

Medicinal Plants (Botanical, Morphological, Pharmacological and Chemical)

Bektayeva Xuriyat Ortigaliyevna

Chirchik State pedagogy University "Genetics" and evolutionary biology", department teacher

Received: 2024, 15, Mar

Accepted: 2025, 21, Apr

Published: 2025, 31, May

Copyright © 2025 by author(s) and Bio Science Academic Publishing. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). <http://creativecommons.org/licenses/by/4.0/>



Open Access

Annotation: Current modern in medicine medicinal from plants wide in scope use recommendation is being done. Because various similar chemical processing given from drugs according to medicinal plants human to the body one a little effective benefit This gives in the article you one how much medicinal plants about for information has you will be possible.

Keywords: Ethnobotanical convergence, omics, pharmacotherapeutics, murikootti, guava, neem, bioinformatics, pharmacophylogeny.

MAIN PART

Relevance: Plants world up to 80% of the population health to save provides. Pharmaceuticals of plants kinship (plant) pharmacology phylogeny) - this ethnopharmacology, plants systematics, phytochemistry, pharmacology and bioinformatics mutual enter progress with medicinal research practice during working issued new topic It is considered a plant. relatedness (phylogenetic) and evolutionary relationship), chemical composition and preventive and healer impact between internal relationship and laws study and discussion to do specialized and from them medicines research to do and to improve leadership Pharmacological and phytochemical characteristics plant from medicines safe to use and medicine working release for leaders to determine help gives . Traditional medicinal for purposes used plant types modern methods with often is studied. Ethnobotanical research pharmacological and phytochemical characteristics with one in line plant pharmacophylogeny knowledge base enrichment for very important.

The research Purpose: Medicinal plants in the world face thousands of plants one part are, they are far geological history during developed came from. Evolution in the process they is formed,

this plant phylogeny concept. Similar types not only in morphology, perhaps genetic connections also physiological due to and biochemical to the features, so for they between chemical content often genetic in terms of far to types than more similar will be. Medicinal of plants physiological active components mainly of plants secondary metabolites is, their plant in the world spread usually is regular.

Medicinal plants have unique relationships between genetic relationships, chemical composition and medicinal effects. The unique regularity between them can be found through advanced technical means. The purpose of this study is to emphasize the biological, chemical classification and significance of medicinal plants.

Method and Methods: Pharmacophylogeny concept originally by Professor Pei-gen Xiao in 1980 offer That was done. at the time researchers medicinal of plants genetic basics about less for information has was. "The same phylogenetic in groups plants similar to genetics has to be possible, therefore for similar chemical working release to the potential yes, this and own in turn similar therapeutic impact to show possible";

such logic plant pharmacophylogeny initial development in the phase there is it's not was. In the 1980s-1990s pharmacophylogeny study various kind medicinal of plants phylogenetic in the structure phytochemical components values emphasizes. Traditional taxonomy morphological to the features relies on and since 2000 then DNA markers molecular phylogeny in recovery wide applied;

however, morphologically signs often distracts and various from different DNA markers use often clear phylogenetic to the results take Pharmacophylogeny researchers various kind medicinal of plants phytochemical structural parts they found out and medicinal plant phylogeny in conclusion morphological DNA markers and chemical markers combine better that understood. Medicinal plants bioprospecting to do and from them use according to some new concepts offer was done, for example, in the "Ethnobotanical convergence", this phylogeny one kind to the node included plants for similar use means. Pharmacophylogenetic The "omics" revolution with together modern technologies traditional Ethnobotanical knowledge with combined, medicinal of plants potential new application determination for how use possible shows.

Results: Plants undoubtedly medicines, food, spices, clothing, shelter, fertilizers and the most importantly, the climate change order eater of mechanisms are elements. Medicinal plants centuries during human in good health solution doer role played. Example for, known as Kutki *Picrorhiza Kurrooa* traditional in medicine liver diseases, respiratory to take problems and skin conditions relief for used. Another example-in-blood sugar amount reduce, liver protection to do, cancer of the disease prevent to get, inflammation reduce and fever management potential with famous was Swert Chirayita. From now on except Apocynaceae family one how many to drugs resistant infections treatment alternative option offer does.

Medicinal plants world population most of health storage also widely used in systems World Health Organization storage of the World Health Organization (WHO) approximate to reports based on, developing country More than 80% of the population traditional from medicine uses, plant medicine and the pain loss and diseases treatment for far to history has. From this except, medicinal plants new antimicrobial therapy source as big role plays and biological suitable coming medicines working exit for potential opportunities presented will reach.

For example: *Bilanania Somnifera* has various therapeutic properties such as stress and anxiety reduction, anti-inflammatory effects, immune system modulation, anti-tumor effects, and improvement of sexual dysfunction and is being used for its potential pharmacotherapeutic applications.

