

Dictionary
of
Natural
Products

THIRD SUPPLEMENT

VOLUME 10 OF DICTIONARY OF NATURAL PRODUCTS

0054227

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Third Supplement

1. Introduction

For detailed information about how to use the *Dictionary of Natural Products* (DNP) see the Introduction in Volume 1 of the Main Work.

1. Using DNP Supplements

As in the Main Work volumes, every Entry is numbered to assist ready location. The DNP Number consists of a letter of the alphabet followed by a five-digit number. In this Third Supplement the first digit is invariably 3. Cross-references within the text to Entries having numbers beginning with zero refer to Main Work Entries and with 1 and 2 refer to the First and Second Supplements.

Where a Supplement Entry contains additional or corrected information referring to an Entry in the Main Work the whole Entry is reprinted, with the accompanying statement "Updated Entry replacing ...". In such cases, the new Entry contains all of the information which appeared in the former Entry, except for any which has been deliberately deleted. Therefore there is

no necessity for the user to consult the Main Work or previous supplements.

2. Literature coverage

In compiling this Supplement the primary literature has been surveyed to the end of 1995. The printed supplement concentrates principally on important new natural products isolated during the period in question. A considerable number of amendments have been made during the review period to entries which have not been reprinted in the Supplement owing to space limitations. All of these can be accessed via the CD-ROM version.

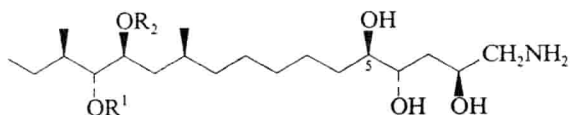
3. Indexes

The indexes in the Supplement consist of Name and Molecular Formula Index and are cumulative for the first three supplements. No CAS Registry Number Index is included in this supplement, for reasons of pressure on space. A CAS index was published with the Second Supplement and will next reappear as part of the Fifth Supplement.

A

AAL Toxin

A-30001



TA₁ R¹ = H, R² = COCH₂CH(COOH)CH₂COOH
TA₂ R¹ = COCH₂CH(COOH)CH₂COOH, R² = H

Prod. by *Alternaria alternata* f. sp. *lycopersici*. Host-specific phytotoxin complex. Similar to Fumonisin A₁, F-00532.

AAL Toxin TA₁ [79367-52-5]

C₂₅H₄₇NO₁₀ M 521.647

5-Deoxy: [149849-90-1]. AAL Toxin TB₁

C₂₅H₄₇NO₉ M 505.648

From *A. alternata* f. sp. *lycopersici*. Phytotoxin.

AAL Toxin TA₂ [79367-51-4]

C₂₅H₄₇NO₁₀ M 521.647

5-Deoxy: [149849-91-2]. AAL Toxin TB₂

C₂₅H₄₇NO₉ M 505.648

From *A. alternata* f. sp. *lycopersici*. Phytotoxin.

Bottini, A.T. et al, *Tet. Lett.*, 1981, **22**, 2723 (isol)

Caldas, E.D. et al, *J. Agric. Food Chem.*, 1994, **42**, 327 (struct)

Boyle, C.D. et al, *J.A.C.S.*, 1994, **116**, 4995 (struct)

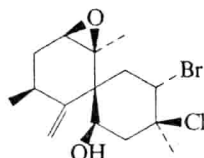
Oikawa, H. et al, *Tet. Lett.*, 1994, **35**, 1223 (synth)

Oikawa, H. et al, *Tetrahedron*, 1994, **50**, 13347 (abs config)

12(11→10)-Abeo-4-bromo-3-chloro-7,8-epoxy-11(13)-chamigren-1-ol

A-30002

[116498-63-6]



C₁₅H₂₂BrClO₂ M 349.694

Constit. of a *Laurencia* sp. [α]_D²⁵ +67 (c, 0.5 in CHCl₃).

Ac: [124019-98-3]. Pinnatifate

C₁₇H₂₄BrClO₃ M 391.731

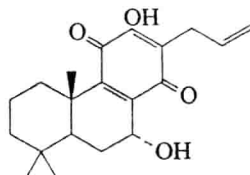
Constit. of *L. pinnatifida*. [α]_D²⁵ +61 (c, 0.6 in CHCl₃).

Bittner, M.L. et al, *Phytochemistry*, 1985, **24**, 987 (isol, pmr, cmr)

Atta-ur-Rahman, *Pure Appl. Chem.*, 1989, **61**, 453 (Pinnatifate)

17(15→16)-Abeo-7,12-dihydroxy-8,12,16-abietatriene-11,14-dione

A-30003



C₂₀H₂₆O₄ M 330.423

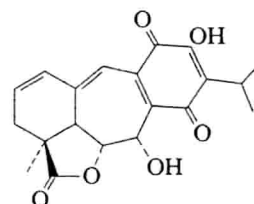
7α-form [157072-23-6]

Constit. of *Plectranthus hereroensis*. Red amorph. solid. Mp 55-60°. [α]_D¹⁹ -75.7 (c, 0.111 in CHCl₃).

Batista, O. et al, *J. Nat. Prod.*, 1994, **57**, 858 (isol, pmr)

9(10→20)-Abeo-7,12-dihydroxy-11,14-dioxo-1,8,10(20),12-abietatetraen-19,6-olide

A-30004



C₂₀H₂₀O₆ M 356.374

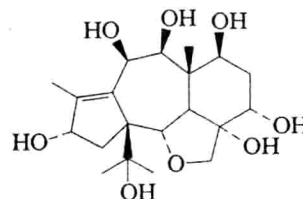
(6α,7α)-form

Constit. of *Salvia candicans*. Orange amorph. solid. [α]_D²⁵ +772 (c, 0.036 in CHCl₃). Related to Anastomosine, A-01652.

Cardenas, J. et al, *Phytochemistry*, 1995, **38**, 199 (isol, pmr, cmr)

11(15→1)-Abeo-2,20-epoxy-11-taxene-4,5,7,9,10,13,15-heptol

A-30005



C₂₀H₃₂O₈ M 400.468

(2α,4α,5α,7β,9β,10β)-form

9-Benzoyl, 4,7,13-tri-Ac: [167425-73-2]. *Taxayunnanine E*

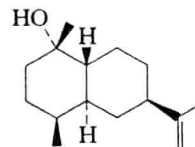
C₃₃H₄₂O₁₂ M 630.688

Constit. of *Taxus yunnanensis*. Amorph. powder. [α]_D²⁶ +3.3 (c, 0.6 in CHCl₃).

Zhang, H. et al, *Phytochemistry*, 1995, **39**, 1147 (isol, pmr, cmr)

14(10→1)-Abeo-11-eudesmen-1-ol

A-30006



C₁₅H₂₆O M 222.370

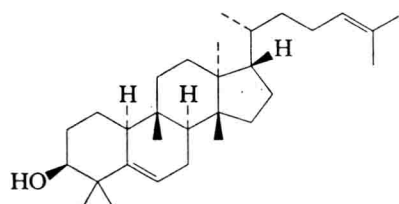
(1α,4β)-form [166322-01-6]

Constit. of *Ocotea corymbosa*. Oil. [α]_D²⁵ -10.5 (c, 0.005 in CHCl₃).

