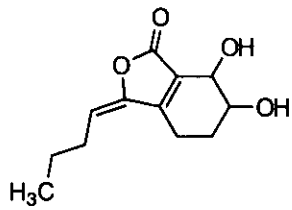
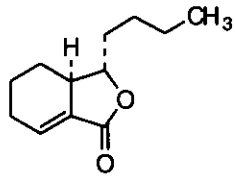
Kobayashi, M. et al., Chem. Pharm. Bull., 1985, 32, 3770; 1987, 35, 4789, (分離, Senkyunolide L)
Naito, T. et al., Phytochemistry, 1992, 31, 639, (分離, 絶対構造)

§ Ligustilide; 6,7-Dihydro, 6*S*,7*R*-dihydroxy
[化学名・別名]Senkyunolide H
[CAS No.]94596-27-7
[化合物分類]ベンゾフラノイド(Isobenzofuran)
[構造式]
[分子式]$C_{12}H_{16}O_4$
[分子量]224.256
[正確な分子量]224.10486
[基原]*Cnidium officinale*, *Ligusticum wallichii*



----------文献----------
Stahl, E. et al., Naturwissenschaften, 1967, 54, 118, (分離)
Mitsuhashi, H., CA, 1969, 71, 88456, (分離)
Nikonov, G.K. et al., Khim. Prir. Soedin., 1971, 7, 387; Chem. Nat. Compd. (Engl. Transl.), 373, (分離)
Yamagishi, T. et al., CA, 1975, 83, 84751; 1976, 84, 132662, (分離)
Yamagishi, T. et al., Yakugaku Zasshi, 1977, 97, 237, (分離)
Kobayashi, M. et al., Chem. Pharm. Bull., 1985, 32, 3770; 1987, 35, 4789, (分離, Senkyunolide L)
Naito, T. et al., Phytochemistry, 1992, 31, 639, (分離, 絶対構造)

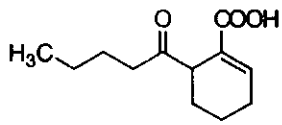
§ Neocnidilide
[化学名・別名]3-Butyl-3*a*,4,5,6-tetrahydro-1(3*H*)-isobenzofuranone(CAS 名). Sedanolide
[CAS No.]4567-33-3
[化合物分類]ベンゾフラノイド(Isobenzofuran)
[構造式]
[分子式]$C_{12}H_{18}O_2$
[分子量]194.273
[正確な分子量]194.13068
[基原]*Cnidium officinale* の根とセロリオイル
[性状]結晶(hexane)
[融点]Mp 34.5-35 ℃ (24-27 ℃)
[沸点]Bp_4 147-148 ℃. $Bp_{0.4}$ 112 ℃
[比旋光度]:$[\alpha]_D$ -74.7 ($CHCl_3$)



Absolute configuration

----------文献----------
Mitsuhashi, H. et al., Tetrahedron, 1964, 20, 1971, (構造決定)
Nagai, U. et al., Tetrahedron, 1965, 21, Cocker, W. et al., J.C.S.(C), 1966, 1152, (合成法)
Yamagishi, T. et al., Yakugaku Zasshi, 1977, 97, 237, (分離)

§ Sedanonic acid
[化学名・別名]6-(1-Oxopentyl)-1-cyclohexene-1-carboxylic acid(CAS 名)
[CAS No.]6697-07-0
[関連 CAS No.]62006-38-6
[化合物分類]脂肪族化合物(Monocarbocyclic carboxylic acid and lactone)
[構造式]
[分子式]$C_{12}H_{18}O_3$
[分子量]210.272
[正確な分子量]210.125595
[基原]次の植物から分離: 加水分解後のセロリオイル(*Apium graveolen*), *Cnidium officinale* の根
[性状]結晶(C_6H_6)
[融点]Mp 113 ℃



----------文献----------
Ciamician, G. et al., Ber., 1897, 30, 492; 501; 1419, (分離, 構造決定)
Barton, D.H.R. et al., J.C.S., 1963, 1916, (分離)
Bjeldanes, L.F. et al., J.O.C., 1977, 42, 2333, (IR, H-NMR, Mas)

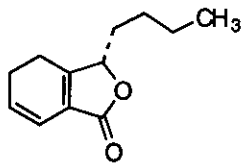
§ Senkyunolide A

[化学名・別名]3-Butyl-4,5-dihydro-1(3*H*)-isobenzofuranone. Sedanenolide. Senkyunolide. 3-Butyl-4,5-dihydrophthalide

[CAS No.]63038-10-8

[化合物分類]ベンゾフラノイド(Isobenzofuran)

[構造式]



[分子式]$C_{12}H_{16}O_2$

[分子量]192.257

[正確な分子量]192.11503

[基原]*Cnidium officinale* の乾燥根茎, the crude drug senkyu

----------文献----------

Bjeldanes, L.F. et al., J.O.C., 1977, 42, 2333,(分離. IR, UV, Mas)

Yamagishi, T. et al., Yakugaku Zasshi, 1977, 97, 237; CA, 87, 44123t,(分離)

Kobayaski, M. et al., Chem. Pharm. Bull., 1984, 32, 3770

Naito, T. et al., Phytochemistry, 1992, 31, 639,(分離, H-NMR, C13-NMR)

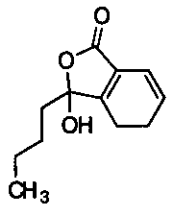
§ Senkyunolide A; 3-Hydroxy

[化学名・別名]Senkyunolide G. 3-Butyl-4,5-dihydro-3-hydroxy-1(3*H*)-isobenzofuranone

[CAS No.]94530-85-5

[化合物分類]ベンゾフラノイド(Isobenzofuran)

[構造式]



[分子式]$C_{12}H_{16}O_3$

[分子量]208.257

[正確な分子量]208.109945

[基原]*Cnidium officinale*

----------文献----------

Bjeldanes, L.F. et al., J.O.C., 1977, 42, 2333,(分離. IR, UV, Mas)

Yamagishi, T. et al., Yakugaku Zasshi, 1977, 97, 237; CA, 87, 44123t,(分離)

Kobayaski, M. et al., Chem. Pharm. Bull., 1984, 32, 3770

Naito, T. et al., Phytochemistry, 1992, 31, 639,(分離, H-NMR, C13-NMR)

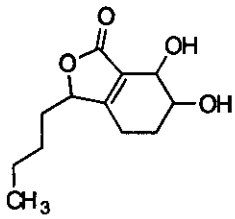
§ Senkyunolide A; 6,7-Dihydro, 6 α,7 β-dihydroxy

[化学名・別名]Senkyunolide J. 3-Butyl-4,5,6,7-tetrahydro-6,7-dihydroxy-1(3*H*)-isobenzofuranone

[CAS No.]94530-86-6

[化合物分類]ベンゾフラノイド(Isobenzofuran)

[構造式]



[分子式]$C_{12}H_{18}O_4$

[分子量]226.272

[正確な分子量]226.12051

[基原]*Cnidium officinale, Ligusticum chuangxiong*

[性状]オイル

[比旋光度]:[α]$_D$ -11 ($CHCl_3$). [α]$_D$ +9.8 (c, 1.04 in $CHCl_3$)

----------文献----------

Bjeldanes, L.F. et al., J.O.C., 1977, 42, 2333,(分離. IR, UV, Mas)

Yamagishi, T. et al., Yakugaku Zasshi, 1977, 97, 237; CA, 87, 44123t,(分離)

Naito, T. et al., Phytochemistry, 1992, 31, 639,(分離, H-NMR, C13-NMR)

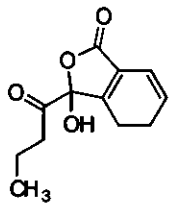
§ Senkyunolide A; 3-Hydroxy, 8-oxo

[化学名・別名]Senkyunolide D. 4,5-Dihydro-3-hydroxy-3-(1-oxobutyl)-1(3*H*)-isobenzofuranone

[CAS No.]94530-82-2

[化合物分類]ベンゾフラノイド(Isobenzofuran)

[構造式]



[分子式]$C_{12}H_{14}O_4$

[分子量]222.24
[正確な分子量]222.08921
[基原]*Cnidium officinale*

----------文献----------

Bjeldanes, L.F. et al., J.O.C., 1977, 42, 2333,（分離. IR, UV, Mas）
Yamagishi, T. et al., Yakugaku Zasshi, 1977, 97, 237; CA, 87, 44123t,（分離）
Kobayaski, M. et al., Chem. Pharm. Bull., 1984, 32, 3770
Naito, T. et al., Phytochemistry, 1992, 31, 639,（分離, H-NMR, C13-NMR）

*********センタウリア（Centaury）*********

§§リンドウ科センタウリア(*Centaurium umbellatum* Gilibert)の全草または花。
該当物質なし

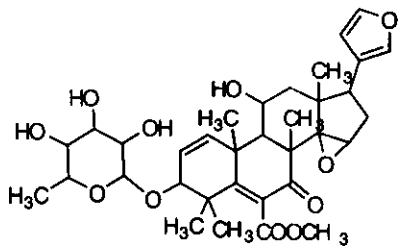
§§キク科ヤグルマギク(*Centaurium cyanus* Linne)の全草または花。
該当物質なし

