

triphosphate (ATP), Deoxyribonucleic acid (DNA), Ribonucleic acid (RNA), ensuring the formation of coenzymes.

Phosphorus also acts as an energy source in the form of Adenosine triphosphoric acid (ATP), Nicotinamide adenine dinucleotide (NAD), Nicotinamide adenine dinucleotide phosphate (NADPH) and contributes to the formation of etheric bonds between natural alcohol groups.

Raw material of gladiolus accumulates a considerable amount of silicium (115 mg/100 g), aluminum (23 mg/100 g), iron (17 mg/100 g), zinc (5.7 mg/100 g), strontium (4.3 mg/100 g).

These trace elements are participate in the transport of substances, as well as in the formation of enzymes. Elements are detected such as cobalt (<0.03 mg/100g), mercury, cadmium and arsenic (<0.001 mg/100g).

The content of the elements in the samples of raw *Gladiolus x hybridus hort.*, can be arranged in the following decreasing sequence of the content for leaves – K > Ca > Mg > P = Si > Na > Al > Fe > Zn > Sr > Mn > Cu > Pb = Ni = Mo = Co > Hg = Cd = As.

Conclusions. The content of 19 elements in leaves of gladiolus has been determined. A significant amount contains potassium, calcium, magnesium, phosphorus, silicium. Heavy, toxic metals, such as Pb, Ni, Mo, Co (<0.03 mg/100g), Hg, Cd, As (<0.001 mg/100g) are within the permissible limits for medicinal raw materials.

Experimental data will be further used to standardize raw material of gladiolus. The study of plant of the of *Gladiolus x hybridus hort.* continues.

MORPHOLOGICAL RESEARCH FRUIT OF *COCOS NUCIFERA*

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Introduction. The coconut tree (*Cocos nucifera*) is a tropical plant from the palm family grown primarily for its fruit, coconuts. The tree is native to the South Pacific region and is widely cultivated in all the tropical regions of the world, growing particularly well in coastal areas. The single-trunked tree has a mature height of 80 to 100 feet. The dwarf-sized varieties tend to grow much shorter. The straight, columnar trunk is light gray in color and often develops a swollen base with maturity. Certain cultivars have curved or slightly leaning trunks. The trunk diameter generally remains a consistent 10 to 13 inches from the base to the top. The yellowish-green leaves are 8 to 18 feet long with a width of 3 to 5 feet. The tree sheds and produces 10 to 15 leaves every year. The feathery-textured foliage is pinnate and grows on 3- to 5-foot long, spineless stalks. At the age of 4 to 6 years, coconut trees start to produce flowers. The light yellow, smaller male flowers grow at the ends of the branchlets while the larger female flowers grow at the base. Younger fruit has more milk that gradually dries to create the meat in mature nuts. Coconut oil receive from coconut pulp. There are many various cumulative biologically active components present in coconut oil.

Aim. Morphological study of *Cocos nucifera* fruits.

Materials and Methods. The object of the study were fruit of *Cocos nucifera*.

Results. The fruit of the coconut palm (*Cocos nucifera*) is the upper pseudomonocarpic dry drupe. The size of fruit is large with clearly differentiated parts of the pericarp. Ovary is formed by three carpels with one ovule in each nest. Mellow fruit is unilocular and one-seeded. Exocarp is thin, leathery, dense and smooth. Mesocarpy is powerful, developed and fibrous. The endocarp consists of very hard stony cells. Three meridional ridges are distinctly visible on it - these are traces of fusion of carpels. At the base of the fruit, there are 3 germinal openings, 2 of which are overgrown, and the third serves as the exit point of the embryonic root. The endosperm of the seed is rich in oil, initially it is liquid, by the time of maturation the endosperm hardens.

Conclusions. The research of the morphological of *Cocos nucifera* fruits was conducted.