Plants ancient from ancient times to the present until today various civilizations by medicinal for purposes used. For example, Betelvine extracts antimicrobial, antifungal and antiviral properties

demonstration edi, piperidine and piperine and potential anticancer and pharmacological features demonstration will reach.

Conservative to the calculations according to , plant types current loss expected and natural no become to leave 100-1000 times higher than the level many and every two in land at least one potential main medicine is losing .

Current no become to leave level mainly human directly and indirectly activity with depends. So medicinal plant types fast and clear classification and recognition biological diversity effective research to do and management for very important. Deep study methods the computer see in the field wonderful to the results achieved, the image determination and improve such as applications various in areas including health storage, village economy, education and in industry is being used .



Table 1: Medicinal of plants types.

Above in the department discussion as done , medicinal of plants types this in the department from them use with together discussion will be done .

* Tulsi : of thulsi general name holy to basil relevant Lamiaceae family . Thulsi religion and medical for purposes It is mainly used in Ayurveda and the disease treatment for the siddha method . From this except , repellent and his/her oil nematicide to the characteristics has .

* Neem: Neem is also known as Azadirachta indica and Meliaceae to the family relevant .

* Hibiscus : this Malvaceae to the family related . Hibiscus this one row medicinal substance as used. It blood pressure treatment for that is make sour tea treatment for the purpose is used .

* Amla: also known as Indian gooseberry as again This is a wonderful vitamin C. source This is the liver . and kidney growth It also improves the food . digestion to do and heart seed improves .

* Karinochi : five leafy clean plant Also known as . This is a lot medicinal to the features has . Home use Carinochi arthritis and rheumatic the pain is treatment .

* Guava: this Myrtaceae to the family It is very relevant . many medicinal features there is ,

mainly antimicrobial feature . He wound also in the treatment of diabetes reduce for is used .

* Murikootti : it is mainly wounds healer as used . Murikootti ulcer and inflammation It is also useful in treating . except anemia for is used .

* Ashwagandha : Ashwagandha night to the shade relevant family.His medicinal benefits many they are : blood sugar reduce stress and worry relief and muscles strength increases .

CONCLUSION

Medicinal of plants classification people for very useful is considered . Above discussion as done , medicinal plants classification for various kind methods used . Various in methods various kind information package and of plants every kind types This is used . in the classification entrance image or information package important role plays . Each algorithm work The time is also different. does . Deep to study based method high accuracy provides , because it has the features separate to take for in advance trained from the model uses . Training the time is different too to methods relatively less is considered . The future circle as we are more plant types with information base our creation and high to accuracy achieve for every one in class clear the images our multiplication possible .

REFERENCES USED:

1. Kholmatov HX, Khabibov ZH, Pharmacognosy [Textbook], T., 1967.
2. Nabiev M, Physician Herbs , T., 1980.
3. Hojimatov K., Olloyorov M., of Uzbekistan healer plants and them protection To do , T., 1988.
4. Kholikov K., Uzbekistan south of medicinal Plants , T., 1992.
5. Hojimatov QH, Yuldoshev KY, Shogulomov U.Sh. , Hojimatov AQ, Healer herbs to pains Ointment (Phytotherapy), T., 1995.
6. Jo'rayeva MA, Dorivor plants atlas [educational] manual] T.,2019
7. Pratov.O'P , Nabiev.MM . Uzbekistan high of plants modern system . Tashkent. Teacher - 2007.
8. ARG Gantner Verlag KG, Ruggell , Liechtenstein 2001. ISBN 3-904144-77-4
9. Medicinal plants cultivation technology and Ecology . Tashkent. Garden of Thought -2018.
10. Medical Laws 3-4-volumes. Bektayeva XO The state and analysis of teaching medicinal plants in the system of continuous education//2022/ International Congress on Multidisciplinary Studies in Education and Applied Sciences September 30 TH . St- 172-175
11. Bekta yev a XO Student - Formation of medical literacy of students as a pedagogical problem. Sovremenni ye tendency innovative development science I education and global n om mire//2023 . 1(3), 127-133. <https://doi.org/10.47689/stars.university> - St-117-122
12. Bektayeva XO Formation of medical literacy - as a pedagogical problem // Proceedings of the scientific seminar "Modern trends in the labor market in the conditions of digital transformation" [Text] / Collection of theses. – T.: "Donishmad ziyosi", 2023. – 150 p
13. Bektayeva, Kh. (2023). Methodological development of the topic "Medicinal plants and products containing vitamins B" from the science of the basics of medicinal plants. Nauka innovatsiya, 1(19), P 147–158.izvlecheno horse <https://in-academy.uz/index.php/si/article/view/19742>
14. Bektayeva XO Formation of scientific and methodological support of professional competence based on teaching subjects related to medicinal plants // National University of Uzbekistan . – 2023. No. 1/7/1. St-65-67