Analysis of Isocembrol and Its 4-Epimer by Reverse-Phase HLPC

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Diterpene macrocyclic alcohol isocembrol (I) is a well-known metabolite of some conifer plants of *Pinaceae* family. This compound is accompanied by its natural 4-epimer (II). Both alkohols are the growth inhibitors for plants as it was established by the wheat coleoptile standard test. Both epimers are eluted together during usual adsorbtion chromatography on silicagel. They are easy dehydrated to cembrene (III) by action of various acids or high temperature. Quantitative separation of these alcohols may be decided by chromatography on SiO₂/AgNO₃ only.

It is found that these epimers may be readily separated by reverse-phase column HLPC (Milichrom apparatus, LiChrosorb RP-18, 5 μ m (Merck); column 64 x 2 mm; 85% aq.MeOH; detection at 200 nm). The epimer II is eluted first; the peaks of epimers I and II are not overlapped.

