

SYNTHESIS AND SEARCH OF PHARMACEUTICAL SUBSTANCES BASED ON 2(3)-[2-(ADAMANTHANE-1-YL)-2-OXOETHYLIDENEHYDRAZONO]-5-(HET)ARYLFURAN-3(2)-ONES

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Using Staudinger and diaza-Wittig reactions, by interaction of 4-(het)aryl-2,4-dioxobutanoic acids, 5-(het)arylfuran-2,3-diones and 1-(adamantane-1-yl)-2-(triphenylphosphoranylidenehydrazono) ethanones we obtained 2(3)-[2-(adamantane-1-yl)-2-oxoethylidenehydrazono]-5-(het)arylfuran-3(2)-ones (**1,2**). A comparative study of the chemical behavior of hydrazones **1,2** with water, aliphatic alcohols, derivatives of aliphatic thiols, and aromatic amines allowed to synthesize a number of compounds **3-6,7-10**. As a result of pharmacological screening, substances with high anti-flavivirus, antimicrobial, hemostatic, analgesic, anti-inflammatory, phagocytic, anxiolytic activity were revealed. The structure-activity dependence and the possible mechanism of biological activity of compounds **1-10** are discussed.

