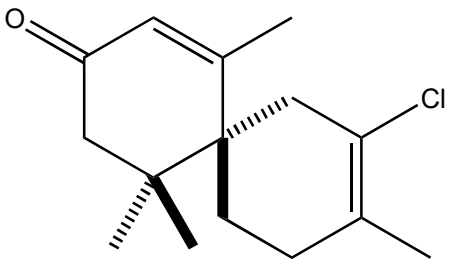
1262 (Sesquiterpene)

Name: Laurencenone B[(1)] = (+)-Laurencenone B
{8-Chloro-1,5,5,9-tetramethyl-spiro[5.5]undeca-1,8-dien-3-one}
Origin: *Laurencia obtusa* (Negril, Jamaica)[(1)];
Laurencia majuscula (Selalong Island, Semporna, Kota Kinabalu, Sabah, Malaysia)[(2)];
Laurencia majuscula (Dinawan Island, Kota Kinabalu, Sabah, Malaysia)[(3)];
Formula: $C_{15}H_{21}ClO$
Mol. Wt.: 252.78
Opt. Rot.: $[\alpha]_D^{25}$ +58.3 ($CHCl_3$)[(4)]; $[\alpha]_D^{24}$ +47.08 ($CHCl_3$)[(5)]
Mp.: Oil



References and Notes

(1) Kennedy, D. J., Selby, I. A, and Thomson, R. H. 1988. Phytochemistry, **27**, 1761-1766. Chamigrane metabolites from *Laurencia obtusa* and *L. scoparia*. (**UV, IR, ^{1}H-NMR, MS**)
(together with laurencenone A, laurencenone B, laurencenones C-D, deschloroelatol, elatol, iso-obtusol)
(2) Kamada, T., Phan, C.-S., and Vairappan, C. S. 2019. Nat. Prod. Res., **33**, 464-471. New anti-bacterial halogenated tricyclic sesquiterpenes from Bornean *Laurencia majuscula* (Harvey) Lucas.
(together with omphalaurediol, rhodolaurenones B and C, 9 known sesquiterpenes; rhodolaurenone A, rhodolaurenol, isorhodolaureol, (-)-laurencenone D, (+)-laurencenone B, elatol, (+)-deschloroelatol, cartilagineol, 2-chloro-3-hydroxy-α-chamigren-9-one)
(3) Kamada, T., Phan, C.-S., Sien, V. S.-T., and Vairappan, C. S. 2019. J. Appl. Phycol., **30**, 3373-3378. Halogenated chamigrane sesquiterpenes from Bornean *Laurencia majuscula*.
(together with 7-aldehydelaurencenone B, 2-chloro-3-methoxy-α-chamigren-9-one, laureboeneone, 5 known chamigranes; laurencenone B, ma'ilion, etcetera)
(4) **Dehydrobromination of elatol**; Brennan, M. R., Erickson, K. L., Minotto, D. A., and Pascoe, K. A. 1987. Phytochemistry, **26**, 1053-1057. Chamigrane metabolites from a Jamaican variety of *Laurencia obtusa*. (**IR, ^{1}H-NMR, ^{13}C-NMR**)
(5) **Synthesis**; White, D. E., Stewart, I. C., Grubbs, R. H., and Stoltz, B. M. 2008. J. Am. Chem, Soc., **130**, 810-811. The catalytic asymmetric total synthesis of elatol.
(Supporting Information; **$[\alpha]_D$, IR, ^{1}H-NMR, ^{13}C-NMR**)