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Article

Some Medicinal Plants and Their Ways of Using Them for Medication

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Abstract: Medical plants are defined as plants with medical advantages and characteristics capable of healing and treating the human and animal body from disease. Throughout history, medicinal plants have been utilized as a primary therapy for a wide range of disorders in diverse cultures. This is especially true in Africa and emerging nations, where 80% of the world's population still employs these plants in traditional medicine to cure a wide range of illnesses. Medical plants possess many biological properties that need to be detected, identified and documented for safe use and to guide others on how to use them, with some powerful medical plants having harmful side effects on humans and animals and sometimes potentially toxic to the destruction of body organs. Since the beginning of time, medicinal plants have been found and utilized in traditional medicine. Hundreds of chemical components of plants that may be exploited to control fungus, insects, and illnesses were synthesized by them. Numerous phytochemicals with demonstrated or possible bioactivity have been found, but the fact that a large number of diverse chemicals are owned by a plant has made the use of the plant completely ineffective and has hindered microscientific research aimed at establishing the efficacy and safety of these compounds by evaluating their activities in several plants.

Keywords: medicinal plants, ways of using, medication

1. Introduction

Any plant that has chemicals in one or more of its organs that have medical value or that serve as building blocks for the creation of effective medications is considered medicinal. This description enables one to distinguish between plants that are considered medicinal but have not yet undergone a comprehensive scientific investigation, and plants whose therapeutic qualities and ingredients have been scientifically proven [1], [2].

Numerous natural compounds with diverse medicinal characteristics can be obtained from plants, and these resources are constantly being investigated to create new medications [3]. These natural materials have long been used by traditional medicine to treat a wide range of disorders. Nowadays, these natural ingredients are used to make the majority of pharmaceutical drugs. Numerous bioactive chemicals make up natural goods. These bioactive substances have biological activity against certain pathogens. Several secondary metabolites from plants have been discovered too far, each having a unique structure and set of pharmacological characteristics [3], [4].

Researchers have reached the production of these active compounds by 1,600 plant species out of 7,500 species examined in the study. According to researchers, this means that different plant types do not produce active compounds in the same way. Instead, as they differ in their concentrations from one species to another. This means that the more

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biological diversity there is, the more likely it is to find plants producing higher therapeutic compounds [5].

The origin of the use of plants only within the environment, and their implication, therefore, is that plants are a property that is not available to others, their ability to store or produce in-house effective substances, which have a physiological effect on the human body, which enables them to treat certain diseases radically, discourage the growth of some, mitigate others, and strengthen the body's defences. They also play a role when they interfere with certain medicines. This role is often constructive, enhancing the efficacy of the synthetic medicine, but in a few cases it may be harmful. Evidence shows that plants have been planted in order to treat and treat more than 60,000 years ago. The first school of medicinal plants appeared in Greek time [6].

Because of the advantages of plant phytochemicals and the trend toward natural products in the pharmaceutical and cosmetics industries, research on medicinal plants is just as significant as research on conventional pharmaceuticals [7-12].

Although they are commonly used and thought to be safe, medicinal herbs may also be poisonous. When reports of medical plant poisoning have occurred, it is typically because the plants were misidentified in the form they are sold in, or because poorly educated people prepared and administered the plants inappropriately. Certain "drug like" plant treatments have properties similar to those of pharmaceuticals. Herbalists employ these herbs in therapeutic regimens, although in nations like Britain, legal restrictions limit their widespread availability [13].

Medical plants are promised a bright future; more than half a million (500,000) have been studied or newly used, with few, and the rest of them not far from finding effective medicine for many diseases. With the development of modern methods, the concept of identifying and influencing more effective substances in each plant, the chemical structure of each plant, and replacing them with greater human opportunity for greater benefit and less harmful enrichment, so that they can gain more control over the pharmaceutical industry, but this future is fraught with danger, which poses a real threat; quality, exposure to disease, climate variability and change, and unconsidered agriculture, which will preserve the sustainability of these plants, must be radically resolved [14].

2. Materials and Methods

The synthesize a comprehensive general studies of some medicinal plants and their ways of using them for medication.

3. Results and Discussion

3.1. The black pill plant

The black pill plant Nigella sativa is a medical plant belonging to Ranunculaceae family. It is small herbal herb up to 50-30 cm, high tape leaves and white flowers, and the fruit is in the form of a capsule containing a large number of small, black seeds [5].