Chavez, J.P. et al, *Phytochemistry*, 1995, **39**, 849 (isol, pmr, cmr)

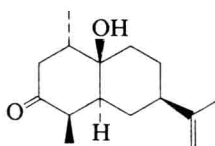
19(10→9)-Abeoeupha-5,24-dien-3-ol

A-30007

 $C_{30}H_{50}O$ M 426.724(3 β ,8 α ,9 β ,10 α)-form*Boetical*Constit. of *Euphorbia boetica*. Oil. $[\alpha]_D^{20} + 30$ (c, 0.07 in $CHCl_3$).Ferreira, M.J.U. et al, *J. Nat. Prod.*, 1995, **58**, 575 (isol, pmr, cmr)

14(10→1)-Abeo-10-hydroxy-11-eudesmen-3-one

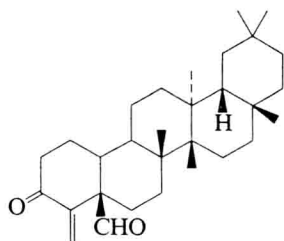
A-30008

 $C_{15}H_{24}O_2$ M 236.353(1 α ,4 β ,10 β)-form [166322-02-7]Constit. of *Ocotea corymbosa*. Oil. $[\alpha]_D^{25} + 64.8$ (c, 0.003 in $CHCl_3$).Chavez, J.P. et al, *Phytochemistry*, 1995, **39**, 849 (isol, pmr, cmr)

25(9→8)-Abeo-3-oxo-4(23)-friedelen-24-al

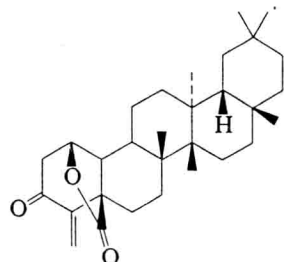
A-30009

[156214-08-3]

 $C_{30}H_{46}O_2$ M 438.692Constit. of *Schaefferia cuneifolia*.Gonzalez, A.G. et al, *Rev. Latinoam. Quim.*, 1992, **23**, 22 (isol, pmr, cmr)

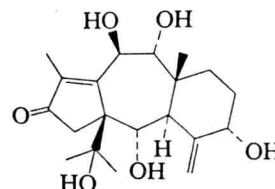
25(9→8)-Abeo-3-oxo-4(23)-friedelen-24,1-olide

A-30010

 $C_{30}H_{44}O_3$ M 452.6761 β -form [156214-07-2]Constit. of *Schaefferia cuneifolia*.Gonzalez, A.G. et al, *Rev. Latinoam. Quim.*, 1992, **23**, 22 (isol, pmr, cmr)

11(15→1)-Abeo-2,5,9,10,15-pentahydroxy-4(20),11-taxadien-13-one

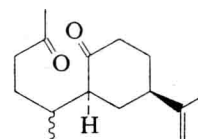
A-30011

 $C_{20}H_{30}O_6$ M 366.453(2 α ,5 α ,9 α ,10 β)-form2,9-Di-Ac: *Taxacustone* $C_{24}H_{34}O_8$ M 450.528Constit. of *Taxus cuspidata*. Plates (MeOH). Mp 268–271°. $[\alpha]_D^{28} - 14.6$ (c, 0.079 in $CHCl_3$).10-Benzoyl, 5-O- β -D-glucopyranosyl, 2,9-di-Ac: 10-Benzoyl-5-glucopyranosyltaxacustone $C_{37}H_{48}O_{14}$ M 716.778Constit. of *T. cuspidata*. Needles (MeOH). Mp 178–180°. $[\alpha]_D^{28} - 92.6$ (c, 0.074 in MeOH).Tong, X.-J. et al, *J. Nat. Prod.*, 1995, **58**, 233 (isol, pmr, cmr)

14(10→1)-Abeo-1,10-seco-11-eudesmene-1,10-dione

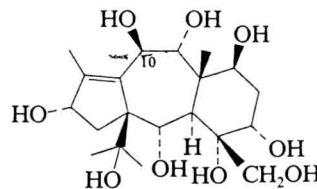
A-30012

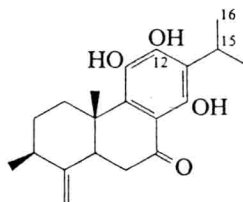
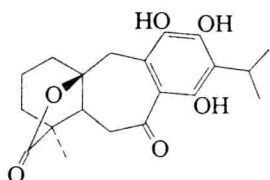
[166322-03-8]

 $C_{15}H_{24}O_2$ M 236.353Constit. of *Ocotea corymbosa*. Oil. $[\alpha]_D^{25} - 1.48$ (c, 0.005 in $CHCl_3$).Chavez, J.P. et al, *Phytochemistry*, 1995, **39**, 849 (isol, pmr, cmr)

11(15→1)-Abeo-11-taxene-2,4,5,7,9,10,13,15,20-nonol

A-30013

 $C_{20}H_{34}O_9$ M 418.483(2 α ,4 α ,5 α ,7 β ,9 α ,10 β ,13 α)-form10-Benzoyl, 5,7,9,20-tetra-Ac: [160928-37-0]. *Yunantaxusin A* $C_{35}H_{46}O_{14}$ M 690.740Constit. of *Taxus yunnanensis*. Needles (Me_2CO). Mp 239–240°. $[\alpha]_D - 52$ (c, 0.11 in MeOH).Zhang, S. et al, *J. Nat. Prod.*, 1994, **57**, 1581 (isol, pmr, cmr)

19(4→3)-Abeo-11,12,14-trihydroxy-4(18),8,11,13-abietatetraen-7-one**A-30014** $C_{20}H_{26}O_4$ M 330.42312-Me ether: [160896-57-1]. *Agastanol* $C_{21}H_{28}O_4$ M 344.450Constit. of *Agastache rugosa*. Pale yellow cryst. Mp 180-182°.15,16-Didehydro, 12-Me ether: [142182-52-3]. 19(4→3)-Abeo-11,14-dihydroxy-12-methoxy-4(18),8,11,13,15-abietapentaen-7-one. *Dehydroagastanol* $C_{21}H_{26}O_4$ M 342.434Constit. of *A. rugosa*. Pale yellow cryst. Mp 158-159°.Lee, H.-K. *et al*, *Saengyak Hakhoechi*, 1994, 25, 319; *CA*, 122, 128601b (isol, pmr, cmr)**9(10→20)-Abeo-11,12,14-trihydroxy-7-oxo-8,11,13-abietatrien-19,10-olide****A-30015** $C_{20}H_{24}O_6$ M 360.406

10β-form

Constit. of *Salvia candicans*. Related to Icetexone, I-00023 and Romulogarzone, R-00339.Cardenas, J. *et al*, *Phytochemistry*, 1995, 38, 199 (isol, pmr, cmr)**Musca Accessory gland peptide I****A-30016**

[150302-48-0]

H-Leu-Leu-Asn-Ala-Leu-Pro-Leu-Asp-Ala-Leu-Ser-Ser-Leu-Thr-Gly-NH₂ $C_{67}H_{117}N_{17}O_{21}$ M 1496.763Constit. of the accessory sex gland of the female housefly *Musca domestica*.Wagner, R.M. *et al*, *Biochem. Biophys. Res. Commun.*, 1993, 194, 1336 (isol, struct)**ACE inhibitor peptide C 105****A-30017**

C 105

[144357-25-5]

H-Ser-Val-Ala-Lys-Leu-Glu-Lys-OH

 $C_{34}H_{63}N_9O_{11}$ M 773.925

Isol. from the intestine of the bonito fish. Angiotensin I-converting enzyme inhibitor.

