

Table S1. Classes of isolated compounds and biological activities reported for selected galactogogue plants.

Plant species (Code)	Class of compounds	Reported activity	Ref.
<i>Hubera cerasoides</i> (HC)	Aporphine alkaloids	Inhibition of transcriptional activity of TCF/β-catenin	[1]
	Aporphine and isoquinone alkaloids, sesquiterpenes	Antimalarial and antimicrobacterial activities	[2]
<i>Polyalthia debilis</i> (PD)	Polyacetylenes	Antimicrobial, cytotoxic and antimicrobacterial activities	[3, 4]
	Aporphine alkaloids	Antimalarial activity	[5]
<i>Polyalthia evecta</i> (PE)	Furans polyacetylenes	Antiviral and cytotoxic activities	[6]
<i>Polyalthia suberosa</i> (PS)	Furans polyacetylenes	Inhibition of HIV-1 reverse transcriptase	[7]
	Anthracene alkaloids	-	[8]
<i>Uvaria rufa</i> (UR)	Cyclohexenoids	-	[9-12]
	Flavonol glycosides	Inhibit formation of advanced glycation end-products	[13]
<i>Caesalpinia sappan</i> (CS)	Protosappanins	Cytotoxic activity	[14]
	Benzylchroman derivatives, protosappanins, chalcones, brazilines, sappanones	-	[15]
	Methanodibenzoxocinone	Inhibition of xanthine oxidase	[16]
	Flavonoids	Antioxidant activity	[17, 18]
<i>Celastrus paniculatus</i> (CP)	Sesquiterpenes and triterpenes	Cytotoxic activity	[19, 20]
<i>Salacia chinensis</i> (SCh)	Triterpenes	-	[21-24]
	Glycosides	Hepatoprotective effects	[25-27]
<i>Salacia verrucosa</i> (SV)	Triterpenes	Cytotoxic activity	[28]
<i>Siphonodon celastrineus</i> (SCe)	Sesquiterpenes and triterpenes	Cytotoxic activity	[29-33]
<i>Clausena harmandiana</i> (CH)	Carbazole alkaloids and courmarins	Antibacterial, antiplasmodial and cytotoxic activities	[34-38]
<i>Glycosmis pentaphylla</i> (GP)	Quinolone alkaloids	Inhibition of β-hexosaminidase	[39]
	Furanopyridine alkaloids	-	[40]
<i>Micromelum minutum</i> (MM)	Coumarins and triterpenes	Cytotoxic and antibacterial	[41-44]
<i>Naringi crenulata</i> (NC)	Alkaloids, phenols, tannins and saponins	Antiinflammatory, antioxidant, antibacterial, antifungal and antimicrobial activities	[45, 46]
<i>Diospyros ehretioides</i> (DE)	Deoxypreussomerins and naphthoquinones	Antimalarial and antibacterial activities	[47]
<i>Ochna integerrima</i> (OI)	Flavonoids	Antimalarial and anti-HIV-1	[48, 49]

References

- [1] Shono T, Ishikawa N, Toume K, Arai, MA, Masu H, Koyano T, Kowithayakorn T, Ishibashi M. Cerasoidine, a bis-aporphine alkaloid isolated from *Polyalthia cerasoides* during screening for Wnt signal inhibitors. *J Nat Prod.* 2016; 79(8): 2083-2088.
- [2] Kanokmedhakul S, Kanokmedhakul K, Lekphrom R. Bioactive constituents of the roots of *Polyalthia cerasoides*. *J Nat Prod.* 2007; 70(9): 1536-1538.
- [3] Boonpangrak S, Cherdtrakulkiat R, Pingaew R, Manam P, Prachayasittikul S, Ruchirawat S, Prachayasittikul V. Antimicrobial and cytotoxic acetogenin from *Polyalthia debilis*. *J Appl Pharm Sci.* 2015; 5(3): 013-018.
- [4] Panthama N, Kanokmedhakul S, Kanokmedhakul K. Polyacetylenes from the roots of *Polyalthia debilis*. *J Nat Prod.* 2010; 73(8): 1366-1369.
