

[化学名・別名] Erinacine A
[化合物分類] テルペノイド (Cyathane diterpenoids)

[構造式]

[分子式] $C_{25}H_{36}O_6$

[分子量] 432.556

[天然基原] 次の植物の代謝物: *Hericium erinaceum*

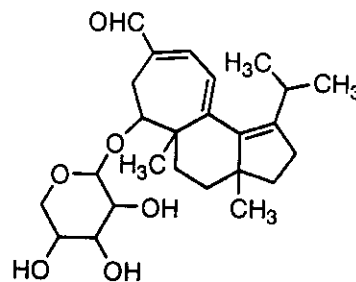
[性状] 結晶

[融点] Mp 74-76 °C

[比旋光度]: $[\alpha]_D^{20} +216$ (c, 0.28 in MeOH)

[溶解性] BERDY SOL: メタノール, アセトン, EtOAc, クロロホルムに可溶; エタノールに易溶; 水に難溶

UV: [neutral] λ_{max} 201 (ϵ 10500); 339 (ϵ 11300) (MeOH) (Berdy) [neutral] λ_{max} 201 (ϵ 6100); 338 (ϵ 12000) (EtOH) (Berdy)



-----文献-----

Kawagisha, H. et al., Tet. Lett., 1994, 35, 1569, (Erinacine A)

§ 5-(1-Hydroxyethyl)-2-(hydroxymethyl)-4H-pyran-4-one

[化学名・別名] Herierin IV

[CAS No.] 131123-57-4

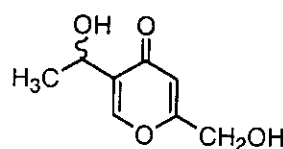
[化合物分類] 含酸素複素環式化合物 (4-Pyrones)

[構造式]

[分子式] $C_8H_{10}O_4$

[分子量] 170.165

[天然基原] *Hericium erinaceum*



-----文献-----

Qian, F. et al., CA, 1991, 114, 20976g, (分離, H-NMR)

*****ヤマモモ (Chinese bayberry) *****

§ § フトモモ科ヤマモモ (*Myrica rubra* Siebold et Zuccarini) の果実。

§ 3,3',4',5,5',7-Hexahydroxyflavan-(4 → 8)-3,3',4',5,5',7-hexahydroxyflavan; (*all-R*)-form, 3',3,4,5-Trihydroxybenzoyl)

[化学名・別名] 3'-Galloylprodelphinidin B:

[CAS No.] 86588-88-7

[化合物分類] フラボノイド (Proanthocyanidin flavonoids), タニン化合物 (Simple gallate ester tannins)

[構造式]

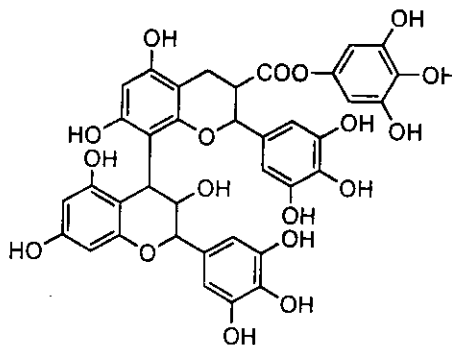
[分子式] $C_{37}H_{30}O_{18}$

[分子量] 762.633

[天然基原] 次の植物から分離: *Cistus salvifolus*, *Myrica rubra*, *Myrica esculenta*, *Thea sinensis*

[性状] 淡褐色の無定型粉末 + 1.1/2H₂O

[比旋光度]: $[\alpha]_D^{20} -52.7$ (c, 0.62 in Me₂CO). $[\alpha]_D^{18} +73.2$ (c, 0.93 in MeOH)



-----文献-----

Krishnamurty, V. et al., Tetrahedron, 1966, 22, 2367, (分離, 誘導體)

Gandhi, P., Experientia, 1977, 33, 1272, (分離, 誘導體)

Gupta, R.K. et al., J.C.S. Perkin 1, 1981, 1148, (分離, 誘導體)

Nonaka, G. et al., Phytochemistry, 1983, 22, 237; 1984, 23, 1753, (Prodelphinidin B₂)

Delcour, K.A. et al., J. Inst. Brewing, 1984, 90, 153, (Prodelphinidin B₂)

Danne, A. et al., Phytochemistry, 1993, 34, 1129; 1994, 37, 533, (分離)

Weinges, K. et al., Phytochemistry, 1995, 38, 505, (Prodelphinidin B₂)

De Mello, J.P. et al., Phytochemistry, 1996, 41, 807, (分離)

Hartisch, C. et al., Phytochemistry, 1996, 42, 191, (分離, H-NMR, 誘導體)

§ 3,3',4',5,5',7-Hexahydroxyflavan-(4 → 8)-3,3',4',5,5',7-hexahydroxyflavan; (*all-R*)-form, 3,3'-Bis(3,4,5-trihydroxybenzoyl)

[化学名・別名] 3,3'-Digalloylprodelphinidin B₂: Rhodisin

[CAS No.] 86588-89-8

[化合物分類] フラボノイド (Proanthocyanidin flavonoids), タンニン化合物 (Simple gallate ester tannins)

[構造式]

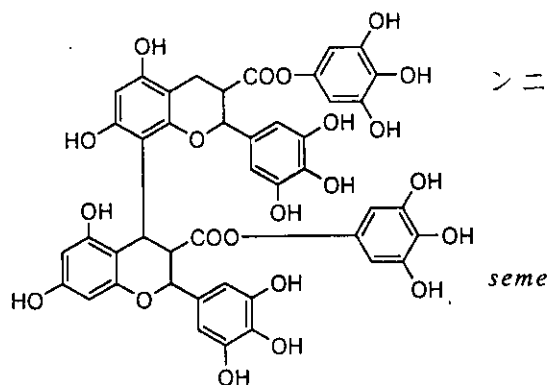
[分子式] C₄₄H₃₄O₂₂

[分子量] 914.739

[天然基原] 次の植物から分離: *Myrica rubra*. また *Rhodiola novii* から得られる

[性状] 灰白色の無定型粉末

[比旋光度]: $[\alpha]_D^{25} -60.9$ (c, 0.87 in Me₂CO)



-----文献-----

Kim, K.H. et al., *Khim. Prir. Soedin.*, 1989, 25, 723; *Chem. Nat. Compd. (Engl. Transl.)*, 1989, 25, 618, (Rhodisin, Rhodisinosside)

§ 3,3',4',5,5',7-Hexahydroxyflavan- (4 → 8)-3,3',4',5,5',7-hexahydroxyflavan; (2R,2'R,3R,3'S,4R)-form, 3,3'-Bis (3,4,5-trihydroxybenzoyl)

[化学名・別名] 3,3'-Digalloylprodelphinidin B₁

[CAS No.] 87392-65-2

[化合物分類] タンニン化合物 (Simple gallate ester tannins), フラボノイド (Proanthocyanidin flavonoids)

[構造式]

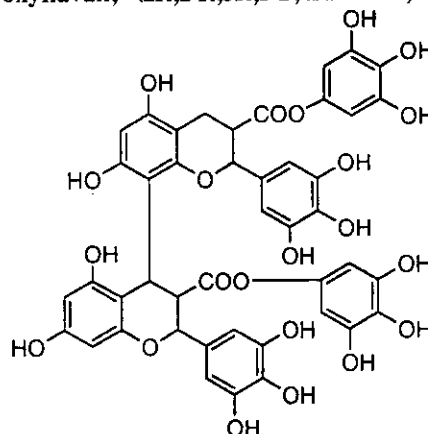
[分子式] C₄₄H₃₄O₂₂

[分子量] 914.739

[天然基原] 次の植物から分離: *Myrica rubra*

[性状] 灰白色の無定型粉末

[比旋光度]: $[\alpha]_D^{25} +26.6$ (c, 0.25 in Me₂CO)



-----文献-----

Krishnamurty, V. et al., *Tetrahedron*, 1966, 22, 2367, (分離, 誘導体)

Gandhi, P., *Experientia*, 1977, 33, 1272, (分離, 誘導体)

Gupta, R.K. et al., *J.C.S. Perkin 1*, 1981, 1148, (分離, 誘導体)

Nonaka, G. et al., *Phytochemistry*, 1983, 22, 237; 1984, 23, 1753, (Prodelphinidin B₂)

Delcour, K.A. et al., *J. Inst. Brewing*, 1984, 90, 153, (Prodelphinidin B₂) (Rhodisin, Rhodisinosside)

Danne, A. et al., *Phytochemistry*, 1993, 34, 1129; 1994, 37, 533, (分離)

Weinges, K. et al., *Phytochemistry*, 1995, 38, 505, (Prodelphinidin B₂)

De Mello, J.P. et al., *Phytochemistry*, 1996, 41, 807, (分離)

Hartisch, C. et al., *Phytochemistry*, 1996, 42, 191, (分離, H-NMR, 誘導体)

§ 3,3',4',5,5',7-Hexahydroxyflavanone; (2R,3R)-form, 3-O-(3,4,5-Trihydroxybenzoyl), 3'-sulfate

[化学名・別名] Myricatin

[CAS No.] 87388-96-3

[化合物分類] フラボノイド (Dihydroflavonols; 6 × O-置換基), タンニン化合物 (Simple gallate ester tannins)

[構造式]

[分子式] C₂₂H₁₆O₁₃S

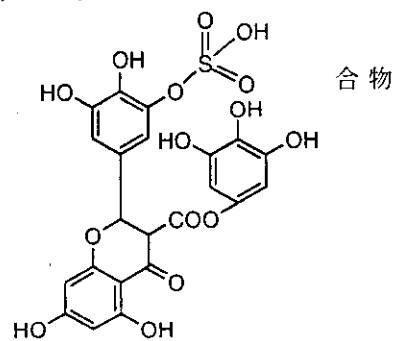
[分子量] 552.425

[天然基原] 次の植物から分離: *Myrica rubra*

[性状] 青白い黄色の針状結晶 (H₂O) (as K salt)

[融点] Mp 235-237 °C (K salt)

[比旋光度]: $[\alpha]_D^{25} +78.2$ (c, 0.87 in Me₂CO)



-----文献-----

Nonaka, G.-I. et al., *Phytochemistry*, 1983, 22, 237, (Myricatin)

