

*****メリロット (Melilot) *****

§ § マメ科セイヨウエビラハギ (*Melilotus officinalis* (L.) Lamarck) の花または全草。

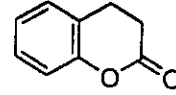
§ 3,4-Dihydro-2H-1-benzopyran-2-one (CAS 名)

[化学名・別名] Hydrocoumarin (旧 CAS 名), 3,4-Dihydrocoumarin, 2-Hydroxyhydrocinnamic lactone, 2-Chromanone, Melilotic lactone, Melilotol, Melilotin †

[CAS No.] 119-84-6

[化合物分類] ベンゾピラノイド (Non-oxygenated coumarins)

[構造式]



[分子式] C₉H₈O₂

[分子量] 148.161

[基原] 次の植物から分離: *Melilotus officinalis*, *Artemisia compacta*

[用途] 香料成分として用いられる

[性状] 結晶もしくは液体

[融点] Mp 25 °C

[沸点] Bp 272 °C, Bp₁₅ 145 °C

[傷害・毒性] 皮膚を刺激, 50%致死量 (LD₅₀) (ラット, 経口) 1460 mg/kg

[化学物質毒性データ総覧 (RTECS) 登録番号] MW5775000

[販売元] Aldrich: W23810-4

-----文献-----

de Benneville, H. et al., J.A.C.S., 1940, 62, 283, (分離)

Appleton, R.A. et al., Phytochemistry, 1971, 10, 447, (分離)

Opdyke, D.L.J., Food Cosmet. Toxicol., 1974, 12, 521, (レビュー, 毒性)

Lewis, R.J., Food Additives Handbook, Van Nostrand Reinhold International, New York, 1989, HHR500

***RTECS (化学物質毒性データ) ***

生体影響物質 : 催腫瘍物質, 一時刺激物質,

健康障害に関するデータ

皮膚/眼の刺激に関するデータ

<<試験方法>> 標準ドライズ (Draize) 試験法,

曝露経路 : 皮膚への塗布

被験動物 : げっ歯類-ウサギ,

投与量・期間 : 500 mg/24 時間

反応の症度 : 軽度,

参照文献

Food and Cosmetics Toxicology. (London, UK) 12,521,1974

急性毒性に関するデータ

<<試験方法>> LD50 試験 (50%致死量試験),

曝露経路 : 経口投与,

被験動物 : げっ歯類-ラット,

投与量・期間 : 1460 mg/kg

毒性影響 : [行動] 傾眠 (全身活動度の低下),

参照文献

Food and Cosmetics Toxicology. (London, UK) 2,327,1964

その他の多回投与試験

<<試験方法>> 最小毒性量 (TDLo),

曝露経路 : 経口投与,

被験動物 : げっ歯類-ラット,

投与量・期間 : 18 gm/kg/16 日間間欠投与

毒性影響 : [慢性データ関連] 死亡

参照文献

National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) NTP-TR-423, 1993

<<試験方法>> 最小毒性量 (TDLo),

曝露経路 : 経口投与,

被験動物 : げっ歯類-マウス,

毒性影響 : [肝臓] 肝臓重量の変化.
[慢性データ関連] 死亡

参考文献

National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) NTP-TR-423,1993
催腫瘍性に関するデータ

<<試験方法>> 最小毒性量(TDLo).

曝露経路 : 経口投与.
被験動物 : げっ歯類-ラット.
投与量・期間 : 433 gm/kg/2 年間欠投与
毒性影響 : [催腫瘍性] RTECS 基準による催腫瘍性.
[腎臓・尿路・膀胱] 腎臓腫瘍.

参考文献

National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) NTP-TR-423,1993

<<試験方法>> 最小毒性量(TDLo).

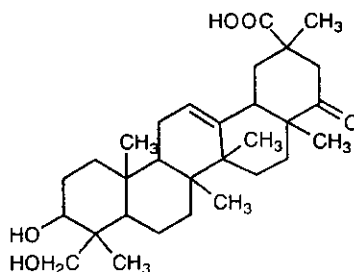
曝露経路 : 経口投与.
被験動物 : げっ歯類-マウス.
投与量・期間 : 144 gm/kg/2 年間欠投与
毒性影響 : [催腫瘍性] RTECS 基準による催腫瘍性.
[肝臓] 腫瘍.

参考文献

National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) NTP-TR-423,1993

§ 3,24-Dihydroxy-22-oxo-12-oleanen-29-oic acid; 3 β -form

[化学名・別名] Melilotigenin. Yunganogenin K
[CAS No.] 114702-59-9
[化合物分類] テルペノイド (Oleanane triterpenoids)
[構造式]
[分子式] $C_{30}H_{48}O_5$
[分子量] 486.69
[基原] *Melilotus officinalis*
[性状] 板状結晶 (MeOH)
[融点] Mp 318-319 °C
[比旋光度]: $[\alpha]_D^{25} +57.1$ (c, 0.04 in MeOH)

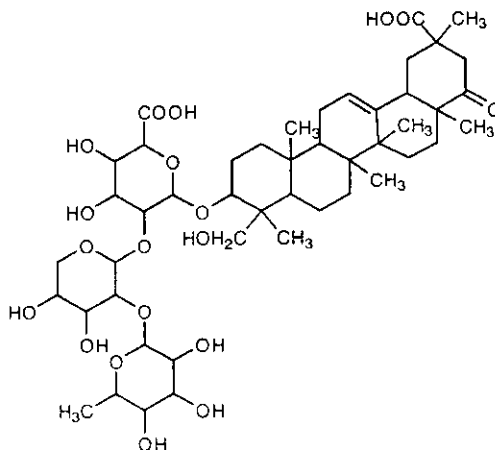


-----文献-----

Kang, S.S. et al., J. Nat. Prod., 1988, 51, 335. (分離, H-NMR)
Ohtani, K. et al., Phytochemistry, 1994, 36, 139. (Yunganosides)
Hirakawa, T. et al., Chem. Pharm. Bull., 2000, 48, 286-287. (Melilotussaponin O₂)

§ 3,24-Dihydroxy-22-oxo-12-oleanen-29-oic acid; 3 β -form, 3-O-[α -L-Rhamnopyranosyl-(1 \rightarrow 2)- β -D-xylopyranosyl-(1 \rightarrow 2)- β -D-glucuronopyranoside]

[化学名・別名] Melilotussaponin O₂
[CAS No.] 263398-47-6
[化合物分類] テルペノイド (Oleanane triterpenoids)
[構造式]



[分子式] $C_{47}H_{72}O_{19}$
[分子量] 941.074
[基原] *Melilotus officinalis*
[性状] 無定型の粉末
[比旋光度]: $[\alpha]_D^{25} -45.7$ (c, 0.5 in Py)

-----文献-----

Hirakawa, T. et al., Chem. Pharm. Bull., 2000, 48, 286-287. (Melilotussaponin O₂)

[比旋光度]: $[\alpha]_D^{25} -45.7$ (c, 0.5 in Py)

-----文献-----

Hirakawa, T. et al., Chem. Pharm. Bull., 2000, 48, 286-287, (Melilotussaponin O₂)

§ 4-Hydroxyphenylacetic acid

[化学名・別名] 4-Hydroxybenzeneacetic acid (CAS 名), *p*-Hydroxy- α -toluic acid

[CAS No.] 156-38-7

[化合物分類] 単環芳香族 (Phenylacetic acid derivatives)

[構造式]

[分子式] C₈H₈O₃

[分子量] 152.149

[基原] *Melilotus officinalis*. また *Taraxacum officinalis* 酵母の種子, ウール, その他の生物起源から得られる

[性状] 針状結晶 (H₂O)

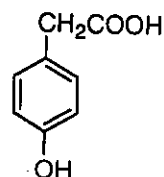
[融点] Mp 148-150 °C

[溶解性] エタノール, エーテル, 温水に可溶

[PKa 値] pK_a 4.59 (10% EtOH 溶液)

[化学物質毒性データ総覧 (RTECS) 登録番号] AI2680000

[販売元] Aldrich:H5000-4; Fluka:56140; Rare Chemicals Library:S11713-7; Sigma:H4377



-----文献-----

Power, F.B. et al., J.C.S., 1912, 101, 2411-2429, (分離)

Kawakishi, S. et al., Agric. Biol. Chem., 1967, 7, 823-830, (分離, 合成法, nitrile)

Li, S. et al., CA, 1984, 100, 117826y, (分離, nitrile)

Dombrowicz, E. et al., Pharmazie, 1991, 46, 156-157; CA, 114, 225712f, (分離)

Faizi, S. et al., Phytochemistry, 1995, 38, 957-963, (分離, nitrile-rhamnoside)

Kachlicki, P. et al., Proc. Eur. Fusarium Semin., 5th, 1997, 853-855, (分離, 活性, Me ester)

RTECS (化学物質毒性データ)

生体影響物質 : 医薬品.

健康障害に関するデータ

急性毒性に関するデータ

<<試験方法>> LD50 試験 (50%致死量試験).

曝露経路 : 腹腔内投与.

被験動物 : げっ歯類-マウス.

投与量・期間 : 3500 mg/kg

毒性影響 : 致死量以外に毒性影響に関する報告はない.

参考文献

Farmaco, Edizione Scientifica. (Casella Postale 227, 27100 Pavia, Italy) 13,286,1958

米国に於ける状況

EPA TSCA Section 8(b) CHEMICAL INVENTORY

§ 3-(2-Hydroxyphenyl)-2-propenoic acid; (E)-form

[CAS No.] 614-60-8

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

[構造式]

[分子式] C₉H₈O₃

[分子量] 164.16

[基原] 多くの植物に見られる, 例えば, *Melilotus officinalis*, *Angraecum fragrans*

[用途] coumarins 生合成の中間体

[性状] 針状結晶 (H₂O)

[融点] Mp 207-208 °C で分解

[溶解性] エタノール, 温水, エーテに可溶; 二硫化炭素, クロロホルムに不溶

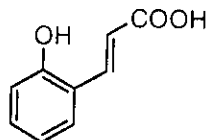
[PKa 値] pK_a 4.61

[その他のデータ] Nonvolatile in steam. 蒸留で分解.