- [5] Kanokmedhakul S, Kanokmedhakul K, Yodbuddee D, Phonkerd N. New antimalarial bis-dehydroaporphine alkaloids from *Polyalthia debilis*. *J Nat Prod.* 2003; 66(5): 616-619.
- [6] Kanokmedhakul S, Kanokmedhakul K, Kantikeaw I, Phonkerd N. 2-Substituted furans from the roots of *Polyalthia evecta*. *J Nat Prod.* 2006; 69(1): 68-72.
- [7] Tuchinda P, Pohmakotr M, Reutrakul V, Thanyachareon W, Sophasan S, Yoosook C, Santisuk T, Pezzuto JM. *Planta Med.* 2001; 67: 572-575.
- [8] Tuchinda P, Pohmakotr M, Munyoo B, Reutrakul V, Santisuk T. An azaanthracene alkaloid from *Polyalthia suberosa*. *Phytochemistry.* 2000; 53(8): 1079-1082.
- [9] Macabeo APG, Tudla FA, Krohn K, Franzblau SG. Antitubercular activity of the semi-polar extractives of *Uvaria rufa*. *Asian Pac. J. Trop. Med.* 2012; 777-780.
- [10] Macabeo APG, Tudla FA, Alejandro GJD, Kouam SF, Hussain H, Krohn, K. Benzoylated derivatives from *Uvaria rufa*. *Biochem Syst Ecol.* 2010; 38(4): 857-860.
- [11] Tudla FA, Aguinaldo AM, Krohn K, Hussain H, Macabeo APG. Highly oxygenated cyclohexene metabolites from *Uvaria rufa*. *Biochem Syst Ecol.* 2007; 35: 45-47.
- [12] Zhang, CR, Yang SP, Liao SG, Wu Y, Yue JM. Polyoxygenated cyclohexene derivatives from *Uvaria rufa*. *Helv. Chim Acta.* 2006; 89: 1408-1416.
- [13] Deepralad K, Kawanishi K, Moriyasu M, Pengsuparp T, Suttisri R. Flavonoid glycosides from the leaves of *Uvaria rufa* with advanced glycation end-products inhibitory activity. *TJPS.* 2009; 33(2-3): 84-90.
- [14] Wang Z, Sun JB, Qua W, Guan FQ, Li LZ, Liang YJ. Caesappin A and B, two novel protosappanins from *Caesalpinia sappan* L. *Fitoterapia.* 2014; 92: 280-284.
- [15] Fu L, Huang X, Lai Z, Hu Y, Liu H, Cai X. A New 3-Benzylchroman derivative from Sappan Lignum (*Caesalpinia sappan*). *Molecules.* 2008; 13: 1923-1930.
- [16] Nguyen MIT, Awale S, Tezuka Y, Tran QL, Kadota S. Neosappanone A, a xanthine oxidase (XO) inhibitory dimeric methanodibenzoxocinone with a new carbon skeleton from *Caesalpinia sappan*. *Tetrahedron Lett.* 2004; 45: 8519-8522.
- [17] Niranjan Reddy VL, Ravikanth V, Jansi Lakshmi VVNS, Suryanarayanan Murty U, Venkateswarlu Y. Inhibitory activity of homoisoflavonoids from *Caesalpinia sappan* against *Beauveria bassiana*. *Fitoterapia.* 2003; 74: 600-602.
- [18] Safitria R, Tarigan, P, Freisleben HJ, Rumampuk RJ. Murakami A. Antioxidant activity in vitro of two aromatic compounds from *Caesalpinia sappan* L. *BioFactors.* 2003; 19: 71-77.
- [19] Wang Z, Sun JB, Qua W, Guan FQ, Li LZ, Liang YJ. Caesappin A and B, two novel protosappanins from *Caesalpinia sappan* L. *Fitoterapia.* 2014; 92: 280-284.
- [20] Weng JR and Yen MH. New dihydroagarofuranoid sesquiterpenes from *Celastrus paniculatus*. *Helv Chim Acta.* 2010; 93; 1716-1724.
- [21] Zhang Y, Nakamura S, Pongpiriyadacha Y, Matsuda H, Yoshikawa M. Absolute structures of new megastigmane glycosides, foliasalaciosides E(1), E(2), E(3), F, G, H, and I from the leaves of *Salacia chinensis*. *Chem Pharm Bull.* 2008; 56(4): 547-553.
