DICTIONARY OF ORGANIC COMPOUNDS

TENTH AND CUMULATIVE SUPPLEMENT

DICTIONARY OF ORGANIC COMPOUNDS

The constitution and physical, chemical and other properties of the principal carbon compounds and their derivatives, together with relevant literature references

FOURTH EDITION

TENTH AND CUMULATIVE SUPPLEMENT

collating new material published in and before 1973 with material published in the sixth, seventh, eighth, and ninth annual supplements

LONDON

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PREFACE TO TENTH SUPPLEMENT

This Tenth Supplement to the Dictionary of Organic Compounds is a cumulative volume. In addition to new entries derived from papers published during 1973, it contains all the entries from the Sixth, Seventh, Eighth, and Ninth Supplements revised and brought up-to-date in the light of more recent literature. The Tenth Supplement therefore supersedes the previous four Supplements. Entries which are supplementary to the Main Work are indicated by an asterisk (*), while those supplementary to the Fifth Supplement are indicated by a dagger (†). In a few cases entries have been moved and now appear under alternative names to those used either in the Main Work or in earlier Supplements. This has usually been done to bring them adjacent to related compounds. In one or two instances authors have revised the names they originally assigned to compounds. In this, as in the previous Supplements, references are given in full, in accord with modern practice. A few minor changes were introduced in the Sixth Supplement and are continued. Spectral data are now given in nanometres (nm) rather than millimicrons (mμ). The symbol D for density has been replaced by *d*. Melting point ranges are no longer abbreviated. A Formula Index containing formulae of all new compounds and any corrected formulae is included in this Supplement. Only title compounds and those derivatives for which formulae are given in the entry are listed. A Formula Index for the Main Work and Fifth Supplement has already been published.

Our thanks are again due to those who have brought errors and omissions to our notice. Errata have been inserted for errors in the Main Work and Fifth Supplement, and errors in the four previous Supplements have been corrected.

Nomenclature in Organic Chemistry and Biochemistry

The Nomenclature Commissions of the International Union of Pure and Applied Chemistry (IUPAC) and the International Union of Biochemistry (IUB) have been active over the last few years, and new or revised Rules in many areas have recently been published; much further work is in progress.

The following is a list of some sources of information in the English language. Simplified titles are used, and the precise official status of Rules with the two Unions is not always defined.

General Organic Chemistry

IUPAC Rules of Organic Chemical Nomenclature.

Sections A, B and C; New Edition (1969) Butterworths, London, 1971. (Covers hydrocarbons, heterocyclic structures, and all functional groups containing O, N, S, Se, Te and halogens).

Section D (covers functional groups containing P, As, Si, B, metals, and all other

elements not included in Section C). Tentative Rules (joint with Commission on the Nomenclature of Inorganic Chemistry) Appendix 31 to IUPAC *Information Bulletin*, August 1973.

Section E; Stereochemistry, Tentative Rules IUPAC *Information Bulletin*, no. 35 (1969) and also *J. Org. Chem.*, 1970, **35**, 2849; *Biochim. Biophys. Acta*, 1970, **208**, 1; *Europ. J. Biochem.*, 1970, **18**, 151.

Ring Systems; "The Ring Index," Second Edition, 1960, and Supplements I–III, A. M. Patterson, L. T. Capell, and D. F. Walker (Chemical Abstracts Service, Columbus, Ohio).

A statement of the nomenclature practice of *Chemical Abstracts*, which is based on IUPAC Rules and which selects certain names for indexing purposes, is given in "Naming and Indexing of Chemical Substances for *Chemical Abstracts* during the Ninth Collective Period (1972–76)" (A reprint of Section IV (Selection of Index Names for Chemical Substances) from the *Chemical Abstracts* Volume 76, Index Guide), published by the American Chemical Society, Columbus, Ohio 43210, U.S.A. This contains much detailed information on the nomenclature of organic and inorganic compounds, including polymers.

Special Groups of Compounds, including those of Biochemical Interest

IUPAC Rules when Definitive appear in the journal *Pure and Applied Chemistry*, and sometimes as separate books.

IUPAC Tentative Rules appear in Appendixes to the *Information Bulletin* (commonly called "Yellow Pages"); earlier titles appeared in the *Information Bulletin* itself ("Green Books").

The Recommendations of the Commission on Biochemical Nomenclature (CBN), which is a Joint Commission of IUPAC and IUB, appear in the "Yellow Pages" (or previously "Green Books") and also more accessibly in various biochemical journals. Certain Rules (or Recommendations) indicated by an asterisk * in the Table opposite are issued jointly by the IUPAC Commission on the Nomenclature of Organic Chemistry (CNOC) and by CBN. A few other sets of Rules have been more widely published in this way (e.g. Section E of the Organic Rules).

Collected Tentative Rules and Recommendations of the Commission on Biochemical Nomenclature (*IUPAC–IUB*) 1973, have been published by the American Society of Biological Chemists, Inc., 9650 Rockville Pike, Bethesda, Maryland 20014, U.S.A. This booklet covers revisions to the end of 1972, and includes most of the items listed in the Table.

Enzyme Nomenclature

See *Enzyme Nomenclature*, Recommendations (1972) of IUPAC and IUB, Elsevier, Amsterdam, 1973. (This is the 3rd version, previous versions having been published in 1961 and 1964.)

		Arch. Biochem. Biophys.	*Biochem. J.*	*Bio-chemistry*	*Biochim. Biophys. Acta*	*European J. Biochem.*	*J. Biol. Chem.*
Amino acids (names)	See Note A						
Amino acids and peptides (symbols)		**150,** 1	**126,** 773	**11,** 1726	**263,** 205	**27,** 201	**247,** 977
Carotenoids*	See Note B			**10,** 4827			
Carbohydrates*				**10,** 3983	**244,** 223	**21,** 455	
Cyclitols*	See Note C	**128,** 269	**112,** 17		**165,** 1	**5,** 1	**243,** 5809
Lipids	See Note D	**123,** 409	**105,** 897	**6,** 3287	**152,** 1 (**202,** 404)	**2,** 127 (**12,** 1)	**242,** 4845 (**245,** 1511)
Nucleotides (symbols)		**145,** 425	**120,** 449	**9,** 4022	**247,** 1	**15,** 203	**245,** 5171
Peptides (modifications)		**121,** 6	**104,** 17	**6,** 362	**133,** 1	**1,** 379	**242,** 555
Steroids*	See Notes D, E	**136,** 13	**113,** 5	**8,** 2227 (**10,** 4994)	**164,** 453 (**210,** 208)	**10,** 1 (**12,** 2)	
Vitamins, coenzymes and related compounds							
a Miscellaneous (A, B's, C, D's, tocols, niacins)							
b Quinones with isoprenoid side-chains (E, K, Q)	See Note C	**118,** 505	**102,** 15	**13,**1555	**107,** 1(a–c) **117,** 285(d)	**2,** 1	**241,** 2987
c Folic acids							
d Corrinoids (B-12's)	See Note C						
e B-6's		**145,** 422	**119,** 1	**9,** 4019	**222,** 1	**40,** 325	**245,** 4229

Notes

A New and greatly extended version in Press, 1974.
B Also in the book "Carotenoids," ed. O. Isler, Birkhäuser, Basel, 1971.
C Revision in Press, 1974.
D References in parentheses indicate amendments.
E Up-to-date version incorporating amendments, see *Pure and Appl. Chem.*, 1972, **31**, 283.

French, German and Russian versions exist of some Rules.

Nomenclature in Optical Rotatory Dispersion and Circular Dichroism

This follows the proposals of C. Djerassi and W. Klyne, *Proc. Chem. Soc.* 1957, 55 and C. Djerassi and E. Bunnenberg, *Proc. Chem. Soc.* 1963, 299. For summary see P. Crabbé, *Optical Rotatory Dispersion and Circular Dichroism in Organic Chemistry*, published by Holden-Day, San Francisco, 1965.

Optical Rotatory Dispersion (O.R.D.) values are *molecular* rotations

$$[\phi] \text{ (previously designated } [M]) = [\alpha] \times \text{mol. wt./100.}$$

These are given for extrema (peaks, troughs) and other significant features such as inflexions, and occasionally for the shortest wavelength recorded. Wavelengths, (λ) are in nm. The amplitude of a Cotton effect (*a*) is

([ϕ] for extremum of longer wavelength *minus*
[ϕ] for extremum of shorter wavelength) $\times 10^{-2}$.

Sometimes only the amplitude is quoted with the wavelengths of the two extrema, e.g. *a*, +116 (323/273 nm).

Circular Dichroism (C.D.) values are given as molecular ellipticity (θ), or differential absorption ($\Delta\varepsilon = \varepsilon_l - \varepsilon_r$) for maxima (positive or negative), and occasionally for other significant wavelengths. θ and $\Delta\varepsilon$ are alternative methods of expressing the same property; $\theta = 3300 \times \Delta\varepsilon$. Wavelengths, ($\lambda$) are in nm.

W. K.

A

Aabomycin A

$C_{39-40}H_{65-67}NO_{11}$ MW 723–737

Antibiotic produced by a *Streptomyces* sp. White needles from $CHCl_3$–C_6H_6, AcOEt–C_6H_6, Me_2CO.Aq, and EtOH.Aq. M.p. 144–145°. $[\alpha]_D^{26}$ +93·5° (c, 1 in $CHCl_3$). Light absorption: $\lambda_{max.}$ 280 nm ($E_{1cm}^{1\%}$ 1·67) in MeOH.

S. Aizawa, Y. Nakamura, S. Shirato, R. Taguchi, I. Yamaguchi, and T. Misato, *J. Antibiotics* (Tokyo), 1969, **22**, 457.