§ 3,3',4',5,5',7-Hexahydroxyflavone

[化学名・別名] 3,5,7-Trihydroxy-2-(3,4,5-trihydroxyphenyl)-4H-1-benzopyran-4-one (CAS 名), 3',4',5,5',7-Pentahydroxyflavonol. Myricetin. Cannabiscetin. Myricetol

[CAS No.] 529-44-2

[関連 CAS No.] 6822-41-9, 28454-80-0, 29662-78-0, 36116-88-8, 39049-12-2, 79191-63-2

[化合物分類] フラボノイド (Flavonols; 6 × O-置換基), 薬物: 抗ウイルス物質 (Antiviral agents), 薬物: 抗 HIV 薬 (Anti-HIV agents), PS8250, PA3750, PM6148

[構造式]

[分子式] C₁₅H₁₀O₈

[分子量] 318.239

[天然基原] 次の植物から分離: *Myrica rubra* と *Myrica nagi* の樹皮; 植物界に広く分布し, 種子, 花, 茎, しばしば配糖体にも存在している

[用途] Used as 0.1% soln. in Me₂CO or DMF for fluorimetric detn. of Sc. 抗 HIV 活性を示す

[性状] 淡黄色の針状結晶 (EtOH 溶液)

[融点] Mp 357-360 °C で分解

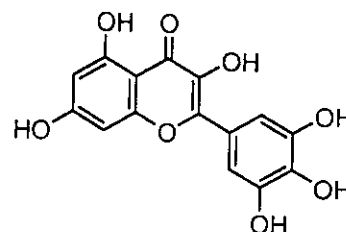
[溶解性] アセトン, DMF に可溶

[Log P 計算値] Log P -0.95 (計算値)

UV: [neutral] λ_{max} 252 ; 374 (MeOH) (Berdy) [neutral] λ_{max} 255 ; 375 (EtOH) (Berdy) [base] λ_{max} 285 ; 437 (MeOH-NAOH) (Berdy)

[化学物質毒性データ総覧 (RTECS) 登録番号] LK8646000

[販売元] Aldrich:11481-2; Fluka:70050; Sigma:M6760



----- 文献 -----

Subramanian, S.S. et al., Indian J. Chem., 1972, 10, 452, (Melicitrin)

Karrer, W. et al., Konstitution und Vorkommen der Organischen Pflanzenstoffe, 2nd edn., Birkhäuser Verlag, Basel, 1972, nos. 1575; 1576, (生育)

RTECS (化学物質毒性データ)

生体影響物質 : 変異原性物質.

健康障害に関するデータ

変異原性に関するデータ

<<試験方法>> 微生物を用いた突然変異試験.

試験系 : 大腸菌 *Salmonella typhimurium*

投与量・期間: 166 nmol/plate

参照文献

Mutation Research. (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) 54,297,1978

§ Myricanol; Ketone, 5-deoxy

[化学名・別名] 5-Deoxymyricanone

[CAS No.] 110007-10-8

[化合物分類] 単環芳香族 (Diarylalkyls), 単環芳香族 (Biphenyls)

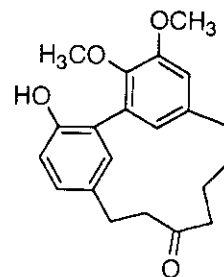
[構造式]

[分子式] C₂₁H₂₂O₄

[分子量] 340.418

[天然基原] 次の植物から分離: bacterial galls of *Myrica rubra*

[性状] 無定型



----- 文献 -----

Takeda, Y. et al., Chem. Pharm. Bull., 1987, 35, 2569. (5-Deoxymyricanone)

§ Myricanol; 5-O-β-D-Glucopyranoside

[化学名・別名] Myricanol 5-glucoside

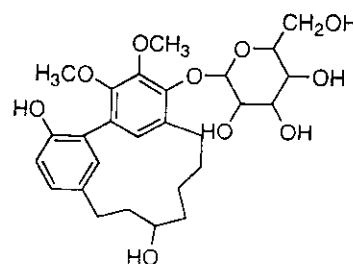
[CAS No.] 90052-02-1

[化合物分類] 単環芳香族 (Diarylalkyls), 単環芳香族 (Biphenyls)

[構造式]

[分子式] C₂₇H₃₀O₁₀

[分子量] 520.575



[天然基原] *Myrica arborea*, *Myrica rubra*

[融点] Mp 220-223 °C

[比旋光度]: $[\alpha]_D^{25}$ -53.7

----- 文献 -----

Campbell, R.V.M. et al., Chem. Comm., 1970, 1206, (分離)

Inoue, T. et al., Yakugaku Zasshi, 1984, 104, 37-41, (5-glucoside)

Morihara, M. et al., Chem. Pharm. Bull., 1997, 45, 820, (Myricatomentoside II)

§ **Myricanol; 5-O-[(3,4,5-Trihydroxybenzoyl)-(→6)-β-D-glucopyranoside]**

[化学名・別名] Myricanol 5-(6-galloylglucoside)

[CAS No.] 113204-18-5

[化合物分類] 単環芳香族 (Diarylalkyls), タンニン化合物

Simple gallate ester tannins), 単環芳香族 (Biphenyls)

[構造式]

[分子式] C₃₄H₄₀O₁₄

[分子量] 672.682

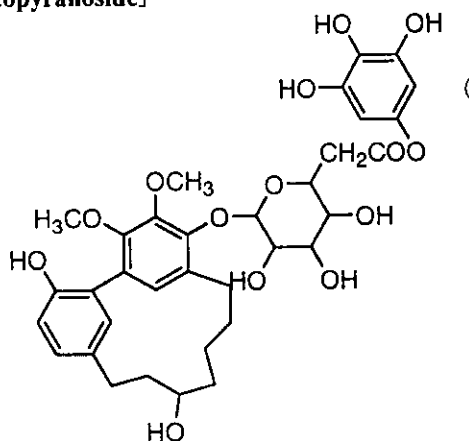
[天然基原] *Myrica rubra*

[性状] 結晶 (MeOH 溶液)

[融点] Mp 267-269 °C

[比旋光度]: $[\alpha]_D^{25}$ -78.4 (c, 1 in EtOH)

UV: [neutral] λ_{max} 256 (log ε 4.2); 285 (log ε 4.11) (EtOH)



----- 文献 -----

Campbell, R.V.M. et al., Chem. Comm., 1970, 1206, (分離)

Inoue, T. et al., Yakugaku Zasshi, 1984, 104, 37-41, (5-glucoside)

Takeda, Y. et al., Chem. Pharm. Bull., 1987, 35, 2569, (5-Deoxymyricanone)

Morihara, M. et al., Chem. Pharm. Bull., 1997, 45, 820, (Myricatomentoside II)

§ **Myricanol; 5-O-[α-L-Arabinofuranosyl-(1→6)-β-D-glucopyranoside]**

[化合物分類] 単環芳香族 (Diarylalkyls), 単環芳香族 (Biphenyls)

[構造式]

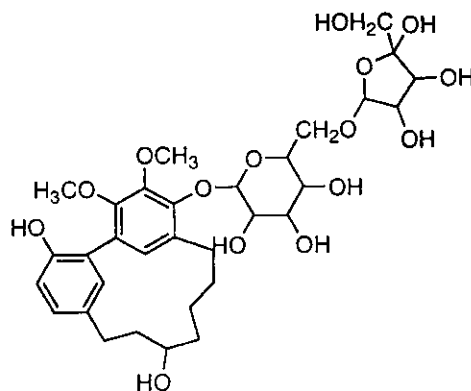
[分子式] C₃₃H₄₀O₁₄

[分子量] 652.691

[天然基原] *Myrica rubra*

[性状] 灰白色の粉末

[比旋光度]: $[\alpha]_D^{25}$ -81.5 (c, 1 in MeOH)



----- 文献 -----

Campbell, R.V.M. et al., Chem. Comm., 1970, 1206, (分離)

Malterud, K.E. et al., Phytochemistry, 1980, 19, 705, (13-Oxomyricanol)

Inoue, T. et al., Yakugaku Zasshi, 1984, 104, 37-41, (5-glucoside)

Takeda, Y. et al., Chem. Pharm. Bull., 1987, 35, 2569, (5-Deoxymyricanone)

Morihara, M. et al., Chem. Pharm. Bull., 1997, 45, 820, (Myricatomentoside II)

§ **Myricanol; 5-O-[β-D-Glucopyranosyl-(1→3)-β-D-glucopyranoside]**

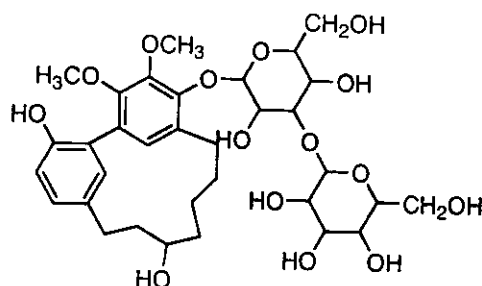
[化学名・別名] Myricanol 5-laminaribioside

[CAS No.] 137578-55-3

[化合物分類] 単環芳香族 (Diarylalkyls), 単環芳香族 (Biphenyls)

[構造式]

[分子式] $C_{33}H_{46}O_{15}$
 [分子量] 682.717
 [天然基原] *Myrica rubra*
 [性状] 灰白色の粉末
 [比旋光度]: $[\alpha]_D^{21} -47.7$ (c, 1 in MeOH)

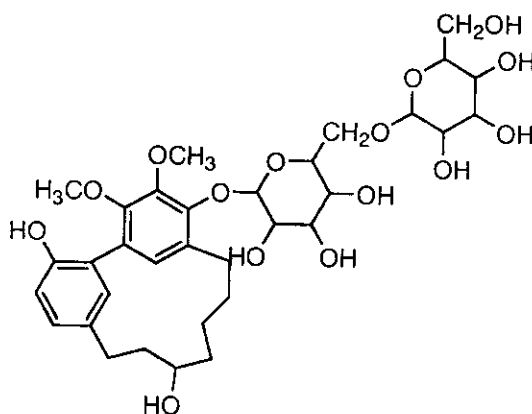


----- 文献 -----

Campbell, R.V.M. et al., Chem. Comm., 1970, 1206, (分離)
 Malterud, K.E. et al., Phytochemistry, 1980, 19, 705, (13-Oxomyricanol)
 Inoue, T. et al., Yakugaku Zasshi, 1984, 104, 37-41, (5-glucoside)
 Takeda, Y. et al., Chem. Pharm. Bull., 1987, 35, 2569, (5-Deoxymyricanone)
 Morihara, M. et al., Chem. Pharm. Bull., 1997, 45, 820, (Myricatomentoside II)

