>>**Entry Name: 2,6,8-Decatrienoic acid**

$H_3CCH=CHCH=CHCH_2CH_2CH=CHCOOH$

Molecular Formula: $C_{10}H_{14}O_2$
Molecular Weight: 166.219
Accurate Mass: 166.09938
Percentage Composition: C 72.26%; H 8.49%; O 19.25%
Use/Importance: Powerful insecticide
Calculated Log P Data: Log P 3.15 (calc)

>>**Variant:** (2*E*,6*Z*,8*E*)-form
Synonym(s): Spilanthic acid

CAS Registry Number: 94450-21-2
Molecular Formula: $C_{10}H_{14}O_2$
Molecular Weight: 166.219
Accurate Mass: 166.09938
Percentage Composition: C 72.26%; H 8.49%; O 19.25%

>>**Derivative:** *N*-(2-Methylpropyl)amide
Synonym(s): Affinin. *N*-(2-Methylpropyl)-2,6,8-decatrienamide, 9Cl. *N*-Isobutyl-2,6,8-decatrienamide. Spilanthol

CAS Registry Number: 25394-57-4

Molecular Formula: $C_{14}H_{23}NO$
Molecular Weight: 221.342
Accurate Mass: 221.177964
Percentage Composition: C 75.97%; H 10.47%; N 6.33%; O 7.23%
Biological Source: Alkaloid from the roots of *Heliopsis longipes, Sapilanthes oleraceae* and *Sapilanthes acmella*
Physical Description: Pale-yellow viscous oil
Melting Point: Mp 23°
Boiling Point: $Bp_{0.5}$ 165°. $Bp_{0.001}$ 120-125°
Refractive Index: n_D^{25} 1.5135
Other Data: In the earlier lit. *H. longipes* was incorrectly identified as *Erigeron affinis*

>>**Variant:** (*all-E*)-form

Molecular Formula: $C_{10}H_{14}O_2$
Molecular Weight: 166.219
Accurate Mass: 166.09938
Percentage Composition: C 72.26%; H 8.49%; O 19.25%

>>**Derivative:** *N*-(2-Methylpropyl)amide

CAS Registry Number: 76361-77-8
Melting Point: Mp 91.5-92.5°
Boiling Point: $Bp_{0.25}$ 145°

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Acree, F. *et al.*, *J.O.C.*, 1945, **10**, 236; 449, *(isol, uv, struct)*
Jacobson, M. *et al.*, *J.O.C.*, 1947, **12**, 731
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