МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

105-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
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Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

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У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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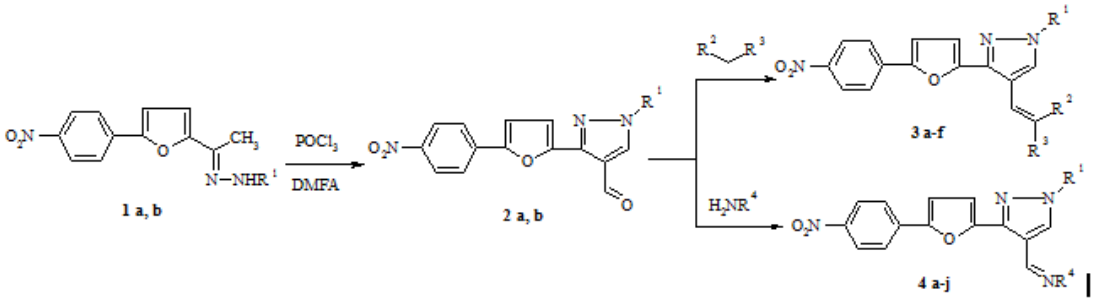
nitrophenyl)furan-2-yl]pyrazol-4-carbaldehydes to the corresponding alkenyl derivatives under the action of malononitrile, ethylcyanoacetate, cyanoacetamideand thioxoimidazolidin-2-one.

The aim of the study. To investigate the synthetic and practical potential of pyrazole-containing compounds, which is due to hepresence in their structure of a unique electron-enriched azolecycle, thanks to which the yare widely used in medicine, agrochemistry and materials science.

Materials and methods. Condensation of the indicated aldehydes with hydrazides, (thio)semicarbazides, and hydroxylamine yielded corresponding hydrazones, (thio)semicarbazones, andoximes.



1: R^1=C(O)NH_2 **(a)**, Ph **(b)**; 2 R^1=H **(a)**, Ph **(b)**;

3: R^1=H; R^2=R^3=CN **(a)**; R^2=CN, R^3=CO_2Et **(b)**; R^2=CN, R^3=C(O)NH_2 **(c)**; R^1R^2=C(S)NHC(O)NH **(d)**; R^1=Ph, R^2=R^3=CN **(e)**;

4: R^1=H, R^4=NHC(O)Ph **(a)**; NHC(O)-4-піридил **(b)**; $NHSO_2C_6H_4$-4-Me **(c)**; NHC(O)NH_2 **(d)**; R^1=Ph; R^4=OH **(e)**, NHC(O)Ph **(f)**, NHC(O)-4-піридил **(g)**; $NHSO_2C_6H_4$-4-Me **(h)**; NHC(O)NH_2 **(i)**; NHC(S)NH_2 **(j)**.

The composition and structure of the synthesized compounds were confirmed by elemental analysis, IR and ^{1}H-NMR spectra. In the series of obtained hydrazones of 1-phenyl-4-pyrazolecarbaldehydes, the fact of their existence in the form of a mixture of E/Z-isomers, the quantitative ratio of which was determined by the ^{1}H-NMR spectroscopy method, was recorded.

Results. The results of the microbiological evaluation of the synthesized pyrazole derivatives evidenced that they have a pronounced effect against strains of S. aureus, E. coli and Candida fungi and are promising for creating effective antimicrobial agents based on them.

Conclusions. By the reaction of 3-[5-(4-nitrophenyl)furan-2-yl]pyrazole-4-carbaldehydes with methylene-active compounds and aminonucleophiles, new pyrazole derivatives modified with alkenyl and iminofunctional groups were synthesized. Primary microbiological screening of the obtained functional pyrazoles detected among them substances with pronounced bactericidal and fungicidal properties and confirmed the expediency of the irfurther in-depth study for the search of new antimicrobial agents.

Bratenko M. K.