[傷害・毒性] 50%致死量 (LD₅₀) (マウス, 静脈内) 180 mg/kg

[化学物質毒性データ総覧 (RTECS) 登録番号] GD9090000

[販売元] Aldrich:H2280-9; Fluka:28170; Sigma:C4400



-----文献-----

急性毒性に関するデータ

<<試験方法>> LD50 試験(50%致死量試験).

曝露経路 : 静脈内投与.

被験動物 : げっ歯類-マウス.

投与量・期間 : 180 mg/kg

毒性影響 : 致死量以外に毒性影響に関する報告はない.

参照文献

U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals. (Aberdeen Proving Ground, MD 21010) NX#02587

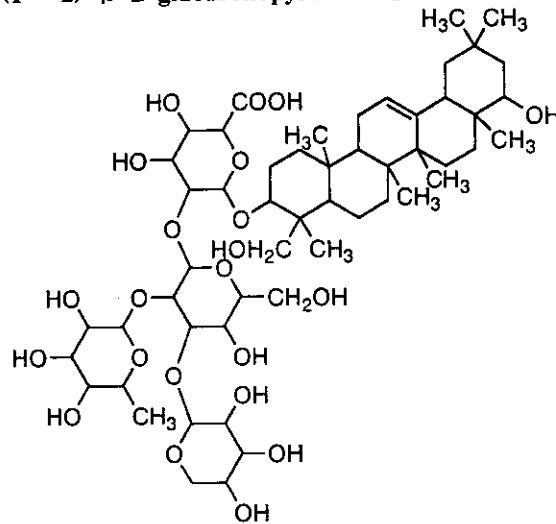
米国に於ける状況

§ 12-Oleanene-3,22,24-triol; (3 β , 22 β)-form, 3-O-[α -L-Rhamnopyranosyl-(1 \rightarrow 2)-[α -L-arabinopyranosyl-(1 \rightarrow 3)]- β -D-galactopyranosyl-(1 \rightarrow 2)- β -D-glucuronopyranoside]

[化学名・別名] Melilotussaponin O₁

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

[構造式]



[分子式] C₅₅H₈₆O₂₂

[分子量] 1075.249

[基原] *Melilotus officinalis*

[性状] 無定形の粉末

[比旋光度]: [α]_D²⁵ +5.7 (c, 0.5 in MeOH)

-----文献-----

Udayama, M. et al., Chem. Pharm. Bull., 1998, 46, 526-527, (Melilotussaponin O₁)

§ § マメ科 (*Melilotus coerulea* Desrousseaux) の花または全草。

本調査研究では、成分に関する文献はなかった。

*****メロン (Melon) *****

§ § ウリ科メロン (*Cucumis melo* L.) またはその変種及び交雑変種の果実。

§ Cucumisin

[化学名・別名] E.C. 3.4.21.25

[CAS No.] 82062-89-3

[化合物分類] アミノ酸とペプチド (Enzymes)

[構造式] 不明

[一般的性質] タンパク質

[基原] *Cucumis melo* var. Prince の果実

[用途] Serine endopeptidase

-----文献-----

Kaneda, M. et al., J. Biochem. (Tokyo), 1975, 78, 1287, (分離)

Yamagata, H. et al., J. Biol. Chem., 1994, 269, 32725-32731, (構造決定)

Kaneda, M. et al., Biotechnol. Appl. Biochem., 1995, 22, 215-222, (分離)

§ Isoorientin; 2''-O- β -D-Glucopyranosyl

[化学名・別名] 3',4',5,7-Tetrahydroxy-6-C-sophorosylflavone. Meloside L

[CAS No.] 55196-48-0

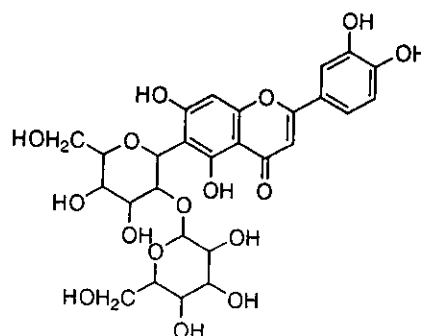
§ Isoorientin; 2''-O-β-D-Glucopyranosyl

[化学名・別名] 3',4',5,7-Tetrahydroxy-6-C-sophorosylflavone. Meloside L

[CAS No.] 55196-48-0

[化合物分類] フラボノイド (Flavones; 4 × O-置換基)

[構造式]



[分子式] C₂₇H₃₀O₁₆

[分子量] 610.524

[基原] *Gentiana verna* の葉, *Gentiana depressa*, *Cucumis melo*,
Oryza sativa, *Silene pratensis*

[性状] 結晶 (MeOH)

[融点] Mp 212 °C

-----文献-----

Hostettmann, K. et al., *Helv. Chim. Acta*, 1975, 58, 130, (2''-glucosyl)

Hostettmann, M. et al., *Phytochemistry*, 1978, 17, 2083. (レビュー)

Congora, C. et al., *Helv. Chim. Acta*, 1986, 69, 251, (分離)

§ Isoorientin; 2''-O-[3,4-Dihydroxycinnamoyl-(→?)-β-D-glucopyranoside]

[化学名・別名] Meloside I

[CAS No.] 39384-49-1

[化合物分類] フラボノイド (Flavonoids 構造は一部又は全てが未知), フラボノイド (Flavones; 4 × O-置換基)

[構造式] 有効な構造式はない

[分子式] C₂₆H₂₆O₁₉

[分子量] 772.669

[基原] 次の植物から分離: *Cucumis melo*

-----文献-----

Monties, B. et al., *Phytochemistry*, 1976, 15, 1053, (Meloside)

Hostettmann, M. et al., *Phytochemistry*, 1978, 17, 2083, (レビュー)

Congora, C. et al., *Helv. Chim. Acta*, 1986, 69, 251, (分離)

§ Isovitexin; 2''-O-β-D-Glucopyranosyl, O-(3,4-Dihydroxycinnamoyl)

[化学名・別名] Meloside a †

[CAS No.] 39384-48-0

[化合物分類] フラボノイド (Flavonoids 構造は一部又は全てが未知), フラボノイド (Flavones; 3 × O-置換基)

[構造式] 有効な構造式はない

[分子式] C₂₆H₂₆O₁₈

[分子量] 756.67

[基原] 次の植物から分離: *Cucumis melo*

[その他のデータ] Caffeyol ester of Meloside A

-----文献-----

Monties, B. et al., *Phytochemistry*, 1976, 15, 1053, (Meloside)

§ 3,6-Nonadien-1-ol; (3Z,6E)-form

[CAS No.] 53250-56-9

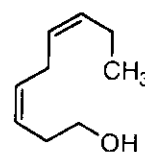
[化合物分類] 脂肪族化合物 (Unbranched alkenic alcohols)

[構造式]

[分子式] C₉H₁₆O

[分子量] 140.225

[基原] 次の植物から分離: *Citrullus vulgaris*, *Cucumis melo*



-----文献-----

Kemp, T.R. et al., *J. Agric. Food Chem.*, 1974, 22, 717. (分離)

§ 3,6-Nonadien-1-ol; (all-Z)-form

[CAS No.]53046-97-2

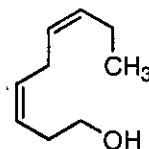
[化合物分類] 脂肪族化合物 (Unbranched alkenic alcohols)

[構造式]

[分子式] C₉H₁₆O

[分子量] 140.225

[基原] 次の植物から分離: *Citrullus vulgaris*, *Cucumis melo*. Constit. of sex pheromone of Caribbean and Mexican fruit flies (*Anastrepha suspensa* and *Anastrepha ludens*)



-----文献-----

Kemp, T.R. et al., J. Agric. Food Chem., 1974, 22, 717, (分離)

Kemp, T.R. et al., Phytochemistry, 1974, 13, 1167, (分離, 合成法)

Hatanaka, A. et al., Phytochemistry, 1975, 14, 2589, (分離)

Flath, R.A. et al., J. Agric. Food Chem., 1978, 26, 835, (分離)

§ 6-Nonenal; (Z)-form

[CAS No.]2277-19-2

[化合物分類] 脂肪族化合物 (Unbranched alkenic aldehydes and ketones)

[構造式]

[分子式] C₉H₁₆O

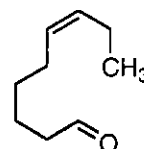
[分子量] 140.225

[基原] *Cucumis melo* の香料成分

[傷害・毒性] 皮膚を刺激する. 50 %致死量 (LD₅₀) (マウス, 経口) >5000 mg/kg

[化学物質毒性データ総覧 (RTECS) 登録番号] RA8509200

[販売元] Aldrich:W35800-2



-----文献-----

Kemp, T.R. et al., Phytochemistry, 1972, 11, 3321, (分離)

Kemp, T.R. et al., J. Agric. Food Chem., 1974, 22, 717, (分離)

Opdyke, D.L.J., Food Chem. Toxicol., 1982, 20, 777, (レビュー, 毒性)

Lewis, R.J., Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold, 1992, NNA325

RTECS (化学物質毒性データ)

生体影響物質 : 天然物. 一時刺激物質.

健康障害に関するデータ

皮膚/眼の刺激に関するデータ

<<試験方法>> 標準ドライズ (Draize) 試験法.

曝露経路 : 皮膚への塗布

被験動物 : げっ歯類-モルモット.

投与量・期間 : 100%/24 時間

反応の症度 : 中等度.

参照文献

FCTOD7 Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.20- 1982- [Vol.,頁,年(19-)]20,777,1982

急性毒性に関するデータ

<<試験方法>> LD50 試験 (50%致死量試験).

曝露経路 : 皮膚への塗布

被験動物 : げっ歯類-モルモット.

投与量・期間 : >5 gm/kg

毒性影響 : 致死量以外に毒性影響に関する報告はない.

