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SEARCH AND CREATION OF NEW BIOLOGICALLY ACTIVE ORGANIC SUBSTANCES BASED ON 5-((PYRIMIDIN-2-YLTHIO)METHYL)-1,2,4- TRIAZOLE/1,3,4-OXADIAZOLE-3/2-THIONES

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Pyrimidine-2-thiols are widely used in medicinal chemistry due to their wide spectrum of biological activity. They are precursors of important organic compounds and organometallic complexes. In addition, they can also be used for the determination of many metal ions as selective and sensitive ligands in analytical chemistry.

On the other side of, derivatives of 1,2,4-triazoles / 1,3,4-oxadiazoles exhibit high biological activity: antibacterial, fungicidal, anti-inflammatory, analgesic, hypoglycemic, antimalarial, anti-tuberculosis and many others.

The combination in one molecule of two pharmacophore fragments - a pyrimidine and anazole heterocycle, linked by a thiomethylene bridge, can lead to the production of compounds exhibiting a wide spectrum of biological activity. The pharmacological aspect of this kind of heterocyclic systems is of particular interest, since π -electron-deficient heterocycles, including pyrimidine, have a peculiar mutagenic effect on DNA, which predetermines the search for a new type of antitumor and chemotherapeutic drugs in this series.

The relevance of the study of 1,2,4-triazole derivatives with a pyrimidine fragment is determined by the synthesis of potential antioxidant drugs with a wide spectrum of action, the search for molecular descriptors of their structure, important for establishing the laws of "structure - biological activity".

