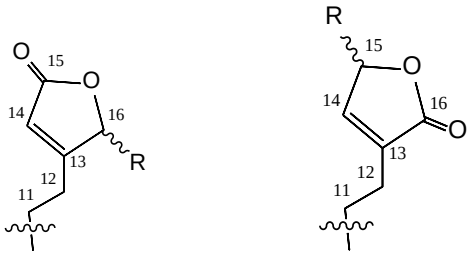
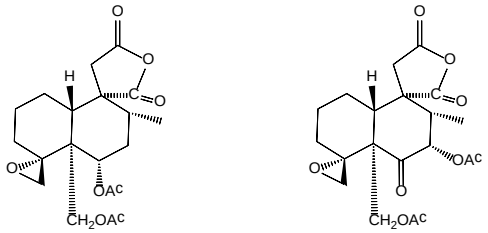


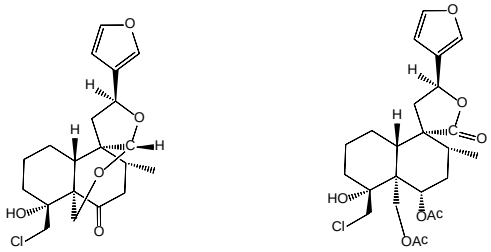
R = 2H; *α*,*β*-OH,H; =O; *α*,*β*-OAc,H; *α*,*β*-OMe,H.

a) 15,16-*γ*-lactone b) 16,15-*γ*-lactone

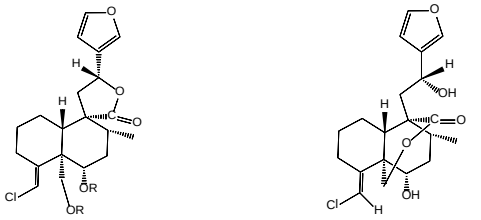
A: *α*,*β*-Unsaturated -*γ*-lactones



B: 13,14,15,16-Tetranor-neo-clerodanes

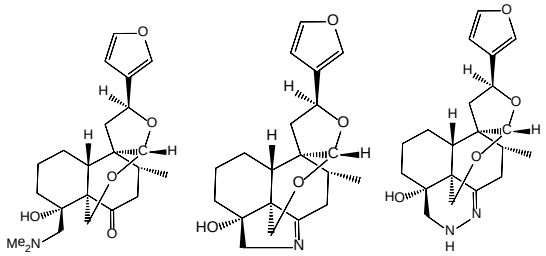


C: Chlorohydrins



R = H;
R = OAc

D: vinyl chlorides



a) Amine b) 1-Pyrroline c) 2-Pyridazoline

E: N-containing derivatives

Fig. 4. Hemi-synthetic derivatives of the *neo*-clerodane diterpenes montanine C (**7**), teucrin P_1 (**12**) and teupolin III (**17**).

The chemical reactions leading to the opening of the 4*α*,l8-oxirane ring result in an antifeedant index with a negative value. Diterpenoids that are bridged by an oxygen atom between C-19 and C-20 either stimulate feeding or are inactive. Activity of all 13,14,15,16-tetranor-*neo*-clerodanes was drastically decreased.

Consequently, in order to optimize the antifeedant activity of natural *neo*-clerodanes from *Teucrium* by chemical transformations, the 4α,l8-oxirane needs to be maintained and the furan ring should be oxidized.

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