参照文献

Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) 20,777,1982

*****モウセンゴケ (Sundew) *****

§ § モウセンゴケ科モウセンゴケ (*Drosera rotundifolia* L.) の花期の全草。

§ 3,5-Dihydroxy-2-methyl-1,4-naphthoquinone; 5-O-β-D-Glucopyranoside

*****モウセンゴケ (Sundew) *****

§ § モウセンゴケ科モウセンゴケ (*Drosera rotundifolia* L.) の花期の全草。

§ 3,5-Dihydroxy-2-methyl-1,4-naphthoquinone; 5-O-β-D-Glucopyranoside

[化学名・別名] Droserone 5-glucoside

[CAS No.] 121531-31-5

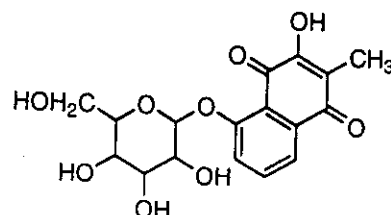
[化合物分類] 多環芳香族 (Naphthoquinones; 2 × O-置換基)

[構造式]

[分子式] C₁₇H₁₆O₆

[分子量] 366.324

[基原] *Drosera rotundifolia*



-----文献-----

Sidhu, G.S. et al., *Indian J. Chem.*, 1968, 6, 681, (分離, UV, IR, 誘導体)

Higa, M. et al., *Chem. Pharm. Bull.*, 1987, 35, 4366, (分離, UV, IR, H-NMR)

Schoelly, T. et al., *Pharm. Acta Helv.*, 1989, 64, 66-67, (5-glucoside)

Likhitwitayawuid, K. et al., *Planta Med.*, 1998, 64, 237-241, (分離, C13-NMR)

Bringmann, G. et al., *Phytochemistry*, 2000, 53, 339-343, (分離, 生合成, 成書)

§ 7-Methyl-1,4,5-naphthalenetriol; 4-O-β-D-Glucopyranoside

[化学名・別名] Rossoliside

[CAS No.] 29868-44-8

[化合物分類] 多環芳香族 (Naphthalenes)

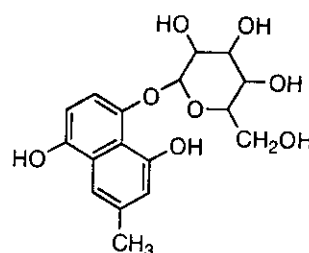
[構造式]

[分子式] C₁₇H₂₀O₆

[分子量] 352.34

[基原] *Drosera rotundifolia*, *Drosera spathulata*

[性状] ベージュ色の粉末



-----文献-----

Budzianowski, J., *Phytochemistry*, 1995, 40, 1145, (Rossoliside)

*****モニリアバイヨウエキ (Cultured Moniliaceae solution) *****

§ § モニリア属 (*Monilia* spp.) 不完全菌の培養液。

§ 2,3-Oxiranedicarboxylic acid; (2R,3R)-form

[化学名・別名] (-)-trans-form

[CAS No.] 17015-08-6

[化合物分類] 脂肪族化合物 (Simple heteroalicyclics (1 × O))

[構造式]

[分子式] C₃H₄O₃

[分子量] 132.073

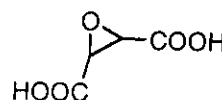
[基原] 次の菌の代謝物: *Aspergillus fumigatus*, *Paecilomyces varioti*, *Monilia formosa*, *Penicillium vineferum*

[用途] 植物生育制御, パパイン酵素阻害因子

[性状] 結晶 (dry dioxan)

[融点] Mp 182-184 °C

[比旋光度]: [α]_D²⁵ -118 (c, 1 in EtOH)



-----文献-----

Oh-Hashi, J. et al., *Bull. Chem. Soc. Jpn.*, 1967, 40, 2977-2979, (分割, 成書)

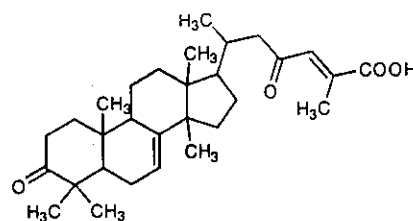
*****モミノキ (Fir) *****

§ § マツ科モミ (*Abies firma* Siebold et Zuccarini) の枝葉または樹脂。

§ 3,23-Dioxolanosta-7,24-dien-26-oic acid; (9β,24E)-form

[化学名・別名] Firmanoic acid

[CAS No.] 107584-83-8
 [化合物分類] テルペノイド (Lanostane triterpenoids)
 [構造式]



[分子式] $C_{50}H_{84}O_4$
 [分子量] 468.675
 [基原] *Abies firma*, *Abies sibirica*

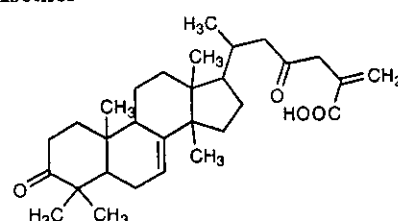
-----文献-----

Roshchin, V.I. et al., *Khim. Prir. Soedin.*, 1986, 22, 48; *Chem. Nat. Compd. (Engl. Transl.)*, 1986, 22, 613
 Hasegawa, S. et al., *Phytochemistry*, 1987, 26, 1095

§ 3,23-Dioxolanosta-7,24-dien-26-oic acid; (9 β, 24E)-form, Δ^{22,27}-Isomer

[化学名・別名] 3,23-Dioxo-9 β-lanosta-7,25(27)-dien-26-oic acid.
 manoic acid

[化合物分類] テルペノイド (Lanostane triterpenoids)
 [構造式]
 [分子式] $C_{50}H_{84}O_4$
 [分子量] 468.675
 [基原] *Abies firma*



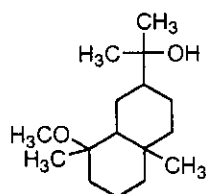
Isofir

-----文献-----

Roshchin, V.I. et al., *Khim. Prir. Soedin.*, 1986, 22, 48; *Chem. Nat. Compd. (Engl. Transl.)*, 1986, 22, 613
 Hasegawa, S. et al., *Phytochemistry*, 1987, 26, 1095

§ 4,11-Eudesmanediol; 4 α-form, 4-Me ether

[化学名・別名] 4-Methoxy-11-eudesmanol
 [CAS No.] 95360-09-1
 [化合物分類] テルペノイド (Simple eudesmane sesquiterpenoids)
 [構造式]
 [分子式] $C_{16}H_{30}O_2$
 [分子量] 254.412
 [基原] *Abies firma*
 [性状] オイル
 [比旋光度]: $[\alpha]_D -26.1$

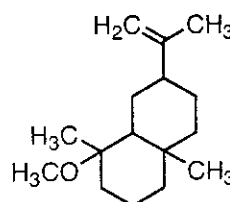


-----文献-----

Kaneko, N. et al., *Phytochemistry*, 1985, 24, 185-186, (4-Methoxyeudesmanol)

§ 11-Eudesmen-4-ol; (4 α, 5 α, 7 β, 10 β)-form, Me ether

[化学名・別名] 4-Methoxy-11-eudesmene
 [CAS No.] 95360-08-0
 [化合物分類] テルペノイド (Simple eudesmane sesquiterpenoids)
 [構造式]
 [分子式] $C_{16}H_{28}O$
 [分子量] 236.397
 [基原] *Abies firma*
 [性状] オイル
 [比旋光度]: $[\alpha]_D -11.8$

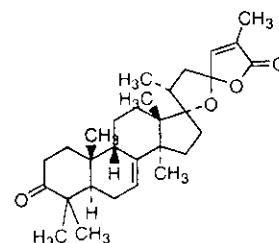


-----文献-----

Kaneko, N. et al., *Phytochemistry*, 1985, 24, 185-186, (Methoxyeudesmene)
 Duh, C.-Y. et al., *J. Nat. Prod.*, 1999, 62, 1518-1521, (*Nephtea brassica* const.)

§ Firmanolide

[化学名・別名] 17 α, 23S-Epoxy-3-oxolanosta-7,24-diene-26,23-olide
 [化合物分類] AJ1750, テルペノイド (Lanostane triterpenoids)
 [構造式]
 [分子式] $C_{50}H_{82}O_4$
 [分子量] 466.659



[基原] *Abies firma*
[性状] 針状結晶
[融点] Mp 193-195 °C
[比旋光度]: $[\alpha]_D^{20} -8$ (c, 0.48 in CHCl₃)

-----文献-----

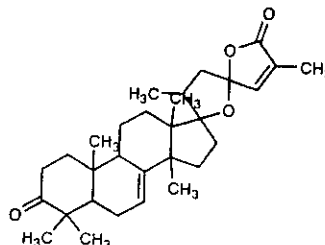
Hasegawa, S. et al., *Phytochemistry*, 1987, 26, 1095

§ **Firmanolide; 23-Epimer**

[化学名・別名] 23-*epi*-Firmanolide
[化合物分類] AJ1750, テルペノイド (Lanostane triterpenoids)

[構造式]
[分子式] C₃₀H₄₈O₃
[分子量] 466.659

[基原] *Abies firma*
[性状] 微細結晶
[融点] Mp 193-195 °C
[比旋光度]: $[\alpha]_D^{20} +24$ (c, 0.67 in CHCl₃)



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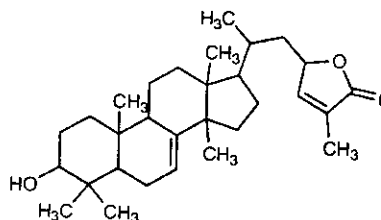
Hasegawa, S. et al., *Phytochemistry*, 1987, 26, 1095

§ **3-Hydroxylanosta-7,24-dien-26,23-olide; (3 β, 9 β, 23R)-form**

[CAS No.] 108925-80-0
[化合物分類] テルペノイド (Lanostane triterpenoids)

[構造式]
[分子式] C₃₀H₄₆O₃
[分子量] 454.692

[基原] *Abies firma*
[性状] 結晶 (MeOH)
[融点] Mp 239-241 °C
[比旋光度]: $[\alpha]_D^{20} -58.9$ (c, 0.21 in CHCl₃)



