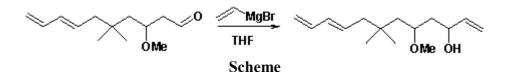
<u>Molecules</u> 1997, 2, M37

5-Methoxy-7,7-dimethyl-1,9(E),11-dodecatrien-3-ol

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To a stirred solution of the diene aldehyde [1] in dry THF under Ar at -78 fC, vinylmagnesium bromide in THF was added via a syringe. The reaction was stirred for 15 minutes then quenched at -78 fC with sat aq sodium potassium tartrate and stirred while warming to room temperature. The mixture was extracted with pet ether and the combined organic layers dried over Na₂SO₄ and concentrated to give a 1 : 1 diastereomeric mixture of the triene alcohols as a colorless oil in 69 percent yield.

¹H NMR (CDCl₃): d: 6.30 (dt, J = 17.0, 10.2Hz, 1H), 6.01 (bdd, J = 14.8, 10.6Hz, 1H), 5.84 (ddd, J = 17.1, 10.7, 5.8Hz, 1H), 5.70 (dt, J = 15.1, 7.5Hz, 1H), 5.26 (dd, J = 14.1, 7.6Hz, 1H), 5.1 - 5.04 (m, 2H), 4.94 (d, J = 10.0Hz, 1H), 4.38 (m, CHOH), 4.21 (m, CHOH), 3.54 (m, CHOMe), 3.44 (M, CHOMe), 3.30 (s, OMe), 3.28 (s, (OMe), 3.25 (bs, OH), 2.90 (bs, OH), 1.99 (d, J = 7.5Hz, 2H), 1.9 - 1.48 (m, 3H), 1.35 - 1.25 (m, 1H), 0.91 (s, 3H), 0.87 (s, 3H).

IR (CDCl₃): 3600, 3450, 2960, 2940, 2830, 1645, 1600, 1460, 1425, 1390, 1370, 1085, 1010, 890.

MS (m/e): 238 (M⁺, 2), 223, 205, 198, 169, 115, 113, 108 (100), 99, 94, 93, 59.

HRMS: calc. for C₁₄H₂₁O: (M - CH₅O): 205.1592; found: 205.1593.

References and Notes

1. Smith, D. 3-Methoxy-5,5-dimethyl-7(E),9-decadienal, Molecules 1997, 2, M36.

Sample Availability: No sample available.

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