

Some Transformations of Peucedanin

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Peucedanin (**1**) is accessible furocoumarin from Siberian and Altai floras. Chemical investigations of this compound, in the first line, were directed to establish its structure, confirmed by multistage synthesis. In the association with the necessity of the extending of assortment of new medicinal preparations we have studied some transformations of peucedanin **1**.

For the first time the structure of 2-bromooreoselon (**3**) – monobromide, obtained by reaction of peucedanin **1** or oreoselon (**2**) with molecular bromine, has been established by us. The interaction of pointed bromide by boiling in alcohol with pyridine lead to a mixture of three products: pyridinium salt (**4**) (monohydrate), known unsaturated keton (**5**) and ethoxyketon (**6**) (yields 67, 22 and 7% resp.). Boiling in chloroform with pyridine afforded the salt **4** and keton **5** (yields 62 and 16.5% resp.). Keton **5** was also obtained by boiling in chloroform with triethylamine (yield 47%). Heating of bromide **3** with sodium acetate in glacial acetic acid gave a mixture of keton **5** and 2-acetoxyoreoselon (**7**) (yields 44 and 27% resp.). The nucleophilic substitution of bromine atom in bromide **3** proceeds by the action of morpholine in chloroform at 25°C. The yield of aminoketon (**8**) was 72%. Under the action of *m*-chloroperbenzoic acid peucedanin **1** undergoes the fission to the natural peuruthenicin isobutyrate (**9**) (yield 57%).