Matsumura, N. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, 57, 1743 (isol, struct)**ACE inhibitor peptide C 107****A-30018**

C 107

[143936-45-2]

H-Ala-Leu-Pro-His-Ala-OH

 $C_{23}H_{37}N_7O_6$ M 507.589

Isol. from the intestine of the bonito fish. Angiotensin I-converting enzyme inhibitor.

Matsumura, N. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, 57, 1743 (isol, struct)**ACE inhibitor peptide C 111****A-30019**

C 111

[146935-77-5]

H-Gly-Val-Tyr-Pro-His-Lys-OH

 $C_{33}H_{49}N_9O_8$ M 699.806

Isol. from the liver of the bonito fish. Angiotensin I-converting enzyme inhibitor.

Matsumura, N. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, 57, 1743 (isol, struct)**ACE inhibitor peptide C 112****A-30020**

C 112

[148162-36-1]

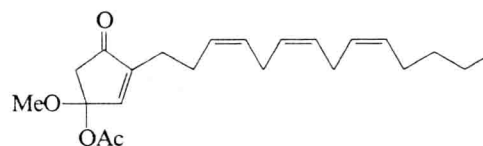
H-Ile-Arg-Pro-Val-Gln-OH

 $C_{27}H_{49}N_9O_7$ M 611.740

Isol. from the intestine of the bonito fish. Angiotensin I-converting enzyme inhibitor.

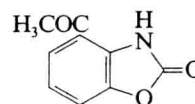
Matsumura, N. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, 57, 1743 (isol, struct)**4-Acetoxy-4-methoxy-2-(3,6,9-tetradecatrienyl)-2-cyclopenten-1-one****A-30021**

[156992-93-7]

 $C_{22}H_{32}O_4$ M 360.492Constit. of the sea pen *Virgularia* sp. Unstable oil. $[\alpha]_D^{25} + 12.05$ (c, 0.9 in CHCl₃). Incorrect MF and name in CA.Anjaneyulu, A.S.R. *et al*, *Indian J. Chem., Sect. B*, 1994, 33, 55 (isol, ir, pmr, cmr)**4-Acetyl-2(3*H*)-benzoxazolone, 9CI****A-30022**

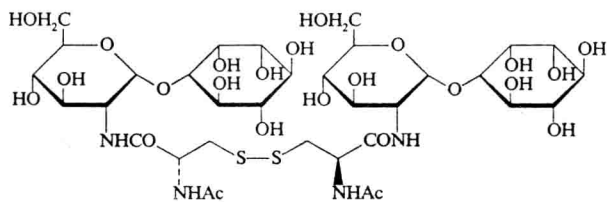
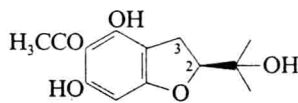
4-Acetylbenzoxazolin-2-one

[70735-79-4]

 $C_9H_7NO_3$ M 177.159Found in kernels of *Zea mays* (Gramineae). Needles (Me₂CO aq.). Mp 217-218°.Fielder, D.A. *et al*, *Tet. Lett.*, 1994, 35, 521 (isol, uv, ir, pmr, cmr, ms, cryst struct)Fielder, D.A. *et al*, *J. Nat. Prod.*, 1995, 58, 456 (synth)

2-(N-Acetylcysteinyl)amido-2-deoxy- α -D-glucopyranosyl-D-myo-inositol disulfide **A-30023**2',2'''-[Dithiobis[[2-(acetyl-amino)-1-oxo-3,1-propanediyl]imino]]bis[3-O-(2-deoxy- α -D-glucopyranosyl)]-D-myo-inositol, 9CI

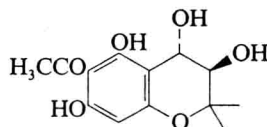
[157230-65-4]

 $C_{34}H_{58}N_4O_{14}S_2$ M 970.977Prod. by *Streptomyces* sp. AJ-9463. Powder. Mp 199-204° dec. $[\alpha]_D^{25} + 48.8$ (c, 0.14 in H_2O).Sakuda, S. et al, *Biosci., Biotechnol., Biochem.*, 1994, **58**, 1347 (isol, uv, ir, pmr, cmr)**5-Acetyl-2,3-dihydro-4,6-dihydroxy-2-(2-hydroxyisopropyl)benzofuran** **A-30024** $C_{13}H_{16}O_5$ M 252.266**(S)-form**

4-Me ether: [37986-62-2]. 5-Acetyl-2,3-dihydro-6-hydroxy-2-(2-hydroxyisopropyl)-4-methoxybenzofuran

 $C_{14}H_{18}O_5$ M 266.293Prisms (MeOH aq.). Mp 89-90.5°. $[\alpha]_D^{28} + 84.8$ (c, 1 in $CHCl_3$).

2,3-Didehydro, 4-Me ether: [159440-58-1]. 5-Acetyl-6-hydroxy-2-(2-hydroxyisopropyl)-4-methoxybenzofuran.

Furostipitol $C_{14}H_{16}O_5$ M 264.277Constit. of *Melicope stipitata*. Gum.Kondo, Y. et al, *Chem. Pharm. Bull.*, 1972, **20**, 1940.Parsons, I.C. et al, *Phytochemistry*, 1994, **37**, 565 (Furostipitol)**6-Acetyl-3,4-dihydro-2,2-dimethyl-2H-1-benzopyran-3,4,5,7-tetrol** **A-30025** $C_{13}H_{16}O_6$ M 268.266**(3RS,4SR)-form** $(\pm)$ -trans-form

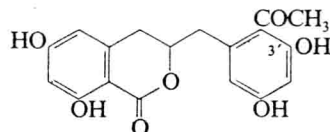
5,7-Di-Me ether: [159334-29-9]. 6-Acetyl-3,4-dihydro-5,7-dimethoxy-2,2-dimethyl-2H-1-benzopyran-3,4-diol. 3,4-Dihydroxydihydropyranostipitol

 $C_{15}H_{20}O_6$ M 296.319Constit. of *Melicope stipitata* (Rutaceae). Gum.