§ **Myricanol; 5-O- $[\beta$ -D-Glucopyranosyl-(1→6)- β -D-glucopyranoside]**

[化学名・別名] Myricanol 5- β -sophoroside
 [CAS No.] 116107-17-6
 [化合物分類] 単環芳香族 (Diarylalkyls), 単環芳香族 (Biphenyls)
 [構造式]



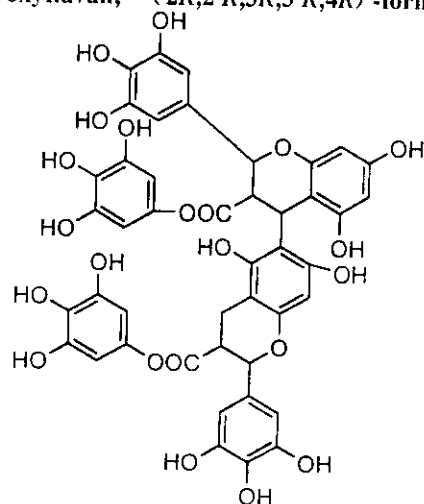
[分子式] $C_{33}H_{46}O_{15}$
 [分子量] 682.717
 [天然基原] *Myrica rubra*
 [性状] 灰白色の粉末
 [比旋光度]: $[\alpha]_D^{20} -64.6$ (c, 1.1 in Py)

----- 文献 -----

Campbell, R.V.M. et al., Chem. Comm., 1970, 1206, (分離)
 Malterud, K.E. et al., Phytochemistry, 1980, 19, 705, (13-Oxomyricanol)
 Inoue, T. et al., Yakugaku Zasshi, 1984, 104, 37-41, (5-glucoside)
 Takeda, Y. et al., Chem. Pharm. Bull., 1987, 35, 2569, (5-Deoxymyricanone)
 Yaguchi, Y. et al., Chem. Pharm. Bull., 1988, 36, 1419-1424, (5-sophoroside, 5-6-galloylglucoside)
 Sun, D. et al., Phytochemistry, 1988, 27, 579, (C13-NMR)
 Morihara, M. et al., Chem. Pharm. Bull., 1997, 45, 820, (Myricatomentoside II)

§ **3,3',4',5,7-Pentahydroxyflavan (4 → 6)-3,3',4',5,7-pentahydroxyflavan; (2R,2'R,3R,3'R,4R)-form, 5'',5'''-Dihydroxy,3,3'-bis(3,4,5-trihydroxybenzoyl)**

[化学名・別名] 3,3'-Di-O-galloylprodelphinidin B₅
 [CAS No.] 86588-87-6
 [化合物分類] タンニン化合物 (Simple gallate ester tannins), フラボノイド (Proanthocyanidin flavonoids)
 [構造式]



[分子式] $C_{44}H_{34}O_{22}$
 [分子量] 914.739
 [天然基原] 次の植物から分離: *Myrica rubra* の樹皮
 [性状] 灰白色の無定型粉末
 [比旋光度]: $[\alpha]_D^{20} +57.4$ (c, 1.01 in Me:CO)

-----文献-----

- Kashiwada, Y. et al., Chem. Pharm. Bull., 1986, 34, 4083, (gallates)
 Cui, C.-B. et al., Chem. Pharm. Bull., 1992, 40, 889, (分離, H-NMR, C13-NMR)
 Greiss, F. et al., Phytochemistry, 1995, 39, 635, (分離)
 Wang, J.-N. et al., Phytochemistry, 2000, 53, 1097-1102, (3'-Galloylprocyanidin Bs)

§ 14-Taraxerene-3,28-diol; 3 β-form, 3-Ketone

[化学名・別名] 28-Hydroxy-14-taraxeren-3-one. Miricolone

[CAS No.] 88717-97-9

[化合物分類] テルペノイド (Taraxerane triterpenoids)

[構造式]

[分子式] C₃₀H₄₈O₂

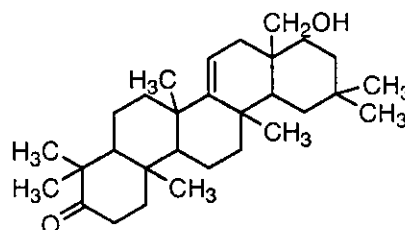
[分子量] 440.708

[天然基原] 次の植物から分離: *Myrica rubra*, *Alnaster fruticosus*

[性状] 結晶 (CHCl₃)

[融点] Mp 225-227 °C (202-204 °C)

[比旋光度]: [α]_D²⁰ -0.2 (c, 1 in CHCl₃)



-----文献-----

- Sakurai, N. et al., Phytochemistry, 1987, 26, 217, (ketone)
 Merfort, I. et al., Phytochemistry, 1992, 31, 4031, (Isomyricadiol, C13-NMR)

*****ユーカリ (Eucalyptus) *****

§ § フトモ科ユーカリノキ (*Eucalyptus globulus* de La Billardiere) の枝葉。

§ 1-Acetyl-4-isopropenylcyclopentene

[化学名・別名] 1-[4-(1-Methylethenyl)-1-cyclopenten-1-yl] ethanone (CAS 名)

[CAS No.] 2704-76-9

[化合物分類] テルペノイド (Other cyclopentane monoterpenoids)

[構造式]

[分子式] C₁₀H₁₆O

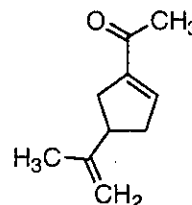
[分子量] 150.22

[天然基原] 次の植物から分離: *Eucalyptus globulus* のオイル

[性状] オイル

[沸点] Bp_{23k} 225-225.5 °C, Bp₁₅ 67-68 °C

[屈折率] n_D²⁵ 1.4965



-----文献-----

- Schmidt, H., Chem. Ber., 1947, 80, 528; 533, (分離)
 Vig, P. et al., Indian J. Chem., 1968, 6, 564, (合成法)

§ 10-Aromadendranol; (1 α, 4 α, 5 β, 6 α, 7 α, 10 α)-form

[化学名・別名] Globulol

[CAS No.] 489-41-8

[化合物分類] テルペノイド (Aromadendrane sesquiterpenoids)

[構造式]

[分子式] C₁₅H₂₆O

[分子量] 222.37

[天然基原] *Eucalyptus globulus*, *Thryptomene kochii*. また *Eucalyptus eudesmoides*, *Eucalyptus caesia*, *Eucalyptus gongylocarpa*, *Prostanthera sieberi*, *Prostanthera rotundifolia* から得られる

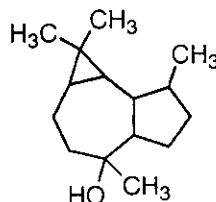
[性状] 針状結晶 (EtOH 溶液)

[融点] Mp 88.5 °C

[沸点] Bp 283 °C

[比旋光度]: [α]_D²⁰ -35.3 (CHCl₃)

[販売元] Fluka:49070



-----文献-----

- Karrer, W. et al., Konstitution und Vorkommen der Organischen Pflanzenstoffe, 2nd edn., Birkhäuser Verlag, Basel, 1972, no. 1908, (生育)

Asakawa, Y. et al., Phytochemistry, 1980, 19, 2141, (ent-Globulol)

§ 10(14)-Aromadendrene; (1 β , 4 α , 5 β , 6 β , 7 β)-form

[化学名・別名] Alloaromadendrene, α -Aromadendrene

[CAS No.] 25246-27-9

[その他の CAS No.] 72747-25-2

[化合物分類] テルペノイド (Aromadendrane sesquiterpenoids)

[構造式]

[分子式] $C_{15}H_{24}$

[分子量] 204.355

[天然基原] 次の植物を含む多くの精油: *Ledum palustre*, *Croton* spp. *Eucalyptus globulus*, *Metrosideros scandens*, *Perovskia scrophulariaefolia*, *Glycyrrhiza triphylla*

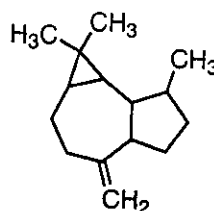
[性状] オイル

[沸点] Bp: 96 °C

[比旋光度]: $[\alpha]_D^{20}$ -21.6

[その他のデータ] n_D^{20} 1.5010

[販売元] Fluka:5680



-----文献-----

Tressl, R. et al., J. Agric. Food Chem., 1983, 31, 892, (Aromadendrene epoxide)

Bohlmann, F. et al., Planta Med., 1984, 50, 1950, (Alloaromadendrene epoxide)

Zafra-Polo, M.C. et al., J. Chromatogr., 1990, 518, 230, (Aromadendrene epoxide)

§ 1,2,3,5-Benzenetetro; 1,2,3-Tri-Me ether, 5-Ac

[CAS No.] 17742-46-0

[化合物分類] 単環芳香族 (Simple phenols)

[構造式]

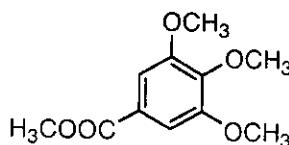
[分子式] $C_{11}H_{14}O_5$

[分子量] 226.229

[天然基原] *Eucalyptus globulus*

[性状] 結晶 (MeOH 溶液)

[融点] Mp 74 °C



-----文献-----

Nonaka, G. et al., Chem. Pharm. Bull., 1982, 30, 2061, (Trimethoxyphenyl galloylglucoside)

Shimomura, H. et al., Phytochemistry, 1988, 27, 644, (分離, H-NMR, C13-NMR)

§ 1,2,3,5-Benzenetetro; 1,3,5-Tri-Me ether, Ac

[CAS No.] 30225-90-2

[化合物分類] 単環芳香族 (Simple benzene derivatives)

[構造式]

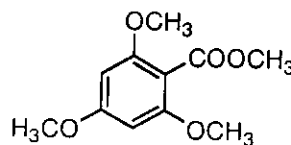
[分子式] $C_{11}H_{14}O_5$

[分子量] 226.229

[天然基原] *Eucalyptus globulus*

[性状] 結晶 (EtOH 溶液)

[融点] Mp 100 °C



-----文献-----

Sargent, M.V. et al., J.C.S. Perkin 1, 1982, 403, (合成法, 1,3,5-tri-Me)