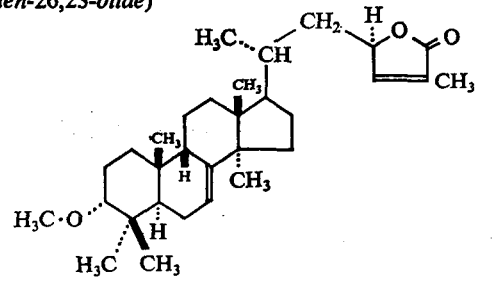
I. Yamaguchi, R. Taguchi, K. T. Huang, and T. Misato, *J. Antibiotics* (Tokyo), 1969, **22**, 463.

Abbeokutone.†

See also:

J. R. Hanson and A. F. White, *Tetrahedron*, 1970, **26**, 4839.

Abieslactone† ((23R)-3α-*Methoxy*-5α,9β-*lanosta*-7,24-*dien*-26,23-*olide*)



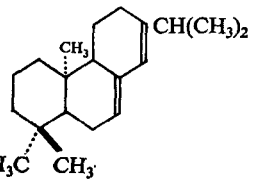
Revised structure:

J. P. Kutney, N. D. Westcott, F. H. Allen, N. W. Isaacs, O. Kennard, and W. D. S. Motherwell, *Tetrahedron Letters*, 1971, 3643.

Cryst. structure and revised structure:

F. H. Allen, N. W. Isaacs, O. Kennard, and W. D. S. Motherwell, *J. C. S. Perkin II*, 1973, 498.

***ent*-7,13-Abietadiene**

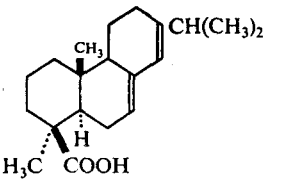


$C_{20}H_{32}$ MW 272

Constituent of the roots of *Solidago missouriensis* Nutt. Oil. $[\alpha]_D^{24}$ +127° (c, 2·05 in $CHCl_3$).

T. Anthonsen and C. Bergland, *Acta Chem. Scand.*, 1973, **27**, 1073.

4-*epi*-Abieta-7,13-dienoic acid (4-epi-*Abietic acid*)



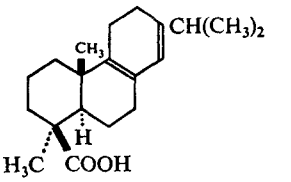
$C_{20}H_{30}O_2$ MW 302

Constituent of *Juniperus phoenicea* L.

Me ester: $C_{21}H_{32}O_2$. MW 316. M.p. 38–40°. $[\alpha]_D$ −61° ($CHCl_3$). Light absorption: $\lambda_{max.}$ 234, 241·5 (ε, 2300), and 250 nm in EtOH.

C. Tabacik and C. Poisson, *Bull. Soc. Chim. France*, 1969, 3264.

4-*epi*-Abieta-8,13-dienoic acid (4-epi-*Palustric acid*)



$C_{20}H_{30}O_2$ MW 302

Constituent of *Juniperus phoenicea* L.

Me ester: $C_{21}H_{32}O_2$. MW 316. M.p. 56–58°. B.p. 158–160°/0·15 mm.

C. Tabacik and C. Poisson, *Bull. Soc. Chim. France*, 1969, 3264.

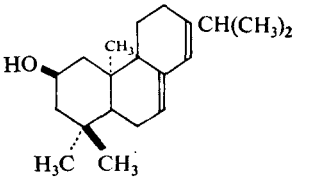
Abieta-12,14-dienoic acid.†

Cryst. structure:

U. Weiss, W. B. Whalley, and I. L. Karle, *J. C. S. Chem. Comm.*, 1972, 16.

I. L. Karle, *Acta Cryst.*, 1972, **28B**, 2000.

***ent*-7,13-Abietadien-2α-ol**



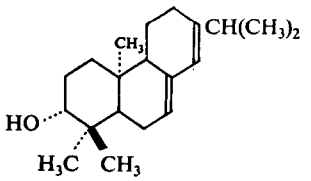
$C_{20}H_{32}O$ MW 288

Oil.

Ac: constituent of the roots of *Solidago missouriensis* Nutt. Oil. $[\alpha]_D^{27}$ +111° (c, 6·1 in $CHCl_3$).

T. Anthonsen and C. Bergland, *Acta Chem. Scand.*, 1973, **27**, 1073.

***ent*-7,13-Abietadien-3β-ol**

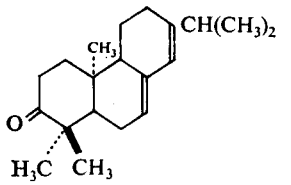


$C_{20}H_{32}O$ MW 288

Constituent of the roots of *Solidago missouriensis* Nutt. Oil. $[\alpha]_D^{25}$ +108° (c, 2·3 in $CHCl_3$).

T. Anthonsen and C. Bergland, *Acta Chem. Scand.*, 1973, **27**, 1073.

***ent*-7,13-Abietadien-3-one**



$C_{20}H_{30}O$ MW 286

Constituent of the roots of *Solidago missouriensis* Nutt. Oil. $[\alpha]_D^{27}$ +100° (c, 13·3 in $CHCl_3$).

T. Anthonsen and C. Bergland, *Acta Chem. Scand.*, 1973, **27**, 1073.

Abietane.†

Total synthesis:

E. Fujita, T. Fujita, H. Katayama, and Y. Nagao, *Tetrahedron*, 1969, **25**, 1335.

Abieta-8,11,13-triene. *See* Dehydroabietane.

Abieta-8,11,13-triene-2,12-diol. *See* Salviol.

***ent*-8(14)-Abietene-3β,13-diol.** See Missourienol B.

4-*epi*-Abietic acid. *See* 4-*epi*-Abieta-7,13-dienoic acid.

Abikoviromycin.†

Stereochemistry:

A. I. Gurevich, M. N. Kolosov, V. G. Korobko, and V. V. Onoprienko, *Khim. Prir. Soedin.*, 1971, **7**, 104 (*Chem. Abstracts*, 1971, **75**, 5752e).

Cryst. structure and absolute configuration:

Y. Kono, S. Takeuchi, H. Yonehara, F. Marumo, and Y. Saito, *J. Antibiotics* (Tokyo), 1970, **23**, 572; *Acta Cryst.*, 1971, **27B**, 2341.

See also:

A. I. Gurevich, M. N. Kolosov, V. G. Korobko, V. D. Kuznetsov, and V. V. Onoprienko, *Dokl. Akad. Nauk SSSR*, 1968, **182**, 828.

Abromine. *See* Betaine.★†

Abscisic acid.†

(−)(*S*)-.

Et ester:

Synthesis:

(+)(*R*)-.

Revised configuration:

T. Oritani and K. Yamashita, *Tetrahedron Letters*, 1972, 2521.

G. Ryback, *J. C. S. Chem. Comm.*, 1972, 1190.

Absolute configuration:

M. Koreeda, G. Weiss, and K. Nakanishi, *J. Am. Chem. Soc.*, 1973, **95**, 239.

N. Harada, *J. Am. Chem. Soc.*, 1973, **95**, 240.

K. Mori, *Tetrahedron Letters*, 1973, 2635.

G. Ohloff, E. Otto, V. Rautenstrauch, and G. Snatzke, *Helv. Chim. Acta*, 1973, **56**, 1874.

(±)-.

Synthesis:

J. A. Findlay and W. D. MacKay, *Can. J. Chem.*, 1971, **49**, 2369.

Absinthin.★

L. Novotný, V. Herout, and F. Šorm, *Collection Czech. Chem. Commun.*, 1960, **25**, 1492.

Revised structure:

K. Vokáč, Z. Samek, V. Herout, and F. Šorm, *Tetrahedron Letters*, 1968, 3855.

Acacetin.★†

7-β-D-*Galactoside*: cryst. from Py. M.p. 259° decomp. $[\alpha]_D^{25}$ −36·6° (c, 0·55 in $HCONMe_2$). Light absorption: $\lambda_{max.}$ 268 (log ε, 4·16) and 325 nm (4·13) in MeOH.

H. Wagner, G. Aurnhammer, L. Hörhammer, and L. Farkas, *Chem. Ber.*, 1970, **103**, 851.

7-β-D-*Glucurono*-β-(1 → 2)-D-*glucuronide*: constituent of the leaves of *Clerodendron trichotomum* Thunb. M.p. 191–205° decomp. $[\alpha]_D^{22}$ −48° (c, 1·3 in Py). Light absorption: $\lambda_{max.}$ 272 (ε, 29,800) and 326 nm (3200) in EtOH.

M. Okigawa, H. Hatanaka, N. Kawano, I. Matsunaga, and Z. Tamura, *Tetrahedron Letters*, 1970, 2935.

Acacic acid.†

Absolute stereochemistry:

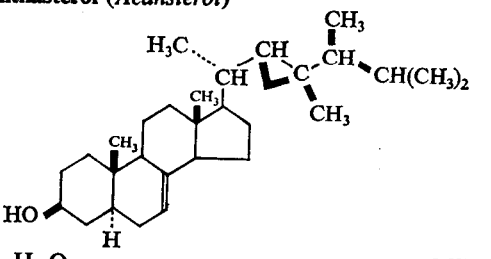
I. P. Varshney and K. M. Shamsuddin, *Bull. Chem. Soc. Japan*, 1970, **43**, 3830.

I. P. Varshney and G. Badhwar, *Planta Med.*, 1972, **22**, 47.

Acansterol. *See* Acanthasterol.