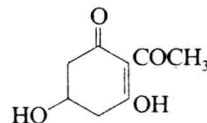
4-Et ether, 5,7-di-Me ether: [159334-28-8]. 6-Acetyl-4-ethoxy-3,4-dihydro-5,7-dimethoxy-2,2-dimethyl-2H-1-benzopyran-3-ol

 $C_{17}H_{24}O_6$ M 324.373Constit. of *M. stipitata* (Rutaceae). Needles (EtOAc/petrol). Mp 92-94°. Probable artifact.Parsons, I.C. et al, *Phytochemistry*, 1994, **37**, 565 (isol, uv, ir, pmr, cmr, ms)**3-(2-Acetyl-3,5-dihydroxybenzyl)-3,4-dihydro-6,8-dihydroxyisocoumarin** **A-30026**

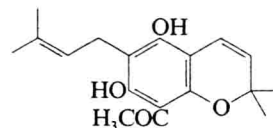
3-[[2-Acetyl-3,5-dihydroxyphenyl]methyl]-3,4-dihydro-6,8-dihydroxy-1H-2-benzopyran-1-one, 9CI

 $C_{18}H_{16}O_7$ M 344.3203'-O- β -D-Glucopyranoside: [155173-58-3]. $C_{24}H_{26}O_{12}$ M 506.462Constit. of leaf exudate of *Aloe hildebrandtii* (Aloeaceae). Light buff powder.Veitch, N.C. et al, *Phytochemistry*, 1994, **35**, 1163 (isol, uv, ir, pmr, cmr)**2-Acetyl-3,5-dihydroxy-2-cyclohexen-1-one** **A-30027**

AB 5046B. Antibiotic AB 5046B

 $C_8H_{10}O_4$ M 170.165 **$(\pm)$ -form** [154037-63-5]Prod. by a *Nodulisporium* sp. Shows chlorosis-inducing props. Oil.Igarashi, M. et al, *J. Antibiot.*, 1993, **46**, 1843 (isol, uv, ir, pmr, cmr, props)**8-Acetyl-5,7-dihydroxy-2,2-dimethyl-6-(3-methyl-2-butenyl)-2H-1-benzopyran** **A-30028**

8-Acetyl-5,7-dihydroxy-2,2-dimethyl-6-prenylchromene

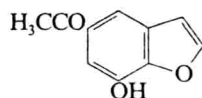
 $C_{18}H_{22}O_4$ M 302.369

5-Me ether: [160036-28-2]. 8-Acetyl-7-hydroxy-5-methoxy-2,2-dimethyl-6-(3-methyl-2-butenyl)-2H-1-benzopyran. 8-Acetyl-7-hydroxy-5-methoxy-2,2-dimethyl-6-prenylchromene

 $C_{19}H_{24}O_4$ M 316.396Constit. of *Boronia coerulescens* (Rutaceae). Pale yellow oil.Ahsan, M. et al, *Phytochemistry*, 1994, **37**, 259 (isol, uv, ir, pmr, cmr, ms)

5-Acetyl-7-hydroxybenzofuran**A-30029**

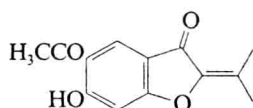
1-(7-Hydroxy-5-benzofuranyl)ethanone. 5-Acetyl-7-benzofuranol

 $C_{10}H_8O_3$ M 176.171

Me ether: [28996-92-1]. 1-(7-Methoxy-5-benzofuranyl)ethanone, 9CI. 5-Acetyl-7-methoxybenzofuran

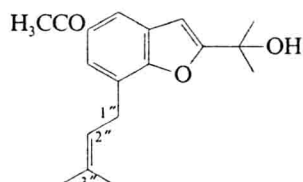
 $C_{11}H_{10}O_3$ M 190.198Constit. of the roots of *Ligularia przewalskii*. Needles ($CHCl_3$). Mp 86-87°.Giraldi, P.N. et al, *Arzneim.-Forsch.*, 1970, **20**, 676 (synth, deriv)
Jia, Z. et al, *J. Nat. Prod.*, 1994, **57**, 146 (isol, deriv)**5-Acetyl-6-hydroxy-2-isopropylidene-3(2H)-benzofuranone****A-30030**

[155696-12-1]

 $C_{13}H_{12}O_4$ M 232.235Constit. of the roots of *Ligularia nelumbifolia* (Compositae). Needles ($CHCl_3$). Mp 177-178°.Zhao, Y. et al, *Phytochemistry*, 1994, **37**, 1149 (isol, ir, pmr, cmr)**5-Acetyl-2-(2-hydroxyisopropyl)-7-prenylbenzofuran****A-30031**

5-Acetyl-2-(2-hydroxyisopropyl)-7-(3-methyl-2-butenyl)benzofuran

[148707-27-1]

 $C_{18}H_{22}O_3$ M 286.370Constit. of *Ophryosporus macrodon*. Gum.

1''-Oxo: [148707-28-2]. 5-Acetyl-2-(2-hydroxyisopropyl)-7-(3-methyl-2-butenyl)benzofuran

 $C_{18}H_{20}O_4$ M 300.354Constit. of *O. macrodon*. Mp 75-76°.

2'', 3''-Dihydro, 1''-oxo: [148707-26-0]. 5-Acetyl-2-(2-hydroxyisopropyl)-7-(3-methylbutanoyl)benzofuran

 $C_{18}H_{22}O_4$ M 302.369Constit. of *O. macrodon*. Gum.

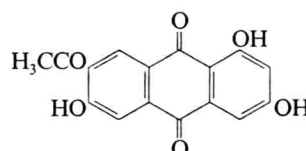
2'', 3''-Dihydro, 2'', 3''-dihydroxy: [148707-29-3]. 5-Acetyl-7-(2,3-dihydroxy-3-methylbutyl)-2-(2-hydroxyisopropyl)benzofuran

 $C_{18}H_{24}O_5$ M 320.385Constit. of *O. macrodon*. Mp 125-127°.

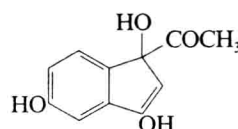
2'', 3''-Dihydro, 1'', 2'', 3''-trihydroxy: 5-Acetyl-2-(2-hydroxyisopropyl)-7-(1,2,3-trihydroxy-3-methylbutyl)benzofuran

 $C_{18}H_{24}O_6$ M 336.384Constit. of *O. macrodon*. Obt. as a mix. of erythro- and threo-isomers which were separated. $\Delta^{1''}$ -Isomer, 3''-hydroxy: [148707-25-9]. 5-Acetyl-2-(2-hydroxyisopropyl)-7-(3-hydroxy-3-methyl-1-butenyl)benzofuran $C_{18}H_{22}O_4$ M 302.369Isol. from *O. macrodon*. Cryst. (EtOAc/heptane). Mp 128-128.5°.

[148707-30-6, 148707-31-7]

Sigstad, E. et al, *Phytochemistry*, 1993, **33**, 165 (isol, pmr)**7-Acetyl-1,3,6-trihydroxyanthraquinone****A-30032** $C_{16}H_{10}O_6$ M 298.2513-Me ether, 6-Ac: [160669-36-3]. 6-Acetoxy-7-acetyl-1-hydroxy-3-methoxyanthraquinone. **Nemetzone** $C_{19}H_{14}O_7$ M 354.315Isol. from *Haematomma nemetzi*. Orange-red cryst. ($CHCl_3$ /MeOH). Mp 289-290°.Huneck, S. et al, *Z. Naturforsch., B*, 1994, **49**, 1561 (isol, uv, ms, pmr, cmr)**1-Acetyl-1,3,5-trihydroxy-1H-indene****A-30033**

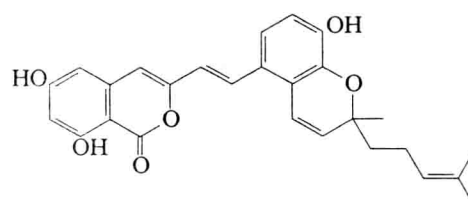
1-Acetyl-1H-indene-1,3,5-triol, 9CI

 $C_{11}H_{10}O_4$ M 206.1983,5-Di-Me ether: [151466-74-9]. 1-Acetyl-1-hydroxy-3,5-dimethoxy-1H-indene. **Coixinden B** $C_{13}H_{14}O_4$ M 234.251Constit. of *Coix lacrima-jobi* var. *ma-yuen*.