-----文献-----

Yaroshenko, N.I. et al., *Khim. Prir. Soedin.*, 1989, 25, 220; *Chem. Nat. Compd. (Engl. Transl.)*, 1989, 25, 188

Tanaka, R. et al., *J. Nat. Prod.*, 1991, 54, 1337, (分離, H-NMR, C13-NMR, Mass)

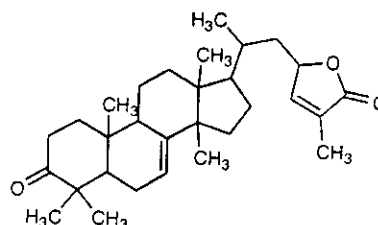
Tanaka, R. et al., *Phytochemistry*, 1991, 30, 1983, (分離, H-NMR, C13-NMR, Mass)

§ **3-Hydroxylanosta-7,24-dien-26,23-olide; (3 β, 9 β, 23R)-form, 3-Ketone**

[化学名・別名] 3-Oxo-9-lanosta-7,24-dien-26,23-olide
[CAS No.] 117703-27-2
[化合物分類] テルペノイド (Lanostane triterpenoids)

[構造式]
[基原] 次の植物から分離: *Abies sibirica*, *Abies firma*

[性状] 結晶 (EtOH)
[融点] Mp 224-228 °C
[比旋光度]: $[\alpha]_D^{21} +22$ (c, 2.62 in CHCl₃)



-----文献-----

Yaroshenko, N.I. et al., *Khim. Prir. Soedin.*, 1989, 25, 220; *Chem. Nat. Compd. (Engl. Transl.)*, 1989, 25, 188

Tanaka, R. et al., *J. Nat. Prod.*, 1991, 54, 1337, (分離, H-NMR, C13-NMR, Mass)

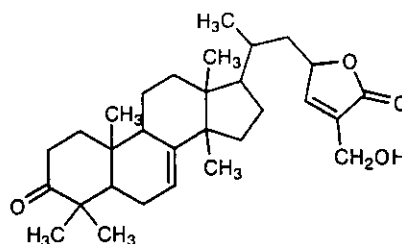
Tanaka, R. et al., *Phytochemistry*, 1991, 30, 1983, (分離, H-NMR, C13-NMR, Mass)

§ **3-Hydroxylanosta-7,24-dien-26,23-olide; (3 β, 9 β, 23R)-form, 27-Hydroxy, 3-ketone**

[化学名・別名] 27-Hydroxy-3-oxo-9-lanosta-7,24-dien-26,23-olide
[CAS No.] 135650-09-8

[化合物分類] テルペノイド (Lanostane triterpenoids)
[構造式]

[分子式] $C_{30}H_{44}O_3$
 [分子量] 468.675
 [基原] 次の植物から分離: *Abies firma*
 [性状] 結晶 (MeOH)
 [融点] Mp 216-218 °C
 [比旋光度]: $[\alpha]_D^{25} +27$ (c, 0.27 in $CHCl_3$)

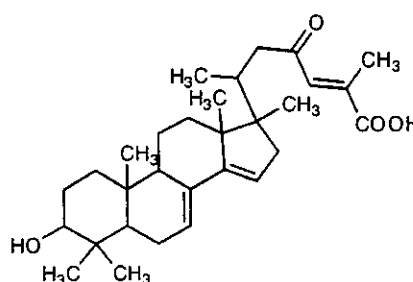


-----文献-----

Yaroshenko, N.I. et al., *Khim. Prir. Soedin.*, 1989, 25, 220; *Chem. Nat. Compd. (Engl. Transl.)*, 1989, 25, 188
 Tanaka, R. et al., *J. Nat. Prod.*, 1991, 54, 1337, (分離, H-NMR, C13-NMR, Mass)
 Tanaka, R. et al., *Phytochemistry*, 1991, 30, 1983, (分離, H-NMR, C13-NMR, Mass)
 Joshi, R.K. et al., *Fitoterapia*, 1998, 69, 93, (C13-NMR)

§ 3-Hydroxy-23-oxo-7,14,24-mariesiatrien-26-oic acid; (3 α , 24E)-form

[化学名・別名] 23-Oxomariesiic acid A
 [CAS No.] 113105-30-9
 [化合物分類] テルペノイド (Lanostane triterpenoids)
 [構造式]
 [分子式] $C_{30}H_{44}O_4$
 [分子量] 468.675
 [基原] *Abies sibirica*, *Abies mariesii*, *Abies firma*
 [性状] 結晶 (Et:O/petrol) (as Me ester)
 [融点] Mp 58-60 °C (Me ester)
 [比旋光度]: $[\alpha]_D +53.2$ (c, 1.28 in $CHCl_3$) (Me ester)

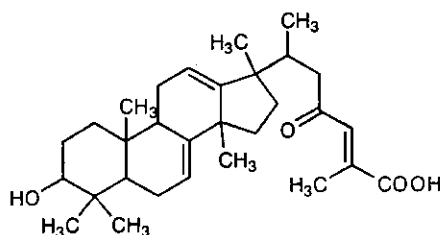


-----文献-----

Raldugin, V.A. et al., *Khim. Prir. Soedin.*, 1987, 23, 824; *Chem. Nat. Compd. (Engl. Transl.)*, 684, (分離, H-NMR, 結晶構造)
 Hasegawa, S. et al., *Tetrahedron*, 1987, 43, 1775

§ Mariesiic acid B; 23-Ketone

[化学名・別名] 23-Oxomariesiic acid B
 [化合物分類] テルペノイド (Lanostane triterpenoids)
 [構造式]
 [分子式] $C_{30}H_{44}O_4$
 [分子量] 468.675
 [基原] *Abies mariesii*, *Abies firma*
 [性状] ガム (as Me ester)
 [比旋光度]: $[\alpha]_D -157.4$ (c, 1.98 in $CHCl_3$) (Me ester)

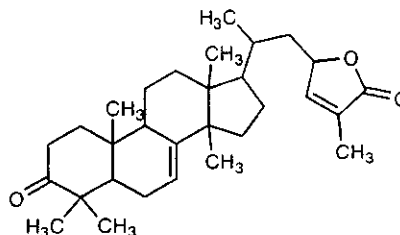


-----文献-----

Hasegawa, S. et al., *Tetrahedron*, 1987, 43, 1775

§ 3-Oxolanosta-7,24-dien-26,23-olide; (9 β H, 23R)-form

[化合物分類] テルペノイド (Lanostane triterpenoids)
 [構造式]
 [分子式] $C_{30}H_{44}O_3$
 [分子量] 452.676
 [基原] *Abies firma*
 [性状] 結晶 (EtOAc)
 [融点] Mp 245-248 °C
 [比旋光度]: $[\alpha]_D^{25} +27.5$ (c, 0.96 in $CHCl_3$)



-----文献-----

Tanaka, R. et al., *Phytochemistry*, 1990, 29, 3263, (分離, 結晶構造)

*****モモ (Peach) *****

§ § バラ科モモ (*Prunus persica* Batsch)

§ § バラ科モモ (*Prunus persica* Batsch)

§ Acaciabiuronic acid

[化学名・別名] 6-O-β-D-Glucopyranuronosyl-D-galactose

[CAS No.] 7264-19-9

[関連 CAS No.] 1693-80-7, 5566-99-4

[化合物分類] 炭水化物 (Glycuronic acids), 炭水化物 (Disaccharides)

[構造式]

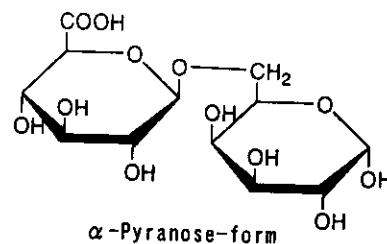
[分子式] C₁₂H₂₀O₁₂

[分子量] 356.283

[基原] Probably the commonest aldobiouronic acid present as a structural unit in plant gums. Isol. from partial acid hydrolysates from the following plants; black wattle (*Acacia mollissima*), *Acacia senegal*, *Acacia pycnantha*, *Acacia karroo*, *Acacia cyanophylla*, egg plum (*Prunus domestica*), アーモンド (*Prunus amygdalus*), モモ (*Prunus persica*), *Anogeissus latifolia* (gum ghatti), *Vigilia oroboides*, *Afraegle paniculata*, *Ferula* and *Chorisia* spp. Also isol. from hydrolysates of カイガンシヨウ (*Pinus pinaster*) hemicellulose and wheat straw

[融点] Mp 118-119 °C (hydrate)

[比旋光度]: [α]_D +11.6 → -8.6 (H₂O)



----- 文献 -----

Goebel, W.F. et al., J. Biol. Chem., 1938, 124, 207, (分離)

Jackson, J. et al., J.C.S., 1940, 74, (α-Me pyr hexa-Me Me ester, 分離)

Aspinall, G.O. et al., J.C.S., 1955, 1160; 1961, 3461, (分離)

Mukherjee, S. et al., J.A.C.S., 1958, 80, 2536, (分離)

Jones, J.K.N. et al., Can. J. Chem., 1961, 39, 162, (分離)

Peciar, C. et al., Chem. Zvesti, 1974, 28, 83, (構造, H-NMR)

Di Fabio, J.L. et al., Carbohydr. Res., 1982, 99, 41, (分離)

§ Afzelin; 4''-O-β-D-Glucopyranosyl

[化学名・別名] Multiflorin B

[CAS No.] 52657-01-9

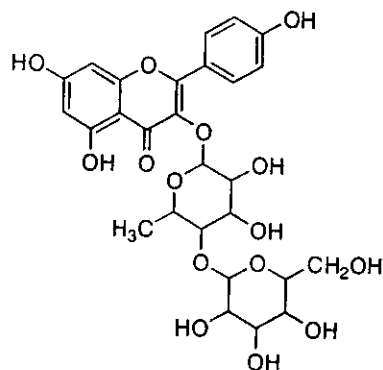
[化合物分類] フラボノイド (Flavonols; 4 × O-置換基)