§ 3,11-Dihydroxy-12-ursen-28-oic acid; (3 β , 11 α)-form, 11-Me ether, 3-Ac, Me ester

[CAS No.] 189139-96-6

[化合物分類] テルペノイド (Ursane triterpenoids)

[構造式]

[分子式] $C_{31}H_{54}O_5$

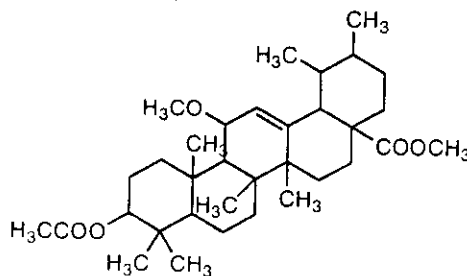
[分子量] 542.798

[天然基原] *Eucalyptus globulus*

[性状] 結晶

[融点] Mp 140.5-141 °C

[比旋光度]: $[\alpha]_D^{20}$ -82 (c. 0.25 in $CHCl_3$)



-----文献-----

Siddiqui, S. et al., *Phytochemistry*, 1990, 29, 3615, (分離, H-NMR, C13-NMR, Obtusilin)
 Syamasundar, K.V. et al., *Phytochemistry*, 1991, 30, 362, (分離, H-NMR, C13-NMR, Obtusilin)
 Shirota, O. et al., *J. Nat. Prod.*, 1996, 59, 1072-1075, (Krukovine B)
 Santos, G.G. et al., *Phytochemistry*, 1997, 44, 1309-1312, (分離, H-NMR, C13-NMR, 誘導体)

§ Ellagic acid; 3-Me ether, 8-O- α -L-rhamnopyranoside

[化合物分類] タンニン化合物 (Hexahydroxydiphenoyl ester tannins)

[構造式]

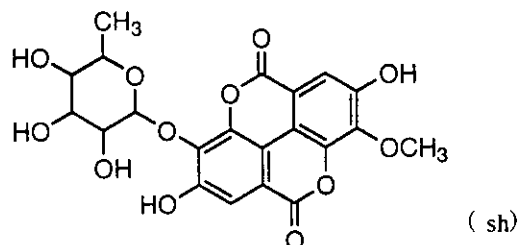
[分子式] $C_{21}H_{18}O_{12}$

[分子量] 462.366

[天然基原] *Eucalyptus globulus*

[性状] 黄色の粉末

UV: [neutral] λ_{max} 246 (log ϵ 4.6); 260 (sh) (log ϵ 4.5); 285 (log ϵ 4); 360 (sh) (log ϵ 3.9); 375 (log ϵ 4) (MeOH)



-----文献-----

Karrer, W. et al., *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd edn., Birkhäuser Verlag, Yazaki, Y. et al., *Phytochemistry*, 1976, 15, 1180-1182, (3-Me ether rhamnoside)
 Kim, J.-P. et al., *Phytochemistry*, 2001, 57, 587-591, (3-Me 8-rhamnoside)

§ Ellagic acid; 3-Me ether, 8-O-(2-O-acetyl- α -L-rhamnopyranoside)

[化合物分類] タンニン化合物 (Hexahydroxydiphenoyl ester tannins)

[構造式]

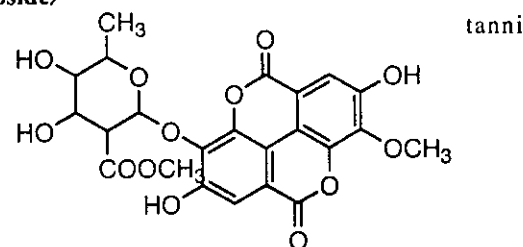
[分子式] $C_{23}H_{20}O_{13}$

[分子量] 504.403

[天然基原] *Eucalyptus globulus*

[性状] 黄色の粉末

[その他のデータ] 非天然物



-----文献-----

Karrer, W. et al., *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd edn., Birkhäuser Verlag, Basel, 1972, no. 1143, (生育)
 Yazaki, Y. et al., *Phytochemistry*, 1976, 15, 1180-1182, (3-Me ether rhamnoside)
 Kim, J.-P. et al., *Phytochemistry*, 2001, 57, 587-591, (3-Me 8-rhamnoside)

§ Ellagic acid; 3-Me ether, 8-O-(3-O-acetyl- α -L-rhamnopyranoside)

[化合物分類] タンニン化合物 (Hexahydroxydiphenoyl ester tannins)

[構造式]

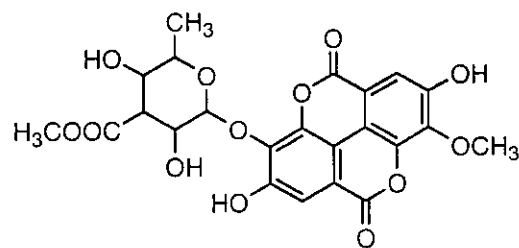
[分子式] $C_{23}H_{20}O_{13}$

[分子量] 504.403

[天然基原] *Eucalyptus globulus*

[性状] 黄色の粉末

[その他のデータ] 非天然物



-----文献-----

Karrer, W. et al., *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd edn., Birkhäuser Verlag, Basel, 1972, no. 1143, (生育)
 Yazaki, Y. et al., *Phytochemistry*, 1976, 15, 1180-1182, (3-Me ether rhamnoside)
 Kim, J.-P. et al., *Phytochemistry*, 2001, 57, 587-591, (3-Me 8-rhamnoside)

§ Ellagic acid; 3-Me ether, 8-O-(4-O-acetyl- α -L-rhamnopyranoside)

[化合物分類] タンニン化合物 (Hexahydroxydiphenoyl ester tannins)

[構造式]

[分子式] $C_{23}H_{30}O_{13}$

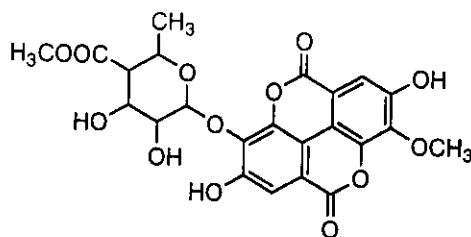
[分子量] 504.403

[天然基原] *Eucalyptus globulus*

[性状] 黄色の粉末

UV: [neutral] λ_{max} 246 (log ϵ 4.6); 260 (sh) (log ϵ 4.5);
285 (sh) (log ϵ 4); 360 (sh) (log ϵ 4); 375 (log ϵ 4)
(MeOH)

[その他のデータ] 非天然物



-----文献-----

Karrer, W. et al., *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd edn., Birkhäuser Verlag, Basel, 1972, no. 1143, (生育)

Yazaki, Y. et al., *Phytochemistry*, 1976, 15, 1180-1182, (3-Me ether rhamnoside)

Kim, J.-P. et al., *Phytochemistry*, 2001, 57, 587-591, (3-Me 8-rhamnoside)

§ Eucalyptone

[化学名・別名] Macrocarpal am1

[CAS No.] 172617-99-1

[その他の CAS No.] 168146-22-3

[化合物分類] テルペノイド (Aromadendrane sesquiterpenoids), テルペノイド (Meroterpenoids)

[構造式]

[分子式] $C_{23}H_{30}O_7$

[分子量] 486.604

[一般的性質] CAS 名は不完全

[天然基原] *Eucalyptus globulus*, *Eucalyptus amplifolia*

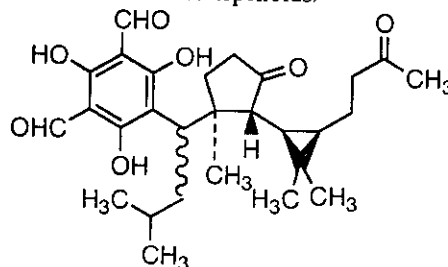
[性状] 粉末

[融点] Mp 145-147 °C

[比旋光度]: $[\alpha]_D^{27} +44.6$ (c, 0.19 in EtOH). $[\alpha]_D^{27} +70$ (c, 0.21 in EtOH)

UV: [neutral] λ_{max} 217 (ϵ 28000); 277 (ϵ 30000); 390 (ϵ 10000) (EtOH)

[その他のデータ] No stereochem. indicated for Macrocarpal am1



-----文献-----

Singh, I.P. et al., *Biosci., Biotechnol., Biochem.*, 1995, 59, 2330-2332. (Macrocarpal am 1)

Osawa, K. et al., *Phytochemistry*, 1995, 40, 183-184, (Eucalyptone)

§ Euglobal V

[CAS No.] 77809-89-3

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $C_{23}H_{30}O_5$

[分子量] 454.605

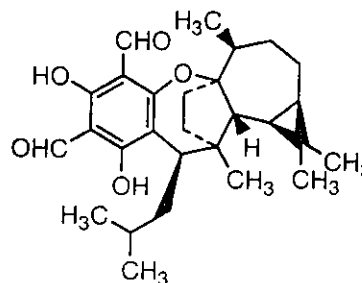
[天然基原] *Eucalyptus globulus*, *Eucalyptus incrassata*

[用途] 強い肉芽形成抑制因子

[性状] プリズム結晶 (EtOH)

[融点] Mp 184-185 °C

[比旋光度]: $[\alpha]_D^{20} -206$ (c, 1 in $CHCl_3$)



-----文献-----

Amano, T. et al., *J. Chromatogr.*, 1981, 208, 347, (分離)

Kozuka, M. et al., *Chem. Pharm. Bull.*, 1982, 30, 1964, (結晶構造)

Takasaki, M. et al., *Chem. Pharm. Bull.*, 1994, 42, 2113, (分離, H-NMR, C13-NMR)

§ Euglobal Ia

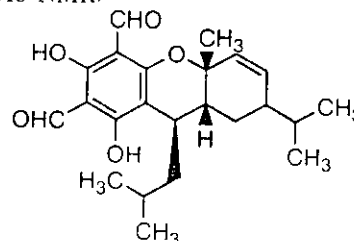
[CAS No.] 77844-93-0

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $C_{23}H_{30}O_5$

[分子量] 386.487



[用途] 強い肉芽形成抑制因子

[性状] オイル

[比旋光度]: $[\alpha]_D^{20} -216.7$ (c, 1.0 in CHCl_3)

UV: [base] λ_{\max} (溶媒は報告されていない) (Derep) [neutral] λ_{\max} 277 (ϵ 32000); 340 (sh) (ϵ 4000) (EtOH) (Derep)