§§キク科(*Centaurium centaurium* Linne)の全草または花。
該当物質なし

*********センダン（Sendan）*********

§§センダン科センダン(*Melia azedarach* L.)の果実または樹皮。

§ 6-Acetoxy-14,15-epoxy-3,11-dihydroxymeliaca-1,5-dien-7-one;（3 β,11 α,14 β,15 β）-form, 3-*O*-L-Rhamnopyranoside
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]

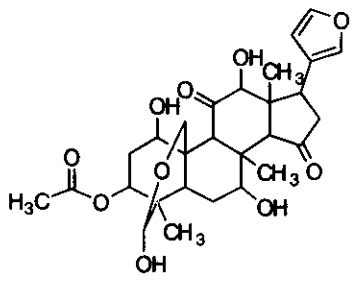


[分子式]$C_{34}H_{44}O_{11}$
[分子量]628.715
[正確な分子量]628.288365
[基原]*Melia azedarach*
[性状]結晶(MeOH/$CHCl_3$)
[融点]Mp 320-324℃で分解
[比旋光度]:[α]$_D$ -70（$CHCl_3$）
[溶解性]BERDY SOL: メタノール, エタノール, クロロホルムに可溶; 水に難溶
[UV]:[neutral] λ $_{max}$ 217（ε 10000）; 239（ε 8000）(EtOH)

----------文献----------

Srivastava, S.D., J. Nat. Prod., 1986, 49, 56

§ Amoorastatone; 12 α-Hydroxy
[化学名・別名]12-Hydroxyamoorastatone
[CAS No.]152013-84-8
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]

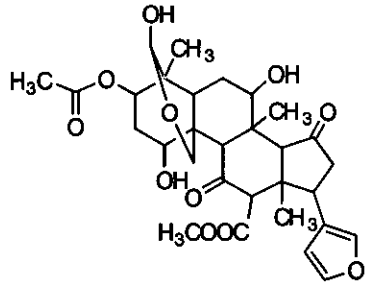


[分子式]$C_{28}H_{36}O_{10}$
[分子量]532.586
[正確な分子量]532.23085
[基原]*Melia azedarach* var. *japonica*
[性状]無定型の粉末

----------文献----------

Ahn, J.-W. et al., Phytochemistry, 1994, 36, 1493, (12-Hydroxyamoorastatone)

§ Amoorastatone; 12 α-Acetoxy

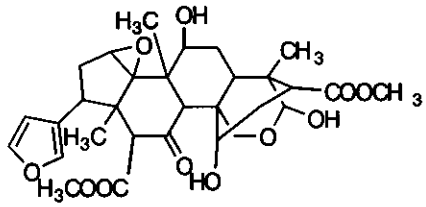


[化学名・別名]Isochuanliansu
[CAS No.]97871-44-8
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{30}H_{38}O_{11}$
[分子量]574.624
[正確な分子量]574.241415
[基原]*Melia toosendan, Melia azedarach*
[性状]結晶
[融点]Mp 270-273 ℃
[比旋光度]:[α]$_D^{27}$ -20.8 (c, 1.2 in MeOH)

----------文献----------

Xie, J.X. et al., Yaoxue Xuebao, 1985, 20, 188; CA, 103, 92693z, (Isochuanliansu)

§ Amoorstatin; 12 α-Acetoxy

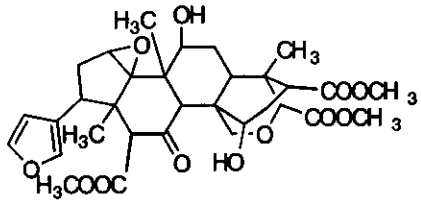


[化学名・別名]Toosendanin. Chuanliansu. 12 α-Acetoxyamoorastatin
[CAS No.]58812-37-6
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{30}H_{38}O_{11}$
[分子量]574.624
[正確な分子量]574.241415
[基原]*Melia azedarach, Melia toosendan*
[用途]Antihelmintic, 茎葉を食する虫の予防剤
[性状]無定型の粉末
[比旋光度]:[α]$_D$ - 31
[その他のデータ]C-28 の異性体の混合物からなる

----------文献----------

Guo, F. et al., Jiegou Huaxue, 1984, 3, 91; CA, 103, 51201, (結晶構造, Toosendanin)
Ahn, J.-W. et al., Phytochemistry, 1994, 36, 1493, (Toosendanin, 分離, H-NMR, C13-NMR)I

§ Azadirachtanin; 14 β,15 β-Epoxide



[化学名・別名]Sendanin
[CAS No.]62078-28-8
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{32}H_{40}O_{12}$
[分子量]616.661
[正確な分子量]616.25198
[基原]*Melia azedarach, Trichilia roka*
[用途]昆虫成長抑制因子
[性状]結晶
[融点]Mp 254-255 ℃
[比旋光度]:[α]$_D^{16}$ +4.3 (c, 0.12 in $CHCl_3$)
[UV]:[neutral] λ $_{max}$ 210 (ε 8790) (MeOH)

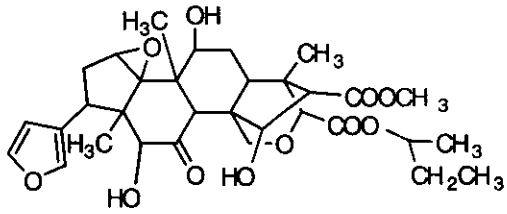
----------文献----------

Ochi, M. et al., Tet. Lett., 1976, 2877, (Sendanin)
Kubo, I. et al., Experientia, 1982, 38, 639, (Sendanin)

§ Azadirachtanin; 14 β,15 β-Epoxide, 12,29-di-de-Ac, 29-(2-methylbutanoyl)

[化学名・別名]Azedarachin A
[CAS No.]157622-62-3

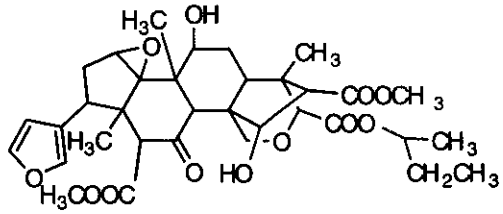
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{33}H_{44}O_{11}$
[分子量]616.704
[正確な分子量]616.288365
[基原]*Melia azedarach*
[性状]無定型の粉末
[比旋光度]:[α]$_D^{22}$ -10 (c, 0.05 in MeOH)



----------文献----------

Podder, G. et al., Heterocycles, 1985, 23, 2321, (Azadirachtanin)
Huang, R.C. et al., Bull. Chem. Soc. Jpn., 1994, 67, 2468, (Azedarachin)

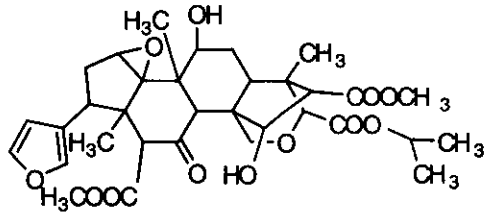
§ Azadirachtanin; 14 β,15 β-Epoxide, 29-de-Ac, 29-(2-methylbutanoyl)
[化学名・別名]12-*O*-Acetylazedarachin A. 29-Isobutylsendanin (incorr.)
[CAS No.]157750-73-7
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{35}H_{46}O_{12}$
[分子量]658.741
[正確な分子量]658.29893
[基原]*Melia azedarach*
[性状]無定型の粉末
[比旋光度]:[α]$_D^{22}$ +7.5 (c, 0.08 in MeOH)



----------文献----------

Podder, G. et al., Heterocycles, 1985, 23, 2321, (Azadirachtanin)
Huang, R.C. et al., Bull. Chem. Soc. Jpn., 1994, 67, 2468, (Azedarachin)
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171, (誘導体)

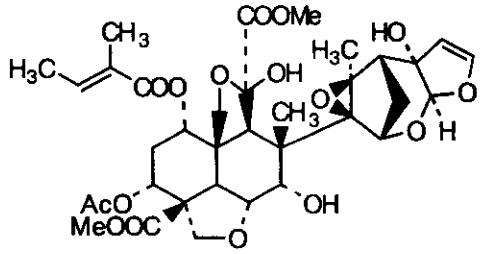
§ Azadirachtanin; 14 β,15 β-Epoxide, 29-de-Ac, 29-(2-methylpropanoyl)
[化学名・別名]12-*O*-Acetylazedarachin B
[CAS No.]163634-39-7
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{34}H_{44}O_{12}$
[分子量]644.714
[正確な分子量]644.28328
[基原]*Melia azedarach*
[性状]無定型の粉末
[比旋光度]:[α]$_D^{22}$ -55 (c, 0.13 in MeOH)



----------文献----------

Podder, G. et al., Heterocycles, 1985, 23, 2321, (Azadirachtanin)
Huang, R.C. et al., Bull. Chem. Soc. Jpn., 1994, 67, 2468, (Azedarachin)
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171, (誘導体)

§ Azadirachtin(CAS 名)
[化学名・別名]Azadirachtin A
[CAS No.]11141-17-6
[化合物分類]薬物: 殺虫剤(Insecticide), テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]
[分子式]$C_{35}H_{44}O_{16}$
[分子量]720.723
[正確な分子量]720.26294
[基原]*Melia azedarach* の種子, the Indian neem tree *Azadirachta indica*
[性状]微細結晶の粉末



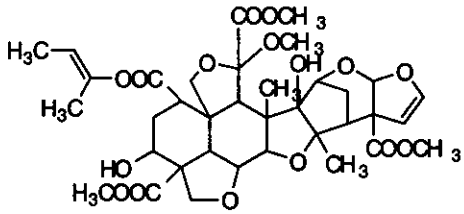
[融点]Mp 155-158 ℃
[比旋光度]:[α]$_D$ -65.4 (c, 0.2 in $CHCl_3$)
[UV]:[neutral] λ $_{max}$ 221 (ε 7300) (MeOH)
[その他のデータ]溶液中で不安定.