Acansterone. *See* Acanthasterone.

Acanthasterol (*Acansterol*)



$C_{30}H_{50}O$ MW 426

Constituent of *Acanthaster planci*. M.p. 179–180°. $[\alpha]_D^{21}$ +5° ± 3° ($CHCl_3$).

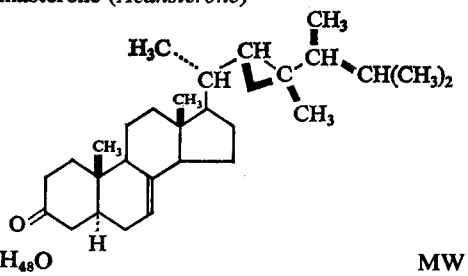
p-*Bromobenzoyl*: m.p. 230–232°.

p-*Iodobenzoyl*: m.p. 219–221°.

K. C. Gupta and P. J. Scheuer, *Tetrahedron*, 1968, **24**, 5831.

Y. M. Sheikh, C. Djerassi, and B. M. Tursch, *Chem. Commun.*, 1971, 217.

Acanthasterone (*Acansterone*)

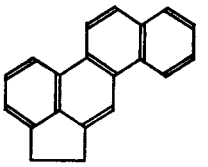


$C_{30}H_{48}O$ MW 424

M.p. 192–194°.

Y. M. Sheikh, C. Djerassi, and B. M. Tursch, *Chem. Commun.*, 1971, 217.

6,7-Acechrysene

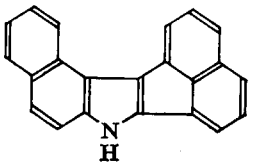


$C_{20}H_{14}$ MW 254

Cryst. from EtOH–C_6H_6. M.p. 185°. Light absorption: $\lambda_{max.}$ 272 (ε, 209,000), 262·5 (106,000), 329 (20,100), 314·5 (19,800), and 302 nm (16,000) in cyclohexane.

C. I. Lewis, J. Y. Chang, and A. W. Spears, *J. Org. Chem.*, 1969, **34**, 1176.

7*H*-Acenaphtho[1,2-*b*]benz[*e*]indole

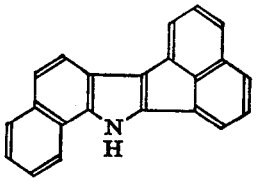


$C_{22}H_{13}N$ MW 291

Orange cryst. from C_6H_6. M.p. 270°.

M. Dufour, N. P. Buu-Hoï, P. Jacquignon, and D.-P. Hien, *J. C. S. Perkin I*, 1972, 527.

7*H*-Acenaphtho[1,2-*b*]benz[*g*]indole

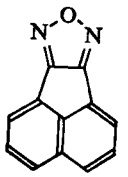


$C_{22}H_{13}N$ MW 291

Orange cryst. from C_6H_6. M.p. 293°.

M. Dufour, N. P. Buu-Hoï, P. Jacquignon, and D.-P. Hien, *J. C. S. Perkin I*, 1972, 527.

Acenaphtho[1,2-*c*]furazan

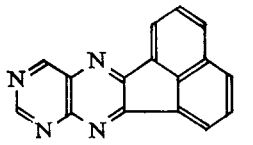


$C_{12}H_6N_2O$ MW 194

Pale buff needles. M.p. 140°.

A. B. Boulton and S. S. Mathur, *J. Org. Chem.*, 1973, **38**, 1054.

Acenaphtho[1,2-*g*]pteridine

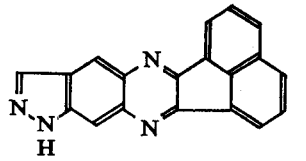


$C_{16}H_8N_4$ MW 256

Yellow prisms from AcOH. M.p. 322°.

N. P. Buu-Hoï, G. Saint-Ruf, and J. C. Arcos, *Bull. Soc. Chim. France*, 1969, 838.

Acenaphtho[1,2-*b*]pyrazolo[5,4-*g*]quinoxaline

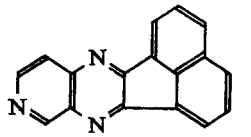


$C_{19}H_{10}N_4$ MW 294

Yellow prisms. M.p. >350°.

N. P. Buu-Hoï, G. Saint-Ruf, and J. C. Arcos, *Bull. Soc. Chim. France*, 1969, 838.

Acenaphtho[1,2-*b*]pyrido[3,4-*e*]pyrazine

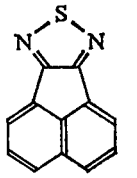


$C_{17}H_9N_3$ MW 255

Yellow plates from EtOH–dioxan. M.p. 246–247°.

N. P. Buu-Hoï, G. Saint-Ruf, and J. C. Arcos, *Bull. Soc. Chim. France*, 1969, 838.

Acenaphtho[1,2-*c*]-1,2,5-thiadiazole



$C_{12}H_6N_2S$ MW 210

Cryst. structure:

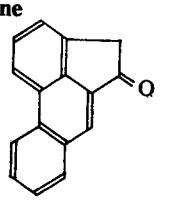
J. P. Schaefer and S. K. Arora, *Chem. Commun.*, 1971, 1623.

Acenaphthylene.★

Cryst. structure:

A. Bree, R. A. Kydd, V. V. B. Vilkos, and R. S. Williams, *Can. J. Chem.*, 1973, **51**, 402.

Acephenanthren-5-one

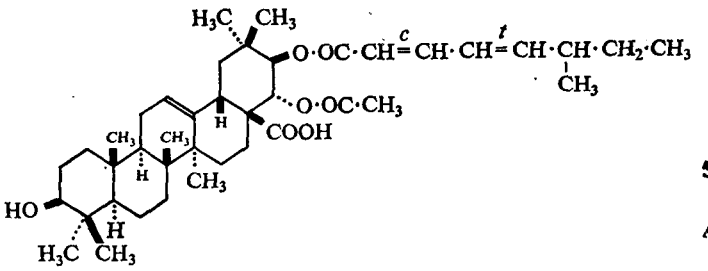


$C_{16}H_{10}O$ MW 218

Needles from light petroleum. M.p. 150–151°.

R. E. Harmon, M. Mazharuddin, and S. K. Gupta, *J. C. S. Perkin I*, 1973, 1160.

Acerocin



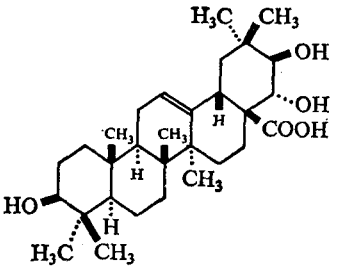
$C_{41}H_{62}O_7$ MW 666

Constituent of the extract of *Acer negundo* L. M.p. 205–207°. Light absorption: $\lambda_{max.}$ 266 nm (ε, 22,900) in MeOH. Hydrol. → Acerogenic acid.

S. M. Kupchan, M. Takasugi, R. M. Smith, and P. S. Steyn, *Chem. Commun.*, 1970, 969; *J. Org. Chem.*, 1971, **36**, 1972.

See also Acerotin.

Acerogenic acid (3β,21β,22α-*Trihydroxyolean*-12-*en*-28-*oic acid*)



$C_{30}H_{48}O_5$ MW 488

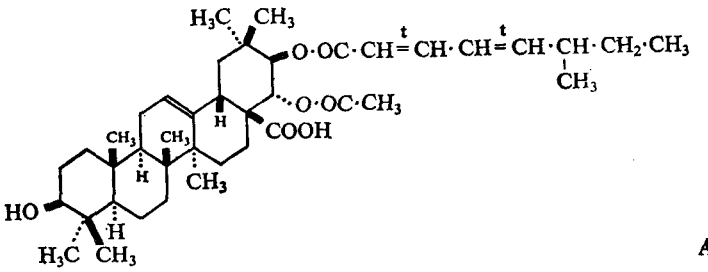
Product from the alkaline hydrol. of Acerotin and Acerocin. M.p. 308–310°. Light absorption: $\lambda_{max.}$ 210 nm (ε, 4400) in MeOH.

Me ester: $C_{31}H_{50}O_5$. MW 502. M.p. 236–238°.

— *Tri-Ac*: m.p. 212–213°.

S. M. Kupchan, M. Takasugi, R. M. Smith, and P. S. Steyn, *Chem. Commun.*, 1970, 969.

Acerotin



$C_{41}H_{62}O_7$ MW 666

Constituent of the extract of *Acer negundo* L. M.p. 240–243°. Light absorption: $\lambda_{max.}$ 264 nm (ε, 28,400) in MeOH. Hydrol. → Acerogenic acid.

S. M. Kupchan, M. Takasugi, R. M. Smith, and P. S. Steyn, *Chem. Commun.*, 1970, 969; *J. Org. Chem.*, 1971, **36**, 1972.

See also Acerocin.

Acetamide.★

Cryst. structure:

J. Wiemann, Mme. Gillier-Pandraud, N. Thoaï, and C. Beauté, *Bull. Soc. Chim. France*, 1969, 2147.

W. A. Denne and R. W. H. Small, *Acta Cryst.*, 1971, **27B**, 1094.

5-Acetamido-2,4,6-tri-iodo-*N*-methylisophthalamic acid. *See* Iothalamic acid.

Acetic formic anhydride

$CH_3{\cdot}CO{\cdot}O{\cdot}OCH$

$C_3H_4O_3$ MW 88

Colourless liquid. B.p. 38–38·5°/39 mm, 27–28°/10 mm. n_D^{20} 1·388.

