

diseases and are developing as many drugs in form of semi-solid forms to help out with such problems. *Cymbopogon citratus*, Stapf (Lemon grass) is a widely used herb in tropical countries, especially in Southeast Asia. The essential oil of the plant is used in aromatherapy. The compounds identified in *Cymbopogon citratus* are mainly terpenes, alcohols, ketones, aldehyde and esters. Some of the reported phytoconstituents are essential oils that contain Citral α , Citral β , Nerol Geraniol, Citronellal, Terpinolene, Geranyl acetate, Myrcene and Terpinol Methylheptenone. The plant also contains reported phytoconstituents such as flavonoids and phenolic compounds, which consist of luteolin, isoorientin 2'-O-rhamnoside, quercetin, kaempferol and apiginin. Studies indicate that *Cymbopogon citratus* possesses various pharmacological activities such as anti-amoebic, antibacterial, antidiarrheal, antiparasitic, antifungal and anti-inflammatory properties. Various other effects like antimalarial, antimutagenicity, antimycobacterial, antioxidants, hypoglycemic and neurobehaviorial have also been studied. These results are very encouraging and indicate that this herb should be studied more extensively to confirm these results and reveal other potential therapeutic effects. Due to some of these findings, lemongrass because a plant of interest for the skin diseases treatment. But there are no available semisolid preparations containing lemongrass oil. Thus the aim of our research is development of compose and technology of semisolid drug for treatment of wide range of topical diseases, containing lemongrass oil.

S-DERIVATIVES OF 5-(THEOPHYLLINE-7'-YL)-4-R-1,2,4-TRIAZOLE-3-THIOL: SYNTHESIS AND PROPERTIES

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The aim was to find promising compounds in the S-series of 4-R-5-(theophylline-7'-yl)-1,2,4-triazoles-3-thiol (R = CH₃, C₂H₅, C₆H₅). Materials and methods. As the starting material was chosen theophylline, which through a series of successive stages received 7-((3-thio-4-R-4H-1,2,4-triazoles-5-yl)methyl)-theophylline. Research of physical and chemical properties of the compounds were carried out by methods that are listed in the State Pharmacopoeia of Ukraine. The melting point was determined by an open capillary method on the device OptiMelt MPA 100. Structure substances are confirmed by elemental analysis instrument Elemental Vario EL cube (CHNS), infrared spectra (4000 - 400 cm⁻¹) were taken off modules of ALPHA-T spectrometer Bruker ALPHA FT-IR. ¹H-NMR spectra were recorded using a spectrometer "Varian Mercury 400" (solvent - DMSO-d₆, internal standard - tetramethylsilane). Chromatography-mass spectral studies were performed on the instrument Agilent 1100 Series LC/MSD System. Results and conclusions. Developed phased strategy targeted synthesis of 7-((3-thio-4-R-4H-1,2,4-triazoles-5-yl)methyl)theophylline and its derivatives. In operation, received 12 salts, 8 esters, 3 hydrazid and 8 amides 2-(5-((theophylline-7'-yl)methyl)-4-R-4H-1,2,4-triazole-3-ylthio)acetic acid. Thiol alkylation of haloalkanes and haloalcohols, synthesized 14 S-derivatives. For the synthesized compounds investigated spectral properties (UV, IR, ¹H NMR, chromatography-mass and mass spectra). The results of virtual screening (program PASS Online) identified promising areas for further biological studies of the compounds obtain.

AMINO ACID COMPOSITION OF PORTULACA OLERACEA L. AND PORTULACA GRANDIFLORA HOOK.

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It is known that aminoacids play important role in synthesis of enzymes, hormones, neurotransmitters, some elements of connective and muscular tissue, in the process of hematopoiesis. The aim of research was to determine the qualitative composition and quantitative contents of aminoacids in leaves, herbs, roots of *Portulaca oleracea* L. and *Portulaca grandiflora* Hook. Materials and methods. The determination of aminoacids was carried out by ion exchange chromatography with using automatic aminoacid analyzer AAA T-339M. Results and discussion.