----------文献----------

Klenk, A. et al., Chem. Comm., 1986, 523, (分離)
Schroeder, D.R. et al., J. Nat. Prod., 1987, 50, 241, (分離)
Ley, S.V. et al., Nat. Prod. Rep., 1993, 10, 109, (レビュー)
Rojatkar, S.R. et al., Indian J. Chem., Sect. B, 1995, 34, 1016, (3 α-Acetoxy-1 α-hydroxyazadirachtol)
Kumar, C.S.S.R et al., Phytochemistry, 1996, 43, 451, (11-Hydroxyazadirachtin B)
Kraus, W. et al., J. Indian Chem. Soc., 1997, 74, 870, (1-Tigloyl-3-acetylazadirachtol)
Jarvis, A.P. et al., Nat. Prod. Lett., 1997, 10, 95, (分離)
Govindachari, T.R. et al., Phytochemistry, 1997, 45, 397, (13,14-Desepoxyazadirachtin A)
Govindachari, T.R. et al., J. Indian Chem. Soc., 1998, 75, 655, (レビュー)

§ Azadirachtinin; 11-Me ether, 1-tigloyl, 20-Ac

[化学名・別名]20-*O*-Acetyl-11-*O*-methyl-1-*O*-tigloylmeliacarpinin.
20-Acetoxy-11-methoxy-1-tigloylmeliacarpinin (incorr.)
[化合物分類]テルペノイド (Ring cleaved tetranortriterpenoid)
[構造式]



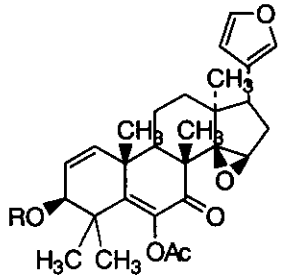
[分子式]$C_{36}H_{46}O_{17}$
[分子量]750.749
[正確な分子量]750.273505
[基原]次の植物から分離: *Melia azedarach*

----------文献----------

Kraus, W. et al., Tetrahedron, 1987, 43, 2817-2830
Kraus, G., The Neem Tree, (ed. Schmutterer, H.), VCH, 1995, 68, (活性)
Kumar, C.S.S.R. et al., Phytochemistry, 1996, 43, 451-455, (分離, H-NMR, C13-NMR)

§ Azecin 3

[CAS No.]182565-80-6
[化合物分類]テルペノイド (Intact tetranortriterpenoid)
[構造式]



R = α-L-Rha-(1→4)-β-D-Glc-(1→6)-b-D-Glc

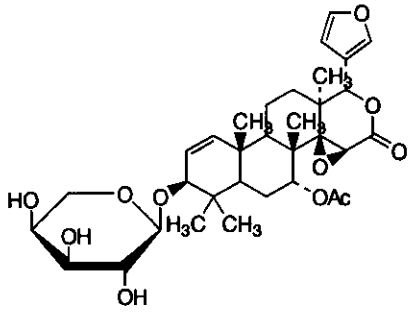
[分子式]$C_{46}H_{64}O_{20}$
[分子量]937
[正確な分子量]936.3991
[基原]*Melia azedarach*
[性状]結晶
[融点]Mp 222-225 ℃
[UV]:[neutral] λ $_{max}$ 210 (ε 10000); 239 (ε 8000) (EtOH)

----------文献----------

Srivastava, S.D. et al., J. Indian Chem. Soc., 1996, 73, 467, (分離, H-NMR, C13-NMR)

§ Azecin 4

[CAS No.]182565-81-7
[化合物分類]テルペノイド (Ring cleaved tetranortriterpenoid)
[構造式]



[分子式]$C_{33}H_{44}O_{11}$
[分子量]616.704
[正確な分子量]616.288365
[基原]*Melia azedarach*
[性状]結晶
[融点]Mp 160-163 ℃
[UV]:[neutral] λ $_{max}$ 210 (ε 9400); 285 (ε 10000) (EtOH)

----------文献----------

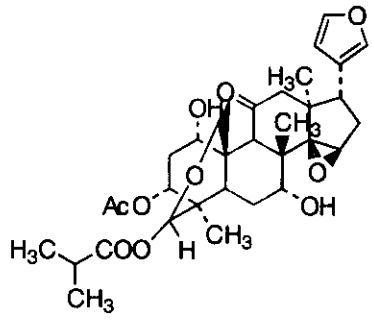
Srivastava, S.D. et al., J. Indian Chem. Soc., 1996, 73, 467, (分離, H-NMR, C13-NMR)

§ Azedarachin C

[CAS No.] 157653-66-2

[化合物分類] テルペノイド (Intact tetranortriterpenoid)

[構造式]



[分子式] $C_{32}H_{42}O_{10}$

[分子量] 586.678

[正確な分子量] 586.2778

[基原] *Melia azedarach*

----------文献----------

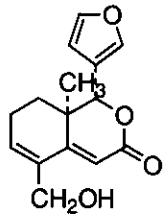
Huang, R.C. et al., Phytochemistry, 1995, 38, 593, (分離, H-NMR, C13-NMR)

§ Azedaralide

[CAS No.] 220210-98-0

[化合物分類] テルペノイド (Ring cleaved tetranortriterpenoid)

[構造式]



[分子式] $C_{15}H_{16}O_4$

[分子量] 260.289

[正確な分子量] 260.10486

[基原] *Melia azedarach*

[性状] 青白い黄色の粉末

[比旋光度]: $[\alpha]_D^{25}$ +165 (c, 0.15 in MeOH)

[UV]: [neutral] λ_{max} 204 (ε 7900); 270 (ε 9400) (MeOH)

----------文献----------

Nakatani, M. et al., Phytochemistry, 1998, 49, 1773, (分離, H-NMR, C13-NMR)

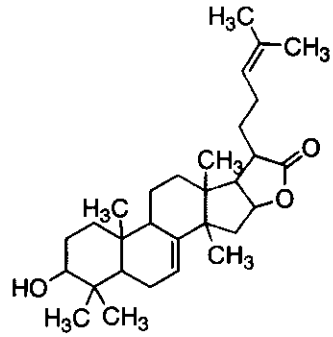
§ 3,16-Dihydroxyeupha-7,24-dien-21-oic acid; (3 α,16 β)-form, (21 → 16)-Lactone

[化学名・別名] 3-Hydroxyeupha-7,24-dien-21,16-olide. Kulolactone

[CAS No.] 22611-40-1

[化合物分類] テルペノイド (Tirucallane/euphane triterpenoid)

[構造式]



[分子式] $C_{30}H_{46}O_3$

[分子量] 454.692

[正確な分子量] 454.344695

[基原] *Melia azedarach* の樹皮

[性状] 無定型

[比旋光度]: $[\alpha]_D^{24}$ -42 (c, 1.9 in $CHCl_3$)

----------文献----------

Chiang, C.-K. et al., Tetrahedron, 1973, 29, 1911

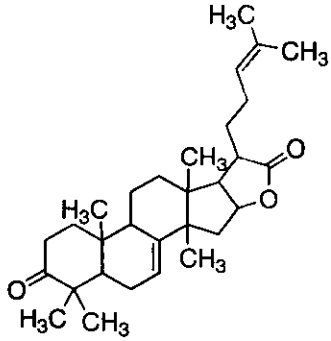
§ 3,16-Dihydroxyeupha-7,24-dien-21-oic acid; (3 α,16 β)-form, 3-Ketone, (21 → 16)-lactone

[化学名・別名] 3-Oxoeupha-7,24-dien-21,16-olide. Kulactone

[CAS No.] 22611-36-5

[化合物分類] テルペノイド (Tirucallane/euphane triterpenoid)

[構造式]



[分子式] $C_{30}H_{44}O_3$

[分子量] 452.676

[正確な分子量] 452.329045

[基原] *Melia azedarach*

[性状] 結晶 (MeOH)

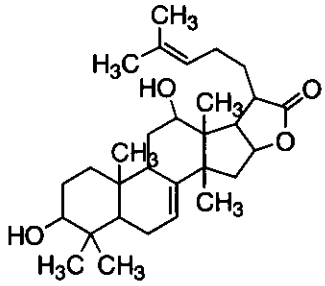
[融点] Mp 163-164.5 ℃

[比旋光度]: $[\alpha]_D^{24}$ -60 (c, 1.0 in $CHCl_3$)

