

# SUPRAMOLECULAR COMPLEXES OF IVY AND LICORICE TRITERPENE GLYCOSIDES WITH *L*-HISTIDINE

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A new molecular complex of monoammonium salt of glycyrrhizic acid (glycyram) with amino acid *L*-histidine was prepared. The complexation of glycyram with histidine in aqueous solution at pH 7.2 was investigated by spectrophotometric method.

The complex of monoammonium salt of glycyrrhizic acid (glycyram) with *L*-histidine determined by isomolar series (Ostromyslensky-Zhoba method). Based on isomolar curve is set for the molar ratio of the complex component equal 1,0, indicating that the complex of 1: 1 molar ratio. The absorption spectrum of isomolar series of monoammonium salt of glycyrrhizic acid (glycyram) with *L*-histidine has isobestic points at 221 and 291 nm. The stability constant *K* was calculated by the method of Babko based on isomolar curve.

It was shown that histidine and glycyram forms a 1:1 complex, having a stability constant  $K_{GC-His} = 7.03 \cdot 10^4 \text{ M}^{-1}$ . Molecular complexes of histidine with hederasaponin C (mainly triterpene glycoside from ivy) and glycyram were studied by IR spectroscopy for the first time.

**Keywords:** ivy, licorice, triterpene glycosides, glycyrrhizic acid, glycyram, hederasaponin C, *L*-histidine, supramolecular complex, spectrophotometry, IR spectroscopy, stability constant.

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