

# List of All Chemicals

## **P** Alphonis macrocarpa (Rhamnaceae)

### 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 <input type="button" value="All"/>	Low PPM	High PPM	StdDev	*Reference
BETULIN	Wood	--	--		Jim Duke's personal files.
<b>Activities (13)</b>					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory					Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from Diospyros leucomelas*. Planta Medica, 61: 9.
Antitumor					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiviral 6.1 uM					
Aphidifuge					Lugemwa, F.N., Huang, F-Y., Bentley, M.D., Mendel, M.J., and Alford, A.R. 1990. A Heliothis zea Antifeedant from the Abundant Birchbark Triterpene Betulin. J. Agric. Food Chem. 38(2): 493-494.
Cytotoxic 600 ppm					
Cytotoxic 8.6 uM					
Hypolipemic					
Prostaglandin-Synthesis-Inhibitor IC50=119 uM					Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from Menyanthes trifoliata L. Yao Hsueh Hsueh Pao, 30(8): 621-626.
Topoisomerase-II-Inhibitor IC50=38.6 uM					
BETULIN	Leaf	--	--		Jim Duke's personal files.
<b>Activities (13)</b>					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory					Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from Diospyros leucomelas*. Planta Medica, 61: 9.
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Topoisomerase-II-Inhibitor IC50=38.6 uM					
BETULINIC-ACID	Wood	--	110.0	-0.43	Jim Duke's personal files.

**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. <i>J. Nat. Prod.</i> , 61 (9): 1090-1095.
AntiHIV IC50=6.5 ug/ml	
AntiHIV 14.8 uM	
Antibacterial	
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Anticarcinomic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
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	
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> 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 <i>Alphitonia zizyphoides</i> which Inhibits Prostaglandin Biosynthesis in vitro. <i>Phytochemistry</i> , 48(3): 495-497.
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-ACID

Leaf

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4600.0

0.14

Jim Duke's personal files.

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