----------文献----------

Chiang, C.-K. et al., Tetrahedron, 1973, 29, 1911

§ 3,12-Dihydroxy-7,24-euphadien-21,16-olide; (3 β,12 β,16 β)-form



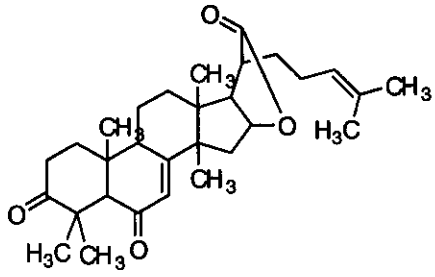
[化学名・別名]Cinamodiol
[CAS No.]173792-76-2
[化合物分類]テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]

[基原]*Melia azedarach*

----------文献----------

Kelecom, A. et al., J. Braz. Chem. Soc., 1996, 7, 39; CA, 124, 170608q, (分離, H-NMR, C13-NMR)

§ 6,16-Dihydroxy-3-oxoeupha-7,24-dien-21-oic acid; (6 β,16 β)-form, 6-Ketone, (21 → 6)-lacton

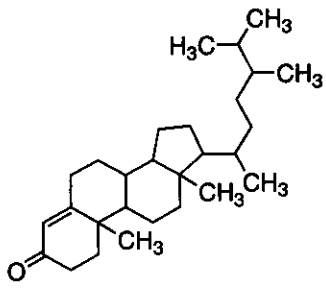


[化学名・別名]3,6-Dioxoeupha-7,24-dien-21,16-olide. Sendanolactone
[CAS No.]64929-59-5
[化合物分類]テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]
[分子式]$C_{30}H_{42}O_4$
[分子量]466.659
[正確な分子量]466.30831
[基原]*Melia azedarach*
[性状]結晶(MeOH)
[融点]Mp 208.5-209 ℃
[比旋光度]:$[\alpha]_D^{14.5}$ -s30 (c, 0.1 in EtOH)

----------文献----------

Ochi, M. et al., Bull. Chem. Soc. Jpn., 1977, 50, 2499, (Sendanolactone)
Cantrell, C.L. et al., J. Nat. Prod., 1999, 62, 546-548, (Hydroxykulactone)

§ Ergost-4-en-3-one; (24*R*)-form



[化学名・別名]4-Campesten-3-one
[CAS No.]22260-46-4
[化合物分類]ステロイド(Ergostane steroids;excluding withanolide and brassinolide). (C28)
[構造式]
[基原]次の植物から分離: *Cannabis sativa, Catharanthus pusillus, Melia azedarach, Metasequoia glyptostroboides, Phoenix dactylifera, Pinus monticola*
[性状]結晶(Et_2O/EtOH)
[融点]Mp 86-87 ℃
[比旋光度]:$[\alpha]_D^{25}$ +77.5 ($CHCl_3$)

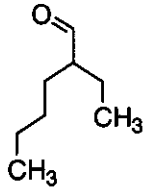
----------文献----------

Hayashi, S. et al., Chem. Pharm. Bull., 1969, 17, 163, (分離)
Itokawa, H. et al., Chem. Pharm. Bull., 1973, 21, 3186, (分離)
Slatkin, D.J. et al., Phytochemistry, 1975, 14, 580, (分離)
Weber, N. et al., Phytochemistry, 1977, 16, 1849, (分離)
Schulte, K.E. et al., Planta Med., 1979, 35, 76, (分離)
Subramanian, P.S. et al., Indian J. Chem., Sect. B, 1980, 19, 331, (分離)
Conner, A.H. et al., Phytochemistry, 1980, 19, 1121, (分離)
Kokke, W.C.M.C. et al., Steroids, 1982, 40, 307, (分離)
Fernandez, M.I. et al., Phytochemistry, 1983, 22, 2087, (分離)

§ 2-Ethylhexanal; (±)-form

[CAS No.]58712-00-8
[化合物分類]脂肪族化合物(Branched aliphatic aldehyde and ketone)

[構造式]

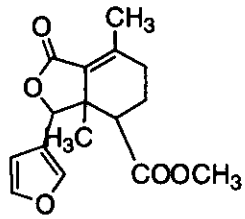


[基原]次の植物から分離: *Melia azedarach* (the Sendan tree)
[用途]抗菌性をもつ
[性状]液体
[沸点]Bp 160 ℃

----------文献----------

Ladhabhoy, M.E., Chem. Process. Eng. (Bombay), 1969, 3, 19, (レビュー)
Wang, C.-P. et al., CA, 1978, 89, 168946, (分離)
Ford, R.A. et al., Food Chem. Toxicol., 1988, 26, 319, (レビュー, 毒性)
Lewis, R.J., Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold, 1992, BRI000

§ Fraxinellone; 12 α-Acetoxy
[化学名・別名]12 α-Acetoxyfraxinellone
[CAS No.]220210-99-1
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

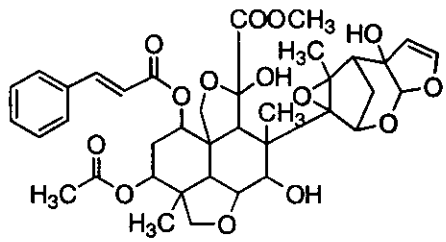


[分子式]$C_{16}H_{18}O_5$
[分子量]290.315
[正確な分子量]290.115425
[基原]*Melia azedarach*
[性状]無定型の粉末
[融点]Mp 102-104 ℃
[UV]:[neutral] λ max 207 (ε 3300) (MeOH)

----------文献----------

Nakatani, M. et al., Phytochemistry, 1998, 49, 1773, (12 α-Acetoxyfraxinellone)
Lewis, R.J., Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold, 1992, FOM200

§ 11-Hydroxymeliacarpin; 1-Cinnamoyl, 3-Ac
[化学名・別名]3-Acetyl-1-cinnamoyl-11-hydroxymeliacarpin
[CAS No.]227451-22-1
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

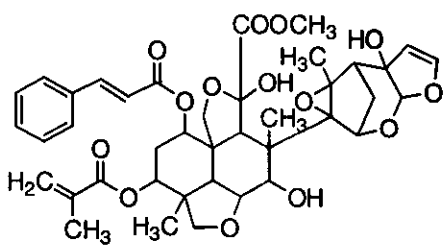


[分子式]$C_{38}H_{44}O_{14}$
[分子量]724.757
[正確な分子量]724.27311
[基原]*Melia azedarach*
[性状]無定型の塊
[比旋光度]:[α]$_D^{20}$ +21 (c, 1 in $CHCl_3$)
[UV]:[neutral] λ max 216 (log ε 3.89); 279 (log ε 3.87) (MeOH)

----------文献----------

Bohnenstengel, F.I. et al., Phytochemistry, 1999, 50, 977, (分離, H-NMR, C13-NMR)

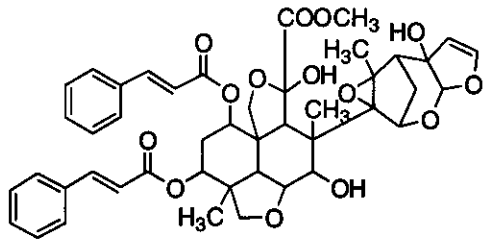
§ 11-Hydroxymeliacarpin; 1-Cinnamoyl, 3-(2-methylpropenoyl)
[化学名・別名]1-Cinnamoyl-3-methacrylyl-11-hydroxymeliacarpin
[CAS No.]227451-21-0
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



[分子式]$C_{40}H_{46}O_{14}$
[分子量]750.795
[正確な分子量]750.28876
[基原]*Melia azedarach*

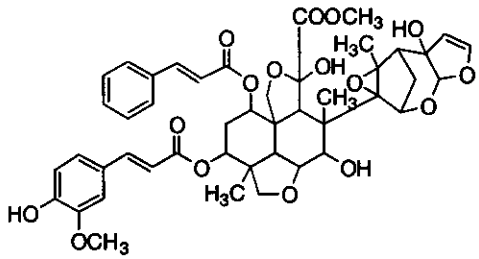
[性状]無定型の塊
[比旋光度]:[α]$_D^{20}$ +17.6 (c, 1 in $CHCl_3$)
[UV]:[neutral] λ $_{max}$ 215 (log ε 4.21); 279 (log ε 4.13) (MeOH)
----------文献----------
Bohnenstengel, F.I. et al., Phytochemistry, 1999, 50, 977, (分離, H-NMR, C13-NMR)

§ 11-Hydroxymeliacarpin; 1,3-Dicinnamoyl
[化学名・別名]1,3-Dicinnamoyl-11-hydroxymeliacarpin
[CAS No.]227451-20-9
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



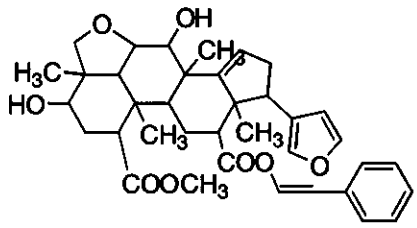
[分子式]$C_{45}H_{48}O_{14}$
[分子量]812.866
[正確な分子量]812.30441
[基原]*Melia azedarach*
[性状]無定型の塊
[比旋光度]:[α]$_D^{20}$ +36.8 (c, 1 in $CHCl_3$)
[UV]:[neutral] λ $_{max}$ 217 (log ε 4.44); 273 (log ε 4.54) (MeOH)
----------文献----------
Bohnenstengel, F.I. et al., Phytochemistry, 1999, 50, 977, (分離, H-NMR, C13-NMR)

