-26 ug/ml

Antitumor Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm *Biosyn. Prod. Cancer Chemotherapy (Petit et al)*

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

Prostaglandin-Synthesis-Inhibitor 200 ug/ml Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from *Alphitonia zizyphoides* which Inhibits Prostaglandin Biosynthesis in vitro. *Phytochemistry*, 48(3): 495-497.

Prostaglandin-Synthesis-Inhibitor IC50=101 uM Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. *Yao Hsueh Hsueh Pao*, 30(8): 621-626.

BETULINIC- Fruit -- 16000.0 2.03 Jim Duke's personal files. ACID

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Anthelmintic

AntiHIV EC50=2.0 ug/ml Kashiwada, Y., et. al. 1998. *Anti-AIDS Agents*. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. *J. Nat. Prod.*, 61 (9): 1090-1095.

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Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm *Biosyn. Prod. Cancer Chemotherapy (Petit et al)*

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

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BETULINIC- Bark -- 8000.0 0.38 * ACID

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AntiHIV EC50=2.0 ug/ml	Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. J. Nat. Prod., 61 (9): 1090-1095.
AntiHIV IC50=6.5 ug/ml	
AntiHIV 14.8 uM	
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Antiedemic	
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.
Antileukemic	
Antimalarial IC50=19-26 ug/ml	
Antimelanomic	New York Times, 3/28/95.
Antinociceptive	
Antiplasmodial IC50=19-26 ug/ml	
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Prostaglandin-Synthesis-Inhibitor IC50=101 uM	Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from <i>Menyanthes trifoliata</i> L. <i>Yao Hsueh Hsueh Pao</i> , 30(8): 621-626.

BETULINIC- Wood -- 1300.0 0.24 *

ACID

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