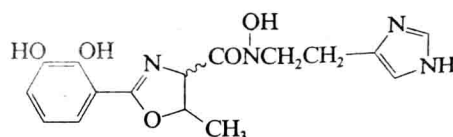
Antimicrobial agent.

Ishiguro, Y. et al, *Chem. Lett.*, 1993, 1139 (isol)**Achlisocoumarin IV****A-30034**

[152110-10-6]

 $C_{27}H_{26}O_6$ M 446.499Constit. of *Achlys triphylla*. Yellow powder.Iinuma, M. et al, *J. Nat. Prod.*, 1993, **56**, 1638 (isol, pmr)**Acinetobactin****A-30035**

[160472-93-5]



$C_{16}H_{18}N_4O_5$ M 346.342

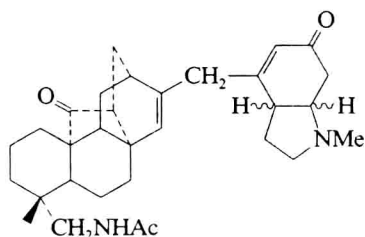
Closely related to Anguibactin, A-01722. Isol. from low-iron cultures of *Acinetobacter baumannii* ATCC 19606. Siderophore.

Yamamoto, S. *et al*, *Arch. Microbiol.*, 1994, **162**, 249 (isol, pmr, cmr, ms)

Acozerine

[155210-48-3]

A-30036



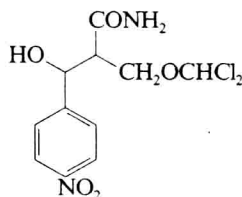
$C_{31}H_{42}N_2O_3$ M 490.684

Alkaloid from *Aconitum zeraivanicum* (Ranunculaceae).

Vaisov, Z.M. *et al*, *Mendelev Commun.*, 1993, 237; *CA*, **120**, 299052m (isol, ir, pmr, ms)

Acrodontiolamide

α -(Dichloromethoxymethyl)- β -hydroxy-4-nitrobenzenepropanamide
[152053-09-3]



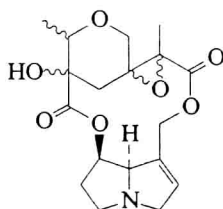
$C_{11}H_{12}Cl_2N_2O_5$ M 323.132

Metab. of the fungus *Acrodontium salmonium*. Antifungal agent. Plates (MeOH). Mp 145-147°.

Buarque de Gusmao, N. *et al*, *Spectrosc. Lett.*, 1993, **26**, 1373 (isol, uv, ir, ms, pmr, cmr)

Adonifoline

A-30038



$C_{18}H_{23}NO_7$ M 365.382

Revised struct. (1992). Two previous isolates shown to be identical with the alkaloid now named Adonifoline. Alkaloid from *Senecio adonidifolius* and *S. dolichodoryius* (Compositae). Cryst. (Me₂CO). Mp 200°. [α]_D +84.74 (c, 0.78 in MeOH).

Bohlmann, F. *et al*, *Phytochemistry*, 1986, **25**, 1151 (isol, ir, pmr, cmr, ms)

Urones, J.G. *et al*, *Phytochemistry*, 1988, **27**, 1507 (isol, ir, pmr, cmr)

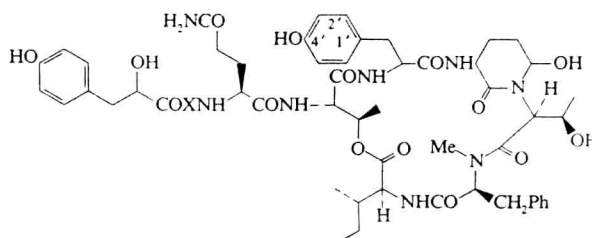
Roeder, E., *Phytochemistry*, 1990, **29**, 11 (cmr)

Witte, L. *et al*, *Phytochemistry*, 1992, **31**, 1027 (isol, pmr, cmr, ms, struct)

Aeruginopeptin 95A

[152510-31-1]

A-30039



X = Thr

$C_{56}H_{75}N_9O_{17}$ M 1146.259

Depsipeptide antibiotic. Prod. by *Microcystis aeruginosa*. [α]_D -35.1 (c, 0.19 in MeOH).

1',2',3',4'-Tetrahydro: [152510-32-2]. **Aeruginopeptin 95B**

$C_{56}H_{79}N_9O_{17}$ M 1150.290

Prod. by *M. aeruginosa*. [α]_D -39.5 (c, 0.09 in MeOH).

Harada, K. *et al*, *Tet. Lett.*, 1993, **34**, 6091.

Aeruginopeptin 228A

[152510-33-3]

A-30040

As Aeruginopeptin 95A, A-30039 with

X = bond

$C_{52}H_{68}N_8O_{15}$ M 1045.154

Depsipeptide antibiotic. Prod. by *Microcystis aeruginosa*. [α]_D -34.0 (c, 0.12 in MeOH).

1',2',3',4'-Tetrahydro: [152510-34-4]. **Aeruginopeptin 228B**

$C_{52}H_{72}N_8O_{15}$ M 1049.185

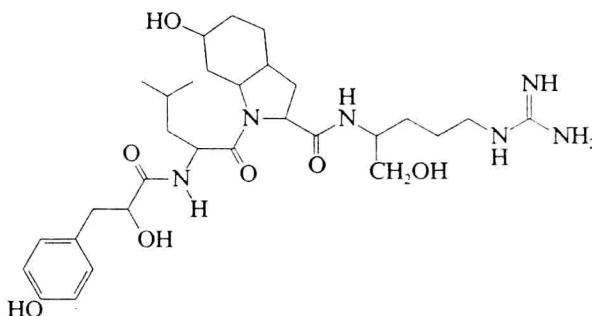
Prod. by *M. aeruginosa*. [α]_D -33.0 (c, 0.09 in MeOH).

Harada, K. *et al*, *Tet. Lett.*, 1993, **34**, 6091 (isol, struct)

Aeruginosin 298A

[156312-05-9]

A-30041



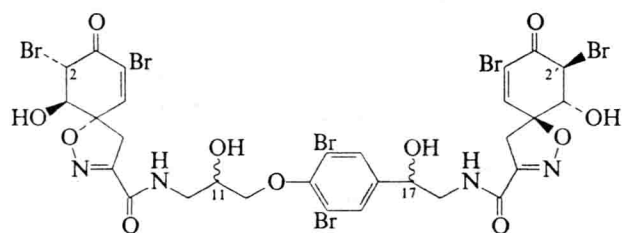
$C_{30}H_{48}N_6O_7$ M 604.745

Isol. from the freshwater blue-green alga *Microcystis aeruginosa*. Thrombin and trypsin inhibitor. Amorph. powder. [α]_D +22.3 (c, 0.36 in H₂O).