§ 11-Hydroxymeliacarpin; 1-Cinnamoyl, 3-(4-hydroxy-3-methoxycinnamoyl)
[化学名・別名]1-Cinnamoyl-3-feruloyl-11-hydroxymeliacarpin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



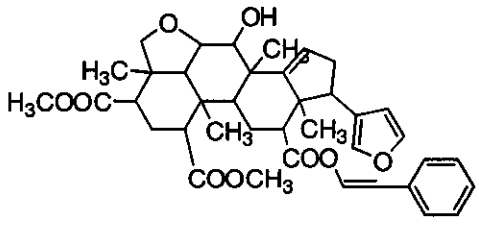
[分子式]$C_{46}H_{50}O_{16}$
[分子量]858.891
[正確な分子量]858.30989
[基原]*Melia azedarach*
----------文献----------
Bohnenstengel, F.I. et al., Phytochemistry, 1999, 50, 977, (分離, H-NMR, C13-NMR)

§ 12-Hydroxyvilasinin; 12-Cinnamoyl, 1-Ac
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]



[分子式]$C_{37}H_{44}O_8$
[分子量]616.75
[正確な分子量]616.30362
[基原]次の植物から分離: *Melia azedarach* の果実
----------文献----------
Kraus, W. et al., Annalen, 1981, 181, (分離)
Purushothaman, K.K. et al., Phytochemistry, 1984, 23, 135; (分離, 誘導体)
Rajab, M.S. et al., J. Nat. Prod., 1988, 51, 840, (誘導体)
Kumar, C.S.S.R. et al., Phytochemistry, 1996, 43, 451, (1,3-Diacetyl-7-tigloyl-12-hydroxyvilasinin)

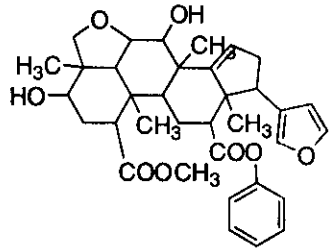
§ 12-Hydroxyvilasinin; 12-Cinnamoyl, 1,3-di-Ac
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]



[分子式]$C_{39}H_{46}O_9$
[分子量]658.787
[正確な分子量]658.314185
[基原]次の植物から分離: *Melia azedarach* の果実
----------文献----------

Kraus, W. et al., Annalen, 1981, 181, (分離)
Purushothaman, K.K. et al., Phytochemistry, 1984, 23, 135, (分離, 誘導体)
Kraus, W., Stud. Org. Chem. (Amsterdam), 1986, 26, 237, (誘導体)
Rajab, M.S. et al., J. Nat. Prod., 1988, 51, 840, (誘導体)

§ 12-Hydroxyvilasinin; 12-Benzoyl, 1-Ac

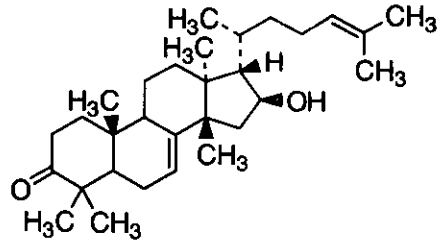


[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{35}H_{42}O_8$
[分子量]590.712
[正確な分子量]590.28797
[基原]次の植物から分離: *Melia azedarach* の果実

----------文献----------

Kraus, W. et al., Annalen, 1981, 181, (分離)
Purushothaman, K.K. et al., Phytochemistry, 1984, 23, 135, (分離, 誘導体)
Kraus, W., Stud. Org. Chem. (Amsterdam), 1986, 26, 237, (誘導体)
Rajab, M.S. et al., J. Nat. Prod., 1988, 51, 840, (誘導体)

§ Kulinone

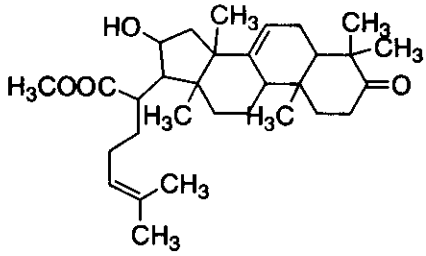


[化学名・別名]16 β-Hydroxyeupha-7,24-dien-3-one
[CAS No.]21688-61-9
[化合物分類]テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]
[分子式]$C_{30}H_{48}O_2$
[分子量]440.708
[正確な分子量]440.36543
[基原]*Melia azedarach* の樹皮
[性状]結晶(petrol)
[融点]Mp 137-138 ℃
[比旋光度]:$[\alpha]_D^{24}$ -20 (c, 1.2 in $CHCl_3$)

----------文献----------

Chiang, C.-K. et al., Tetrahedron, 1973, 29, 1911

§ Kulonic acid; Me ester

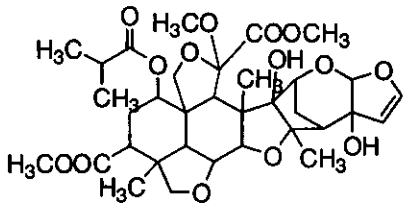


[CAS No.]22611-37-6
[化合物分類]テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]
[分子式]$C_{31}H_{48}O_4$
[分子量]484.718
[正確な分子量]484.35526
[基原]*Melia azedarach*
[性状]結晶(petrol)
[融点]Mp 107.8-108.5 ℃
[比旋光度]:$[\alpha]_D^{24}$ -32 (c, 0.9 in $CHCl_3$)

----------文献----------

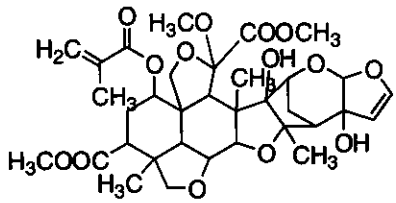
Chiang, C.-K. et al., Tetrahedron, 1973, 29, 1911

§ Meliacarpinin; 11-Methoxy, 1-(2-methylpropanoyl), 3-Ac
[化学名・別名]3-Acetyl-11-methoxy-1-(2-methylpropanoyl) meliacarpinin

[CAS No.]264142-21-4
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

[分子式]$C_{34}H_{46}O_{14}$
[分子量]678.729
[正確な分子量]678.28876
[基原]*Melia azedarach*
[性状]無定型の粉末
[比旋光度]:[α]$_D^{21}$ -169.8 (c, 0.21 in $CHCl_3$)

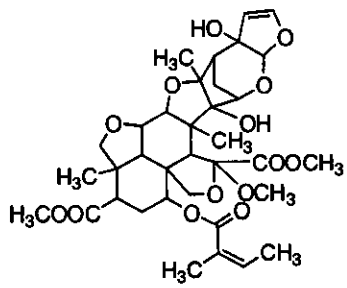
----------文献----------

Nakatani, M. et al., Chem. Lett., 1993, 2125, (分離, H-NMR, C13-NMR)
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171, (分離, H-NMR, C13-NMR)
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731, (分離, H-NMR, C13-NMR)
Takeya, K. et al., Phytochemistry, 1996, 42, 709, (誘導体)
Huang, R.C. et al., Phytochemistry, 1996, 43, 581, (Meliacarpinin E)
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301, (誘導体)
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68, (レビュー)

§ Meliacarpinin; 11-Methoxy, 1-(2-methyl-2-propenoyl), 3-Ac
[化学名・別名]3-Acetyl-1-methacrylyl-11-methoxymeliacarpinin
[CAS No.]264142-19-0
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

[分子式]$C_{34}H_{44}O_{14}$
[分子量]676.713
[正確な分子量]676.27311
[基原]*Melia azedarach*
[性状]無定型の粉末
[比旋光度]:[α]$_D^{21}$ +2.5 (c, 0.19 in $CHCl_3$)

----------文献----------

Nakatani, M. et al., Chem. Lett., 1993, 2125, (分離, H-NMR, C13-NMR)
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171, (分離, H-NMR, C13-NMR)
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731, (分離, H-NMR, C13-NMR)
Takeya, K. et al., Phytochemistry, 1996, 42, 709, (誘導体)
Huang, R.C. et al., Phytochemistry, 1996, 43, 581, (Meliacarpinin E)
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301, (誘導体)
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68, (レビュー)

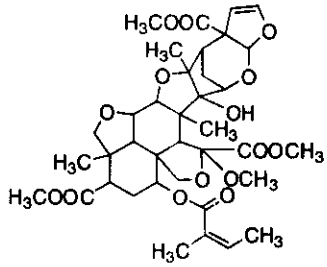
§ Meliacarpinin; 11-Methoxy, 1-tigloyl, 3-Ac
[化学名・別名]Meliacarpinin D. 3-Acetyl-11-methoxy-1-tigloylmeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