A. Behal, *Compt. Rend.*, 1899, **128**, 1460.

C. D. Hurd and A. S. Roe, *J. Am. Chem. Soc.*, 1939, **61**, 3355.

R. E. Dunbar and F. C. Garven, *J. Am. Chem. Soc.*, 1955, **77**, 4161.

C. W. Huffman, *J. Org. Chem.*, 1958, **23**, 727.

I. Muramatsu, M. Murakami, T. Yoneda, and A. Hagitani, *Bull. Chem. Soc. Japan*, 1965, **38**, 244.

L. I. Krimen, *Org. Syn.*, 1970, **50**, 1.

Acetoacetaldehyde★ (3-*Oxobutanal*).

N.M.R. spectrum:

W. O. George and V. G. Mansell, *J. Chem. Soc., B*, 1968, 132.

Erratum p. 10, Main Work

Acetobromoglucose.★

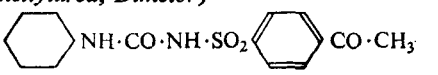
D-.

α-*Form*: cryst. from light petroleum. M.p. 88–89°. $[\alpha]_D^{20}$ +194° (c, 3·94 in $CHCl_3$).

β-*Form*: needles. M.p. 92°. $[\alpha]_D^{20}$ −16° (3 min.) → $[\alpha]_D^{20}$ +77° (8 days).

F. Weygand, H. Ziemann, and H. J. Bestmann, *Chem. Ber.*, 1958, **91**, 2534.

Acetohexamide (N-(4-*Acetylbenzenesulphonyl*)-N′-*cyclohexylurea, Dimelor*)



$C_{15}H_{20}N_2O_4S$ MW 324

Oral hypoglycemic agent. M.p. 184–189°. Light absorption: $\lambda_{max.}$ 247 and 284 nm.

J. S. Welles, M. A. Root, and R. C. Anderson, *Proc. Soc. Exp. Biol. Med.*, 1961, **107**, 583.

C. E. Shafer, *Analytical Profiles of Drug Substances*, 1972, **1**, 1.

Note. Acetohexamide is the name approved by the General Medical Council.

Acetone.★

Hydrazone:

See also:

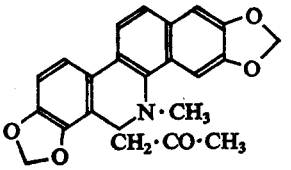
A. C. Day and M. C. Whiting, *Org. Syn.*, 1970, **50**, 3.

ab initio *calculations*:

N. L. Allinger and M. J. Hickey, *Tetrahedron*, 1972, **28**, 2157.

***o*-Acetonylanisole.** *See* 1-(*o*-Methoxyphenyl)-2-propanone.

6-Acetonyldihydrosanguinarine



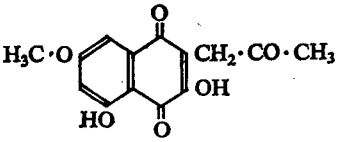
$C_{22}H_{19}NO_5$ MW 389

Alkaloid from **callus tissue** of *Papaver somniferum*. Yellow **needles from** $CHCl_3$–MeOH. M.p. 194–195·5°.

Synthesis:

T. Furuya, A. Ikuta, and K. Syono, *Phytochemistry*, 1972, **11**, 3041.

2-Acetonyl-3,5-dihydroxy-7-methoxy-1,4-naphthoquinone



$C_{14}H_{12}O_6$ MW 276

Metabolite of *Cylindrocarpon* spp. Orange cryst. from AcOEt. M.p. 208°.

5-Me ether: $C_{15}H_{14}O_6$. MW 290. Yellow needles from Me_2CO–hexane. M.p. 210–212°.

R. G. Coombe, H. I. C. Lowe, and T. R. Watson, *Australian J. Chem.*, 1972, **25**, 875.

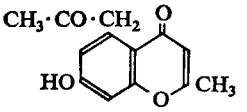
Synthesis:

R. G. Coombe, *Australian J. Chem.*, 1972, **25**, 881.

7-Acetonyl-5,8-dihydroxy-2-methoxy-1,4-napthoquinone. *See* Norjavanicin.

2-Acetonyl-8-glucopyranosyl-7-hydroxy-5-methylchromone. *See* Aloesin.

5-Acetonyl-7-hydroxy-2-methylchromone



$C_{13}H_{12}O_4$ MW 232

Constituent of the flowers of *Cassia siamea*. Yellow-green cryst. from Me_2CO. M.p. 210°. Light absorption: $\lambda_{max.}$ 221 (ε, 18,000), 243 (16,100), 251 (16,400), and 293 nm (11,400) in MeOH.

Ac: cryst. from Et_2O. M.p. 132°.

S. Arora, H. Deymann, R. D. Tiwari, and E. Winterfeld, *Tetrahedron*, 1971, **27**, 981.

9-Acetonyl-3-hydroxypyrrolidino[2,1-*b*]quinazoline. *See* Peganidin.

Erratum p. 6, Fifth Supplement

Acetophenetidine.

This entry should read *See N*-Ac *under p*-Phenetidine.

Acetophenone.★

Hydrazone:

See also:

G. R. Newkome and D. L. Fishel, *Org. Syn.*, 1970, **50**, 102.

Cryst. structure:

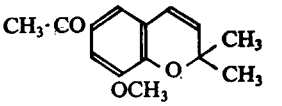
Y. Tanimoto, H. Kobayashi, S. Nagakura, and Y. Saito, *Acta Cryst.*, 1973, **29B**, 1822.

Acetorphine. *See* 3-Ac *under* 19-Propylorvinol.†

Erratum p. 6, Fifth Supplement

For **Acetovallinone** read **Acetovanillone.**

Acetovanillochromene (6-*Acetyl*-8-*methoxy*-2,2-*dimethylchromene*)



$C_{14}H_{16}O_3$ MW 232

Constituent of *Eupatorium riparium*. Oil.

2,4-Dinitrophenylhydrazone: red needles from MeOH. M.p. 203–204°.

D. R. Taylor and J. A. Wright, *Phytochemistry*, 1971, **10**, 1665.

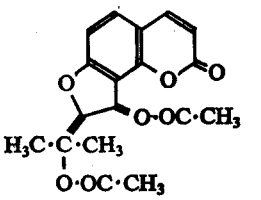
Acetovanillone.★†

Isolation from the roots of Picrorhiza kurroa:

K. Basu, B. Dasgupta, S. K. Bhattacharya, and P. K. Debnath, *Curr. Sci.*, 1971, **40**, 603.

***ent*-2α-Acetoxy-8(14)-abieten-13-ol.** *See* Missourienol C.

9-Acetoxy-*O*-acetyldihydro-oroselol



$C_{18}H_{18}O_7$ MW 346

Constituent of the roots of *Ligusticum pyrenaicum* Koch. Cryst. from CCl_4–CH_2Cl_2. M.p. 123°. Light absorption: $\lambda_{max.}$ 318 nm (ε, 14,000) in Et_2O.

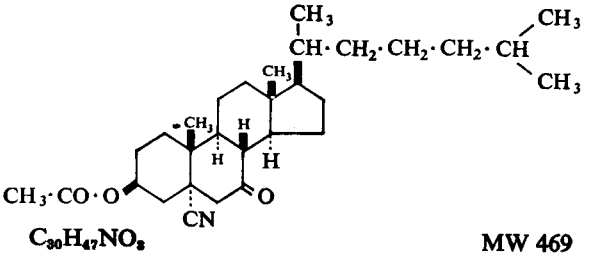
F. Bohlmann and M. Grenz, *Chem. Ber.*, 1969, **102**, 1673.

6-Acetoxyacetyl-7-hydroxy-2,2-dimethyl-2*H*-benzo[*b*]-pyran. *See* Ripariochromene B.

6-Acetoxyacetyl-7-hydroxy-2,2-dimethyl-3-chromene. *See* Ripariochromene B.

5-Acetoxy-12a-*O*-acetyltetracycline. *See* 5,12a-Di-Ac *under* Terramycin.

3β-Acetoxy-5-cyano-5α-cholestan-7-one



$C_{30}H_{47}NO_3$ MW 469

M.p. 192·5–193·5°.

W. Nagata, M. Yoshioka, and S. Hirai, *Tetrahedron Letters*, 1962, 48.

W. Nagata, M. Yoshioka, and M. Murakami, *J. Am. Chem. Soc.*, 1972, **94**, 4644.

W. Nagata, M. Yoshioka, and T. Terasawa, *J. Am. Chem. Soc.*, 1972, **94**, 4672.
W. Nagata and M. Yoshioka, *Org. Syn.*, 1972, **52**, 100.

2-Acetoxy-3-diethylcarbamoyl-1,3,4,6,7,11b-hexahydro-9,10-dimethoxy-2*H*-benzo[*a*]quinolizine. *See* Benzquinamide.

3α-Acetoxy-7β,18-dihydroxy-(−)-kaur-15-ene. *See* 3-Ac *under* Isofoliol.

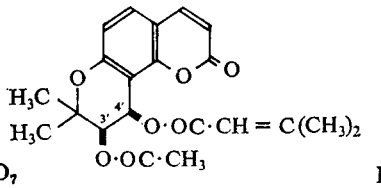
3α-Acetoxy-7β,18-dihydroxy-(−)-kaur-16-ene. *See* 3-Ac *under* Foliol.

18-Acetoxy-3α,7β-dihydroxy-(−)-kaur-15-ene. *See* 18-Ac *under* Isofoliol.

18-Acetoxy-3α,7β-dihydroxy-(−)-kaur-16-ene. *See* 18-Ac *under* Foliol.