These seeds have many active compounds. The chemical content of black grain seeds consists of fat (35.5 - 31%), protein (16-21), carbohydrates (34.3), fibre (6.5-4.5), humidity (7-5) and ash (3.7). These seeds also contain two types of oil, called fixed oil, which accounts for about 35% of the weight of the seeds. The oil contains fatty acids, such as linolec acid (56), oleic acid (24.6), Palmitic acid (12), Citric acid (3), linolinec (0.7%) and mercetic (16.0%). The second oil is volatile oil, which constitutes (1 - 1.5%) of the weight of the seeds. This type of oil contains the first two substances, Nigellone, the active substance in it, which is considered as an antioxidant because it protects the body from many diseases. The second oil is zymohydroquinone (0.5) which uses a disinfectant against rotation [15].

Black pill seeds are used in herbal medicine as an alternative to the treatment of many diseases, such as diabetes, hypertension, cholesterol, heart, kidney, stomach, eczema, cancer and skin. They are also considered painkillers, anti-worms, milk and menstrual. It is also used as a kind of spice and spice in some countries of the region, such as Egypt, India, China and Iran. The use of black pill seeds to treat the toxicity of liver hepatotoxicity caused by chemicals or a disease also reduces the proportion of total cholesterol, harmful cholesterol, triple fat, and blood sugar. It is also used as an improvement in growth, as well as in blood and chemosynthetic standards. The results of the chemical detection have already shown that the seeds of the black pill contain most active compounds of liquefides, dragons, clucoids, soaps, and flafons, so they are antioxidant compounds that help protect the body from the effects of free roots. In addition, the seeds of the black pill contain metal elements such as potassium, phosphorous, sodium, calcium, magnesium and supersym, as well as vitamins such as B1, B2, B3 [5]. They also contain reinforced and enriched sexual hormones, since the failure to rise to the level of these sexual hormones, such as abdominal grease hormones, abdominal grease hormones and abdominal hormonal hormones, at the injecting of FSH, by extracting the seeds of the black bean plant, is due to the fact that the seeds of the black pill contain a high proportion of adipose acids such as arachidonic acid, which is incorporated into the structure of the ablution hormone, thereby increasing the concentration of this hormone and the concentration of the sperm in the semen [15].

Figure 1. The black pill plant

Kingdom = Plantae

Division = Magnoliophyte

Class = Magnoliopsida

Order = Rankles

Family = Ranunculaceae

Genus = *Nigella*

Species = *N. sativa*

3.2. The chamomile

The chamomile plant is one of the most popular plants used for treatment in thousands of years. The benefits of the chamomile are also well known and are not limited to calming down and helping to sleep. Chamomile is a crucial component in many medicines and cosmetics, renowned for its traditional use in folk therapy across various health issues. Recent research highlights its potential in treating conditions like cancer and diabetes [16].

The most widespread variety, German chamomile, originally hails from Europe and Western Asia but is now cultivated globally. Its flavonoid compounds, common in many plants, contribute significantly to its medicinal properties, soothing skin sensitivities and aiding wound healing when applied topically [17], [18].

Rich in antioxidants, chamomile helps reduce disease risk and boosts the immune system. Chamomile tea, a globally beloved herbal infusion, offers numerous health benefits, including alleviating stomach disorders, nausea, vomiting, diarrhea, anxiety, and insomnia [17]. Studies suggest chamomile extract protects against diarrhea due to its anti-inflammatory properties. Chamomile contains the Beijing compound, an antioxidant known to enhance specific brain pathways, improve sleep quality, and reduce insomnia. Research indicates that women consuming chamomile tea postpartum experienced better sleep and fewer depressive symptoms compared to those who didn't. In another study, subjects taking chamomile extract slept longer and woke up less frequently during the night [19].

Figure 2. The chamomile

Kingdom = Plantae

Division = Mayenoliophyta

Class = Magnoliopsida

Order = Asterales

Family = Asteraceae

Genus = *Matriicaria*

Species = *M. chamomilla*

3.3. The thyme plant

Thyme is the dried aerial parts of certain species of the Thymus genus, which is a group of aromatic perennial evergreen herbs belonging to the Lamiaceae mint family. It is considered to be one of the most powerful purifiers and natural antibacterials. Thyme plant is a short-lived tree with an average of 8 inches (20 cm) and a life expectancy of 6 years. It belongs to the Lamasi family.