[分子式]$C_{35}H_{46}O_{14}$
[分子量]690.74
[正確な分子量]690.28876
[基原]*Melia azedarach*
[性状]結晶(Me_2CO)もしくは無定型の粉末
[融点]Mp 165-167 ℃
[比旋光度]:[α]$_D$ -12.6 (c, 0.5 in $CHCl_3$). [α]$_D$ -8.3 (c, 0.52 in MeOH)

----------文献----------

Nakatani, M. et al., Chem. Lett., 1993, 2125, (分離, H-NMR, C13-NMR)
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171, (分離, H-NMR, C13-NMR)
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731, (分離, H-NMR, C13-NMR)
Takeya, K. et al., Phytochemistry, 1996, 42, 709, (誘導体)
Huang, R.C. et al., Phytochemistry, 1996, 43, 581, (Meliacarpinin E)

Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

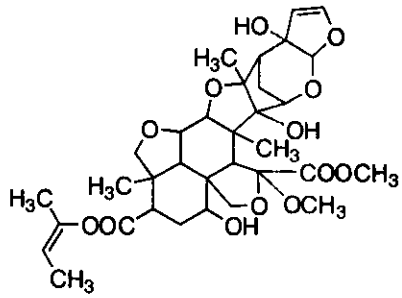
§ Meliacarpinin; 11-Methoxy, 1-tigloyl, 3,20-di-Ac
[化学名・別名]3,20-Diacetyl-11-methoxy-1-tigloylmeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



[分子式]$C_{37}H_{48}O_{15}$
[分子量]732.777
[正確な分子量]732.299325
[基原]*Melia azedarach*
[性状]粉末（$CHCl_3$）
[融点]Mp 150-152 ℃
[比旋光度]:[α]$_D$ -3.6（c, 0.6 in $CHCl_3$）

----------文献----------
Nakatani, M. et al., Chem. Lett., 1993, 2125,（分離, H-NMR, C13-NMR）
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171,（分離, H-NMR, C13-NMR）
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731,（分離, H-NMR, C13-NMR）
Takeya, K. et al., Phytochemistry, 1996, 42, 709,（誘導体）
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

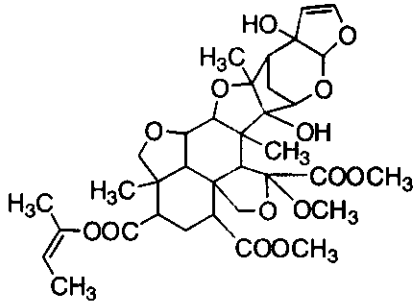
§ Meliacarpinin; 11-Methoxy, 3-tigloyl
[化学名・別名]Meliacarpinin E
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



[分子式]$C_{33}H_{44}O_{13}$
[分子量]648.703
[正確な分子量]648.278195
[基原]*Melia azedarach*
[比旋光度]:[α]$_D^{20}$ -10（c, 0.05 in MeOH）

----------文献----------
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）

§ Meliacarpinin; 11-Methoxy, 3-tigloyl, 1-Ac
[化学名・別名]Meliacarpinin C. 1-Acetyl-11-methoxy-3-tigloylmeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

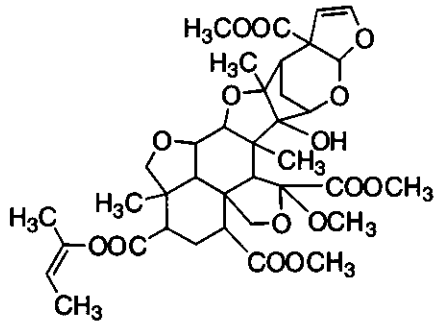


[分子式]$C_{35}H_{46}O_{14}$
[分子量]690.74
[正確な分子量]690.28876
[基原]*Melia azedarach*
[性状]結晶(Me_2CO), もしくは無定型の粉末
[融点]Mp 149-151 ℃
[比旋光度]:[α]$_D$ +5.8（c, 0.2 in $CHCl_3$）. [α]$_D$ +9.1（c, 0.22 in MeOH）

----------文献----------
Nakatani, M. et al., Chem. Lett., 1993, 2125,（分離, H-NMR, C13-NMR）
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171,（分離, H-NMR, C13-NMR）
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731,（分離, H-NMR, C13-NMR）

Takeya, K. et al., Phytochemistry, 1996, 42, 709,（誘導体）
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

§ Meliacarpinin; 11-Methoxy, 3-tigloyl, 1,20-di-Ac
[化学名・別名]1,20-Diacetyl-11-methoxy-3-tigloylmeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

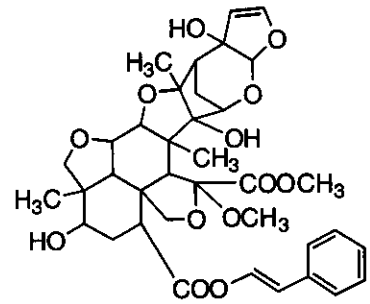


[分子式]$C_{37}H_{48}O_{15}$
[分子量]732.777
[正確な分子量]732.299325
[基原]*Melia azedarach*
[性状]粉末（$CHCl_3$）
[融点]Mp 214-216 ℃
[比旋光度]:[α]$_D$ +7.9 (c, 0.06 in $CHCl_3$)

----------文献----------

Nakatani, M. et al., Chem. Lett., 1993, 2125,（分離, H-NMR, C13-NMR）
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171,（分離, H-NMR, C13-NMR）
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731,（分離, H-NMR, C13-NMR）
Takeya, K. et al., Phytochemistry, 1996, 42, 709,（誘導体）
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

§ Meliacarpinin; 11-Methoxy, 1-cinnamoyl
[化学名・別名]1-Cinnamoyl-11-methoxymeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

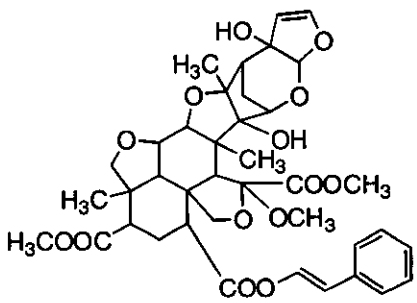


[分子式]$C_{37}H_{44}O_{13}$
[分子量]696.747
[正確な分子量]696.278195
[基原]*Melia azedarach*
[性状]粉末（$CHCl_3$）
[融点]Mp 124-126 ℃
[比旋光度]:[α]$_D$ -2.4 (c, 0.2 in $CHCl_3$)

----------文献----------

Nakatani, M. et al., Chem. Lett., 1993, 2125,（分離, H-NMR, C13-NMR）
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171,（分離, H-NMR, C13-NMR）
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731,（分離, H-NMR, C13-NMR）
Takeya, K. et al., Phytochemistry, 1996, 42, 709,（誘導体）
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

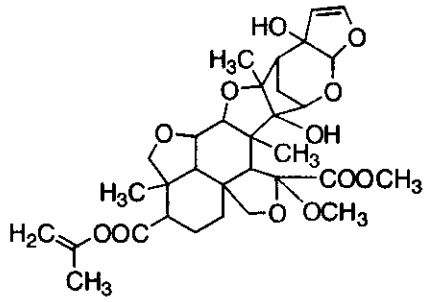
§ Meliacarpinin; 11-Methoxy, 1-cinnamoyl, 3-Ac
[化学名・別名]3-Acetyl-1-cinnamoyl-11-methoxymeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



[分子式]$C_{39}H_{46}O_{14}$
[分子量]738.784
[正確な分子量]738.28876
[基原]*Melia azedarach*

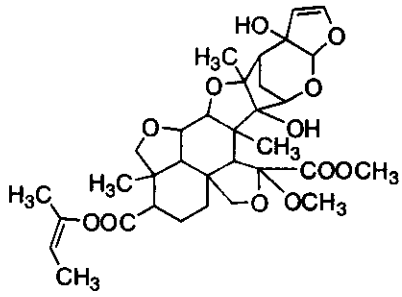
----------文献----------
Nakatani, M. et al., Chem. Lett., 1993, 2125,（分離, H-NMR, C13-NMR）
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171,（分離, H-NMR, C13-NMR）
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731,（分離, H-NMR, C13-NMR）
Takeya, K. et al., Phytochemistry, 1996, 42, 709,（誘導体）
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

§ Meliacarpinin; 11-Methoxy, 1-deoxy, 3-(2-methylpropenoyl)
[化学名・別名]1-Deoxy-3-methacrylyl-11-methoxymeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



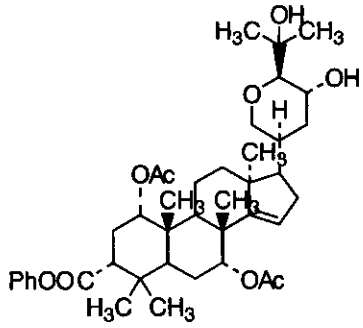
[分子式]$C_{32}H_{42}O_{12}$
[分子量]618.677
[正確な分子量]618.26763
[基原]*Melia azedarach*
[性状]粉末（$CHCl_3$）
[融点]Mp 274-276 ℃
[比旋光度]:[α]$_D$ -16.3（c, 0.2 in $CHCl_3$）
----------文献----------
Nakatani, M. et al., Chem. Lett., 1993, 2125,（分離, H-NMR, C13-NMR）
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171,（分離, H-NMR, C13-NMR）
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731,（分離, H-NMR, C13-NMR）
Takeya, K. et al., Phytochemistry, 1996, 42, 709,（誘導体）
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