Murakami, M. *et al*, *Tet. Lett.*, 1994, **35**, 3129 (isol, uv, pmr, cmr, struct)

Agelorin A

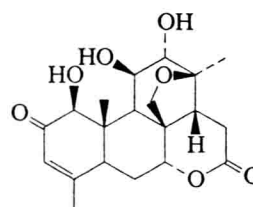
[149998-47-0]

 $C_{29}H_{26}Br_6N_4O_{11}$ M 1085.969Metab. from the tropical marine sponge *Agelas oroides*.Shows antibacterial activity. Amorph. off-white powder. $[\alpha]_D^{25} -17.1$ (c, 1.26 in Me_2CO).Stereoisomer: [150133-30-5]. **Agelorin B** $C_{29}H_{26}Br_6N_4O_{11}$ M 1085.969Isol. from *A. oroides*. Shows antibacterial activity.Amorph. powder. $[\alpha]_D^{25} +50.0$ (c, 0.27 in Me_2CO).

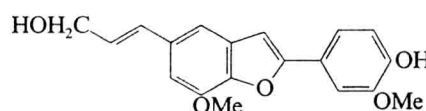
Epimeric at C-2 and C-2', undetd. configs. at C-11 and C-17.

König, G.M. *et al*, *Heterocycles*, 1993, **36**, 1351 (isol, uv, ir, pmr, cmr, ms, struct)**A-30042****Ailanthquassin B**

[159903-53-4]

 $C_{20}H_{26}O_7$ M 378.421Constit. of *Ailanthus malabarica*. Cryst. (MeOH). Mp 262°. $[\alpha]_D^{25} -35.5$ (c, 1.2 in Py).Aono, H. *et al*, *Phytochemistry*, 1994, **37**, 579 (isol, pmr, cmr)**Ailanthoidol**

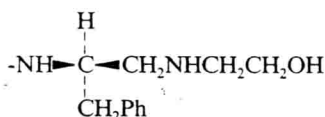
[156398-61-7]

 $C_{19}H_{18}O_5$ M 326.348Constit. of the stems of *Zanthoxylum ailanthoides*. Prisms (MeOH). Mp 199-201°.Sheen, W.-S. *et al*, *Phytochemistry*, 1994, **36**, 213.**A-30046****Aibellin**

[151036-29-2]

Ac-Aib-Ala-Aib-Ala-Aib-Ala-Gln-Aib-Phe-

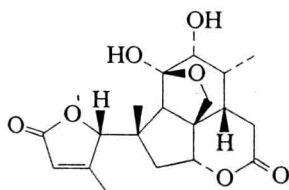
Aib-Gly-Aib-Aib-Pro-Val-Aib-Aib-Glu-Glu-

 $C_{106}H_{155}N_{23}O_{27}$ M 2183.528

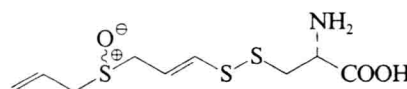
Peptide antibiotic. Metab. of the fungus

Verticimonosporium ellipticum.Kumazawa, S. *et al*, *Pept. Chem.*, 1993, **31**, 137 (isol)Kumazawa, S. *et al*, *Biosci., Biotechnol., Biochem.*, 1994, **58**, 2188 (pmr, cd, cmr, struct)**A-30043****Ailanthquassin A**

[159903-52-3]

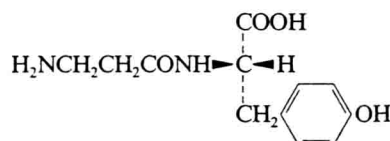
 $C_{19}H_{24}O_7$ M 364.394Constit. of *Ailanthus malabarica*. Cryst. (MeOH). Mp 248°. $[\alpha]_D^{23} +23.3$ (c, 1.5 in Py).Aono, H. *et al*, *Phytochemistry*, 1994, **37**, 579 (isol, pmr, cmr, crystal struct)**A-30044****Ajocysteine**

2-Amino-9-oxo-4,5,9-trithia-6,11-dodecadienoic acid

 $C_9H_{15}NO_3S_3$ M 281.420Constit. of garlic (*Allium sativum*). No phys. props. reported.Lawson, L.D. *et al*, *Planta Med.* (Suppl.), 1993, **59**, A688 (isol)**A-30047****Alanylthreonyltryptophanyl-leucylaspartylthreonine**

[157724-16-8]

H-Ala-Thr-Trp-Leu-Asp-Thr-OH

 $C_{32}H_{47}N_7O_{11}$ M 705.764Isol. from the annelid *Perinereis vancaurica*.Takahashi, T. *et al*, *Pept. Chem.*, 1993, **31**, 169 (isol, struct)**A-30048****N-β-Alanyltirosine***Sarcophagine†***A-30049** $C_{12}H_{16}N_2O_4$ M 252.269*(S)-form* [21612-26-0]*L-form*Isol. from the leaves of *Sarcophaga bullata* and *Phryxe caudata*. Mp 226-228°. $[\alpha]_D +43.5$ (H_2O).

Z- β -Ala-Tyr-OH: [21612-25-9].

Cryst. (EtOAc/petrol). Mp 130-131°. $[\alpha]_D^{25} + 16.2$ (EtOH).

Z- β -Ala-Tyr-OMe: [21612-24-8].

Cryst. (EtOH/Et₂O/petrol). Mp 113-114°. $[\alpha]_D^{25} + 5.9$ (EtOH).

Pinelli, C. *et al*, *Farmaco, Ed. Sci.*, 1968, **23**, 859 (*synth*)

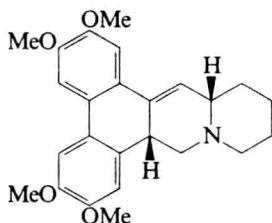
Levenbook, L. *et al*, *Biochem. J.*, 1969, **113**, 837 (*isol, synth*)

Bodnaryk, R.P., *Comp. Biochem. Physiol., B: Comp. Biochem.*, 1972, **43**, 587 (*isol*)

Alihirsutine A

A-30050

[147526-80-5]



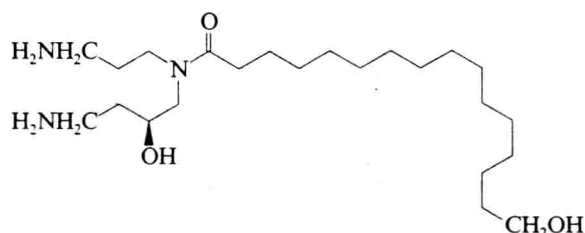
C₂₅H₂₉NO₄ M 407.508

Alkaloid from aerial parts of *Tylophora hirsuta* (Asclepiadaceae). Cryst. (CHCl₃/MeOH 1:1). Mp 296-298°.

Ali, M. *et al*, *Fitoterapia*, 1992, **63**, 243 (*isol, uv, ir, pmr, ms, struct*)

Fromia monilis Alkaloid

A-30051



C₂₃H₄₉N₃O₃ M 415.658

Alkaloid from the New Caledonian starfish *Fromia monilis*. Cytotoxic. $[\alpha]_D^{25} + 3.5$.

Palagiano, E. *et al*, *Tetrahedron*, 1995, **51**, 3675 (*isol, pmr, cmr, struct*)

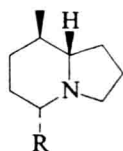
Dendrobates Alkaloid 233D

A-30052

5-(4,6-Heptadienyl)octahydro-8-methylindolizine, 9CI.