[構造式]

[分子式] C₂₇H₃₀O₁₅

[分子量] 594.525

[基原] 次の植物から分離: *Rosa multiflora*, *Prunus persica*, *Prunus japonica*



----- 文献 -----

Takagi, S. et al., Yakugaku Zasshi, 1976, 96, 1217; 1977, 97, 109; 1979, 99, 439, (Multiflorin)

Yamasaki, K. et al., Tet. Lett., 1977, 1231, (C13-NMR, Multiflorin)

§ Afzelin; 4''-O-β-D-Glucopyranosyl, 2'' or 3''-O-Ac

[化学名・別名] Multiflorin A

[CAS No.] 61358-52-9

[化合物分類] フラボノイド (Flavonols; 4 × O-置換基), フラボノイド (Flavonoids 構造は一部又は全てが未知)

[構造式] 有効な構造式はない

[分子式] C₂₉H₃₂O₁₆

[分子量] 636.562

[基原] 次の植物から分離: *Rosa multiflora*, *Prunus persica*

----- 文献 -----

King, F.E. et al., J.C.S., 1950, 168, (分離)

Takagi, S. et al., Yakugaku Zasshi, 1976, 96, 1217; 1977, 97, 109; 1979, 99, 439, (Multiflorin)

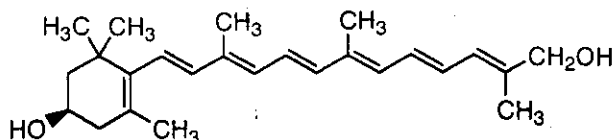
Yamasaki, K. et al., Tet. Lett., 1977, 1231, (C13-NMR, Multiflorin)

[構造式]

[分子式] $C_{25}H_{36}O_2$

[分子量] 368.558

[基原] モモ (*Prunus persica*)



-----文献-----

Gross, J. et al., *Phytochemistry*, 1981, 20, 2267, (Persicaxanthin)

Molnár, P. et al., *Phytochemistry*, 1987, 26, 1493, (絶対構造)

Márki-Fischer, E. et al., *Helv. Chim. Acta*, 1988, 71, 1689, (分離, H-NMR, UV)

§ 5-O-Caffeoylquinic acid; (E)-form

[化合物分類] 脂肪酸化合物 (Monocarbocyclic carboxylic acids and lactones)

[構造式]

[分子式] $C_{16}H_{18}O_9$

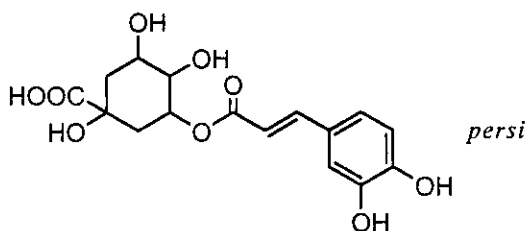
[分子量] 354.313

[基原] コーヒー, その他多くの植物. 最初にモモ (*Prunus*

ca) から分離される

[融点] Mp 177-179 °C で分解

[比旋光度]: $[\alpha]_D -5.4$ (EtOH 溶液)



-----文献-----

Corse, J. et al., *Nature (London)*, 1953, 172, 771, (分離)

Scarpati, M.L. et al., *Tet. Lett.*, 1963, 1147, (構造決定)

Schaller, D.R. et al., *J. Food Sci.*, 1970, 35, 762, (分離)

§ β -Cryptoxanthin; 5R,6S-Epoxy

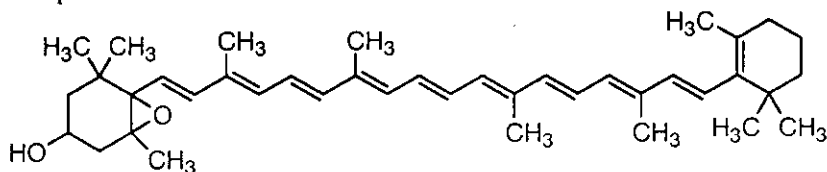
[化学名・別名] 5,6-Epoxy-5,6-dihydro- β , β -caroten-3-ol. Cryptoxanthin epoxide

[CAS No.] 188116-19-0

[その他の CAS No.] 29291-23-4

[化合物分類] テルペノイド (Tetraterpenoids)

[構造式]



[分子式] $C_{40}H_{56}O_2$

[分子量] 568.881

[基原] 次の植物から分離:

icum annuum, 熟した柿の皮 (*Diospyros kaki*), 成熟した *Prunus persica*, ripe peel of a mandarin hybrid (*Citrus reticulata*)

[性状] 結晶 (C_6H_6 /petrol)

[融点] Mp 154 °C

[その他のデータ] Absolute stereochem. of isolate from *C. annuum* determined by Molnar et al. (1997).

Stereochem of isolates and synthetic epoxide prior to this date unknown

-----文献-----

Karrer, P. et al., *Helv. Chim. Acta*, 1946, 29, 229-233, (epoxide, 合成法)

Subbarayan, C. et al., *Anal. Biochem.*, 1965, 12, 275-281, (epoxide)

Pfander, H., *Chimia*, 1972, 27, 103-104, (分離)

Karrer, W. et al., *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd edn., Birkhäuser Verlag, Basel, 1972, no. 1837, (生育)

Lassertois, D. et al., *Phytochemistry*, 1978, 17, 411-415, (epoxide, 分離)

Farin, D. et al., *Phytochemistry*, 1983, 22, 403-408, (5,6-epoxide, 5',6'-epoxide, 分離)

Ebert, G. et al., *Phytochemistry*, 1985, 24, 29-32, (epoxide, 分離)

Straub, O. et al., *Key to Carotenoids*, 2nd edn., Birkhauser Verlag, Basel and Boston, 1987, 55, (成書)

Godoy, H.T. et al., *Food Chem.*, 1990, 36, 281-286, (5,6-epoxide)

§ Cryptoxanthin 5,6:5',8'-diepoxy

[化学名・別名] 5,6:5',8'-Diepoxy-5,5',6,8'-tetrahydro- β , β -caroten-3-ol

§ **Cryptoxanthin 5,6:5',8'-diepoxide**

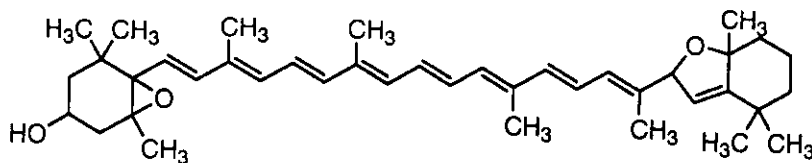
[化学名・別名] 5,6:5',8'-Diepoxo-5,5',6,8'-tetrahydro-β,β-caroten-3-ol

[CAS No.] 55965-22-5

[化合物分類] テルペノイド

(Tetraterpenoids)

[構造式]



[分子式] C₄₀H₅₆O₃

[分子量] 584.881

[一般的性質] 構造は完全ではない

[基原] 次の植物から分離: Shamouti orange (*Citrus sinensis*) の果汁, *Prunus persica* の熟した果実

文献

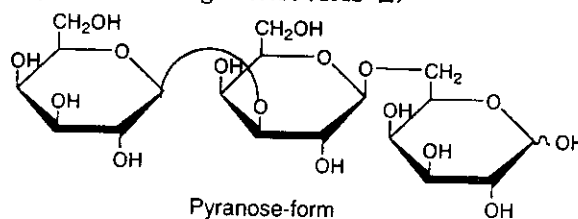
Gross, J. et al., J. Food Sci., 1971, 36, 466, (分離)

Lessertois, D. et al., Phytochemistry, 1978, 17, 411-415, (分離)

§ **β-D-Galactopyranosyl-(1 → 3)-β-D-galactopyranosyl-(1 → 6)-D-galactose (CAS 名)**

[化合物分類] 炭水化物 (Oligosaccharides)

[構造式]



[分子式] C₁₈H₃₂O₁₆

[分子量] 504.441

[基原] 次の植物の部分加水分解物から分離: *Chorisia* のガム, *Prunus persica*, *Opuntia ficus-indica*

[比旋光度]: [α]_D +27.9 (c, 0.5 in H₂O)

文献

Kardosova, A. et al., Coll. Czech. Chem. Comm., 1978, 43, 3428, (分離, ガスクロマト, Mass)

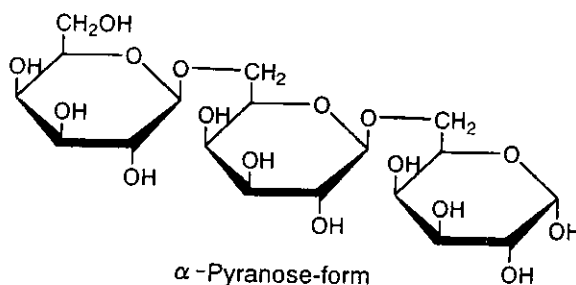
Difabio, J.L. et al., Carbohydr. Res., 1982, 99, 41, (分離)

§ **β-D-Galactopyranosyl-(1 → 6)-β-D-galactopyranosyl-(1 → 6)-D-galactose (CAS 名)**

[CAS No.] 28245-12-7

[化合物分類] 炭水化物 (Oligosaccharides),

[構造式]



[分子式] C₁₈H₃₂O₁₆

[分子量] 504.441

[基原] 次の植物の部分加水分解物から分離: *Virgilia oroboides*, *Anogeissus schimperi*, *Prunus persica*, *Opuntia ficus-indica* のガム, *Larix decidua* ε-galactan, *Larix laricina* arabogalactan

[性状] 針状結晶 (MeOH 溶液)

[融点] Mp 158-163 °C (137-142 °C, 152-155 °C)

[比旋光度]: [α]_D¹⁸ +22 (c, 0.5 in H₂O) (+13)

文献

Kubala, J. et al., Coll. Czech. Chem. Comm., 1977, 42, 2809, (分離)