§ Meliacarpinin; 11-Methoxy, 1-deoxy, 3-*O*-tigloyl
[化学名・別名]Meliacarpanin B. 1-Deoxy-11-methoxy-3-tigloyloxymeliacarpinin
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]



[分子式]$C_{33}H_{44}O_{12}$
[分子量]632.703
[正確な分子量]632.28328
[基原]*Melia azedarach*
[性状]無定型の粉末
[比旋光度]:[α]$_D^{23}$ -6.7（c, 0.06 in MeOH）
----------文献----------
Nakatani, M. et al., Chem. Lett., 1993, 2125,（分離, H-NMR, C13-NMR）
Itokawa, H. et al., Chem. Pharm. Bull., 1995, 43, 1171,（分離, H-NMR, C13-NMR）
Nakatani, M. et al., Tetrahedron, 1995, 51, 11731,（分離, H-NMR, C13-NMR）
Takeya, K. et al., Phytochemistry, 1996, 42, 709,（誘導体）
Huang, R.C. et al., Phytochemistry, 1996, 43, 581,（Meliacarpinin E）
Fukuyama, Y. et al., Chem. Pharm. Bull., 2000, 48, 301,（誘導体）
Kraus, W. et al., The Neem Tree, H. Schmutterer, Ed., VCH, Weinheim, 1995, 68,（レビュー）

§ Melianin A

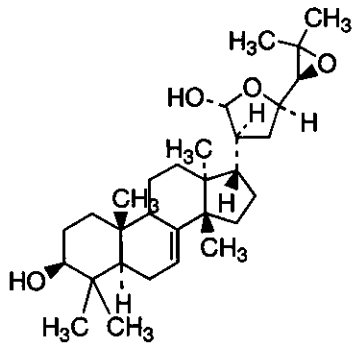


[CAS No.]57589-59-0
[化合物分類]テルペノイド(Apotirucallane triterpenoid)
[構造式]
[分子式]$C_{41}H_{58}O_9$
[分子量]694.904
[正確な分子量]694.408085
[基原]*Melia azedarach*
[性状]結晶(Et_2O/petrol)
[融点]Mp 258-259 ℃

----------文献----------

Okogun, J.I. et al., J.C.S. Perkin 1, 1975, 1352,(Melianin A)

§ Melianol

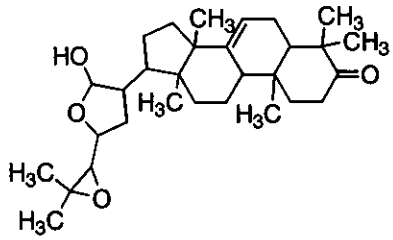


[化学名・別名]21*R*,23*R*:24*S*,25-Diepoxytirucall-7-ene-3 β,21*R*-diol
[CAS No.]16838-01-0
[関連 CAS No.]81177-21-1
[化合物分類] テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]
[分子式]$C_{30}H_{48}O_4$
[分子量]472.707
[正確な分子量]472.35526
[基原]*Melia azedarach*
[性状]結晶(Me_2CO/pentane)
[融点]Mp 194-195 ℃
[比旋光度]:[α]$_D$ -38 (c, 1 in $CHCl_3$)

----------文献----------

Bevan, C.W.L. et al., J.C.S.(C), 1967, 820,(分離)
Lavie, D. et al., J.C.S.(C), 1967, 1347,(分離)
Lyons, C.W. et al., Chem. Comm., 1975, 517,(構造決定)
Nakanishi, T. et al., Chem. Pharm. Bull., 1986, 34, 100,(分離)

§ Melianol; 3-Ketone



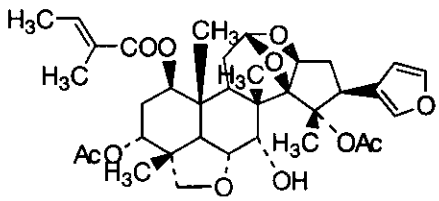
[化学名・別名]Melianone. 24,25-Epoxyflindissone. Cneorin NP$_{37}$
[CAS No.]6553-27-1
[化合物分類] テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]
[分子式]$C_{30}H_{46}O_4$
[分子量]470.691
[正確な分子量]470.33961
[基原]*Melia azedarach, Neochamaelea pulverata, Eurycoma longifolia*
[性状]結晶($CHCl_3$/pentane)
[融点]Mp 232-233 ℃
[比旋光度]:[α]$_D$ -62 (c, 1 in $CHCl_3$)
[UV]:[neutral] λ $_{max}$ (MeOH)

----------文献----------

Mondon, A. et al., Tet. Lett., 1981, 4467,(Cneorin NP$_{37}$)
Itokawa, H. et al., Chem. Pharm. Bull., 1992, 40, 1053,(Melianone, C13-NMR)

§ Melianolide

[CAS No.]174416-97-8
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

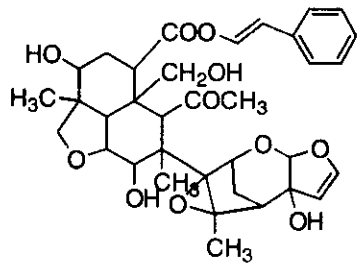


[分子式]$C_{35}H_{46}O_{11}$
[分子量]642.742
[正確な分子量]642.304015
[基原]*Melia azedarach*
[性状]無定型の粉末
[比旋光度]:[α]$_D^{22}$ -2 (c, 0.06 in MeOH)

----------文献----------

Huang, R.C. et al., Heterocycles, 1996, 43, 1477, (分離, H-NMR, C13-NMR)

§ Melianolone; 1-Cinnamoyl
[化学名・別名]1-Cinnamoylmelianolone
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]

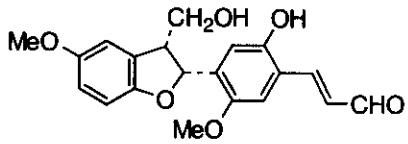


[分子式]$C_{35}H_{42}O_{11}$
[分子量]638.71
[正確な分子量]638.272715
[基原]*Melia azedarach*
[用途]殺虫作用を示す.
[UV]:[neutral] λ $_{max}$ 217 (ε 7750); 279 (ε 14500) (MeOH)

----------文献----------

Lee, S.M. et al., Tet. Lett., 1987, 28, 3543

§ Melianoninol
[CAS No.]136880-81-4
[化合物分類]リグナン化合物(Neolignan)
[構造式]

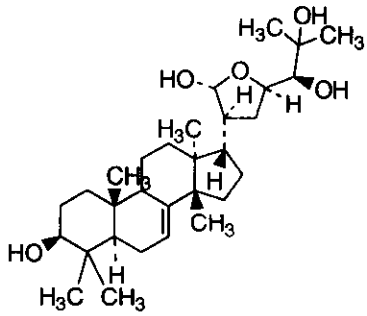


[分子式]$C_{20}H_{20}O_6$
[分子量]356.374
[正確な分子量]356.12599
[基原]*Melia azedarach* の果実
[用途]茎葉を食する昆虫の予防剤

----------文献----------

Han, J. et al., Yaoxue Xuebao, 1991, 26, 426; CA, 115, 201093
Xu, R. et al., J. Chin. Pharm. Sci., 1992, 1, 7, (分離, 構造決定)

§ Melianotriol
[化合物分類]テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]



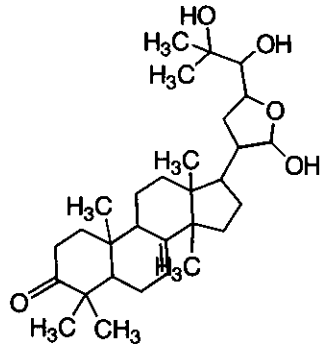
[分子式]$C_{30}H_{50}O_5$
[分子量]490.722
[正確な分子量]490.365825
[基原]Locust phagorepellent from *Melia azedarach*
[性状]結晶(Me_2CO/pentane)
[融点]Mp 176-178 ℃
[比旋光度]:[α]$_D$ -23 (c, 1.6 in $CHCl_3$)

----------文献----------

Lavie, D. et al., Chem. Comm., 1967, 910, (分離)

Merrien, A. et al., Chem. Comm., 1971, 261,（分離）

§ Melianotriol; 3-Ketone

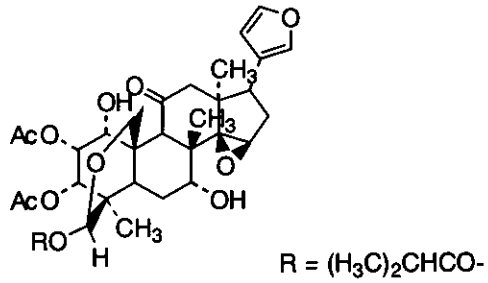


[化学名・別名]Melianodiol
[CAS No.]32764-64-0
[化合物分類]テルペノイド(Tirucallane/euphane triterpenoid)
[構造式]
[分子式]$C_{30}H_{48}O_5$
[分子量]488.706
[正確な分子量]488.350175
[基原]*Melia azedarach, Samadera madagascariensis*
[性状]結晶
[融点]Mp 219-220 ℃
[比旋光度]:[α]$_D$ -39 ($CHCl_3$)