-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952

§ Euglobal Ia₁; 7-Epimer

[化学名・別名] Euglobal Ia₂

[CAS No.] 77794-63-9

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $\text{C}_{23}\text{H}_{30}\text{O}_5$

[分子量] 386.487

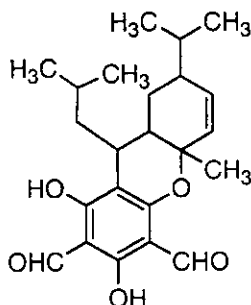
[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子

[性状] オイル

[比旋光度]: $[\alpha]_D^{20} +31.8$ (c, 1.0 in CHCl_3)

UV: [base] λ_{\max} (溶媒は報告されていない) (Derep) [neutral] λ_{\max} 277 (ϵ 32000); 340 (sh) (ϵ 4000) (EtOH) (Derep)



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952

§ Euglobal Ic

[CAS No.] 77794-60-6

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $\text{C}_{23}\text{H}_{30}\text{O}_5$

[分子量] 386.487

[天然基原] *Eucalyptus globulus*

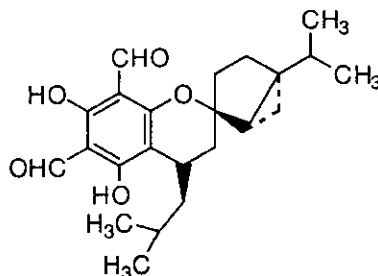
[用途] 強い肉芽形成抑制因子

[性状] プリズム結晶 (EtOH)

[融点] Mp 108-110 °C

[比旋光度]: $[\alpha]_D^{20} -3.12$ (c, 1.0 in CHCl_3)

UV: [base] λ_{\max} (溶媒は報告されていない) (Derep) [neutral] λ_{\max} 277 (ϵ 32000); 340 (sh) (ϵ 4000) (EtOH) (Derep)



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952, (結晶構造)

Takasaki, M. et al., Chem. Pharm. Bull., 1994, 42, 2177-2179, (分離, H-NMR, C13-NMR)

§ Euglobal Ic; 7-Epimer

[化学名・別名] Euglobal Ia₂

[CAS No.] 77844-92-9

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $\text{C}_{23}\text{H}_{30}\text{O}_5$

[分子量] 386.487

[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子

[性状] プリズム結晶 (EtOH)

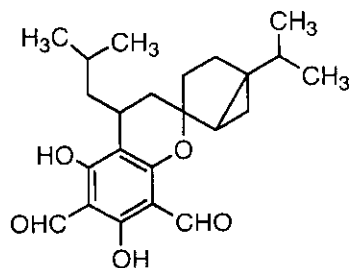
[融点] Mp 130-132 °C

[比旋光度]: $[\alpha]_D^{20} +9.24$ (c, 1.0 in CHCl_3)

UV: [neutral] λ_{\max} 277 (ϵ 32000); 340 (sh) (ϵ 4000) (EtOH) (Derep) [base] λ_{\max} (溶媒は報告されていない) (Derep)

-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952, (結晶構造)



Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952, (結晶構造)
Takasaki, M. et al., Chem. Pharm. Bull., 1994, 42, 2177-2179, (分離, H-NMR, C13-NMR)

§ Euglobal Ic; 2',4',7-Triepimer

[化学名・別名] Euglobal Ib
[CAS No.] 77844-94-1
[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $C_{25}H_{30}O_5$

[分子量] 386.487

[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子

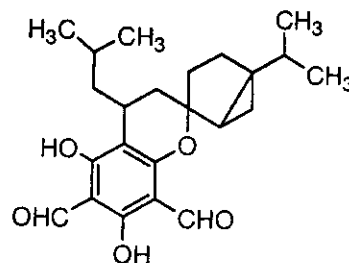
[性状] 針状結晶 (EtOH)

[融点] Mp 119-121 °C

[比旋光度]: $[\alpha]_D^{20} -1.94$ (c, 1.0 in $CHCl_3$)

UV: [neutral] λ_{max} 277 (ϵ 32000); 340 (sh) (ϵ 4000) (EtOH) (Derep)

[base] λ_{max} (溶媒は報告されていない) (Derep)



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952

Takasaki, M. et al., Chem. Pharm. Bull., 1994, 42, 2177-2179, (分離, H-NMR, C13-NMR)

§ Euglobal III

[CAS No.] 76449-26-8

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $C_{25}H_{30}O_5$

[分子量] 454.605

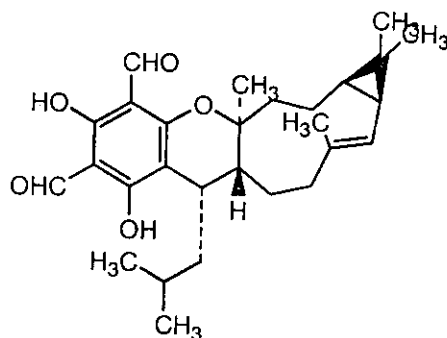
[天然基原] *Eucalyptus globulus*

[性状] 結晶 (EtOH)

[融点] Mp 169-171 °C

[比旋光度]: $[\alpha]_D +229$ (c, 1 in $CHCl_3$)

UV: [base] λ_{max} (溶媒は報告されていない) (Derep) [neutral] λ_{max} 278 (ϵ 32200); 345 (sh) (ϵ 4880) (EtOH) (Derep)



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1964, (構造決定, 絶対構造)

§ Euglobal Ib

[CAS No.] 77794-61-7

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] $C_{25}H_{30}O_5$

[分子量] 386.487

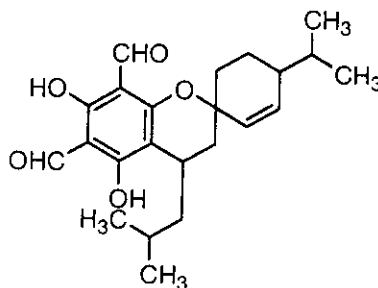
[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子

[性状] オイル

[比旋光度]: $[\alpha]_D^{20} +12.2$ (c, 1 in $CHCl_3$)

UV: [neutral] λ_{max} 277 (ϵ 32000); 340 (sh) (ϵ 4000) (EtOH) (Derep) [base] λ_{max} (溶媒は報告されていない) (Derep)



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952

§ Euglobal Ic

[CAS No.] 77794-62-8

[化合物分類] テルペノイド (Meroterpenoids), 単環芳香族 (Dibenzo[b,e]pyrans)

[構造式]

[分子式] C₂₃H₃₀O₅

[分子量] 386.487

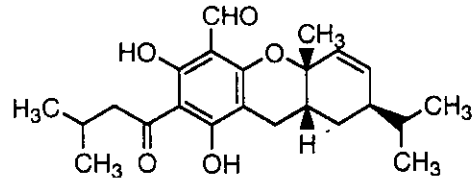
[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子

[性状] オイル

[比旋光度]: $[\alpha]_D^{20}$ -144 (c. 1.0 in CHCl₃)

UV: [base] λ_{max} (溶媒は報告されていない) (bereg) [neutral] λ_{max} 277 (ϵ 32000); 340 (sh) (ϵ 4000) (EtOH) (bereg)



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1952-1963, (Euglobal IIC)

Chiba, K. et al., J.C.S. Perkin 1, 1998, 2939-2942, (合成法)

Singh, I.P. et al., Phytochemistry, 1998, 47, 1157-1159, (Euglobal G6)

§ Euglobal IVb

[CAS No.] 82864-79-7

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

[分子式] C₂₈H₃₈O₅

[分子量] 454.605

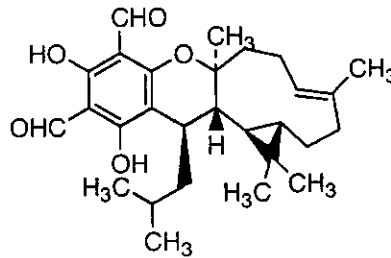
[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子

[性状] プリズム結晶

[融点] Mp 187-190 °C

[比旋光度]: $[\alpha]_D^{20}$ -230 (c, 1.0 in CHCl₃)



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1964

§ Euglobal IVb; 7-Epimer

[化学名・別名] Euglobal IVa

[CAS No.] 77794-65-1

[化合物分類] テルペノイド (Meroterpenoids)

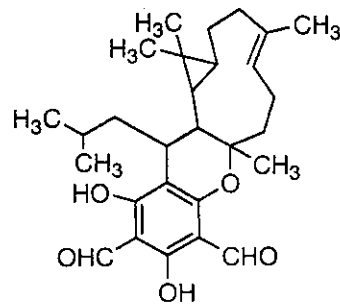
[構造式]

[分子式] C₂₈H₃₈O₅

[分子量] 454.605

[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子



-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1964

§ Euglobal VII

[CAS No.] 77794-64-0

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

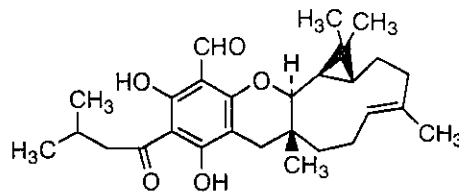
[分子式] C₂₈H₃₈O₅

[分子量] 454.605

[天然基原] *Eucalyptus globulus*

[用途] 強い肉芽形成抑制因子

[比旋光度]: $[\alpha]_D^{20}$ -137 (c, 1.0 in CHCl₃)



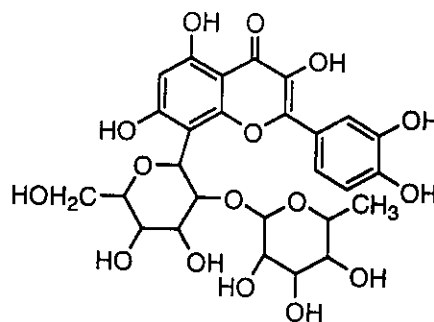
Absolute configuration

-----文献-----

Kozuka, M. et al., Chem. Pharm. Bull., 1982, 30, 1964

§ 8-Glucosyl-3,3',4',5,7-pentahydroxyflavone; 2''-O- α -L-Rhamnopyranoside

[CAS No.] 182062-20-0
 [化合物分類] フラボノイド (Flavonols; 5 × O-置換基)
 [構造式]



[分子式] $C_{27}H_{30}O_{16}$
 [分子量] 610.524
 [天然基原] *Eucalyptus globulus* の葉
 [性状] 黄色の粉末
 UV: [neutral] λ_{max} 256 ; 302 ; 374 (MeOH)

