

Ecdysteroids of South Ural Plants.

Isolation, Transformations and Biological Activity

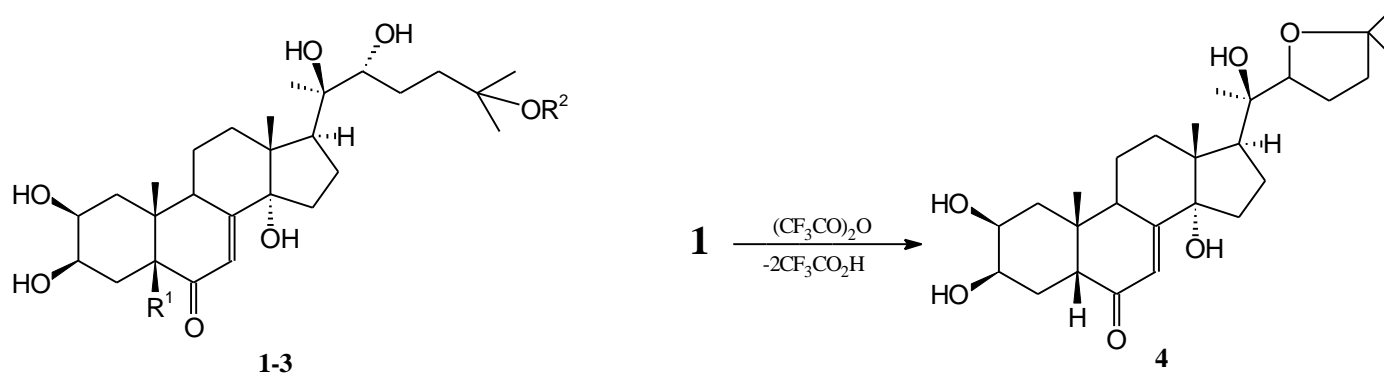
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A preparation «Ecdysten» of tonic action has been created previously on the basis of ecdysterone. Presently we are studying the South Ural flora to find a content of phytoecdysteroids. A new efficient method to isolate ecdysterone (**1**) and viticosterone E (**2**) from *Serratula coronata* was created. Polypodine B (**3**) and **1** were isolated from *Chenopodium album* L.

The new derivatives of ecdysteroids were prepared via an interaction with trifluoroacetic acid anhydride in chloroform, C²²-shidasterone epimer (**4**) was synthesized.

A biologic effect of isolated phytoecdysteroids on melliferous bees *Apis mellifera* was studied.



$\text{R}^1 = \text{H} \text{ (1, 2), OH (3)}; \text{R}^2 = \text{H (1, 3), Ac (2)}.$