Indolizidine 233D

[141643-30-3]



R = (CH₂)₃CH=CHCH=CH₂ (Z-)

C₁₆H₂₇N M 233.396

Alkaloid from skin extracts of the Panamanian poison frog *Dendrobates pumilio*. $[\alpha]_D^{25} - 3.4$ (c, 0.16 in MeOH) (hydrochloride).

Tokuyama, T. *et al*, *Tetrahedron*, 1991, **47**, 5401 (*isol, ms, cmr, struct*)

Dendrobates Alkaloid 251B

A-30053

7-(Octahydro-8-methyl-5-indoliziny)-3-hepten-2-ol, 9CI.

Indolizidine 251B

[141643-31-4]

As *Dendrobates* Alkaloid 233D, A-30052 with

R = -(CH₂)₃CH=CHCH(OH)CH₃ (Z-)

C₁₆H₂₉NO M 251.411

Alkaloid from skin extracts of the Panamanian poison frog *Dendrobates pumilio*. $[\alpha]_D^{25} + 25.9$ (c, 0.8 in CHCl₃).

Tokuyama, T. *et al*, *Tetrahedron*, 1991, **47**, 5401 (*isol, cmr, struct*)

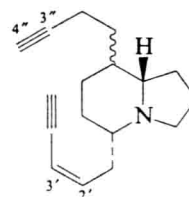
Mantella Alkaloid 241F

A-30054

8-(3-Butynyl)octahydro-5-(2-penten-4-ynyl)indolizine, 9CI.

Indolizidine 241F

[151805-25-3]



C₁₇H₂₃N M 241.375

Provisional struct. Minor alkaloid from skin extracts of 2 populations of the Madagascan frog *Mantella madagascariensis*.

2',3'-Dihydro: [151805-26-4]. 8-(3-Butynyl)octahydro-5-(4-pentynyl)indolizine, 9CI. *Mantella* Alkaloid 243B.

Indolizidine 243B

C₁₇H₂₅N M 243.391

Trace alkaloid in one population of *M. madagascariensis*. Provisional struct.

3'',4''-Dihydro: [151805-27-5]. 8-(3-Butenyl)octahydro-5-(2-penten-4-ynyl)indolizine, 9CI. *Mantella* Alkaloid 243C.

Indolizidine 243C

C₁₇H₂₅N M 243.391

Minor or trace alkaloid in 2 populations of *M. madagascariensis*. Provisional struct.

2'',3'',3'',4''-Tetrahydro: [151805-28-6]. 8-(3-Butenyl)octahydro-5-(4-pentynyl)indolizine, 9CI. *Mantella* Alkaloid 245B. Indolizidine 245B

C₁₇H₂₇N M 245.407

Trace alkaloid in 1 population of *M. madagascariensis*. Provisional struct.

Garraffo, H.M. *et al*, *J. Nat. Prod.*, 1993, **56**, 1016 (*isol, ir, ms*)

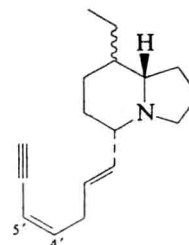
Mantella Alkaloid 243D

A-30055

8-Ethyl-5-(1,4-heptadien-6-ynyl)octahydroindolizine, 9CI.

Indolizidine 243D

[151834-95-6]



C₁₇H₂₅N M 243.391

Provisional struct. Minor or trace alkaloid from skin extracts of 2 populations of the Madagascan frog *Mantella madagascariensis*.

4',5'-Dihydro: [151805-29-7]. 8-Ethyl-5-(1-hepten-6-ynyl) octahydroindolizidine, 9CI. **Mantella Alkaloid 245C**.

Indolizidine 245C

$C_{17}H_{27}N$ M 245.407

Minor or trace alkaloid in 2 populations of *M. madagascariensis*. Provisional struct.

Garraffo, H.M. et al, *J. Nat. Prod.*, 1993, **56**, 1016 (isol, ir, ms)

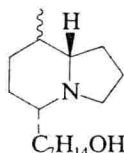
Mantella Alkaloid 253B

A-30056

(Octahydro-8-methyl-5-indoliziny)-sec-heptanol, 9CI.

Indolizidine 253B

[151871-22-6]



$C_{16}H_{31}NO$ M 253.427

Provisional struct. Secondary alcohol. Minor alkaloid from skin extracts of one population of the Madagascan frog *Mantella madagascariensis*.

Garraffo, H.M. et al, *J. Nat. Prod.*, 1993, **56**, 1016 (isol, ir, ms)

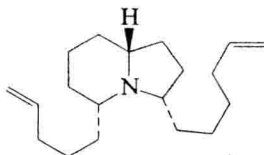
Mantella Alkaloid 275C

A-30057

3-(5-Hexenyl)octahydro-5-(4-pentenyl)indolizidine, 9CI.

Indolizidine 275C

[151805-31-1]



$C_{19}H_{33}N$ M 275.476

Provisional struct. Minor or trace alkaloid from skin extracts of 2 populations of the Madagascan frog *Mantella madagascariensis*.

Garraffo, H.M. et al, *J. Nat. Prod.*, 1993, **56**, 1016 (isol, ir, ms)

Alkaloid CSA 3

A-30058

CSA 3

Struct. unknown. Mol. formula not reported. Co-occurs with Cryptolepine and Quindoline (see 10*H*-Indolo[3,2-*b*]quinoline, I-00134). Could possibly be identical with the recently isolated Isocryptolepine. Alkaloid from roots of *Cryptolepis sanguinolenta* (Asclepiadaceae). Mp > 300°.

Dwuma-Badu, D. et al, *J. Pharm. Sci.*, 1978, **67**, 433 (isol)

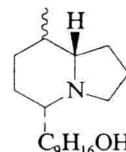
Mantella Alkaloid 279D

A-30059

(Octahydro-8-methyl-5-indoliziny)-sec-nonanol, 9CI.

Indolizidine 279D

[151871-23-7]



$C_{18}H_{33}NO$ M 279.465

Provisional struct. Secondary alcohol contg. a *Z*-double bond. Minor or trace alkaloid from skin extracts of 2 populations of the Madagascan frog *Mantella madagascariensis*.

Garraffo, H.M. et al, *J. Nat. Prod.*, 1993, **56**, 1016 (isol, ir, ms)

Alkaloid PP1†, 9CI

A-30060

[158827-53-3]

$C_{17}H_{19}NO_3$ M 285.342

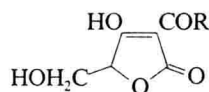
Struct. unknown. Alkaloid from *Papaver pinnatifidum* (Papaveraceae). Mp 179°.

Slavík, J. et al, *Coll. Czech. Chem. Comm.*, 1994, **59**, 1879 (isol)

3-Alkanoyl-4-hydroxy-5-(hydroxymethyl)-2(5*H*)-furanones

A-30061

3-Alkanoyl-5-(hydroxymethyl)tetronic acids



R = alkyl groups

Tetronic acid derivs. Components isol. from the cultures of the Actinomycete strain DSM 7357. Inhibitors of HIV-1 protease. Isol. as Na salts.