1-Acetoxy-2,6-di-(2-methoxy-4,5-methylenedioxyphenyl)-3,7-dioxabicyclo[3,3,0]octane. *See* Phrymarolin I.

3′-Acetoxy-4′-(3,3-dimethylacryloyloxy)-3′,4′-dihydroseselin



$C_{21}H_{22}O_7$ MW 386

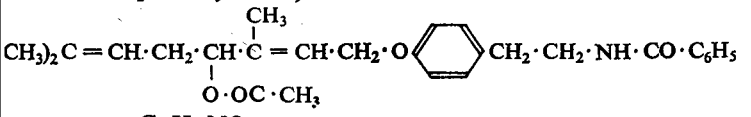
Constituent of the stems of *Seseli gummiferum* Pall. Two cryst. forms. M.p. 106–108° and 121°. $[\alpha]_D^{25}$ −11·9° (c, 0·4 in EtOH).

J. Lemmich, E. Lemmich, and B. E. Nielsen, *Acta Chem. Scand.*, 1966, **20**, 2497.
B. E. Nielsen, P. K. Larsen, and J. Lemmich, *Acta Chem. Scand.*, 1971, **25**, 529.

3-Acetoxy-6-dimethylamino-4,4-diphenylheptane. *See* Methadyl acetate.

7-Acetoxy-9,10-dimethyl-1,5-octacosanolide. *See* Ac *under* Nodolidol.

4-(4-Acetoxy-3,7-dimethylocta-2,6-dienyloxy)-*N*-benzoylphenethylamine (4-(4-*Acetoxyneryloxy*)-N-*benzoylphenethylamine*)



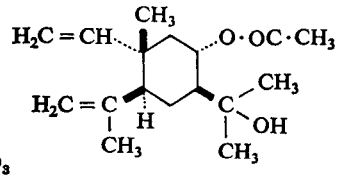
$C_{27}H_{33}NO_4$ MW 435

Alkaloid from the fruits of *Swinglea glutinosa* Merr. Cryst. from AcOEt–hexane. M.p. 64–65°.

D. L. Dreyer, *Tetrahedron*, 1970, **26**, 5745.

6-Acetoxydrim-7-en-12,11-olide. *See* Bemarivolide.

8-Acetoxyelemol



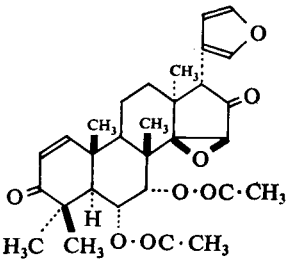
$C_{17}H_{28}O_3$ MW 280

Constituent of the essential oil of *Parabenzoin praecox*.

K. Ohara, Y. Ohta, and Y. Hirose, ***Bull. Chem. Soc. Japan***, 1973, **46**, 641.

16α-Acetoxy-22,26-epimino-3β,23-dihydroxy-5α-cholestan-4-one. *See* Solaphyllidine.

6α-Acetoxy-epoxyazadiradione

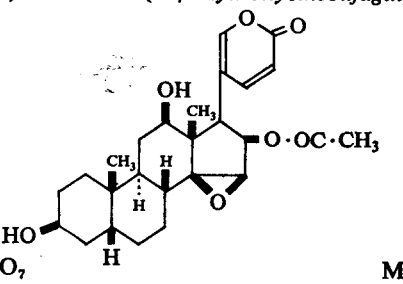


$C_{30}H_{36}O_8$ MW 524

Constituent of *Carapa guianensis*. M.p. 167–169°. $[\alpha]_D$ +40° (c, 0·1 in $CHCl_3$).

D. Lavie, E. C. Levy, and R. Zelnik, *Bioorg. Chem.*, 1972, **2**, 59.

16β-Acetoxy-14,15β-epoxy-3β,12β-dihydroxy-5β,14β-bufa-20,22-dienolide (12β-*Hydroxycinobufagin*)

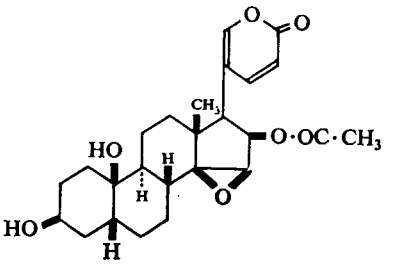


$C_{26}H_{34}O_7$ MW 458

Constituent of toad venom. M.p. 256–266°. *Di-Ac*: m.p. 157–163°.

N. Höriger, D. Živanov, H. H. A. Linde, and K. Meyer, *Helv. Chim. Acta*, 1972, **55**, 2549.

16β-Acetoxy-14,15β-epoxy-3β,10β-dihydroxy-19-nor-5β,14β-bufa-20,22-dienolide



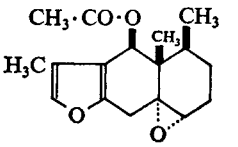
$C_{25}H_{32}O_7$ MW 444

Constituent of toad venom. M.p. 150–154°.

N. Höriger, D. Živanov, H. H. A. Linde, and K. Meyer, *Helv. Chim. Acta*, 1972, **55**, 2549.

16β-Acetoxy-14,15-epoxy-3β,5ξ-dihydroxy-19-oxobufadienolide. *See* 19-Oxocinobufotalin.

6-Acetoxy-1,10-epoxyeuryopsin

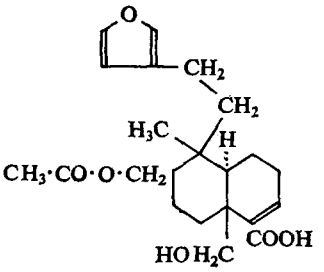


$C_{17}H_{22}O_4$ MW 290

Constituent of *Euryops* spp. Oil.

F. Bohlmann, C. Zdero, and N. Rao, *Chem. Ber.*, 1972, **105**, 3523.

ent-17-Acetoxy-15,16-epoxy-19-hydroxy-3,13(16),14-clerodatrien-18-oic acid



$C_{22}H_{30}O_6$ MW 390

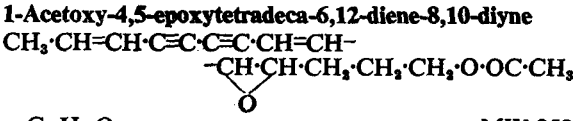
Constituent of the leaves of *Dodonaea attenuata*. Prisms from AcOEt or MeOH. M.p. 160–162°.

P. R. Jefferies and T. G. Payne, *Tetrahedron Letters*, 1967, 4777.

T. G. Payne and P. R. Jefferies, *Tetrahedron*, 1973, **29**, 2575.

16β-Acetoxy-14,15-epoxy-3β-hydroxy-19-oxobufadienolide. *See* 19-Oxocinobufagin.

1-Acetoxy-4,5-epoxytetradeca-6,12-diene-8,10-diyne



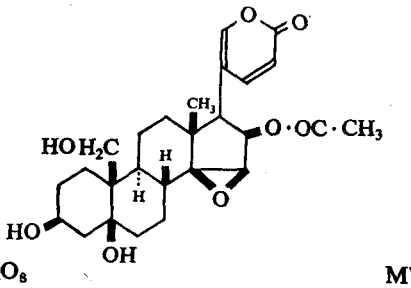
$C_{16}H_{18}O_3$ MW 258

Constituent of *Dahlia scapigera* Link et Otto. Yellow oil. Isolated by gas–liquid chromatography. Light absorption: $\lambda_{max.}$ 243 (ε, 33,100), 252·5 (24,800), 266 (11,900), 281 (19,450), 298 (25,100), and 318 nm (20,500) in EtOH.

J. Lam and F. Kaufmann, *Phytochemistry*, 1971, **10**, 1877.

3α-Acetoxy-12,13-epoxytrichothec-9-en-15-ol. *See* 15-Deacetylcalonectrin.

16β-Acetoxy-14,15β-epoxy-3β,5,19-trihydroxy-5β,14β-bufa-20,22-dienolide (*19-Hydroxycinobufotalin*)

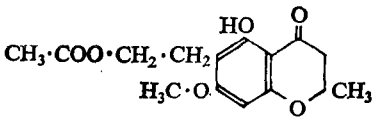


$C_{26}H_{34}O_8$ MW 474

Constituent of toad venom. M.p. 248–253°. 3,19-*Di-Ac*: m.p. 245–251°.

N. Höriger, D. Živanov, H. H. A. Linde, and K. Meyer, *Helv. Chim. Acta.*, 1972, **55**, 2549.

(2*R*)-6-(2-Acetoxyethyl)-5-hydroxy-7-methoxy-2-methylchromanone (*LL-D253β*)

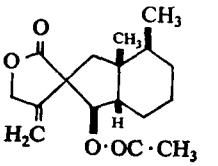


$C_{15}H_{18}O_6$ MW 294

Minor metabolite of *Phoma pigmentivora*. Cryst. from AcOEt–hexane. M.p. 207–208°. $[\alpha]_D^{25}$ +20° (c, 1·09 in MeOH).

W. J. McGahren, G. A. Ellestad, G. O. Morton, and M. P. Kunstmann, *J. Org. Chem.*, 1972, **37**, 1636.

9-Acetoxyfukinanolide

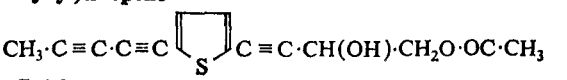


$C_{17}H_{24}O_4$ MW 292

Constituent of the leaves of the wild *Petasites japonicus* Maxim. Needles. M.p. 96–97°. $[\alpha]_D^{25}$ −28·5° (c, 1 in $CHCl_3$).

