



PROCEEDINGS OF UZBEKISTAN-CHINA INTERNATIONAL SYMPOSIUM ON "CURRENT ISSUES IN THE CULTIVATION AND UTILIZATION OF MEDICINAL PLANTS"



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zamonaviy tibbiyotning eng sodda, ammo eng samarali profilaktik quroli bo‘lib qolishi lozim.

Foydalanilgan adabiyotlar

1.Garaulet, M. (2022). Kechki ovqatlanish vaqtida MTNR1B genetik xavfining glyukozatolerantligiga ta'siri: krossoverlirandomizatsiyalangan tadqiqot. *Diabetes Care*jurnali.

2.Vujovic, N. (2024). Kech ovqatlanish ochlikni oshiradi va metabolic yo'llarni o'zgartiradi. *Cell Metabolism*jurnali.

GREEN SYNTHESIS OF PYRAZOLE

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Abstract. Heterocyclic rings named pyrazole-containing compounds show a significant role in medicinal chemistry, owing to various FDA-approved drugs that are used in the treatment of carcinomas as well. Such a five-membered ring has different conformations through their active sites that interact with the targeted amino acid residues and consequently show good inhibition against targeted proteins. Green chemistry is an interdisciplinary field that focuses on minimizing hazardous substances and promoting sustainable alternatives in chemical processes to conventional chemical processes and products. This review provides a comprehensive analysis of the fundamental principles, historical development, and practical applications of green chemistry with a particular emphasis on its role in advancing sustainable chemical synthesis, analytical methodologies, and industrial practices. Chemists availed synthesis to the discovery of drugs using a chemically reaction-based strategy. For that, the analytical techniques named FT-IR, ¹H NMR and ¹³C NMR spectroscopic were applied to the molecular structure's evaluation. Not only that, but ESI-MS/HRMS spectrometry tools have an important role for the confirmation of synthesized compounds. The various methods for drug discovery are used, like in silico, in vitro and in vivo analyses, to find their biological effects against the targeted proteins. The aim of this research is the discovery of pyrazole-containing drugs that could be used in the treatment of various carcinomas.

Keywords: Green synthesis of pyrazole, FDA approved drugs, biological activity, literature on the synthesis of pyrazole derivatives such as pyranopyrazole, spiro-pyrano pyrazole using.

Introduction. There is great concern in the utilization of chemicals and polymers for production processes, which have detrimental effects on public health and the global environment. The utilization of ecofriendly synthetic techniques like 'green chemistry' has come into consideration for the synthetic chemist to develop products with these desired qualities. For the synthesis of heterocyclic compounds, many green methods have been applied performing the reactions at ambient temperature and using alternative