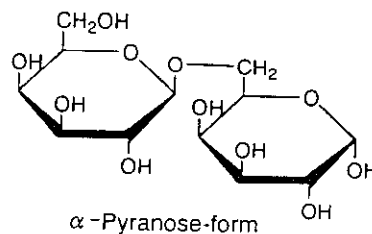
McGarvie, D. et al., Carbohydr. Res., 1981, 94, 57, (分離)

§ **6-O-β-D-Galactopyranosyl-D-galactose (CAS 名) (旧 CAS 名)**

[CAS No.] 5077-31-6

[化合物分類] AF9200. 炭水化物 (Disaccharides)

[構造式]



[分子式] C₁₂H₂₂O₁₁

Spondias cytheria, *Opuntia ficus-indica*, *Prunus persica*, *Chorisia speciosa*. また次の植物の部分加水分解物からも得られる: snail-egg galactogen, *Larix decidua* epsi-galactan and the arabinogalactans of *Larix laricina* and *Larix occidentalis*

[比旋光度]: $[\alpha]_D^{20} +39$ (c, 0.53 in H₂O)

[販売元] Sigma:G5643

-----文献-----

Aspinall, G.O. et al., J.C.S., 1961, 3461; 1958, 593, (分離)

McGarvie, D. et al., Carbohydr. Res., 1981, 94, 57, (分離)

§ **Gibberellin A₃; 12 α ,15 β -Dihydroxy**

[化学名・別名] Gibberellin A₃₂

[CAS No.] 32165-30-3

[化合物分類] テルペノイド (Gibberellins)

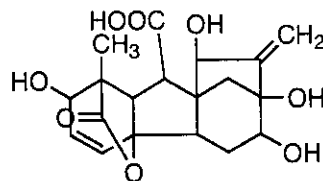
[構造式]

[分子式] C₁₉H₂₂O₈

[分子量] 378.378

[基原] *Prunus persica* の未成熟な種子

[融点] Mp 190-193 °C (as Me ester)



-----文献-----

Danheiser, R.L., Strategies Tactics Org. Synth., 1984, 21; CA, 102, 6856, (専門書)

Synform, 1984, 2, 197, (レビュー)

Bhaskar, K.V. et al., Tet. Lett., 1991, 32, 6203, (GA₈₅, GA₈₆)

Sheng, C. et al., Biosci., Biotechnol., Biochem., 1992, 56, 564, (分離, GA₈₅)

Blake, P.S. et al., Phytochemistry, 1993, 32, 781, (GA₈₇)

§ **Gibberellin A₃; 12 α ,15 β -Dihydroxy, 1,2-dihydro**

[化学名・別名] Gibberellin A₃₆

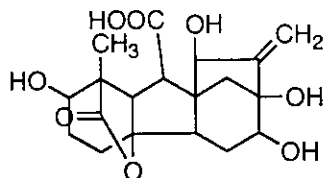
[化合物分類] テルペノイド (Gibberellins)

[構造式]

[分子式] C₁₉H₂₄O₈

[分子量] 380.394

[基原] *Prunus persica*



-----文献-----

Danheiser, R.L., Strategies Tactics Org. Synth., 1984, 21; CA, 102, 6856, (専門書)

Synform, 1984, 2, 197, (レビュー)

Bhaskar, K.V. et al., Tet. Lett., 1991, 32, 6203, (GA₈₅, GA₈₆)

Sheng, C. et al., Biosci., Biotechnol., Biochem., 1992, 56, 564, (分離, GA₈₅)

Blake, P.S. et al., Phytochemistry, 1993, 32, 781, (GA₈₇)

§ **2-Hydroxy-2-phenylacetonitrile; (±)-form**

[CAS No.] 613-88-7

[化合物分類] 炭水化物 (Cyanogenic glycosides), 単環芳香族 (Phenylacetic acid derivatives)

[構造式]

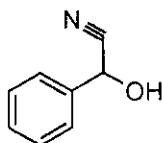
[分子式] C₈H₇NO

[分子量] 133.149

[基原] 次の植物から分離: *Prunus persica*

[性状] プリズム結晶もしくはオイル

[融点] Mp 21.5-22 °C



-----文献-----

Jones, M.B. et al., Science (Washington, D.C.), 1961, 134, 284, (分離, (±)-form)

§ **Mutatochrome; 3-Hydroxy**

[化学名・別名] Cryptoflavin. 5',8'-Epoxy-5',8'-dihydro- β , β -caroten-3-ol. Cryptoxanthin 5,8-epoxide

[CAS No.] 30311-63-8

[化合物分類] テルペノイド (Tetraterpenoids)

[構造式]

[分子式] $C_{40}H_{56}O_2$

[分子量] 568.881

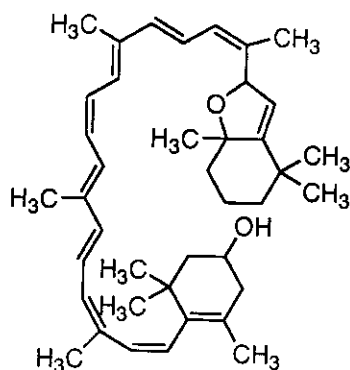
[基原] 柿 (*Diospyros kaki*), スターフルーツ (*Averrhoa carambola*), オレンジ (*Citrus sinensis*), アルファルファ (*Medicago*) spp. Poss. isol. from モモ (*Prunus persica*)

[性状] 葉状結晶 (C_6H_6 /petrol)

[融点] Mp 171 °C

UV: [neutral] λ_{max} 459 ; 490 (CS₂) [neutral] λ_{max} 439 ; 470 (C₆H₆)

[その他のデータ] Natural occurrence poorly documented, poss. artifact



-----文献-----

Karrer, P. et al., Helv. Chim. Acta, 1944, 28, 1695; 1946, 29, 229; 1947, 30, 536, (分離, 構造決定, 合成法)

Ignasiak, T. et al., Biochem. Syst. Ecol., 1973, 1, 97; 1975, 2, 177, (分離, Cryptoflavin)

Ebert, G. et al., Helv. Chim. Acta, 1985, 24, 29, (分離, Cryptoflavin)

§ **Persicachrome; (3S,5R,8R)-form**

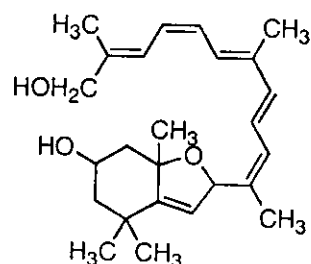
[化合物分類] テルペノイド (Apocarotenoids)

[構造式]

[分子式] $C_{25}H_{36}O_3$

[分子量] 384.558

[基原] モモ (*Prunus persica*)



-----文献-----

Gross, J. et al., Phytochemistry, 1981, 20, 2267

Märki-Fischer, E. et al., Helv. Chim. Acta, 1988, 71, 1689, (分離, H-NMR, UV, CD, 絶対構造)

§ **Persicachrome; (3S,5R,8S)-form**

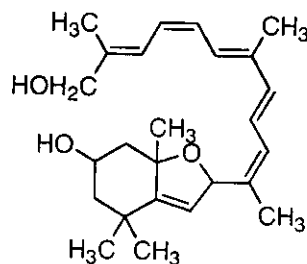
[化合物分類] テルペノイド (Apocarotenoids)

[構造式]

[分子式] $C_{25}H_{36}O_3$

[分子量] 384.558

[基原] *Prunus persica*



-----文献-----

Gross, J. et al., Phytochemistry, 1981, 20, 2267

Märki-Fischer, E. et al., Helv. Chim. Acta, 1988, 71, 1689, (分離, H-NMR, UV, CD, 絶対構造)

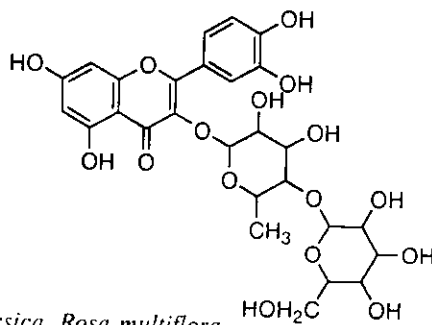
§ **Quercitrin; 4''-O-β-D-Glucopyranosyl**

[化学名・別名] Quercetin 3-(4-glucosylrhamnoside). Multinoside A

[CAS No.] 59262-54-3

[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

[基原] 次の植物から分離: *Euphorbia drancunculoides*, *Prunus persica*, *Rosa multiflora*

-----文献-----

Karrer, W. et al., Konstitution und Vorkommen der Organischen Pflanzenstoffe, 2nd edn., Birkhäuser Verlag, Basel, 1972, no. 1525. (生育)

Takagi, S. et al., Yakugaku Zasshi, 1977, 97, 109, (Multinoside A)

§ 3,4',5,7-Tetrahydroxyflavan (2 → 7,4 → 8)-3,4',5,7-tetrahydroxyflavan; (2R,2''R,3S,3''S,4R)-form

[化学名・別名] Afzelechin (2 β → 7,4 β → 8) afzelechin. Prunus inhibitor a. PIa

[CAS No.] 83944-96-1

[化合物分類] フラボノイド (Proanthocyanidin flavonoids),

フラボノイド (Flavan-3-ols)

[構造式]

[分子式] C₃₀H₂₄O₁₀

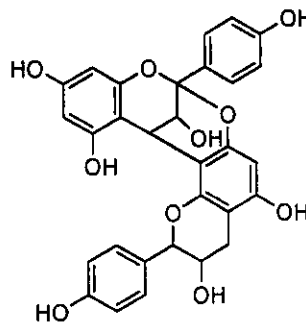
[分子量] 544.514

[基原] 次の植物から分離: *Prunus persica*

[性状] 針状結晶

[融点] Mp 256-257 °Cで分解

[比旋光度]: [α]_D²⁰ -102.9 (c, 0.88 in MeOH)



-----文献-----

Ohigashi, H. et al., Agric. Biol. Chem., 1982, 46, 2555, (誘導體)

Hikino, H. et al., Heterocycles, 1982, 19, 1381

Kolodziej, H. et al., Phytochemistry, 1991, 30, 2041, (分離)

