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We have previously [1] reported the isolation from the rhizomes and roots of *Rhaponticum carthamoides* (family Asteraceae) of crystalline compounds forming the main active substances in the plant. Below we give information on their structure.

The air-dry comminuted raw material (5 kg) collected in the period of the end of flowering-beginning of fruit-bearing in the Ust' Kan region of the Gorno-Altai AO was extracted with 95% ethanol (3 × 3 liters). After the evaporation of the extracts in vacuum, a dark brown residue (15.3 g, 3.06%) was formed which contained, according to thin-layer chromatography [(Al₂O₃, activity grade II, 1-butanol-ethanol-water (5:1:2)], not less than six phytoecdysones, and this was chromatographed on a column of polyamide sorbent with elution by chloroform and mixtures of ethanol and water (95%-20%). The combined substances obtained from the ethanolic and aqueous ethanolic fractions, after the evaporation of the solvents (10.8 g, 2.16%), were rechromatographed on alumina (activity grade II, neutral). Elution with chloroform-ethanol (8:2 and 6:4) gave colorless crystalline compounds (I) and (II) with yields of 0.03 and 0.05%, respectively.

Substance (I) C₂₇H₄₄O₇, mp 247-248°C (from acetone-water, 10:1), [α]_D²¹ +56.4° (c 0.38; methanol), λ_{C₂H₅OH}_{max} 250 nm (log ε 4.07), R_f 0.66. Its IR spectrum contained the absorption bands of a keto group conjugated with a double bond (1665 cm⁻¹) and of hydroxy groups (3420 cm⁻¹). When (I) was heated with 5% HCl in dilute ethanol, a mixture of substances was obtained in the UV spectrum of which two absorption maxima were observed at 248 and 296 nm, which is characteristic for ecdysones [2]. The mass spectrum showed peaks of ions with m/e: 480 (M⁺) 462, 444, 426, 411, 408, 393, 375, 363, 345, 327, 310, 300, 99, 68, and 67, which coincides with the fragmentation of inokosterone [3, 4]. The acetylation of compound (I) with acetic anhydride in pyridine gave the tetraacetate of (I) C₃₅H₅₂O₁₁, with mp 170-171°C (from ether).

Substance (II). C₂₇H₄₄O₇, had mp 236-238°C (from acetone), [α]_D²¹ + 58.6 (c 0.41; methanol), λ_{C₂H₅OH}_{max} 250 nm (log ε 4.05), R_f 0.60. IR spectrum: 3420 cm⁻¹ (OH), 1660 cm⁻¹ (CO-CH=C). The mass spectrum of compound (II) was identical with that of ecdysterone [5-7]. A chromatographic comparison of (II) with an authentic sample of ecdysterone provided by Baltaeu et al. [8] confirmed their identity. On the basis of the facts given, we assume that substance (I) can be identified as inokosterone and (II) as ecdysterone [5-9]. There has been no information previously on the presence of inokosterone in the family Asteraceae. Our investigations have shown that the compounds of the ecdysone group (inokosterone, ecdysterone) possess a pronounced psychostimulating and adaptogenic action [1].

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STEROID SAPONINS AND SAPOGENINS FROM *Allium rubellum* AND *A. albanum*

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On investigating *Allium rubellum* M. B. and *A. albanum* A. Grossh., growing in Azerbaidzhan we detected the presence of steroid saponins in them. It was established that considerable amounts of saponins accumulate in the flowers, and therefore the species of plants studied were collected in the full-flowering period.

After defatting with dichloroethane, the saponins were extracted completely from the dried flowers with 60% ethanol. To study the qualitative composition of the steroid saponins an ethanolic extract was subjected to chromatographic analysis on "Silufol" plates.

In the 1-butanol-ethanol-concentrated ammonia (5:3:2) system, four individual saponins were found in the flowers of *A. rubellum* (R_f 0.13, 0.20, 0.33, and 0.40, respectively), and five saponins in the flowers of *A. albanum* (R_f 0.22, 0.31, 0.39, 0.43, and 0.54).

To study the nature of the genins, the combined saponins were dissolved in an 8% solution of sulfuric acid and were hydrolyzed at 90°C for 6 h. The genins were extracted from the hydrolyzate with chloroform. Chromatographic analysis of the combined material ("Silufol," benzene-ethyl acetate (5:1) system) showed the presence of two genins (R_f 0.28 and 0.86). By chromatography on a column of SiO_2 we isolated from this mixture a sapogenin which, according to its melting point (202-204°C), $[\alpha]_D^{20}$ -67° (c 1.0; methanol), and IR spectrum was identical with tigogenin [1, 2]. The structure of the second genin is being determined.

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