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According to the literature, plants of the genus *Salsola* have been investigated purposefully only with the aim of finding alkaloids. From preliminary results that we obtained previously in an investigation of *Salsola collina* Pall. collected in Eastern Siberia, the extract contained compounds of various classes (sterols, carotenoids, flavanoids, alkaloids, saponins, polysaccharides, derivatives of ketodicarboxylic acids, and organosilicon compounds).

We give information on the identification of the sterols and their acyl derivatives, the total fraction of which, extracted in Soxhlet apparatuses with pentane, amounted to 0.5% of the air-dry raw material.

The ester derivatives of the sterols were separated from the "free" sterols by preparative column chromatography on silica gel with elution by hexane-ether (98:2), and the fractions obtained were analyzed separately.

The fraction of acyl derivatives was saponified with a 5% solution of KOH in methanol. Four sterols were detected in the "neutral fraction," and these were identified as cholesterol, campesterol,  $\beta$ -sitosterol, and stigmasterol. The acyl fraction of the sterol esters consisted of palmitic, stearic, and oleic acids.

The bulk of the pentane fraction (0.35% of the air-dry material) consisted of  $\Delta^5$ -sterols: cholesterol (I), campesterol (II),  $\beta$ -sitosterol (III), the  $\Delta^{5,22}$  desmosterol (IV), and the  $\Delta^{5,24}$ -sterol stigmasterol (V) (27.04, 6.0, 58.1, 2.1, and 3.8% of the fraction).

Chromato-mass-spectrometric analysis was performed on a Varian MAT-212 instrument with a source temperature of 200°C and a Varian 3700 chromatograph with a 20-mm capillary column using the phase SE-54 at 250°C and helium as the carrier gas, the ionizing energy being 70 eV and with a programmed regime in the presence of standard compounds.

The sterols that we have identified have not previously been found in *Salsola collina*.

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