Pant, G. et al., Magn. Reson. Chem., 1992, 30, 5142, (分離, C13-NMR, 誘導體)

Gonzalez, A.G. et al., Phytochemistry, 1992, 31, 1432, (分離, H-NMR, C13-NMR, 構造)

Calzada, F. et al., J. Nat. Prod., 1999, 62, 705-709, (Geranins)

Rawat, M.S.M. et al., Phytochemistry, 1999, 50, 321-324, (分離, UV, IR, CD, H-NMR, C13-NMR)

§ 3,4',5,7-Tetrahydroxyflavan (2 → 7,4 → 8)-3,4',5,7-tetrahydroxyflavan; (2S,2''R,3S,3''S,4S)-form, 3'''-Hydroxy

[化学名・別名] 3,4',5,7-Tetrahydroxyflavan (2 → 7,4 → 8)-3,3',4',5,7-pentahydroxyflavan. ent-Epiafzelechin (2 α → 7,4 α → 8) catechin. Prunus inhibitor b. PIb

[CAS No.] 83889-81-0

[化合物分類] フラボノイド (Flavan-3-ols),

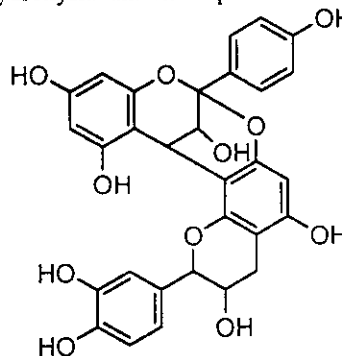
フラボノイド (Proanthocyanidin flavonoids)

[構造式]

[分子式] C₃₀H₂₄O₁₁

[分子量] 560.513

[基原] 次の植物から分離: *Prunus persica*



-----文献-----

Kolodziej, H. et al., Phytochemistry, 1991, 30, 2041, (分離)

Pant, G. et al., Magn. Reson. Chem., 1992, 30, 5142, (分離, C13-NMR, 誘導體)

Gonzalez, A.G. et al., Phytochemistry, 1992, 31, 1432, (分離, H-NMR, C13-NMR, 構造)

Drewes, S.E. et al., Phytochemistry, 1992, 31, 2491, (分離, H-NMR, C13-NMR)

Prasad, D. et al., J. Nat. Prod., 1998, 61, 1123-1125, (*Prunus armeniaca* deriv)

§ 1,2,3,24-Tetrahydroxy-12-oleanen-28-oic acid; (1 β, 2 α, 3 α)

m

[CAS No.] 254098-66-3

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

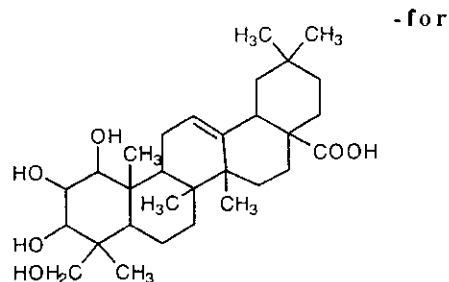
[構造式]

[分子式] C₃₀H₄₈O₆

[分子量] 504.706

[基原] ネクタリンの果実 (*Prunus persica* cv. Fantasia)

[性状] 粉末



-----文献-----

Zhang, Y.-J. et al., Phytochemistry, 1994, 36, 997, (分離, H-NMR, C13-NMR, Mass)

El Lahlou, H. et al., Phytochemistry, 1999, 52, 623-629, (*Prunus persica* constit)

§ 1,2,3,24-Tetrahydroxy-12-ursen-28-oic acid; (1 β , 2 α , 3 α)-form

[CAS No.] 254098-65-2

[化合物分類]テルペノイド (Ursane triterpenoids)

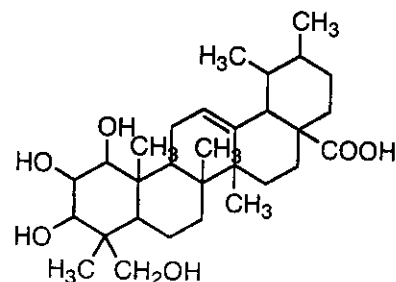
[構造式]

[分子式] $C_{30}H_{48}O_6$

[分子量] 504.706

[基原] ネクタリンの果実 (*Prunus persica* cv. Fantasia)

[性状] 粉末



-----文献-----

El Lahlou, H. et al., Phytochemistry, 1999, 52, 623-629, (分離, H-NMR, C13-NMR)

§ Violaxanthin; (all-*E*)-form, Monodeoxy

[化学名・別名] 5,5',6,6'-Diepoxy-5,5',6,6'-tetrahydro- β , β -caroten-3-ol (CAS 名). Cryptoxanthin diepoxide

[CAS No.] 2086-87-5

[化合物分類]テルペノイド (Tetraterpenoids)

[構造式]

[分子式] $C_{40}H_{56}O_3$

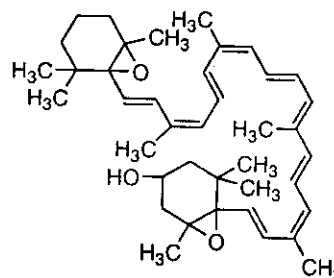
[分子量] 584.881

[基原] Prepared by oxidation of Cryptoxanthin; isol. from the algae of Xanthophyceae. the loquat fruit *Eriobotrya japonica* and *Prunus persica* の果実

[性状] 結晶 (C_6H_6 /petrol)

[融点] Mp 194 °C

UV: [neutral] λ_{max} 473 ; 503 (CS_2) [neutral] λ_{max} 415 ; 438 ; 468 (溶媒の報告はない) [neutral] λ_{max} 442 ; 472 (EtOH)



-----文献-----

Karrer, W. et al., Konstitution und Vorkommen der Organischen Pflanzenstoffe, 2nd edn., Birkhäuser Verlag, Basel, 1972, no. 1842, (生育)

Sapozhnikov, D.I., Pure Appl. Chem., 1973, 35, 47, (レビュー)

Lessertois, D. et al., Phytochemistry, 1978, 17, 411, (分離, deoxy)

Molnár, P. et al., Phytochemistry, 1986, 25, 195, (分離)

Straub, O. et al., Key to Carotenoids, 2nd edn., Birkhauser Verlag, Basel and Boston, 1987, 259, (成書)

§ § パラ科バントウ (*Prunus persica* var. *compressa* Bean (*P. platicarpa* Bailey))

本調査研究では、成分に関する文献はなかった。

§ § パラ科ズパイモモ (*Prunus persica* var. *nectarina* Maximowicz (*P. persica* var. *nucipersica* Schneider ; *Persica nucipersica* Borkh.)) の果実、花または枝葉。

本調査研究では、成分に関する文献はなかった。

*****モロヘイヤ (Jew's mallow) *****

§ § シナノキ科タイワンツナソ (*Corchorus olitorius* L.) の葉または全草。

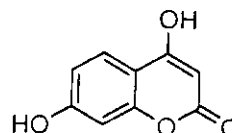
§ 4,7-Dihydroxy-2*H*-1-benzopyran-2-one (CAS 名)

[化学名・別名] 4,7-Dihydroxycoumarin

[CAS No.] 1983-81-9

[化合物分類] ベンゾピラノイド (4,7-Dioxygenated coumarins)

[構造式]



[分子量] 178.144

[基原] *Corchorus olitorius* の種子

[性状] 針状結晶 (H₂O)

[融点] Mp 265 °C で分解. Mp 282 °C

-----文献-----

Mukherjee, K.K. et al., Nat. Prod. Sci., 1998, 4, 51-52, (分離)

§ 3,14-Dihydroxycarda-4,20(22)-dienolide; (3 β ,14 β)-form, 3-O- α -L-Rhamnopyranoside

[化学名・別名] Corchoroside B

[CAS No.] 35536-76-6

[化合物分類] ステロイド (Cardanolide steroids). (C23).

[構造式]

[分子式] C₂₉H₄₂O₈

[分子量] 518.646

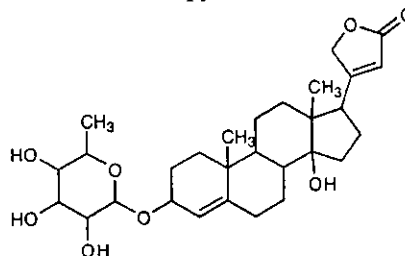
[基原] *Corchorus capsularis*, *Corchorus olitorius*

[性状] 結晶

[融点] Mp 222-224 °C

[比旋光度]: [α]_D²⁰ -68

[化学物質毒性データ総覧 (RTECS) 登録番号] FH4450000



-----文献-----

Rao, D.V. et al., Phytochemistry, 1975, 14, 533, (誘導體)

Goda, Y. et al., Tennen Yuki Kagobutsu Toronkai Koen Yoshishu, 1998, 40, 371-376; CA, 131, 85493j, (*Corchorus olitorius* constit)

RTECS (化学物質毒性データ)

健康障害に関するデータ

急性毒性に関するデータ

<<試験方法>> LD50 試験 (50%致死量試験).

曝露経路 : 静脈内投与.

被験動物 : ほ乳類-ネコ.

投与量・期間 : 141 ug/kg

毒性影響 : 致死量以外に毒性影響に関する報告はない.

参考文献

Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) 111,365,1954

§ 3,14-Dihydroxycarda-4,20(22)-dienolide; (3 β ,14 β)-form, 3-O-[β -D-Glucopyranosyl-(1 \rightarrow 4)-6-deoxy- β -D-allopyranoside]

[CAS No.] 229319-08-8

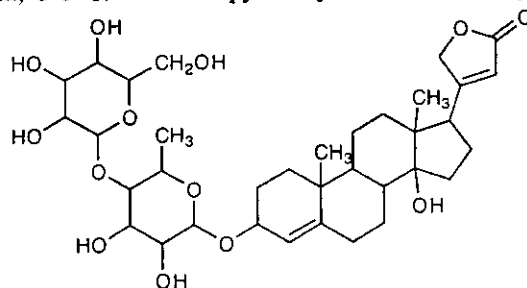
[化合物分類] ステロイド (Cardanolide steroids). (C23).