----------文献----------

Lavie, D. et al., Chem. Comm., 1967, 910,（分離）
Merrien, A. et al., Chem. Comm., 1971, 261,（分離）

§ Meliatoxin A_2

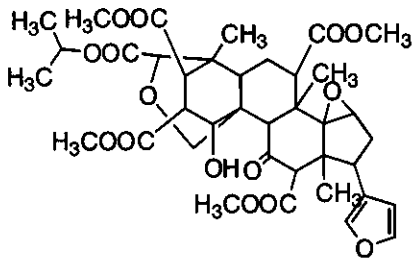


[CAS No.]87617-82-1
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{34}H_{44}O_{12}$
[分子量]644.714
[正確な分子量]644.28328
[基原]Toxin from *Melia azedarach*
[性状]粉末
[融点]Mp 155-160 ℃で分解

----------文献----------

Oelrichs, P.B. et al., Phytochemistry, 1983, 22, 531
Kraus, W., Stud. Org. Chem.（Amsterdam）, 1986, 26, 237,（誘導体）
Huang, R.C. et al., Bull. Chem. Soc. Jpn., 1994, 67, 2468,（分離, H-NMR, C13-NMR）

§ Meliatoxin A_2 ; 12 α-Acetoxy, 7-Ac



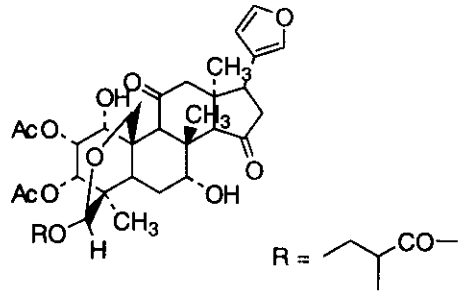
[化学名・別名]2-Acetyl-29-deacetyl-29-isobutyrylsendanin
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{38}H_{48}O_{15}$
[分子量]744.788
[正確な分子量]744.299325
[基原]次の植物の果実から分離: *Melia azedarach*

----------文献----------

Oelrichs, P.B. et al., Phytochemistry, 1983, 22, 531
Kraus, W., Stud. Org. Chem.（Amsterdam）, 1986, 26, 237,（誘導体）
Huang, R.C. et al., Bull. Chem. Soc. Jpn., 1994, 67, 2468,（分離, H-NMR, C13-NMR）

§ Meliatoxin B_1

[CAS No.]87617-81-0
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{35}H_{46}O_{12}$
[分子量]658.741
[正確な分子量]658.29893
[基原]Toxin from *Melia azedarach*
[性状]粉末
[融点]Mp 140-150 ℃で分解

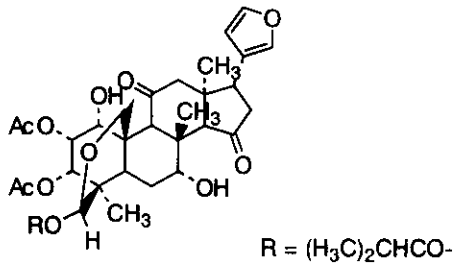


----------文献----------

Oelrichs, P.B. et al., Phytochemistry, 1983, 22, 531

§ Meliatoxin B_2

[CAS No.]87617-80-9
[化合物分類]テルペノイド(Intact tetranortriterpenoid)
[構造式]
[分子式]$C_{34}H_{44}O_{12}$
[分子量]644.714
[正確な分子量]644.28328
[基原]Toxin from *Melia azedarach*
[性状]粉末
[融点]Mp 155-162 ℃で分解

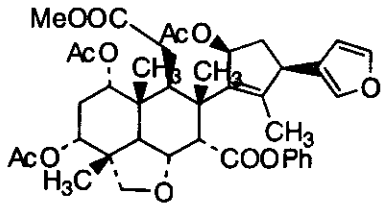


----------文献----------

Oelrichs, P.B. et al., Phytochemistry, 1983, 22, 531

§ Nimbolidin A

[CAS No.]76689-95-7
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]
[分子式]$C_{40}H_{48}O_{12}$
[分子量]720.812
[正確な分子量]720.31458
[基原]*Melia azedarach*
[性状]結晶(MeOH)
[融点]Mp 178 ℃
[比旋光度]:$[\alpha]_D^{20}$ -32 (c, 1 in $CHCl_3$)

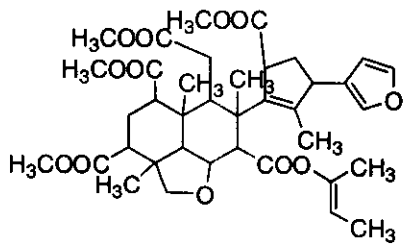


----------文献----------

Kraus, W. et al., Chem. Ber., 1981, 114, 267
Nakatani, M. et al., Phytochemistry, 1996, 41, 739, (Nimbolidins C-E)
Zhou, J.-B. et al., Phytochemistry, 1997, 46, 911, (Nimbolidin F)

§ Nimbolidin A; 7-Deacyl, 7-tigloyl

[化学名・別名]Nimbolidin B
[CAS No.]76689-94-6
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]
[分子式]$C_{38}H_{50}O_{12}$
[分子量]698.806
[正確な分子量]698.33023
[基原]*Melia azedarach*
[性状]結晶(MeOH)
[融点]Mp 180 ℃
[比旋光度]:$[\alpha]_D^{20}$ -9.2 (c, 1 in $CHCl_3$)



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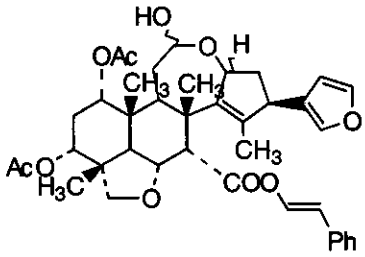
Kraus, W. et al., Chem. Ber., 1981, 114, 267
Nakatani, M. et al., Phytochemistry, 1996, 41, 739, (Nimbolidins C-E)
Zhou, J.-B. et al., Phytochemistry, 1997, 46, 911, (Nimbolidin F)

§ Nimbolin B

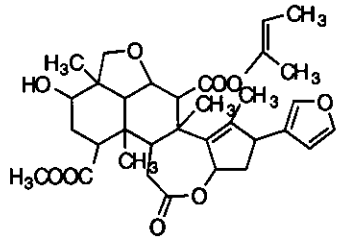


[CAS No.]24480-42-0
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]
[分子式]$C_{39}H_{46}O_{10}$
[分子量]647.786
[正確な分子量]647.3091
[基原]*Azadirachta indica, Melia azedarach*
[性状]結晶
[融点]Mp 243-245 ℃
[比旋光度]:[α]$_D$ -93.3

----------文献----------

Ekong, D.E.U. et al., Chem. Comm., 1969, 1166, (Nimbolin B)
Ara, I. et al., J. Nat. Prod., 1989, 52, 1209, (Nimbilin)
Kraus, W., The Neem Tree, (ed. Schmutterer, H.), VCH, 1995, 35, (レビュー)

§ Nimbolinin; 12-Ketone(lactone), 7-tigloyl, 1-Ac

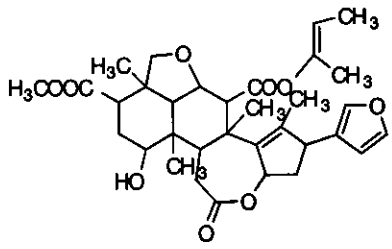


[化学名・別名]Azecin 2
[CAS No.]182565-79-3
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]
[分子式]$C_{33}H_{42}O_9$
[分子量]582.689
[正確な分子量]582.282885
[基原]次の植物から分離: *Melia azedarach*
[性状]結晶
[融点]Mp 215-218 ℃
[UV]:[neutral] λ $_{max}$ 230 (ε 16000); 270 (ε 1200); 282 (ε 900) (EtOH)

----------文献----------

Srivastava, S.D. et al., J. Indian Chem. Soc., 1996, 73, 467, (Azecin 2)
Kraus, W., The Neem Tree, (ed. Schmutterer, H.), VCH, 1995, 35, (レビュー)

§ Nimbolinin; 12-Ketone(lactone), 7-tigloyl, 3-Ac



[化学名・別名]1-Deacetylohchinolide B
[CAS No.]114102-25-9
[化合物分類]テルペノイド(Ring cleaved tetranortriterpenoid)
[構造式]
[分子式]$C_{33}H_{42}O_9$
[分子量]582.689
[正確な分子量]582.282885
[基原]次の植物から分離: *Melia azedarach*
[性状]結晶

----------文献----------

Kraus, W. et al., Stud. Org. Chem. (Amsterdam), 1986, 26, 237, (1-Deacetylohchinolide B)
Kraus, W., The Neem Tree, (ed. Schmutterer, H.), VCH, 1995, 35, (レビュー)

§ Nimbolinin; 12-Ketone(lactone), 7-tigloyl, 1,3-di-Ac