----- 文献 -----

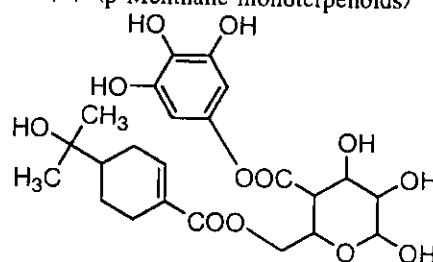
Manguero, L.O.A. et al., Nat. Prod. Lett., 1995, 7, 163, (分離, UV, IR, H-NMR, C13-NMR, Mass)

§ 8-Hydroxy-*p*-menth-1-en-7-oic acid; (*S*)-form, [3,4,5-Trihydroxybenzoyl-(\rightarrow 1)- β -D-glucopyranos-6-yl] ester

[化学名・別名] Eucaglobulin

[CAS No.] 241130-84-7

[化合物分類] タニン化合物 (Simple gallate ester tannins), テルペノイド (*p*-Menthane monoterpeneoids)
 [構造式]



[分子式] $C_{23}H_{30}O_{12}$
 [分子量] 498.483
 [天然基原] *Eucalyptus globulus*
 [性状] 無定形の淡褐色粉末

----- 文献 -----

Panizzi, L. et al., Gazz. Chim. Ital., 1965, 95, 1279, (構造決定)

Drabkina, A.A. et al., Zh. Obshch. Khim., 1971, 41, 1412; CA, 75, 88770h, (合成法)

Manns, D. et al., Planta Med., 1994, 60, 467, (glycosyl ester, H-NMR, C13-NMR)

Hou, A.J. et al., Chin. Chem. Lett., 1998, 9, 541-543, (Eucaglobulin)

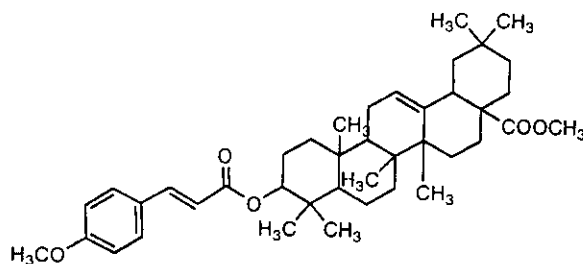
§ 3-Hydroxy-12-oleanen-28-oic acid; 3 β -form, 3-(4-Methoxycinnamoyl) (*Z*-), Me ester

[CAS No.] 189140-50-9

[化合物分類] テルペノイド (Oleanane triterpenoids)

[構造式]

[分子式] $C_{41}H_{58}O_5$
 [分子量] 630.906
 [天然基原] *Eucalyptus globulus*
 [性状] 結晶
 [融点] Mp 208-209 °C



----- 文献 -----

Odinokova, L.E. et al., Khim. Prir. Soedin., 1985, 270-271, (3,4-dihydroxycinnamoyl)

Santos, G.G. et al., Phytochemistry, 1997, 44, 1309, (methoxycinnamoyl ester)

§ 4-Hydroxy-16,18-tritriacontanedione

[CAS No.] 97191-41-8

[化合物分類] 脂肪族化合物 (Saturated unbranched aldehydes and ketones)

[構造式] $H_3C(CH_2)_{11}COCH_2CO(CH_2)_{11}CH(OH)CH_2CH_2CH_3$

[分子式] $C_{33}H_{64}O_3$

[分子量] 508.867

[天然基原] *Eucalyptus globulus* の葉のワックス

----- 文献 -----

Osawa, T. et al., J. Agric. Food Chem., 1985, 33, 777, (生育)

§ 18-Hydroxy-16-tritriacontanone

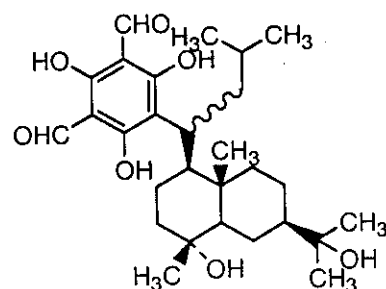
[CAS No.] 97191-42-9
 [化合物分類] 脂肪族化合物 (Saturated unbranched aldehydes and ketones)
 [構造式] $\text{H}_3\text{C}(\text{CH}_2)_{10}\text{CH}(\text{OH})\text{CH}_2\text{CO}(\text{CH}_2)_{10}\text{CH}_3$
 [分子式] $\text{C}_{33}\text{H}_{66}\text{O}_2$
 [分子量] 494.883
 [天然基原] *Eucalyptus globulus* の葉のワックス

-----文献-----

Osawa, T. et al., J. Agric. Food Chem., 1985, 33, 777, (生育)

§ Macrocarpal I

[CAS No.] 179388-54-6
 [化合物分類] テルペノイド (Meroterpenoids)
 [構造式]



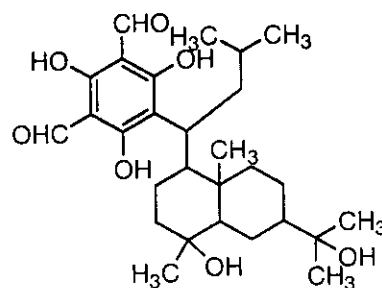
[分子式] $\text{C}_{28}\text{H}_{42}\text{O}_7$
 [分子量] 490.636
 [天然基原] *Eucalyptus globulus*
 [性状] 青白い黄色の粉末
 [比旋光度]: $[\alpha]_D -49.1$ (c, 0.028 in EtOH)

-----文献-----

Osawa, K. et al., J. Nat. Prod., 1996, 59, 823-827, (分離, H-NMR, C13-NMR)
 Osawa, K. et al., Chem. Pharm. Bull., 1997, 45, 1216-1217, (絶対構造)

§ Macrocarpal I; 9'-Epimer

[化学名・別名] Macrocarpal J
 [CAS No.] 179603-47-5
 [化合物分類] テルペノイド (Meroterpenoids)
 [構造式]



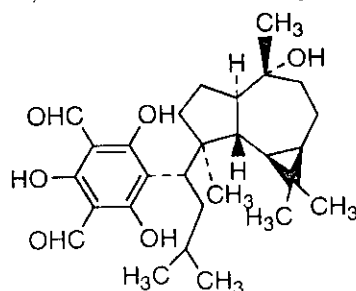
[分子式] $\text{C}_{28}\text{H}_{42}\text{O}_7$
 [分子量] 490.636
 [天然基原] *Eucalyptus globulus*
 [性状] 青白い黄色の粉末
 [比旋光度]: $[\alpha]_D -62.5$ (c, 0.048 in EtOH)

-----文献-----

Osawa, K. et al., J. Nat. Prod., 1996, 59, 823-827, (分離, H-NMR, C13-NMR)
 Osawa, K. et al., Chem. Pharm. Bull., 1997, 45, 1216-1217, (絶対構造)

§ Macrocarpal B

[CAS No.] 142698-60-0
 [化合物分類] テルペノイド (Aromadendrane sesquiterpenoids), テルペノイド (Meroterpenoids)
 [構造式]



[分子式] $\text{C}_{28}\text{H}_{40}\text{O}_6$
 [分子量] 472.62
 [天然基原] *Eucalyptus globulus*, *Eucalyptus macrocarpa*
 [性状] 結晶
 [融点] Mp 198-200 °C

[比旋光度]: $[\alpha]_D^{25} -17.5$ (c, 1.2 in EtOH)

-----文献-----

- Murata, M. et al., Agric. Biol. Chem., 1990, 54, 3221, (分離, H-NMR, C13-NMR, 結晶構造)
Yamakoshi, Y. et al., Biosci., Biotechnol., Biochem., 1992, 56, 1570, (分離, H-NMR, C13-NMR)
Nishizawa, M. et al., Tet. Lett., 1992, 33, 2983, (分離, H-NMR, C13-NMR, 結晶構造)
Tanaka, T. et al., Chem. Comm., 1997, 2401-2402, (合成法)
Tanaka, T. et al., J.O.C., 1998, 63, 9782-9793, (合成法)

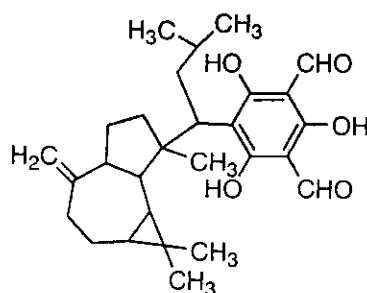
§ **Macrocarpal B; 10-Deoxy, 10,14-didehydro**

[化学名・別名] Macrocarpal C

[CAS No.] 142628-53-3

[化合物分類]テルペノイド(Aromadendrane sesquiterpenoids), テルペノイド(Meroterpenoids)

[構造式]



[分子式] $C_{28}H_{38}O_5$

[分子量] 454.605

[天然基原] 次の植物から分離: *Eucalyptus globulus*

[性状] 無定型の塊

[比旋光度]: $[\alpha]_D^{25} -3$ (c, 0.92 in EtOH)

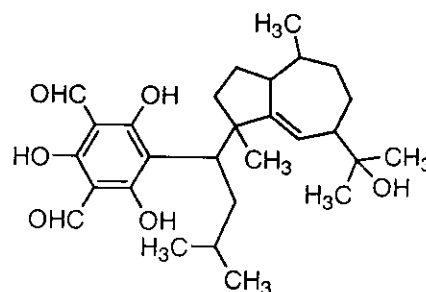
-----文献-----

- Murata, M. et al., Agric. Biol. Chem., 1990, 54, 3221, (分離, H-NMR, C13-NMR, 結晶構造)
Yamakoshi, Y. et al., Biosci., Biotechnol., Biochem., 1992, 56, 1570, (分離, H-NMR, C13-NMR)
Nishizawa, M. et al., Tet. Lett., 1992, 33, 2983, (分離, H-NMR, C13-NMR, 結晶構造)
Tanaka, T. et al., Chem. Comm., 1997, 2401-2402, (合成法)
Tanaka, T. et al., J.O.C., 1998, 63, 9782-9793, (合成法)

§ **Macrocarpal D**

[化合物分類]テルペノイド(Meroterpenoids), テルペノイド(Simple guaiane sesquiterpenoids), テルペノイド(Pachydictyane diterpenoids)

[構造式]



