(NF-κB) signalling pathway.

Conclusions. In the current study, we investigated the changes in the oxidative stress biomarkers using the *in vitro* model of equine plasma to evaluate the antioxidant activities of the aqueous extract derived from the leaves of *F. deltoidea*. The treatment of equine plasma by extract derived from leaves of *F. deltoidea* resulted in increase of TBARS as biomarkers of lipid peroxidation and ketonic derivatives of oxidatively modified proteins. The levels of aldehydic derivatives of oxidatively modified proteins were non-significantly changed. The incubation of equine plasma with an extract derived from leaves of *F. deltoidea* resulted in a non-significantly decrease in the level of total antioxidant capacity. More studies are warranted in future, to illustrate the potential and mechanisms of *F. deltoidea* in preventing oxidative stress using different cell models *in vitro*. Also, further studies are warranted to identify the bioactive components that contribute to this protective effect.

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Phytochemical study of the leaves *Chamaedorea elegans*

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Introductions. *Chamaedorea elegans* is directly related to the family *Arecaceae*. Under natural conditions, it can be found in the humid dense forests of eastern and southern Mexico and the region of Guatemala.

This plant is shrub-like and has a creeping trunk. Thin erect stems grow from it in large numbers, which have a height of 1,5 to 2 meters and a width of 2,5 to 3,5 cm. Panicles are collected in the upper part of the stems, consisting of 6 or 7 long-petiolate closely seated vaginal leaflets, painted in green. Over time, they die off and fall off, while ring-shaped traces of a light shade remain on the surface of the stems. Pinnate arcuately recurved leaves have from 12 to 15 pairs of lanceolate-linear lobes, which can reach 20 cm in length.

Sufficiently long flower stalks grow from the leaf axils. They bear branched, loose inflorescences in the form of panicles, which consist of fragrant, very small yellow flowers that are shaped like a ball. At the end of flowering, small (no more than 6 millimeters in diameter) round fruits are formed. Ripe fruits are black in color, and each of them contains 1 seed. With proper care of the plants in the rooms, the graceful chamedorea palm grows well, some plants can bloom, and with artificial pollination (when male and female plants bloom), they even form germinating seeds. The plant easily fits into any interior and quickly adapts to new conditions. Breeders can tame some varieties to the most extreme conditions. It is quite difficult to destroy an adult plant; most pests bypass the tropical beauty. Chamedorrhoea dissolves better near a window facing the road, because it, in addition, has the ability to neutralize harmful chemicals - trichloroethylene, benzene, etc., which are contained in the exhaust. *Chamaedorea elegans* is not whimsical to the increased humidity and light. Three hours of sunlight is enough for her. The fat woman does not like direct daylight, but does not tolerate deep shadows. The period of adaptation also

passes easily for her. The decoction and infusion of the herb of this plant is used as a wound-healing agent in the form of lotions for tumors, rashes, abscesses, burns and wounds, as well as washes in folk medicine. The juice of the herb of this plant is recommended as a tonic and analgesic. It is noteworthy that in Western Europe, the herb extract of this plant is used as an increase in working capacity

The aim of the study. Preliminary study of the chemical composition of leaves of Chamaedorea elegans

Materials and methods. Raw leaves *Chamaedorea elegans* were harvested in June 2022 from cultivated specimens. Preliminary study of the chemical composition was performed using pharmacognostic methods of analysis (in vitro reactions, chromatography on paper and in a thin layer of sorbent).

Results and their discussion. Preliminary studies of the chemical composition of the leaves of *Chamaedorea elegans* showed the presence of free and bound carbohydrates and amino acids, phenolic compounds, including flavonoids, tanins and hydroxycinnamic acids.

Conclusions. Based on this, it is established optimal timing of harvesting the aboveground part of *Chamaedorea elegans*. The data obtained will be used in further study of *Chamaedorea elegans.* As promising source of raw materials for the creation of drugs for it basis.

The obtained results confirm the prospects for further pharmacognostic study of the raw materials of this plant.

Determination of the composition of sapons in biotransformed medicinal raw material of *Gynostemma pentaphyllum (Thunb.) Makino*

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Gynostema pentaphyllum is a traditional Chinese herb. Gypenosides are one of its main active ingredients, and their structure is a tetracyclic saponin of the Damaran type. Saponins of *G. pentaphyllum* reduce blood sugar and blood lipids, have antitumor, anti-inflammatory, antiviral and antifungal effects, increase immunity and protect the liver. Resources of *G. pentaphyllum* in China are very rich, proven sufficient resource potential as an imported raw material and the possibility of cultivation in the climatic conditions of Ukraine.

The aim of the study: the composition of gypenosides in fermented and ethanol extracts of *Gynostemae Herba*.

Material and methods of research. In our experiment, we used the herb G. pentafillum of different origins and different harvest dates. Each drug material was divided into two parts: one was extracted using a pectinase extraction process and the other with 70% ethanol. The components of the gypenosides and their content in each sample were determined using HPLC, and the differences in the components of the gypenosides in each sample were compared.

Research results. Although the specific content of gypenosides was not determined in this experiment, it was found by chromatogram that the components and content of gypenosides extracted from three