K. Naya, M. Kawai, M. Naito, and T. Kasai, *Chem. Lett.*, 1972, 241.

2-(4-Acetoxy-3-hydroxybut-1-ynyl)-5-(penta-1,3-diynyl)thiopene



$C_{15}H_{12}O_3S$ MW 272

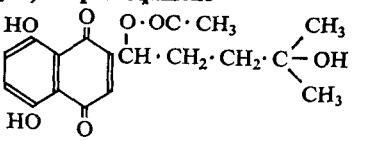
Constituent of the roots of *Eclipta erecta* L. Oil. Light absorption: $\lambda_{max.}$ 320 and 340 nm in Et_2O.

F. Bohlmann and C. Zdero, *Chem. Ber.*, 1970, **103**, 834.

6-Acetoxy-9-hydroxydrim-7-en-12,11-olide. *See* Cinnamosmolide.

28-Acetoxy-22-hydroxyhopan-23-oic acid. *See* Phlebic acid A.

2-(1-Acetoxy-4-hydroxy-4-methylpentyl)-5,8-dihydroxy-1,4-naphthoquinone



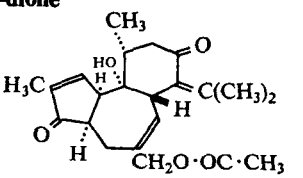
$C_{18}H_{20}O_7$ MW 348

Constituent of *Arnebia nobilis* Rachinger. M.p. 88–90°. Light absorption: $\lambda_{max.}$ 223 (ε, 13,500), 280 (7160), 486 (3840), and 514 nm (4350) in EtOH.

Y. N. Shukla, J. S. Tandon, D. S. Bakuni, and M. M. Dhar, *Phytochemistry*, 1971, **10**, 1909.

16β-Acetoxy-14-hydroxy-3-oxo-5β,14β-bufa-20,22-dienolide. *See* Bufotalon.

20-Acetoxy-9α-hydroxy-13,15-seco-4α-tiglia-1,6,14-triene-3,13-dione

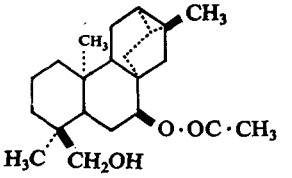


$C_{22}H_{28}O_5$ MW 372

Constituent of *Croton rhamnifolius*. M.p. 171–174°. $[\alpha]_D^{20}$ −259° ($CHCl_3$). Light absorption: $\lambda_{max.}$ 205 (ε, 14,180) and 235 nm (12,210) in EtOH.

K. L. Stuart and M. Barrett, *Tetrahedron Letters*, 1969, 2399.

7β-Acetoxy-18-hydroxytrachylobane

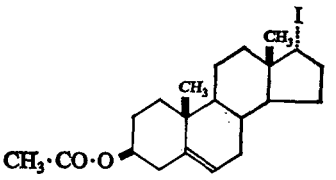


$C_{22}H_{34}O_3$ MW 346

Constituent of *Sideritis canariensis*. M.p. 156–160°. $[\alpha]_D$ +8° (c, 1·19 in $CHCl_3$).
Ac: m.p. 135–136°.

A. G. González, B. M. Fraga, M. G. Hernández, and J. G. Luis, *Phytochemistry*, 1973, **12**, 1113.

3β-Acetoxy-17α-iodoandrost-5-ene



$C_{21}H_{31}IO_2$ MW 442

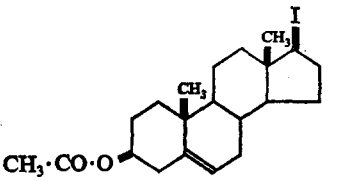
Cryst. from MeOH–CH_2Cl_2. M.p. 154–159° decomp. $[\alpha]_D$ −133° (c, 0·612 in $CHCl_3$). O.R.D.: $[\phi]_{400}$ −1557°, $[\phi]_{350}$ −2314°, $[\phi]_{320}$ −3115°, $[\phi]_{300}$ −3968°, $[\phi]_{280}$ −5151°, $[\phi]_{270}$ −5638°, $[\phi]_{265}$ −5812°, $[\phi]_{260}$ −5951°, $[\phi]_{255}$ −6091°, $[\phi]_{250}$ −6439°, $[\phi]_{230}$ −10790°, $[\phi]_{220}$ −15660°. C.D.: $[\theta]_{320}$ 0, $[\theta]_{259}$ −1321, $[\theta]_{230}$ 0, $[\theta]_{221}$ +621.

M. Biollaz and J. Kalvoda, *Helv. Chim. Acta*, 1972, **55**, 366.

Cryst. structure:

H.-C. Mez and G. Rihs, *Helv. Chim. Acta*, 1972, **55**, 375.

3β-Acetoxy-17β-iodoandrost-5-ene



$C_{21}H_{31}IO_2$ MW 442

Cryst. from CH_2Cl_2–isopropyl ether. M.p. 182–183°. $[\alpha]_D$ −5·6° (c, 0·63 in $CHCl_3$). O.R.D.: $[\phi]_{340}$ +3·5°, $[\phi]_{320}$ +501°, $[\phi]_{307}$ +505°, $[\phi]_{295}$ +487°, $[\phi]_{280}$ +270°, $[\phi]_{257}$ 0°, $[\phi]_{250}$ −722°, $[\phi]_{240}$ −1627°, $[\phi]_{230}$ −1479°, $[\phi]_{220}$ −120°. C.D.: $[\theta]_{320}$ 0, $[\theta]_{251}$ +1994, $[\theta]_{221}$ +397, $[\theta]_{215}$ +1070.

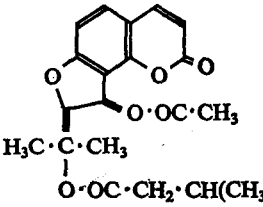
C. Meystre, K. Heusler, J. Kalvoda, P. Wieland, G. Anner, and A. Wettstein, *Experientia*, 1961, **17**, 475; *Helv. Chim. Acta*, 1962, **45**, 1317.
M. Biollaz and J. Kalboda, *Helv. Chim. Acta*, 1972, **55**, 366.

7β-Acetoxyisokauren-18-ol. *See* Siderol.

2-Acetoxyisopropenyl-5-acetyl-2,3-dihydro-6-hydroxybenzofuran. *See* Dihydroageratone.

2-Acetoxyisopropenyl-5-acetyl-6-hydroxybenzofuran. *See* Ageratone.

9-Acetoxy-*O*-isovaleryldihydro-oroselol



$C_{21}H_{24}O_7$ MW 388

Constituent of the roots of *Ligusticum pyrenaicum* Koch. Colourless oil. Light absorption: $\lambda_{max.}$ 244 (ε, 4200), 256 (3600), and 319 nm (14,000) in Et_2O.

F. Bohlmann and M. Grenz, *Chem. Ber.*, 1969, **102**, 1673.

Also isolated from the fruits of *Peucedanum oreoselinum* (L.) Moench. Cryst. from Et_2O–light petroleum. M.p. 88–88·5°. $[\alpha]_D^{20}$ +49° (c, 0·6 in MeOH).

F. Lemmich, J. Lemmich, and B. E. Nielsen, *Acta Chem. Scand.*, 1970, **24**, 2893.

11β-Acetoxykhivorin. †

See also:

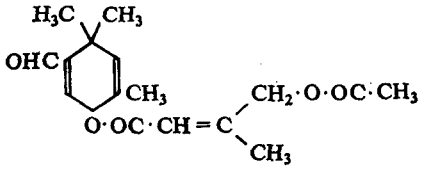
D. A. H. Taylor, *J. Chem. Soc., C*, 1970, 336.

1-Acetoxy-6-(2-methoxy-4,5-methylenedioxyphenyl)-2-(3,4-methylenedioxyphenoxy)-3,7-dioxabicyclo-[3,3,0]octane. *See* Phrymarolin-II.

α-3-Acetoxy-6-methylamino-4,4-diphenylheptane. *See* Noracymethadol.

3-Acetoxymethyl-7-(2-amino-2-phenylacetamido)-8-oxo-5-thia-1-azabicyclo[4,2,0]oct-2-ene-2-carboxylic acid. *See* Cephaloglycin.

4-(3-Acetoxymethylbut-2-enoyloxy)-2-formyl-1,1,5-trimethylcyclohexa-2,5-diene

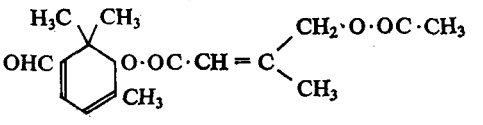


$C_{17}H_{22}O_5$ MW 306

Constituent of the roots of *Selinum carvifolium* L. Viscous liquid. $[\alpha]_D^{20}$ +81° (c, 1 in CCl_4). Light absorption: $\lambda_{max.}$ 226 nm (log ε, 4·43) in EtOH.

F. Bohlmann and F. Grenz, *Tetrahedron Letters*, 1970, 1453.
J. Lemmich, P. A. Pedersen, M. S. Sood, and B. E. Nielsen, *Acta Chem. Scand.*, 1971, **25**, 995.

6-(3-Acetoxymethylbut-2-enoyloxy)-2-formyl-1,1,5-trimethylcyclohexa-2,4-diene



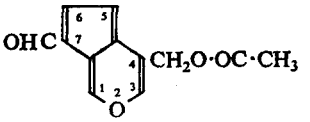
$C_{17}H_{22}O_5$ MW 306

Constituent of the roots of *Selinum carvifolium* L. Viscous liquid. $[\alpha]_D^{20}$ +257° (c, 1·2 in CCl_4). Very unstable.