- [22] Yoshikawa M, Zhang Y, Wang T, Nakamura S, Matsuda, H. New triterpene constituents, foliasalacins A₁–A₄, B₁–B₃, and C, from the leaves of *Salacia chinensis*. *Chem Pharm Bull.* 2008; 56(7): 915-920.
- [23] Nakamura S, Zhang Y, Pongpiriyadacha Y, Wang T, Matsuda H, Yoshikawa M, New triterpene constituents, foliasalacins A1–A4, B1–B3, and C, from the leaves of *Salacia chinensis*. *Heterocycles.* 2008; 75: 131-143.
- [24] Kishi A, Morikawa T, Matsuda H, Yoshikawa M. Structures of new friedelane- and norfriedelane-type triterpenes and polyacylated eudesmane-type sesquiterpene from *Salacia chinensis* Linn. (*S. prinooides* DC., Hippocrateaceae) and radical scavenging activities of principal constituents. *Chem Pharm Bull.* 2003; 51(9): 1051-1055.
- [25] Nakamura S, Zhang Y, Matsuda H, Ninomiya K, Muraoka O, Yoshikawa M. Chemical structures and hepatoprotective effects of constituents from the leaves of *Salacia chinensis*. *Chem Pharm Bull.* 2011; 59(8): 1020-1028.
- [26] Nakamura S, Zhang Y, Wang T, Matsuda H, Yoshikawa M, New phenolic glycosides from the leaves of *Salacia chinensis*. *Heterocycles.* 2008; 75: 1435-1446.
- [27] Zhang Y, Nakamura S, Pongpiriyadacha Y, Matsuda H, Yoshikawa M, Absolute structures of new megastigmane glycosides, foliasalaciosides E(1), E(2), E(3), F, G, H, and I from the leaves of *Salacia chinensis*. *Chem Pharm Bull.* 2008; 56(4): 547-553.

- [28] Somwong P, Suttisri R, Buakeaw A. A new 1,3-diketofriedelane triterpene from *Salacia verrucosa*. *Fitoterapia*. 2011; 82(7): 1047-1051.
- [29] Singha S, Yotmanee P, Yahuafai J, Siripong P, Prabpais S, Sutthivaiyakit S. Siphonagarofurans A-J: Poly-O-acylated β -dihydroagarofuran sesquiterpenoids from the fruits of *Siphonodon celastrineus*. *Phytochemistry*. 2020; 174: 112345.
- [30] Kweetripob W, Mahidol C, Thongnest S, Prawat H, Ruchirawat S. Polyoxygenated ursane and oleanane triterpenes from *Siphonodon celastrineus*. *Phytochemistry*. 2016; 129: 58-67.
- [31] Kweetripob W, Mahidol C, Prawat H, Ruchirawat S. Lupane, friedelane, oleanane, and ursane triterpenes from the stem of *Siphonodon celastrineus* Griff. *Phytochemistry*. 2013; 96: 404-417.
- [32] Niampoka C, Suttisri R, Bavovada R, Takayama H, Aimi N. Potentially cytotoxic triterpenoids from the root bark of *Siphonodon celastrineus* Griff. *Arch Pharm Res*. 2005; 28(5): 546-549.
- [33] Itharat A, Houghton PJ, Eno-Amooquayec E, Burke PJ, Sampson JH, Raman A. In vitro cytotoxic activity of Thai medicinal plants used traditionally to treat cancer. *J Ethnopharm*. 2004; 90(1): 33-38.
- [34] Maneerat W, Phakhodee W, Ritthiwigrom T, Cheenpracha S, Promgool T, Yossathera K, Deachathai S, Laphookhieo S. Antibacterial carbazole alkaloids from *Clausena harmandiana* twigs. *Fitoterapia*. 2012; 83(6): 1110-1114.
- [35] Songsiang U, Thongthoom T, Boonyarat C, Yenjai C. Claurailas A-D, cytotoxic carbazole alkaloids from the roots of *Clausena harmandiana*. *J Nat Prod*. 2011; 74: 208-12.
- [36] Thongthoom T, Songsiang U, Phaosiri C, Yenjai C. Biological activity of chemical constituents from *Clausena harmandiana*. *Arch Pharm Res*. 2010; 33: 675-680.