4-Hydroxy-5-(hydroxymethyl)-3-tetradecanoyl-2(5*H*)-furanone

5-(Hydroxymethyl)-3-tetradecanoyltetronic acid

$C_{19}H_{32}O_5$ M 340.459

4-Hydroxy-5-(hydroxymethyl)-3-pentadecanoyl-2(5*H*)-furanone

[154639-22-2]

5-(Hydroxymethyl)-3-pentadecanoyltetronic acid

$C_{20}H_{34}O_5$ M 354.486

4-Hydroxy-5-(hydroxymethyl)-3-(13-methyltetradecanoyl)-2(5*H*)-furanone

[154639-23-3]

5-(Hydroxymethyl)-3-(13-methyltetradecanoyl)tetronic acid

$C_{20}H_{34}O_5$ M 354.486

3-Hexadecanoyl-4-hydroxy-5-(hydroxymethyl)-2(5*H*)-furanone

[154639-24-4]

3-Hexadecanoyl-5-(hydroxymethyl)tetronic acid

$C_{21}H_{36}O_5$ M 368.512

4-Hydroxy-5-(hydroxymethyl)-3-(14-methylpentadecanoyl)-2(5*H*)-furanone

[154639-25-5]

5-(Hydroxymethyl)-3-(14-methylpentadecanoyl)tetronic acid

$C_{21}H_{36}O_5$ M 368.512

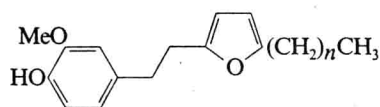
4-Hydroxy-5-(hydroxymethyl)-3-(14-methylhexadecanoyl)-2(5*H*)-furanone

[154639-26-6]

5-(Hydroxymethyl)-3-(14-methylhexadecanoyl)tetronic acid

$C_{22}H_{38}O_5$ M 382.539

Roggo, B.E. et al, *J. Antibiot.*, 1994, **47**, 136, 143 (isol, ir, pmr, ms, props)

2-Alkyl-5-[2-(4-hydroxy-3-methoxyphenyl)ethyl]furans **A-30062**

$n = 3, 5, 7$

Isol. from dry rhizomes of ginger *Zingiber officinale*.

2-Butyl-5-[2-(4-hydroxy-3-methoxyphenyl)ethyl]furan
[143114-90-3]

4-[2-(5-Butyl-2-furanyl)ethyl]-2-methoxyphenol, 9CI
 $C_{17}H_{22}O_3$ M 274.359
 $n = 3$.

2-Hexyl-5-[2-(4-hydroxy-3-methoxyphenyl)ethyl]furan
[143114-91-4]

4-[2-(5-Hexyl-2-furanyl)ethyl]-2-methoxyphenol, 9CI
 $C_{19}H_{26}O_3$ M 302.413
 $n = 5$.

2-[2-(4-Hydroxy-3-methoxyphenyl)ethyl]-5-octylfuran
[143114-92-5]

4-[2-(5-Octyl-2-furanyl)ethyl]-2-methoxyphenol, 9CI
 $C_{21}H_{30}O_3$ M 330.466
 $n = 7$.

Nakatani, N. *et al*, *Chem. Express*, 1992, 7, 221 (isol, pmr, cmr)

Periplaneta americana Allatostatin 1 **A-30063**

1-L-Serine-5-L-methionineallatostatin A. *Pea-AST 1*
 [154037-71-5]

H-Ser-Pro-Ser-Gly-Met-Gln-Arg-Leu-Tyr-Gly-Phe-Gly-Leu-NH₂

$C_{63}H_{98}N_{18}O_{17}S$ M 1411.644

Isol. from the brain of the cockroach *Periplaneta americana*. Allatostatin. Neuropeptide inhibitor.

Weaver, R.J. *et al*, *Comp. Biochem. Physiol., C: Comp. Pharmacol.*, 1994, 107, 119 (isol, struct)

Periplaneta americana Allatostatin 2 **A-30064**

Pea-AST 2
 [154037-72-6]

H-Ala-Asp-Gly-Arg-Leu-Tyr-Ala-Phe-Gly-Leu-NH₂

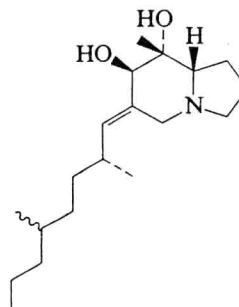
$C_{50}H_{76}N_{14}O_{13}$ M 1081.236

Isol. from the brain of the cockroach *Periplaneta americana*. Allatostatin. Neuropeptide inhibitor.

Weaver, R.J. *et al*, *Comp. Biochem. Physiol., C: Comp. Pharmacol.*, 1994, 107, 119 (isol, struct)

Allopumiliotoxin 309D

6-(2,5-Dimethyloctylidene)octahydro-8-methyl-7,8-indolizinediol, 9CI
 [141643-33-6]



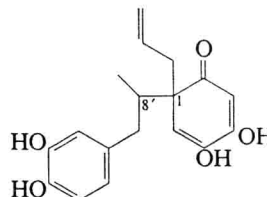
$C_{19}H_{35}NO_2$ M 309.491

Alkaloid from skin extracts of the Panamanian poison frog *Dendrobates pumilio*.

Tokuyama, T. *et al*, *Tetrahedron*, 1991, 47, 5415 (isol, cmr, ms, struct)

6-Allyl-6-[2-(3,4-dihydroxyphenyl)-1-methylethyl]-3,4-dihydroxy-2,4-cyclohexadien-1-one **A-30066**

6-[2-(3,4-Dihydroxyphenyl)-1-methylethyl]-3,4-dihydroxy-6-(2-propenyl)-2,4-cyclohexadien-1-one. 3',4,4',5-Tetrahydroxy-2-oxo-1,8'-ligna-3,5,8-triene



$C_{18}H_{20}O_5$ M 316.353

4,5-Di-Me, 3',4'-methylene ether: [158506-58-2]. 4,5-Dimethoxy-3',4'-methylenedioxy-2-oxo-1,8'-ligna-3,5,8-triene

$C_{21}H_{24}O_5$ M 356.418

Constit. of the stems of *Piper wightii*. Gummy solid. $[\alpha]_D^{25} -2.3$ (c, 1 in CHCl₃).

4,5-Di-Me, 3',4'-methylene ether, diastereoisomer:

$C_{21}H_{24}O_5$ M 356.418

Constit. of the stems of *P. wightii*. Pale yellow oil. $[\alpha]_D^{24} -14.8$ (c, 0.3 in CHCl₃).

Bis(methylene) ether: [138965-87-4]. 3',4':4,5-

Bis(methylenedioxy)-2-oxo-1,8'-ligna-3,5,8-triene

$C_{20}H_{20}O_5$ M 340.375

Constit. of the roots of *P. capense*. $[\alpha]_D^{21} +3.3$ (c, 0.007 in CDCl₃).

Bis(methylene) ether, diastereoisomer:

$C_{20}H_{20}O_5$ M 340.375

Constit. of the roots of *P. capense*. $[\alpha]_D^{22} +11.2$ (c, 0.007 in CDCl₃).

3'-Me, 4,5-methylene ether: [138965-85-2].

$C_{20}H_{22}O_5$ M 342.391

Constit. of the roots of *P. capense*. $[\alpha]_D^{23} -21.8$ (c, 0.02 in CDCl₃).

Green, T.P. *et al*, *Phytochemistry*, 1991, 30, 3759 (isol)

Prasad, A.K. *et al*, *Tetrahedron*, 1994, 50, 10579 (isol, uv, ir, pmr, cmr)