STEROLS OF *Telekia speciosa*

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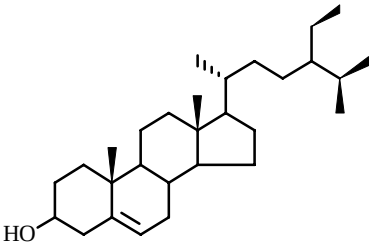
We have investigated the *Telekia speciosa* (Schreber) Baumg. (*Compositae*) plant collected in Trabzon (Turkey) in July 29, 1994 at the bottom of the Uzungel and Baleklegel Lakes 2580–2650 m above sea level.

Air-dried and triturated plant (800 g) were extracted with ethanol. The combined extracts were evaporated and put on a silicagel column (silica L, Czechoslovakia). The column was eluated with petroleum ether, chloroform, chloroform-methanol (20:1 and 10:1) consistently. Sterols were found in some chloroform eluates. The eluates were combined and subjected to rechromatography on a column, then eluted with the system benzene-chloroform-ethylacetate (5:1:1). As a result of the rechromatography a homogeneous crystal substance identical by thin-layer chromatography with β-sitosterol was isolated in the amount of 136 mg. Acoording to the spectral data, the substance isolated by us is a mixture of two components.

The electron impact mass spectrum of the substance showed two ranges of peaks: **1** – M^+ 414, 399, 396, 381, 329, 303, 273, 255, 231, 213 and **2** – M^+ 412, 413, 411, 394, 369, 351, 314, 300, 271, 255. The first range belonged to β-sitosterol (**1**) and the second one belonged to stigmasterol (**2**) [1].

Two ranges of signals were also observed in the ^{1}H NMR spectrum of the substance. ^{1}H NMR (100 MHz, $CDCl_3$, δ, HMDS, *these may be interchanged): **1**– 0.62* (**CH_3**-18, s), 0.94 (CH_3-19, s), 0.70-1.19 (CH_3-21, CH_3-26, CH_3-27, CH_3-29), 3.44 (H-3, m), 5.29 (H-6, bd, ^3J = 5 Hz) and **2** – 0.63 (**CH_3**-18, s), 0.94 (CH_3-19, s), 0.70-1.19 (CH_3-21, CH_3-26, CH_3-27, CH_3-29), 3.44 (H-3, m), 5.02 (H-22, H-23, t,J_1 = $^3J_2$ =6 Hz), 5.29 (H-6, bd, ^3J = 5 Hz)*. The integral intensity of the signals, in particular of the CH_3-18 signals at δ 0.62 and 0.63, showed that the mixture consisted of β-sitosterol and stigmasterol in equal amounts.

To our knowledge, β-sitosterol and stigmasterol have been found in *Telekia speciosa* for the first time [2–4].



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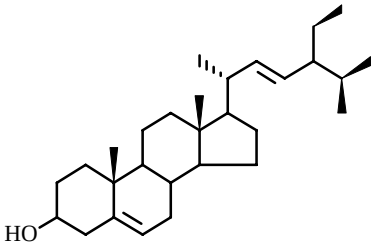

2

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