J. Lemmich, P. A. Pedersen, M. S. Sood, and B. E. Nielsen, *Acta Chem. Scand.*, 1971, **25**, 995.

Acetoxymethyl 3,3-dimethyl-7-oxo-6-(2-phenylacetamido)-4-thia-1-azabicyclo[3,2,0]heptane-2-carboxylate. *See* Penamecillin.

4-Acetoxymethyl-7-formylcyclopenta[*c*]pyran (*Baldrinal*)



$C_{12}H_{10}O_4$ MW 218

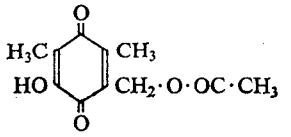
Produced from Valepotriatum by heating or by acid hydrolysis. Yellow-brown prisms from Et_2O–light petroleum. M.p. 112–113°. Light absorption: $\lambda_{max.}$ 227 (ε, 15,820), 244 (15,030), 287 (12,180), and 425 nm (7395).

2,4-*Dinitrophenylhydrazone*: m.p. 235–236°.

Semicarbazone: m.p. 210–212° decomp.

P. W. Thies, *Tetrahedron*, 1968, **24**, 313.

2-Acetoxymethyl-6-hydroxy-3,5-dimethyl-1,4-benzoquinone (*Shanorellin acetate*)



$C_{11}H_{12}O_5$ MW 224

Metabolite of *Shanorella spirotricha* Benjamina. Orange-yellow needles from C_6H_6–light petroleum. M.p. 128°.

Chi-Kit Wat and G. H. N. Towers, *Phytochemistry*, 1971, **10**, 1355.

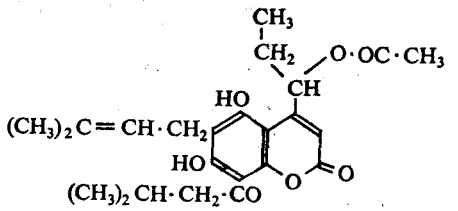
Acetoxymethyl 6-phenylacetamidopenicillanate. *See* Penamecillin.

4-(4-Acetoxyneryloxy)-*N*-benzoylphenethylamine. *See* 4-(4-Acetoxy-3,7-dimethylocta-2,6-dienyloxy)-*N*-benzoylphenethylamine.

6-(2-Acetoxy-4-phenylbut-3-enyl)-5,6-dihydro-2*H*-pyran-2-one. *See* Cryptocaryalactone.

7-Acetoxy-9-phenylnona-2,8-dien-5-olide. *See* Cryptocaryalactone.

4-(1-Acetoxypropyl)-5,7-dihydroxy-6-isopentenyl-8-isovalerylcoumarin

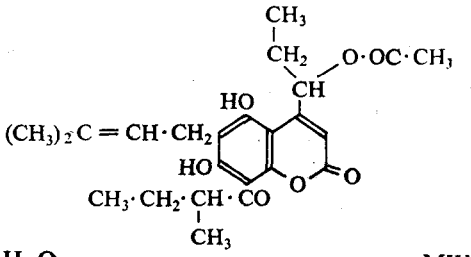


$C_{24}H_{30}O_7$ MW 430

Constituent of the seeds of *Mammea americana* L.

L. Crombie, D. E. Games, N. J. Haskins, and G. F. Reed, *J. C. S. Perkin I*, 1972, 2255.

4-(1-Acetoxypropyl)-5,7-dihydroxy-6-isopentenyl-8-(2-methylbutyryl)coumarin



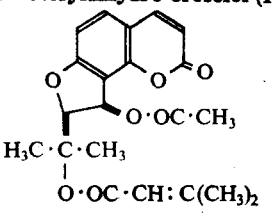
$C_{24}H_{30}O_7$ MW 430

Constituent of the seeds of *Mammea americana* L.

L. Crombie, D. E. Games, N. J. Haskins, and G. F. Reed, *J. C. S. Perkin I*, 1972, 2255.

4-(1-Acetoxypropyl)-6-(3,7-dimethylocta-2,6-dienyl)-5,7-dihydroxy-8-(2-methylbutyryl)coumarin. *See* Surangin B.

9-Acetoxy-*O*-senecioyldihydro-oroselol (*Peucenidin*)



$C_{21}H_{22}O_7$ MW 386

Constituent of the roots of *Ligusticum pyrenaicum* Koch and the fruits of *Peucedanum oreoselinum* (L.) Moench. Cryst. from Et_2O–light petroleum. M.p. 123°. $[\alpha]_{578}^{24}$ −45°, $[\alpha]_{546}^{24}$ −53·5°, $[\alpha]_{436}^{24}$ −126·5°, $[\alpha]_{405}^{24}$ −193° (c, 2·275 in $CHCl_3$). Light absorption: $\lambda_{max.}$ 244 (ε, 4100), 256 (3600), 297 infl. (10,300), and 318·5 nm (297) in Et_2O.

A. P. Prokopenko, *Zh. Obshch. Khim.*, 1964, **34**, 4111.

M. E. Perel'son, G. P. Syrova, Yu. N. Sheinker, and A. P. Prokopenko, *Khim. Prir. Soedin.*, 1967, **3**, 344.

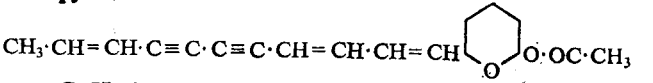
F. Bohlmann and M. Grenz, *Chem. Ber.*, 1969, **102**, 1673.

E. Lemmich, J. Lemmich, and B. E. Nielsen, *Acta Chem. Scand.*, 1970, **24**, 2893.

12β-Acetoxy-3β,8β,14,20ξ-tetrahydroxypregn-5-en-1-one. *See* Flavescin.

1-(3-Acetoxy-1,2,6-trimethyl-5-oxocyclohexyl)-5-(3-chloro-5-formyl-2,6-dihydroxy-4-methylphenyl)-3-methylpenta-1,3-diene. *See* LL-Z1272ζ.

2-Acetoxy-6-(undeca-1,3,9-triene-5,7-diynyl)tetrahydropyran



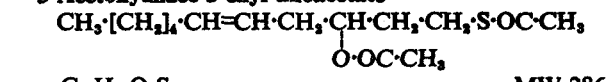
$C_{18}H_{20}O_3$ MW 284

All trans-.

Constituent of *Centaurea macrocephala* Puschk. Cryst. from Et_2O–light petroleum. M.p. 48–48·5°. $[\alpha]_D^{23}$ −46·5° (c, 0·5 in Et_2O). Light absorption: $\lambda_{max.}$ 248 (ε, 30,100), 265 (26,100), 278 (14,700), 295 (27,400), 314 (38,100), and 336 nm (27,400) in Et_2O.

F. Bohlmann and J. Laser, *Chem. Ber.*, 1970, **103**, 2100.

3-Acetoxyundec-5-enyl thioacetate

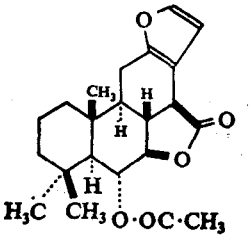


$C_{15}H_{26}O_3S$ MW 286

Constituent of *Dictyopteris* spp. Liquid.

R. E. Moore, J. Mistysyn, and J. A. Pettus, *J. C. S. Chem. Comm.*, 1972, 326.

6α-Acetoxyvouacapano-17β,7β-lactone



$C_{23}H_{28}O_5$ MW 372

Constituent of *Pterodon emarginatus* Vog. Needles from EtOH. M.p. 279–280°. $[\alpha]_D^{24}$ +27° (c, 1 in $CHCl_3$).

J. R. Mahajan and M. B. Monteiro, *J. C. S. Perkin I*, 1973, 520.

Acetylacetone.*

Molecular structure:

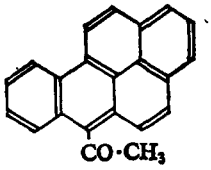
A. H. Lowrey, C. George, P. D'Antonio, and J. Karle, *J. Am. Chem. Soc.*, 1971, **93**, 6399.

See also:

M. S. Gordon and R. D. Koob, *J. Am. Chem. Soc.*, 1973, **95**, 5863.

***N*-(4-Acetylbenzenesulphonyl)-*N'*-cyclohexylurea.** *See* Acetohexamide.

6-Acetylbenzo[*a*]pyrene

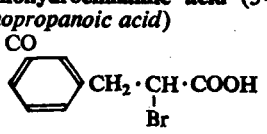


$C_{22}H_{14}O$ MW 294

Cryst. from Me_2CO. M.p. 212–213° decomp.

F. Dewhurst and D. A. Kitchen, *J. C. S. Perkin I*, 1972, 710.

***m*-Acetyl-α-bromohydrocinnamic acid** (3-(m-*Acetylphenyl*)-2-*bromopropanoic acid*)



$C_{11}H_{11}BrO_3$ MW 271

M.p. 105–106°.

G. H. Cleland, *J. Org. Chem.*, 1969, **34**, 744.

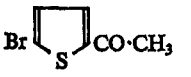
***p*-Acetyl-α-bromohydrocinnamic acid** (3-(p-*Acetylphenyl*)-2-*bromopropanoic acid*)

$C_{11}H_{11}BrO_3$ MW 271

Needles from formic acid–H_2O. M.p. 158–160°. Light absorption: $\lambda_{max.}$ 252·5 nm (ε, 17,000) in EtOH.

G. H. Cleland, *J. Org. Chem.*, 1969, **34**, 744; *Org. Syn.*, 1971, **51**, 1.

2-Acetyl-5-bromothiophene



C_6H_5BrOS MW 205

Cryst. from EtOH. M.p. 94°. B.p. 105°/0·2 mm.

