

STEROID SAPOGENINS AND STEROLS
OF *Solanum kieseritzkii*

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It has been reported previously [1] that the epigeal part of *Solanum kieseritzkii* C.A.M. yielded 0.203% (on the dry weight of the plant) of steroid sapogenins. Later, by chromatography on a column of silica gel [solvent: chloroform-ethyl acetate-benzene (65:36:5)] we isolated two individual substances.

The first substance has the composition $C_{27}H_{42}O_3$, mp 205-207°C, $[\alpha]_D^{20} -121.5^\circ$ (c 0.8; chloroform); and the second the composition $C_{27}H_{44}O_3$, mp 200-204°C, $[\alpha]_D^{20} -56.5^\circ$ (c 0.82; chloroform).

The absence of depressions of the melting points of mixtures with authentic samples and the identity of their IR spectra permitted these compounds to be identified as diosgenin and tigogenin, respectively [2-5].

To obtain sterols, the comminuted air-dried epigeal part of the plant (400 g) was extracted with petroleum ether (bp 40-70°C). The extract was concentrated and was chromatographed on a column of alumina (activity grade III) with elution by petroleum ether.

On elution with a mixture of petroleum ether and benzene (5:5) β -sitosterol [4, 7] was isolated and also a substance with mp 100-103°C, $[\alpha]_D^{20} -46^\circ$, IR spectrum (cm^{-1}): 3600, 3200, 3040, 2970, 2840, 1460, 1370, 1080, 1020, 980 which we have not yet identified.

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