FLAVONOIDS OF *Onobrychis biebersteinii*

M. S. Luk'yanchikov and A. L. Kazakov

UDC 547.814:582.73

We have isolated for the first time and have investigated three compounds of flavonoid nature from *Onobrychis biebersteinii* Sirjaev (Bieberstein's sainfoin) [1], collected in the flowering stage in the Dautskii gorge, Karachai-Cherkess Autonomous Region.

The flavonoids from the herbage of Bieberstein's sainfoin were isolated and purified as described previously [2]. The total flavonoid material was deposited on a column of polyamide sorbent and eluted successively with water and ethanol of various concentrations.

Substance (1) (eluted with 15–20% ethanol), $C_{27}H_{30}O_{16}\cdot 2H_2O$, mp 188–189°C (ethanol), λ_{max} 365, 258 nm, $[\alpha]_D^{20}$ –12.5° (c 0.7; methanol) was quercetin 3-rutinoside (rutin).

Substance (2) (eluted with 75–85% ethanol), $C_{16}H_{12}O_7$, mp 305–307°C (ethanol), λ_{max} 371, 254 nm, was isorhamnetin.

Substance (3) (eluted with 90-96% ethanol), $C_{15}H_{10}O_7$, mp 309-312°C (ethanol), λ_{max} 372, 257 nm, was quercetin.

The structures of the compounds isolated were confirmed by the results of elementary analysis and UV and IR spectroscopy, and also by a study of the products of acid and enzymatic hydrolyses and by comparison with authentic samples.

LITERATURE CITED

1. Flora of the USSR [in Russian], Moscow, Vol. XIII (1948), p. 336.
2. A. L. Kazakov, V. A. Kompantsev, and M. S. Luk'yanchikov, Khim. Prir. Soedin., 244 (1981).

Pyatigorsk Pharmaceutical Institute. Translated from Khimiya Prirodnykh Soedinenii, No. 6, p. 784, November-December, 1982. Original article submitted June 22, 1982.

0009-3130/82/1806-0751$07.50