- [37] Noipha K, Thongthoom T, Songsiang U, Boonyarat C, Yenjai C. Carbazoles and coumarins from *Clausena harmandiana* stimulate glucose uptake in L6 myotubes. *Diabetes Res Clin Pract*. 2010; 90: 67-71.
- [38] Yenjai C, Sripontan S, Sriprajun P, Kittakoop P, Jintasirikul A, Tanticharoen M, Thebtaranonth, Y. Coumarins and carbazoles with antiplasmoidal activity from *Clausena harmandiana*. *Planta Med*. 2000; 66: 277-279.
- [39] Choi YH, Seo C, Jeong W, Lee JE, Lee, JY, Ahn EK, Kang JS, Lee JH, Choi CW, Oh JS, Lee D, Hong SS. Glycopentanolones A-D, four new geranylated quinolone alkaloids from *Glycosmis pentaphylla*. *Bioorg Chem*. 2019; 87: 714-719.
- [40] Zhang QB, Ding G, Zhang T, Si JG, Song B, Wang MH, Chenc JH, Yu M, Gu YC, Zou ZM. New furanopyridine alkaloids from the leaves of *Glycosmis pentaphylla*. *Phytochem Lett*. 2016; 18: 51-54.
- [41]. Sakunpak A, Matsunami K, Otsuka H, Panichayupakaranant P. Isolation of new monoterpane coumarins from *Micromelum minutum* leaves and their cytotoxic activity against *Leishmania major* and cancer cells. *Food Chem*. 2013; 139(1-4): 458-463.
- [42] Susidarti, RA, Rahmani M, Ismail HBM, Sukari MA, Hin TYY, Lian GEC, Ali AM. Cytotoxic activity of coumarins from *Micromelum minutum*. *Pharm Biol*. 2009; 47(2): 182-185.
- [43] Rahmani M, Susidarti RA, Ismail HBM, Sukari MA, Taufiq-Yap YH, Ee GCL, Ali AM, Kulip J, Waterman PG. Coumarins from Malaysian *Micromelum minutum*. *Phytochemistry*. 2003; 64: 873-877.
- [44] Susidarti RA, Rahmani M, Ismail HBM, Sukari MA, Taufiq-Yap YH, Ee GCL, Ali AM, Kulip J, Waterman PG. A new coumarin and triterpenes from Malaysian *Micromelum minutum*. *Nat Prod Res*. 2006; 20: 145-151.
- [45] Wangthong S, Palaga T, Rengpipat S, Wanichwecharungruang SP, Chanchaisak P, Heinrich M. Biological activities and safety of Thanaka (*Hesperethusa crenulata*) stem bark. *J Ethnopharm*. 2010; 132(2): 466-472.
- [46] Pratheeba T, Vivekanandhan P, Faezac NAK, Natarajan D. Chemical constituents and larvicidal efficacy of *Naringi crenulata* (Rutaceae) plant extracts and bioassay guided fractions against *Culex quinquefasciatus* mosquito (Diptera: Culicidae). *Biocatalysis and Agricultural Biotechnology*. 2019; 19:101137.
- [47] Prajoubklang A, Sirithunyalug B, Charoenchai P, Suvannakad R, Sriabolmas N, Piyamongkol S, Kongsaeree P, Kittakoop P. Bioactive deoxypreussomerins and dimeric naphthoquinones from *Diospyros ehretioides* Fruits: deoxypreussomerins may not be plant metabolites but may be from fungal epiphytes or endophytes. *Chem Biodivers*. 2005; 2:1358-1367.
- [48] Ichino C, Kiyohara H, Soonthornchareonnon N, Chuakul W, Ishiyama A, Sekiguchi H, Namatame M, Otoguro K, Omura, S, Yamada H. Antimalarial activity of biflavonoids from *Ochna integerrima*. *Planta Med*. 2006; 72(7): 611-614.
- [49] Reutrakul V, Ningnuek N, Pohmakot M, Yoosook C, Napaswad C, Kasisit J, Santisuk T, Tuchinda P. Anti HIV-1 flavonoid glycosides from *Ochna integerrima*. *Planta Med*. 2007; 73(7): 683-688.