



Accurate Mass: 400.26136
Percentage Composition: C 74.96%; H 9.06%; O 15.98%
Biological Source: From *Smallanthus uvedalia*
Physical Description: Oil (as Me ester) (not pure)

>>**Derivative:** 19-Carboxylic acid, 3-(3-methylbutanoyl)

CAS Registry Number: 74635-55-5

Molecular Formula: C₂₅H₃₈O₄
Molecular Weight: 402.573
Accurate Mass: 402.27701
Percentage Composition: C 74.59%; H 9.51%; O 15.90%
Biological Source: From *Smallanthus uvedalia*
Physical Description: Oil (as Me ester) (not pure)
Optical Rotation: [α]_D²⁴ -39 (c, 0.2 in CHCl₃)

>>**Derivative:** 19-Carboxylic acid, 3-cinnamoyl

CAS Registry Number: 79406-10-3

Molecular Formula: C₂₉H₃₆O₄
Molecular Weight: 448.601
Accurate Mass: 448.26136
Percentage Composition: C 77.65%; H 8.09%; O 14.27%
Biological Source: Isol. from *Wedelia trilobata* and *Wedelia prostrata*
Physical Description: Cryst.
Melting Point: Mp 53-55°
Optical Rotation: [α]_D -129 (c, 0.02 in CHCl₃)

>>**Variant:** (*ent*-3 α)-form

Molecular Formula: C₂₀H₃₂O₂
Molecular Weight: 304.472
Accurate Mass: 304.24023
Percentage Composition: C 78.90%; H 10.59%; O 10.51%

>>**Derivative:** 19-Carboxylic acid, 3-Ac

CAS Registry Number: 66673-14-1

Biological Source: From *Helichrysum heterolasium*

>>**Derivative:** 19-Carboxylic acid, 3-(3-methyl-2-butenoyl)

CAS Registry Number: 64086-30-2

Biological Source: From *Wedelia* spp.
Physical Description: Oil (as Me ester)

References:

- Baddeley, G.W. *et al.*, *Tetrahedron*, 1964, **20**, 1983, (*isol, struct*)
Lloyd, H.A. *et al.*, *Tet. Lett.*, 1967, 4891, (*isol*)
Coates, P. *et al.*, *Tetrahedron*, 1968, **24**, 795, (*isol, struct*)
Lunnon, M.W. *et al.*, *J.C.S. Perkin I*, 1977, 2317, (*synth*)
Bohlmann, F. *et al.*, *Phytochemistry*, 1977, **16**, 579; 1978, **17**, 1173; 1917-1922; 1980, **19**, 107, (*isol, pmr*)
Piozzi, F. *et al.*, *Phytochemistry*, 1980, **19**, 1237-1238, (*isol*)
Ragasa, C.Y. *et al.*, *J. Nat. Prod.*, 1993, **56**, 387, (*isol, pmr, cmr*)
Toyota, M. *et al.*, *Phytochemistry*, 1996, **43**, 1057, (*monoacetates*)