[分子式] $C_{29}H_{40}O_6$

[分子量] 472.62

[天然基原] *Eucalyptus globulus*

[性状] 無定型の塊

[比旋光度]: $[\alpha]_D^{25} -13.2$ (c, 1 in EtOH)

-----文献-----

- Nishizawa, M. et al., Tet. Lett., 1992, 33, 2983, (分離, H-NMR, C13-NMR)

§ **Macrocarpal E**

[化合物分類]テルペノイド(Simple eudesmane sesquiterpenoids), テルペノイド(Prenyleudesmane diterpenoids), テルペノイド(Meroterpenoids)

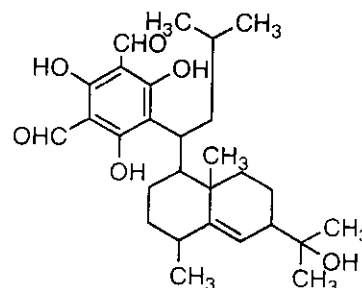
[構造式]

[分子式] $C_{29}H_{40}O_6$

[分子量] 472.62

[天然基原] *Eucalyptus globulus*

[性状] 無定型の塊



-----文献-----

Nishizawa, M. et al., Tet. Lett., 1992, 33, 2983, (分離, H-NMR, C13-NMR)

§ Macrocarpal H

[CAS No.] 179388-53-5

[化合物分類] テルペノイド (Meroterpenoids)

[構造式]

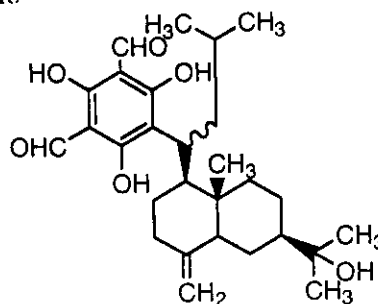
[分子式] $C_{28}H_{40}O_6$

[分子量] 472.62

[天然基原] *Eucalyptus globulus*

[性状] 青白い黄色の粉末

[比旋光度]: $[\alpha]_D -39.2$ (c, 0.02 in EtOH)



-----文献-----

Osawa, K. et al., J. Nat. Prod., 1996, 59, 823-827, (分離, H-NMR, C13-NMR)

Osawa, K. et al., Chem. Pharm. Bull., 1997, 45, 1216-1217, (絶対構造)

§ 2(10)-Pinen-3-ol; (1S,3R,5S)-form

[化学名・別名] (-)-trans-form

[CAS No.] 547-61-5

[化合物分類] テルペノイド (Pinane monoterpeneoids)

[構造式]

[分子式] $C_{10}H_{16}O$

[分子量] 152.236

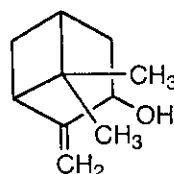
[天然基原] *Eucalyptus globulus* のオイル。また *Sium latijugum*, *Torilis japonica*, *Costus speciosus* から得られる

[性状] オイル

[融点] Mp 5 °C

[沸点] Bp 209-210 °C. Bp₁ 72 °C

[販売元] Fluka:80613



-----文献-----

Bose, A.K., J.O.C., 1955, 20, 1003, (構造決定)

Banthorpe, D.V. et al., Chem. Rev., 1966, 66, 643, (レビュー)

§ 2(10)-Pinen-3-one; (-)-form

[CAS No.] 19890-00-7

[化合物分類] テルペノイド (Pinane monoterpeneoids)

[構造式]

[分子式] $C_{10}H_{16}O$

[分子量] 150.22

[天然基原] 次の植物から分離: *Eucalyptus globulus* のオイル, *Chenopodium ambrosioides*, *Nepeta ciliaris*

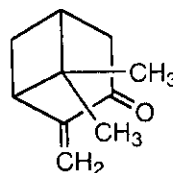
[用途] キクイムシの性誘因物質

[性状] オイル

[融点] Mp -1.8 °C

[沸点] Bp₁ 67-69 °C

[比旋光度]: $[\alpha]_D -68.5$



-----文献-----

Banthorpe, D.V. et al., Chem. Rev., 1966, 66, 643, (レビュー)

Bessiegrave-Chreacutetien, Y. et al., Bull. Soc. Chim. Fr., 1971, 2591, (合成法)

Jefford, C.W. et al., Helv. Chim. Acta, 1973, 56, 2649, (合成法)

§ 13,15-Triacontanedione

[CAS No.] 81116-08-7

[化合物分類] 脂肪族化合物 (Saturated unbranched aldehydes and ketones)

[販売元] $H_3C(CH_2)_{11}COCH_2CO(CH_2)_{11}CH_3$

[分子式] $C_{30}H_{58}O_2$

[分子量] 450.787

[天然基原] コーヒー, *Eucalyptus globulus*

[用途] 食物の抗酸化剤

[天然基原] コーヒー, *Eucalyptus globulus*
[用途] 食物の抗酸化剤

-----文献-----

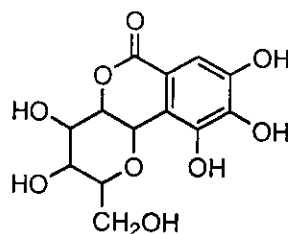
Japan. Pat., 1981, 81 151 486; CA, 96, 141433n, (分離, 性質)
Ablanque, E. et al., CA, 1989, 110, 209458q, (分離)

*****ユキノシタ (Yukinoshita) *****

§ § ユキノシタ科ユキノシタ (*Saxifraga stolonifera* Meerburg) の全草。

§ **Bergenin; O-De-Me**

[化学名・別名] Norbergenin. Desmethylbergenin. Demethylbergenin
[CAS No.] 79595-97-4
[化合物分類] ベンゾピラノイド (Pyrano-2-benzopyrans)
[構造式]



[分子式] $C_{13}H_{14}O_9$

[分子量] 314.248

[天然基原] *Woodfordia fruticosa*, *Saxifraga stolonifera*, *Mallotus japonicus*

[性状] プリズム結晶もしくは針状結晶 (H₂O) (dimorph.)

[融点] Mp 277-278 °C (275-277 °C (分解)) (prisms). Mp 178-180 °C (needles)

[比旋光度]: $[\alpha]_D^{25} -22.9$ (c, 0.393 in H₂O)

[その他のデータ] Incorrect (enantiomeric) abs. config. shown in the paper descr. this compd.

-----文献-----

Karrer, W. et al., Konstitution und Vorkommen der Organischen Pflanzenstoffe, 2nd edn., Birkhuser Verlag, Basel, 1972, no. 1395, (生育)

Kalidhar, S.B. et al., Indian J. Chem., Sect. B, 1981, 20, 720, (Norbergenin)

Taneyama, M. et al., Phytochemistry, 1983, 22, 1053, (Norbergenin)

§ **3,3',4',5,7-Pentahydroxyflavone; 5-O-β-D-Glucopyranoside**

[化学名・別名] Quercetin 5-glucoside. Saxifragin

[CAS No.] 34199-21-8

[化合物分類] フラボノイド (Flavonols; 5 × O-置換基)

[構造式]

[分子式] $C_{21}H_{20}O_{12}$

[分子量] 464.382

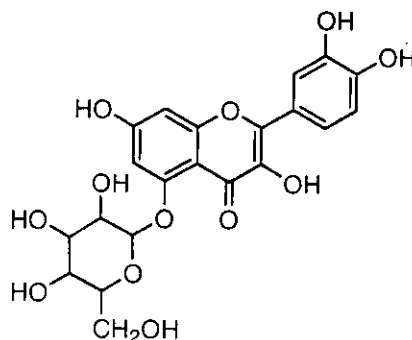
[天然基原] 次の植物の葉から分離: *Saxifraga stolonifera*, その他の植物

[性状] 黄色の針状結晶 (MeOH/Py)

[融点] Mp 244-246 °C で分解 (264 °C)

[比旋光度]: $[\alpha]_D^{25} -105$ (c, 0.575 in Py)

[その他のデータ] May be identical with Serotrin and Incarnatrin descr. in 1910 from *Prunus serotina* and *Trifolium incarnatum* resp. (Power and Moore: Rogerson)



-----文献-----

Morita, N. et al., Chem. Pharm. Bull., 1974, 22, 1487, (Saxifragin)

IARC Monog., 1983, 31, 213; Suppl. 7, 71, (レビュー, 毒性)

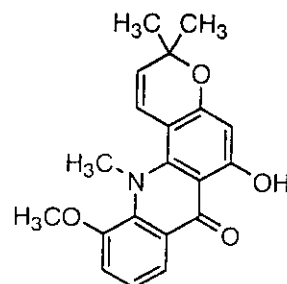
*****ユズ (Yuzu) *****

§ § ミカン科ユズ (*Citrus junos* Siebold ex Tanaka) の果実。

§ **Acronycine; O-De-Me, 5-methoxy**

[化学名・別名] 5-Methoxynoracronycine

[化合物分類] アルカロイド化合物 (Acridone alkaloids)



[天然基原] 次の植物から得られるアルカロイド: *Citrus junos* の樹皮 (ミカン科)
[性状] 淡黄色のプリズム結晶
[融点] Mp 146-148 °C

-----文献-----

Ju-ichi, M. et al., *Heterocycles*, 1986, 24, 1595, (5-Methoxynoracronycine)

§ Bicyclogermacrene

[CAS No.] 24703-35-3

[化合物分類] テルペノイド (Lepidozanes and bicyclogermacrene sesquiterpenoids)

[構造式]

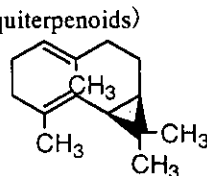
[分子式] C₁₅H₂₄

[分子量] 204.355

[天然基原] *Citrus junos* の皮のオイル

[性状] オイル

[比旋光度]: [α]_D +61 (CHCl₃)



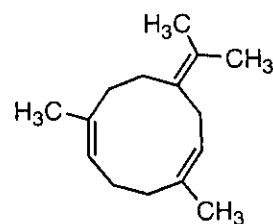
-----文献-----

Nishimura, K. et al., *Tetrahedron*, 1973, 29, 271, (分離, 構造)

McMurry, J.E. et al., *J.O.C.*, 1987, 52, 4885, (合成法)

Ihara, M. et al., *J.O.C.*, 1994, 59, 8092, (合成法)

Hardt, I.H. et al., *Phytochemistry*, 1995, 40, 605, (Isolepidozene)