2,4-*Dinitrophenylhydrazone*: m.p. 268°.

C. Feugeas, *Bull. Soc. Chim. France*, 1963, 2568.

Cryst. structure:

H. J. Streurman and H. Schenk, *Rec. Trav. Chim.*, 1970, **89**, 313.

Acetylcholine.*†

Cryst. structure:

J. K. Herdklotz and R. L. Sass, *Biochem. Biophys. Res. Commun.*, 1970, **40**, 583.

See also:

D. L. Beveridge and R. J. Radna, *J. Am. Chem. Soc.*, 1971, **93**, 3759.

Molecular orbital calculations:

D. W. Genson and R. E. Christoffersen, *J. Am. Chem. Soc.*, 1973, **95**, 362.

2-Acetyl-*m*-cresol. *See* 2-Hydroxy-6-methylacetophenone.

Acetylcyclohexane.*

See also:

T. M. Bare and H. O. House, *Org. Syn.*, 1969, **49**, 81.

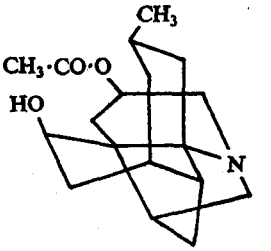
2-Acetylcyclopentane-1,3-dione† (2-*Acetyl-3-hydroxycyclopent-2-en-1-one*).

See also:

F. Merenyl and M. Nilsson, *Org. Syn.*, 1972, **52**, 1.

***N*-Acetylcylindrocarine.** *See* Cylindrocarpidine.

Acetyldebenzoylalopecurine

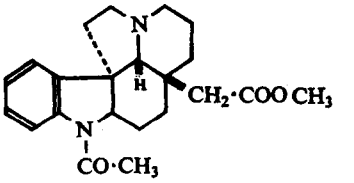


$C_{18}H_{27}NO_3$ MW 305

Alkaloid from *Lycopodium alopecuroides*. M.p. 238–240°.

W. A. Ayer, B. Altenkirk, N. Masaki, and S. Valverde-Lopez, *Can. J. Chem.*, 1969, **47**, 2449.

***N*-Acetyl-17-demethoxycylindrocarine**



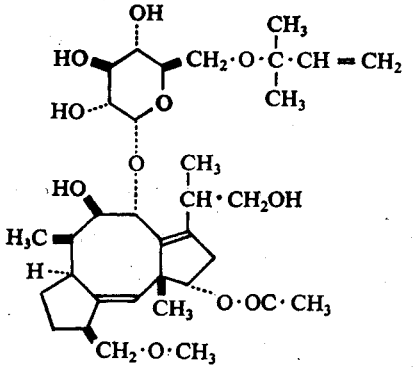
$C_{23}H_{28}N_2O_3$ MW 368

Constituent of *Asperidosperma cylindrocarpon*. Needles. M.p. 160–162°. $[\alpha]_D^{20}$ ±0° (c, 0·001 in

MeOH). $[\alpha]_{300}$ −800°, $[\alpha]_{265}$ −5400°, $[\alpha]_{240}$ +8400°. Light absorption: $\lambda_{max.}$ 212 (log ε, 4·47), 250 (4·01), 278 (3·58), and 288 nm (3·50) in MeOH.

B. V. Milborrow and C. Djerassi, *J. Chem. Soc.*, *C*, 1969, 417.

12-Acetyldideacetylfusicoccin



$C_{34}H_{54}O_{11}$ MW 638

Minor metabolite of *Fusicoccum amygdali* Del. Cryst. from Me_2CO. M.p. 186–188°. $[\alpha]_D^{25}$ +11·5° (c, 0·49 in EtOH).

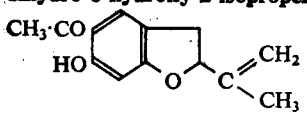
A. Ballio, C. G. Casinovi, M. Framondino, G. Grandolini, G. Randazzo, and C. Rossi, *Experientia*, 1972, **28**, 1150.

Acetyldihydrocodeinone. *See* Thebacon.

1-Acetyl-1,2-dihydro-5,10-dihydroxy-2-(1-hydroxyethyl)-3,7,8,12-tetramethoxybenzo[*ghi*]perylene-4,11-quinone. *See* Elsinochrome B.

5-Acetyl-2,3-dihydro-4,7-dihydroxy-2-isopropenyl-6-methoxybenzo[*b*]furan. *See* Remiridiol.

5-Acetyl-2,3-dihydro-6-hydroxy-2-isopropenylbenzofuran



$C_{13}H_{14}O_3$ MW 218

Constituent of the roots of *Helianthella uniflora*. Cryst. from light petroleum. M.p. 69°. Light absorption: $\lambda_{max.}$ 213 (ε, 19,400), 218 (18,900), 235 (12,100), 241·5 (12,200), 278·5 (13,300), and 326·5 nm (8900) in Et_2O. $[\alpha]_{578}^{25}$ −50°, $[\alpha]_{546}^{25}$ −58·6°, $[\alpha]_{436}^{25}$ −119°, $[\alpha]_{405}^{25}$ −158° (c, 1·56 in Et_2O).

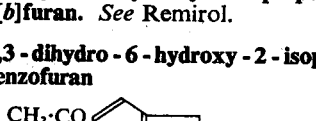
F. Bohlmann and M. Grenz, *Chem. Ber.*, 1970, **103**, 90.

Synthesis:

F. Bohlmann and U. Bühmann, *Chem. Ber.*, 1972, **105**, 863.

5-Acetyl-2,3-dihydro-4-hydroxy-2-isopropenyl-6-methoxybenzo[*b*]furan. *See* Remirol.

5-Acetyl-2,3-dihydro-6-hydroxy-2-isopropenyl-7-methoxybenzofuran



$C_{14}H_{16}O_4$ MW 248

Constituent of the roots of *Helianthella uniflora*. Oil. B.p. 120°/0·05 mm. Light absorption: $\lambda_{max.}$ 223·5 (ε, 17,700), 241 infl. (10,000), 288·5 (14,100), and 330 (infl.) nm (5000) in Et_2O. $[\alpha]_{578}^{25}$ −18·5°, $[\alpha]_{546}^{25}$ −22·5°, $[\alpha]_{436}^{25}$ −57·4° (c, 3·9 in Et_2O).

2,4-*Dinitrophenylhydrazone*: cryst. from $CHCl_3$–MeOH. M.p. 205–207° decomp.

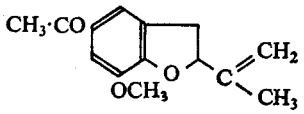
F. Bohlmann and M. Grenz, *Chem. Ber.*, 1970, **103**, 90.

Synthesis:

F. Bohlmann and U. Bühmann, *Chem. Ber.*, 1972, **105**, 863.

5-Acetyl-2,3-dihydro-6-hydroxy-2-isopropenyl-3-(2-methylcrotonyl)benzo[*b*]furan. *See* Cistifolin.

5-Acetyl-2,3-dihydro-2-isopropenyl-7-methoxybenzofuran

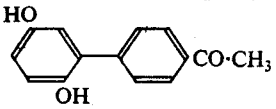


$C_{14}H_{16}O_3$ MW 232

Constituent of the roots of *Helianthella uniflora*. Cryst. from Et_2O–light petroleum. M.p. 68–69°. Light absorption: $\lambda_{max.}$ 210 (ε, 16,700), 230 (13,800), 236 (13,500), and 283 nm (12,100) in Et_2O.

F. Bohlmann and M. Grenz, *Chem. Ber.*, 1970, **103**, 90.

4′-Acetyl-2,5-dihydroxybiphenyl (p-(2,5-*Dihydroxyphenyl*)*acetophenone*, 2-p-*Acetylphenylhydroquinone*)



$C_{14}H_{12}O_3$ MW 228

M.p. 193–194°.

G. A. Reynolds and J. A. VanAllan, *Org. Syn.*, 1954, **34**, 1; Coll. Vol. **4**, 15.

6-Acetyl-7,8-dimethoxy-2,2-dimethyl-2*H*-benzo[*b*]pyran. *See* Me ether *under* Ripariochromene A.

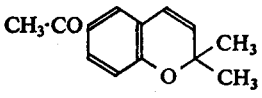
6-Acetyl-7,8-dimethoxy-2,2-dimethyl-3-chromene. *See* Me ether *under* Ripariochromene A.

3-[4-Acetyl-3-(3,3-dimethylallyl)-2,5,6-trihydroxybenzyl]-6-ethyl-4-hydroxy-5-methyl-2*H*-pyran-2-one. *See* Homoarenol.

3-[4-Acetyl-3-(3,3-dimethylallyl)-2,5,6-trihydroxybenzyl]-4-hydroxy-5,6-dimethyl-2*H*-pyran-2-one. *See* Arenol.

6-Acetyl-2,2-dimethyl-2*H*-benzopyran. *See* 6-Acetyl-2,2-dimethyl-3-chromene.

6-Acetyl-2,2-dimethyl-3-chromene (6-*Acetyl*-2,2-*dimethyl*-2H-*benzopyran*)



$C_{13}H_{14}O_2$ MW 202

Constituent of the roots of *Helianthella uniflora*. Oil. B.p. 95°/0·05 mm. Light absorption: $\lambda_{max.}$ 219 (ε, 6500), 245 (20,000), 254 (19,500), 279·5 (6850), 310 (4500), and 323·5 nm (4200) in Et_2O.

2,4-*Dinitrophenylhydrazone*: m.p. 230–232° decomp.

F. Bohlmann and M. Grenz, *Chem. Ber.*, 1970, **103**, 90.