[構造式]

[分子式] C₃₅H₅₂O₁₃

[分子量] 680.788

[基原] *Corchorus olitorius*



-----文献-----

Tschesche, R. et al., Annalen, 1963, 663, 157, (Canariboivinoside)

Studer, P. et al., Helv. Chim. Acta, 1963, 46, 23, (3-Epicanarigenin, Canaridigitoxoside)

Goda, Y. et al., Tennen Yuki Kagobutsu Toronkai Koen Yoshishu, 1998, 40, 371-376; CA, 131, 85493j, (*Corchorus olitorius* constit)

§ 3,14-Dihydroxycard-20(22)-enolide; (3 β ,5 β ,14 β ,17 β)-form, 3-O-(2,6-Dideoxy- β -D-xylo-hexopyranoside)

[化学名・別名] Desglucocoroloside. Digitoxigenin boivinoside. Deglucocoroloside

[CAS No.] 57361-72-5

[化合物分類] ステロイド (Cardanolide steroids). (C23)

[構造式]

[分子式] $C_{29}H_{44}O_7$

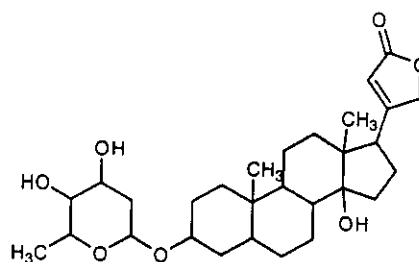
[分子量] 504.662

[基原] *Corchorus olitorius*

[性状] 結晶

[融点] Mp 190-192 °C

[比旋光度]: $[\alpha]_D^{20} -22.9$ (c, 1.66 in MeOH)



-----文献-----

Okano, A. et al., Chem. Pharm. Bull., 1957, 5, 272-276, (Glucodigifucoside)

Kaiser, F., Experientia, 1965, 21, 575, (Glucodigifucoside, Neoglucodigifucoside, Glucosidoallomethylsiole)

Fritsch, W. et al., Annalen, 1974, 621-629, (Digitoxigenin, 合成法)

Hartenstein, J. et al., Annalen, 1974, 1763-1766, (Glucodigitoxigenin, 合成法)

Yoshii, E. et al., Chem. Pharm. Bull., 1975, 23, 2496-2506, (Digitoxigenin, 合成法)

Donovan, S.F. et al., Tet. Lett., 1979, 3287-3290, (Digitoxigenin, Neouzarin, 合成法)

Welzel, P. et al., Annalen, 1982, 2119-2134, (Digitoxigenin, 合成法)

Milkova, T. et al., Tet. Lett., 1982, 23, 413-414, (Digitoxigenin, 合成法)

Wicha, J. et al., J.C.S. Perkin 1, 1985, 1601-1605, (Digitoxigenin, 合成法)

Go, K. et al., Acta Cryst. B, 1989, 45, 306-312, (結晶構造, bisdigitoxoside)

§ 3,14-Dihydroxycard-20(22)-enolide; (3 β , 5 β , 14 β , 17 β)-form, 3-O-[β -D-Glucopyranosyl-(1 \rightarrow 4)-2,6-dideoxy-xylo-hexopyranoside]

[化学名・別名] Coroloside

[CAS No.] 57361-71-4

[化合物分類] ステロイド (Cardanolide steroids). (C23).

[構造式]

[分子式] $C_{33}H_{54}O_{12}$

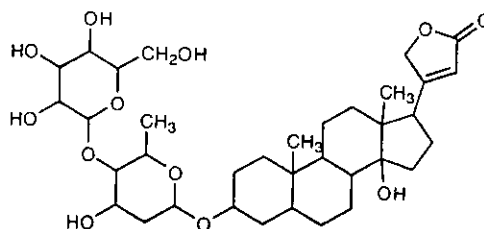
[分子量] 666.804

[基原] *Corchorus olitorius*

[性状] 結晶

[融点] Mp 235-237 °C

[比旋光度]: $[\alpha]_D^{20} -46.7$ (MeOH)



-----文献-----

Maslennikova, V.A. et al., Khim. Prir. Soedin., 1975, 11, 525-526; Chem. Nat. Compd. (Engl. Transl.), 1975, 11, 553-554, (Corolosides)

Siddiqui, S. et al., Phytochemistry, 1992, 31, 3541-3546, (分離, H-NMR, C13-NMR)

§ 3,14-Dihydroxycard-20(22)-enolide; (3 β , 5 β , 14 β , 17 β)-form, 3-O-[β -D-Glucopyranosyl-(1 \rightarrow 6)- β -D-glucopyranosyl-(1 \rightarrow 4)-2,6-dideoxy- β -D-ribo-hexopyranoside]

[CAS No.] 220710-06-5

[化合物分類] ステロイド (Cardanolide steroids). (C23).

[構造式]

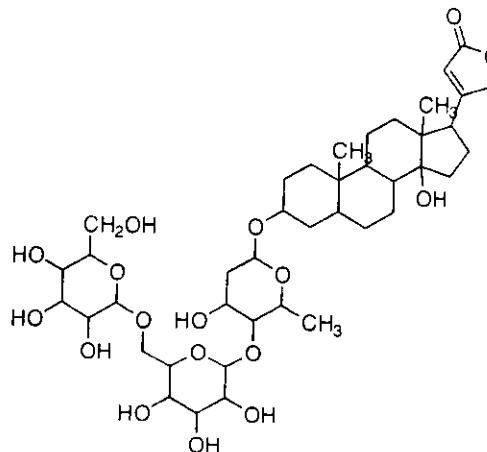
[分子式] $C_{41}H_{66}O_{17}$

[分子量] 828.946

[基原] *Corchorus olitorius*

[性状] 無定型の粉末

[比旋光度]: $[\alpha]_D^{22} -1.3$ (c, 0.4 in MeOH)



-----文献-----

Kaiser, F. et al., Naturwissenschaften, 1965, 52, 108. (分離)

Maslennikova, V.A. et al., *Khim. Prir. Soedin.*, 1975, 11, 525-526; *Chem. Nat. Compd. (Engl. Transl.)*, 1975, 11, 553-554, (Corolosides)
 Siddiqui, S. et al., *Phytochemistry*, 1992, 31, 3541-3546, (分離, H-NMR, C13-NMR)

§ 6,10-Dihydroxy-4,7-megastigmadiene-3,9-dione; (S)-form, 10-O-β-D-Glucopyranoside

[化学名・別名] Corchoionoside B

[CAS No.] 189344-54-5

[化合物分類] テルペノイド (Megastigmane norterenoids)

[構造式]

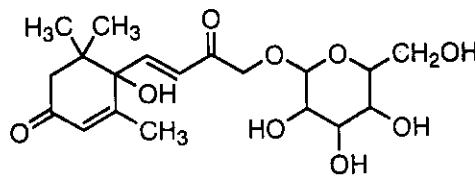
[分子式] C₁₉H₂₈O₉

[分子量] 400.425

[基原] *Corchorus olitorius*

[性状] 粉末

[比旋光度]: [α]_D²⁵ +113.7 (c, 0.4 in MeOH)



-----文献-----

Yoshikawa, M. et al., *Chem. Pharm. Bull.*, 1997, 45, 464-469, (分離, H-NMR, C13-NMR)

§ 6,9-Dihydroxy-4,7-megastigmadien-3-one; (6S,7E,9S)-form, 9-O-β-D-Glucopyranoside

[化学名・別名] Corchoionoside C

[CAS No.] 185414-25-9

[化合物分類] テルペノイド (Megastigmane norterenoids)

[構造式]

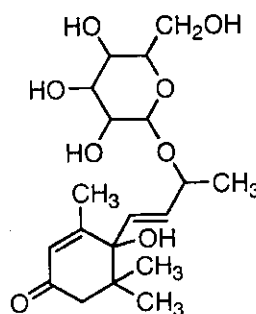
[分子式] C₁₉H₃₀O₈

[分子量] 386.441

[基原] *Corchorus olitorius*

[性状] 粉末

[比旋光度]: [α]_D²⁵ +25.3 (c, 0.3 in MeOH)



-----文献-----

Yoshikawa, M. et al., *Chem. Pharm. Bull.*, 1997, 45, 464-469, (Corchoionoside C)

§ 5,6-Epoxy-7-megastigmene-3,9-diol; (3β,5α,6α,7E,9S)-form, 3-O-β-D-Glucopyranoside

[化学名・別名] Corchoionoside A

[CAS No.] 189351-14-2

[化合物分類] テルペノイド (Megastigmane norterenoids)

[構造式]

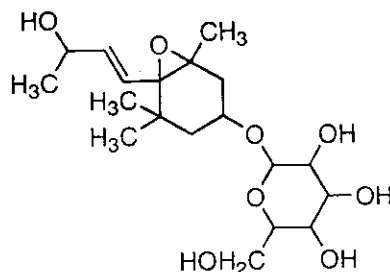
[分子式] C₁₉H₃₂O₈

[分子量] 388.457

[基原] *Corchorus olitorius*

[性状] 粉末

[比旋光度]: [α]_D²⁵ -24.8 (c, 0.1 in MeOH)



-----文献-----

Della Greca, M. et al., *J. Nat. Prod.*, 1990, 53, 972, (分離, H-NMR, C13-NMR)

Winterhalter, P. et al., *Nat. Prod. Lett.*, 1994, 4, 57, (分離, H-NMR, C13-NMR)

Yoshikawa, M. et al., *Chem. Pharm. Bull.*, 1997, 45, 464-469, (Corchoionoside A)

§ 9-Hydroxy-16-oxo-10,12,14-octadecatrienoic acid; (9S,10E,12E,14E)-form

[化学名・別名] Corchorifatty acid A

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

[構造式]

[分子式] C₁₈H₃₂O₄

[分子量] 308.417