§ 1(10),4,7(11)-Germacatriene; (1(10)E,4E)-form

[化学名・別名] Germacrene B. Germacatriene

[CAS No.] 15423-57-1

[化合物分類] テルペノイド (Simple germacrene sesquiterpenoids)

[構造式]

[分子式] C₁₅H₂₄

[分子量] 204.355

[天然基原] ユズ *Citrus junos* の皮のオイル

[性状] オイル

-----文献-----

Ognyanov, I. et al., *Coll. Czech. Chem. Comm.*, 1958, 23, 2033, (合成法)

Allen, F.H. et al., *Chem. Comm.*, 1967, 588, (結晶構造)

Nishimura, K. et al., *Tet. Lett.*, 1969, 3097, (分離)

Minnaard, A.J. et al., *J.O.C.*, 1997, 62, 7366-7345, (合成法)

§ 6-Hydroxy-2,6-dimethyl-2,7-octadien-4-one

[CAS No.] 64661-54-7

[化合物分類] テルペノイド (Acyclic monoterpenoids)

[構造式]

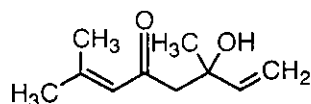
[分子式] C₁₀H₁₆O₂

[分子量] 168.235

[天然基原] *Citrus junos*

[性状] オイル

[沸点] Bp_{lit} 69-70 °C



-----文献-----

Kitahara, T. et al., *Agric. Biol. Chem.*, 1980, 44, 897, (分離)

§ 6-Hydroxy-2,6-dimethyl-7-octen-4-one; (+)-form

[CAS No.] 23007-34-3

[化合物分類] テルペノイド (Acyclic monoterpenoids)

[構造式]

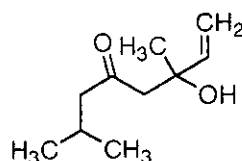
[分子式] C₁₁H₁₈O₂

[分子量] 170.251

[天然基原] 次の植物の精油から分離: *Cinnamomum camphora*, *Citrus junos*, *Zanthoxylum alatum*

[性状] 液体

[沸点] Bp_{lit} 72-74 °C



[天然基原] 次の植物の精油から分離: *Cinnamomum camphora*, *Citrus junos*, *Zanthoxylum alatum*

[性状] 液体

[沸点] Bp. 72-74 °C

[比旋光度]: $[\alpha]_D^{25} +4.8$ (c, 3 in CCl_4)

-----文献-----

Yoshida, T. et al., *Agric. Biol. Chem.*, 1969, 33, 343, (分離, H-NMR, 構造)

Kitahara, T. et al., *Agric. Biol. Chem.*, 1980, 44, 897, (分離, 合成法)

Ahmad, A. et al., *Fitoterapia*, 1988, 59, 413, (分離)

§ 12-Hydroxy-9-dodecenoic acid; (Z)-form, Lactone

[化学名・別名] Oxacyclotridec-10-en-2-one (CAS 名). 9-Dodecen-12-olide. Yuzu lactone

[CAS No.] 79894-05-6

[その他の CAS No.] 79894-06-7

[化合物分類] 脂肪族化合物 (Unbranched alkenic carboxylic acids and lactones)

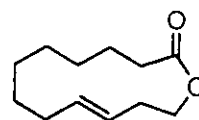
[構造式]

[分子式] $C_{12}H_{20}O_2$

[分子量] 196.289

[天然基原] *Citrus junos*, *Medicago rugosa*

[性状] オイル



-----文献-----

Doss, R.P. et al., *Phytochemistry*, 1989, 28, 3311-3315, (分離, lactone)

Suzuki, Y. et al., *Biosci., Biotechnol., Biochem.*, 1995, 59, 2049, (分離, H-NMR, C_{13} -NMR)

Rodefeld, L. et al., *Tetrahedron*, 1998, 54, 5893-5898, (lactone)

§ Junosidine

[化学名・別名] 2,11-Dihydro-5-hydroxy-10-methoxy-2,2,11-trimethyl-6H-pyrano [3,2-b] acridin-6-one (CAS 名)

[CAS No.] 110883-39-1

[化合物分類] アルカロイド化合物 (Acridone alkaloids)

[構造式]

[分子式] $C_{20}H_{19}NO_4$

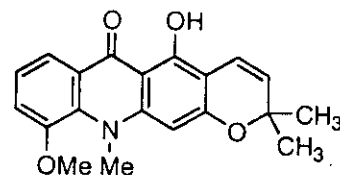
[分子量] 337.374

[天然基原] 次の植物から得られるアルカロイド: *Citrus junos* の根皮 (≡

カン科)

[性状] 橙色の針状結晶

[融点] Mp 188-189 °C



-----文献-----

Ju-ichi, M. et al., *Heterocycles*, 1987, 26, 2077, (UV, H-NMR, 構造)

Takemura, Y. et al., *Heterocycles*, 1992, 34, 2123, (Yukocitrine)

§ Junosine

[化学名・別名] 1,3,5-Trihydroxy-10-methyl-2-(3-methyl-2-butenyl)-9(10H)-acridinone (CAS 名). 1,3,5-Trihydroxy-10-methyl-2-prenylacridone

[CAS No.] 103956-34-9

[化合物分類] アルカロイド化合物 (Acridone alkaloids)

[構造式]

[分子式] $C_{19}H_{19}NO_4$

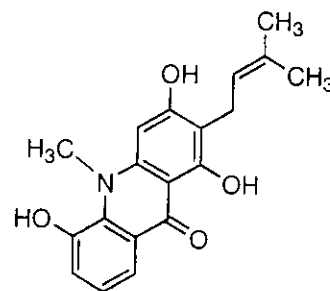
[分子量] 325.363

[天然基原] 次の植物から得られるアルカロイド: *Citrus junos* の樹皮 (≡

カン科)

[性状] 淡黄色のプリズム結晶

[融点] Mp 210-213 °C



-----文献-----

Ju-ichi, M. et al., *Heterocycles*, 1986, 24, 1595, (Junosine)

Auzi, A.A. et al., *Phytochemistry*, 1996, 42, 235, (Bosistidine)

Ito, C. et al., *Chem. Pharm. Bull.*, 2000, 48, 65-70, (Glycocitrine IV)

Wu, T.-S. et al., *Chem. Pharm. Bull.*, 2000, 48, 85-90, (Buxifoliadine C)

8-substituted)

[構造式]

[分子式] $C_{19}H_{22}O_6$

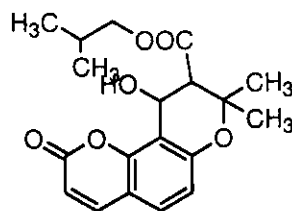
[分子量] 346.379

[天然基原] *Citrus junos*

[性状] オイル

[比旋光度]: $[\alpha]_D^{20} -16.4$ (CHCl₃)

[その他のデータ] Registered in CA as identical with Campesterol, which appears to be incorrect



-----文献-----

Ju-ichi, M. et al., *Heterocycles*, 1986, 24, 2777, (Junosmarin)

§ *p*-Mentha-1,8-dien-4-ol

[化学名・別名] 4-Methyl-1-(1-methylethenyl)-3-cyclohexen-1-ol (CAS 名)

[CAS No.] 3419-02-1

[関連 CAS No.] 73069-45-1

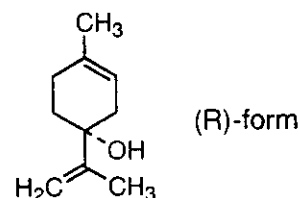
[化合物分類] テルペノイド (*p*-Menthane monoterpenoids)

[構造式]

[分子式] $C_{10}H_{16}O$

[分子量] 152.236

[天然基原] 次の植物から分離: 日本のコショウ (*Zanthoxylum piperitum*), ユズ (*Citrus junos*), スペアミント (*Mentha spicata*) のオイル



-----文献-----

Sakai, T. et al., *Bull. Chem. Soc. Jpn.*, 1968, 41, 1945, (分離)

Naya, Y. et al., *Heterocycles*, 1978, 10, 29, (分離)

Delay, F. et al., *Helv. Chim. Acta*, 1979, 62, 2168, (合成法, H-NMR)

*****ユッカ (Yucca) *****

§ § ユリ科イトラン (ベアグラス) (*Yucca filamentosa* L.) の地上部および根茎部。

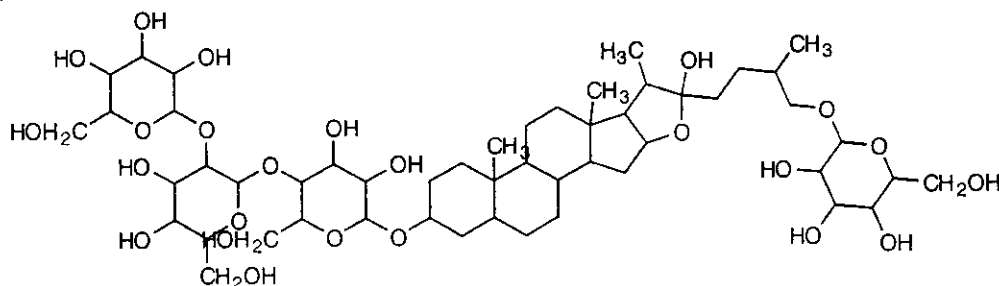
§ Furostane-3,22,26-triol; (3 β , 5 α , 22 α , 25S)-form, 3-O-[α -D-Galactopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-glucopyranoside], 26-O- β -D-glucopyranoside

[化学名・別名] Protoyuccoside C

[CAS No.] 55826-89-6

[化合物分類] ステロイド (Furostane steroids). (C27).

[構造式]



[分子式] $C_{57}H_{96}O_{24}$

[分子量] 1083.226

[天然基原] *Yucca filamentosa*, *Solanum lyratum*

[性状] 結晶

[融点] Mp 182-184 °C

[比旋光度]: $[\alpha]_D^{20} -30$ (c, 2 in MeOH)

-----文献-----

Dragalin, I.P. et al., *Phytochemistry*, 1975, 14, 1817, (Protoyuccoside C)

§ Furostane-3,22,26-triol; (3 β , 5 β , 22 α , 25S)-form, 3-O-[α -D-Galactopyranosyl-(1 \rightarrow 2)-[β -D-galactopyranosyl-(1 \rightarrow 6)]- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-glucopyranoside], 26-O- β