ALKALOIDS OF Taxus baccata

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We have studied the alkaloid composition of the leaves of <u>Taxus</u> <u>baccata</u> (English yew) of the family Taxaceae collected in Azerbaidzhan.

The comminuted raw material, after wetting with 3% ammonia solution, was extracted with ether. The ethereal extract was concentrated and extracted with 1% sulfuric acid, and the acid solution of alkaloid salts was made alkaline with 5% ammonia and re-extracted with ether. Distillation of the ether gave the combined alkaloids consisting, according to chromatography, of two bases – A and B.

For separation, the combined alkaloids were dissolved in 1% sulfuric acid and the solution was washed with chloroform. Base A passed into the chloroform layer and B could be isolated from the acid solution.

<u>Base A, C₃₃H₄₃N₂O₁₄, mp 112-113°C, $[\alpha]_{D}^{47}$ + 10.7° (c 0.835; chloroform), was purified by recrystallization from petroleum ether. IR spectrum, cm⁻¹: 3400 - 3500, 1740, 1670, 1640, 1240, 1190, 1040, 990, 760.</u>

<u>Base B</u>, $C_{37}H_{51}NO_{10}$, has mp 118-120°C (ethanol), $[\alpha]_D^{17}$ + (c 1.08; ethanol). The UV spectrum has $\lambda_{\text{max}} \frac{280 \text{ nm}}{280 \text{ nm}}$, which is characteristic for the alkaloid taxine isolated previously from the yew growing in foreign countries [1, 2]. The IR spectrum (UR-20 spectrophotometer) exhibits absorption bands in the

following regions (cm⁻¹): 3480 (OH), 2960 (C - CH₃), 1730 $\left(-C \swarrow^{O}\right)$, 1640, 1605, (- CH = CH-), 1240 $\begin{pmatrix} C \\ 1 > O \\ C \end{pmatrix}$, 1040 (-C-O-C), which agrees with the IR spectrum of taxine given by Graf and Bertholdt [1].

LITERATURE CITED

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2. T. A. Henry, The Plant Alkaloids [Russian translation], Moscow, 1956, p. 799.

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