SYNTHESIS AND ANTIMICROBIAL ACTION OF 4-PYRAZOLIL THIOSEMICARBAZONES WITH SOME CATIONS OF d-ELEMENTS

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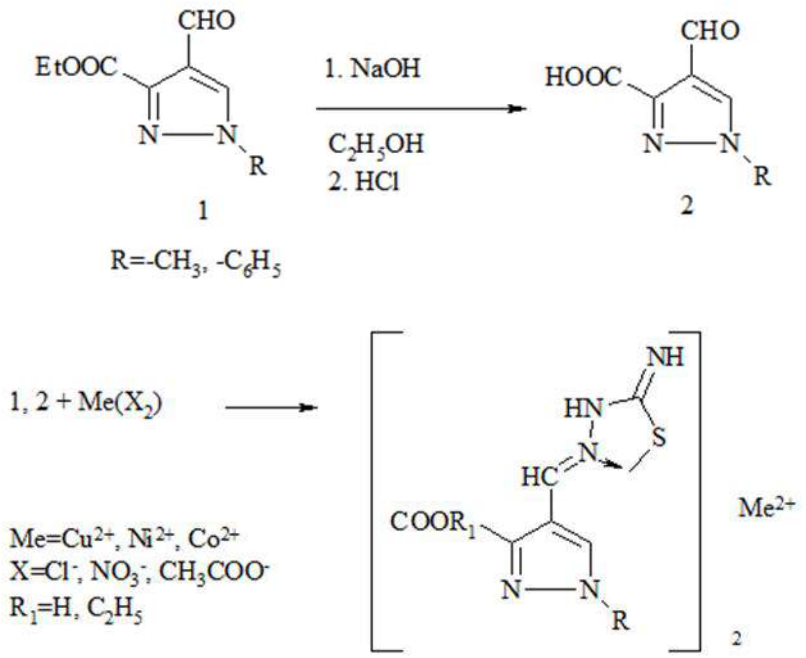
Introduction. Thiosemicarbazones are a promising class of compounds for the synthesis of heterocycles, the creation of drugs, and effective ligands in the synthesis of metalcomplexes.

The aim of the study. On the basis of ethyl esters of 4-formyl-3-pyrazolylcarboxylic acids, synthesized thiosemicarbazones and study their complex-forming ability with Cu^{2+}, Ni^{2+}, Co^{2+}salts. For the synthesized complexes, study the antimicrobial activity.

Materials and methods. The synthesized of complex compounds was carried out according to the following scheme:



Results. The composition and structure of the intermediate and target compounds was confirmed by elemental analysis data and chromato-mass, ^{1}H NMR spectra.

Conclusions. On the basis of ethyl esters of 4-formyl-3-pyrazolylcarboxylic acids, thiosemicarbazones were synthesized and to study their complexing ability with Cu^{2+}, Ni^{2+}, Co^{2+} salts. Research on antimicrobial activity will be conducted.

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CHARACTERISTICS OF THE BLOOD PLASMA COAGULATION SYSTEM INDICATORS IN PATIENTS WITH GENITAL ENDOMETRIOSIS

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Introduction. In this work, we have conducted the analysis of indicators of the blood coagulation system, which characterize the internal APTT(Activated Partial Thromboplastin Time) and external coagulation pathway PT (Prothrombin Time) for 38 patients within the age range of 25-37 years old with genital endometriosis who do not have pathologies of the hemostasis system. According to statistics, endometriosis affects 10% of women of reproductive age. This chronic disease causes an inflammatory process with various types of damage. The final causes of the development of the disease are not known, but a number of genetic factors, hormonal imbalance (especially estrogen), dysfunction of the immune system, and even ethnicity contribute to its spread.

The aim of the study. To compare the parameters of blood plasma coagulation system (APTT, PT) of women within the reproductive age range of 25-37 years old with chronic endometriosis with the blood parameters of healthy women of a similar age in the control group. INR and APTT coefficients were used to standardize indicators.

Materials and methods. Venous blood sampling of the patients was performed on an empty stomach from the ulnar vein. As an anticoagulant, 3.2% (109 mmol/L) trisodium citrate was used in a ratio of 1:9 to the volume of whole blood. Platelet-poor plasma was obtained by centrifugation at 2000 rev/min for 10 min. The resulting plasma was stable at room temperature for up to four hours.

Determination of APTT and RT was carried out on a two-channel semi-automatic coagulometer DIAGON COAG-2D using diagnostic kits: DIA-PTT LIQUAD and DIA-PT. Control plasmas DIA-CONT I-II (No. 910436) were used for control, respectively, with normal (I) and hypocoagulable (II) data. According to the analyzer program