The plant grows from spring to autumn and blooms during the summer of July in most parts of the United States. There are more than 200 different species of Thyme [19].

Thyme is grown in many different countries throughout the world in a variety of weather circumstances (Russians, Poland, Switzerland, United States of America, Spain, France, Italy, Morocco, South Africa, etc.). Plants are grown with basic oil-rich aromatic

leaves, and can also be used for cooking. Basic algal oil was found to be anti-bacterial, anti-convulsive, urinary, hypertension, calming and many other characteristics. Thyme oil has been defined as a respected global commodity, where it can be used in many pharmaceutical industries, personal health care, detergents, pesticides, etc. [20], [21].

Thyme is characterized by its anti-convulsive, gas chasing properties, where corn tea encourages better digestion when its leaves are used as a form of spice, which reduces gas and swelling, improves digestion, and volatile oils also help to mitigate intestinal spasms and colonoscopy. The hot soot, which is brought with a small spoon of dried plants / glass of boiling water, is used three times a day as anti-inflammatory treatments in cases of stomach and intestinal infections and weed in gastrointestinal ulcer treatment. Thimol is the most active element in the atom, characterized by anti-fungal and bacterial properties, which have the potential to prevent innate and viral infections and to combat various types of bacteria, thus raising and strengthening the immune system. The atom has a high vitamin C content, which promotes the formation of white blood cells, the immune system's first line of defense. Thyme also contains several anti-inflammatory elements, which can be considered effective in preventing chronic infections in the body, and the disinfectant is used in the epicenter to mitigate gum infections and the resulting pain. The atom contains high concentrations of antioxidants in herbs, where the phenolic antioxidants found in the atom contribute to strengthening and strengthening the immune system and maintaining the health of organs and cells of the body, including skin, eyes and heart [19].

Figure 3. The thyme plant

Kingdom = Plantae

Division = Mayenoliophyta

Class = Magnoliopsida

Order = Lamiales

Family = Lamiaceae

Genus = *Thymus*

Species = *Thymus vulgaris* L.

3.4. The rosemary plant

Rosemary is a member of the mint family Lamiaceae. This woody perennial is native to the Mediterranean region, where it has been used as food and medicine for centuries. Rosemary is usually prepared as a dried whole herb or a dry powder extract, while rosemary tea and liquid extracts are made from fresh or dried leaves. Antioxidants and anti-inflammatory chemicals, which are abundant in rosemary, may strengthen the immune

system and enhance circulation. Research has indicated that rosemary possesses a high concentration of antioxidants, which are crucial in eliminating dangerous particles known as radicals free [19].

Researchers have discovered that rosemary may provide mental health benefits as well. One component of rosemary called carnosic acid has the ability to protect the brain from harm brought on by free radicals. Additionally, several mouse studies have suggested that rosemary may help stroke victims. It may speed up the healing process and shield the brain from harm [22].

Since ancient times, people have used rosemary to improve and fortify their memory. Although it is a native of the Mediterranean region, this plant is grown for domestic or commercial use in more than 80 nations. Since it likes a hot, dry, temperate climate, it is planted in the spring using seeds or plant cuttings. During the summer, the stems are gathered and frequently let to dry. The majority of the leaves are distilled to remove the essential oils, while they can also be utilized as a flavoring in recipes. A common element in shampoos for hair development, lotions, soaps, and other beauty products is rosemary essential oil. Additionally, rosemary oil is commonly utilized in the pharmaceutical sector and has been shown to be helpful [19].

Similar to thyme, mint, and cinnamon, essential oils are frequently found for rosemary. Highly concentrated extracts called essential oils are utilized in cleaning, cooking, cosmetics, and health care. One typical type of essential oil that you may purchase and use as a home treatment is rosemary. It has been found in recent years that rosemary oil may help promote hair growth. Some claim it can help prevent hair loss, citing the hundreds of years that Mediterranean cultures have used this herb in hair rinses as evidence. The basic health advantages of rosemary oil may be the source of the belief that it promotes hair growth. Because rosemary oil improves blood circulation, it can keep hungry hair follicles from receiving blood flow [23].

Figure 4. Rosemary plant

Kingdom = Plantae

Division = Mayenoliophyta

Class = Magnoliopsida

Order = Lamiales

Family = Lamiaceae

Genus = *Rosmarinus*

Species = *R. officinalis*

4. Conclusion

The comprehensive general studies of some medicinal plants data are important used to update stored database of Medicinal Plants as well as in the Central Information System.

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