



CHEMICAL COMPOSITION OF MEDICINAL PLANTS AND CLASSIFICATION

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Annotation: In this article, while we attach importance to the issues of maintaining public health, preventing diseases, and raising healthy generations, timely and fast high-quality medical care is one of the main factors of disease treatment and prevention. Possibilities in the supply of many medicinal plants with a good effect, medicines obtained and prepared from them, and other means are highlighted.

Key words: Biologically active substances, ballast substances, ontogenesis, chemical composition, organic acids, enzymes, proteins, vitamins, essential oils, glycosides, starch, polysaccharides, alkaloids, phytoncides, tannins, coumarins, dyes, nitrogenous substances, fatty and fatty acids.

Introduction

The effect of medicinal plants on the body depends on the amount of compounds in their composition, which are accumulated in different amounts in plant parts. For the preparation of medicinal products, the bark, buds of the plant are taken in early spring, leaves before flowering or when the plant blooms, when the flowers are fully open, when the fruits and seeds are ripe, the root, rhizome, bulb are taken in early spring or late autumn.

Medicinal plants contain hydrocarbons, organic acids, polysaccharides, starch, protein, fatty and fatty acids, essential oils, alkaloids, tannins, saponins, glycosides, bitter substances, phytoncides, trace elements, vitamins, mineral salts and others will be substances.

Chemical composition of medicinal plants. The chemical composition of plants is very complex and consists of various organic and mineral substances. Not all of them will be medicinal and will not have a curative effect in the treatment of the disease. Some of them interfere with the preparation of medicines, as well as cause their quality to deteriorate during the storage of medicinal products or cause rapid decomposition of the main active chemical compounds. Therefore, from the point of view of medicine, substances found in medicinal plants are divided into 3 groups:

1. The main biologically active substances of medicinal plants. Since the medicinal product contains therapeutically important biologically active substances that treat diseases, it is used in medicine and pharmacy. Medicinal biologically active chemical compounds of therapeutic value of the plant are called main active

substances. These substances are often alkaloids specific to certain plants (belladonna, bangidevona, mingdevona, atropine typical of scopolia species, hyoscyamine, scopolamine), glycosides (angishvonagul, strophant, adonis, marvaridgul, heart glycosides characteristic of erizimum plants, ra amygdalin typical of legumes, sinigrin typical of cabbage and other isothiocyanates), coumarins, essential oils, flavonoids, vitamins, lignans, flavoring and other substances.

2. Compounds found together with active substances of plants. Although such substances do not have therapeutic value in this plant, they can change (strengthen) the effect of the main active compounds and accelerate their effect as a result of their absorption into the body. by accelerating the absorption of the main active compound of the plant - cardiac glycosides into the body, accelerates and enhances the effect of medicinal preparations of the product.

3. Unnecessary ballast substances without therapeutic value. These substances can be different substances according to their chemical structure, such as the main effectors of plants and the compounds found together with them. These include carbohydrates, resins, essential oils, fats, organic acids, protein, minerals and other substances. Although they are considered compounds with a therapeutic effect under certain conditions, they can be found as a ballast (unwanted) substance in another plant. Therefore, it is a mistake to say that ballast substances are always the same compounds that belong to a certain group. For example, if the oils obtained from the seeds of sesame, olive, almond, etc. are considered the main active compounds, the oils found in the fungus of the mushroom and strophantus are considered ballast substances in the preparation of medicines from these plants and in product storage. In addition, resins in psano leaf and lactic acid are ballast substances for products that contain lactic acid.

Research Results

For example, dyes were studied. Plant organs store various pigments, i.e. dyes. They include chlorophyll, flavonoid, anthocyanin, carotenoid and others. Chlorophyll is a green pigment found in the green parts of plant organs. This substance is divided into chlorophyll "A" and chlorophyll "B". Chlorophyll does not break down in water, but does break down in oil. The word flavonoids means yellow. They are natural complex compounds and are considered a product of benzo-U pyrone, whose basis is phenyl-propane. Flavonoids, in turn, are divided into groups such as flavone, flavonoid, flavonol, catechin, anthocyanin. Anthocyanins give the color a purple to red appearance. Anthocyanins are flavone glycosides and are hydrolyzed and decomposed into sugar and aglycone-anthocyanidins. They, in turn, are divided into keracyanin, enin and betanin. Anthocyanins are highly soluble in water. If it is heated or boiled, it quickly deteriorates, that is, it loses its color and properties. Anthocyanins are more abundant in flowers, fruits and seeds of plants. Medicines made from quercetin and rutin substances are used more often in medicine. They are used against diseases such as cardiovascular disease, bleeding, stomach ulcer, and high blood pressure.

Conclusion

Providing medicinal plant products to the pharmaceutical industry, medicine, pharmacies, Galen factories and laboratories, increasing the amount of wild and cultivated medicinal plant products, using wild medicinal plants naturally preservation, protection and propagation of medicinal plants in the state and community farms are among these.

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