and carbon assimilation rates. This eucalypt species was introduced as an ornamental tree, but its rapid growth and adaptability to a variety of ecological conditions turned it into a widely planted species for industrial uses, mainly paper pulp, firewood and timber. The essential oil from *E. globulus* Labill. shows different degrees of antibacterial activity against 14 clinical strains of methicillin-resistant *Streptococcus aureus*.

As a result, we can say that Australia is home of *Eucalyptus*, but some species grow in Namibia and have industrial, economic and medical significance. Essential oils of *Eucalyptus* are widely used in treating many diseases mainly with bactericidal action.

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Phytochemical study of celery (*Apium graveolens* L.)

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The use of natural products in the prevention and treatment of diseases and reduction of the adverse reactions of drugs has increased substantially during the past decade. Therefore, it is promising to study the possibility of using food plants to create dietary supplements, functional foods and herbal drugs. In this regard, our attention has attracted Celery, *Apium graveolens* L. is a plant from the family of *Apiaceae* that has been used as food and as medicine.

The wild plants were used for medicinal purposes for hundreds of years before celery was cultivated as a food plant. The wild celery plants were not considered fit for consumption. During domestication, selection altered this heritable characteristic and reduced the bitter and strong smell of the wild plant.

Celery can be classified as an aromatic vegetable because it is mainly grown as a fresh herb, i.e. for the leaves and petioles. Celery is primarily used as a salad crop, a spice, and for the cooking soups, stews, and sauces. They are used for this purpose in whole or powdered form, or in the form of seed oil or oleoresins.

Three morphotypes of celery have been distinguished, based on the part of the plant used (Orton, 1984). These are *Apium graveolens var. dulce* (celery; blanched celery, stalk celery), *Apium*

graveolens var. rapaceum (edible rooted celery, celery root or celeriac) and *Apium graveolens var. secalinum* (leaf celery or smallage type) [2].

The chemical composition of celery differs considerably depending upon the plant part (leaves, stalks or seeds), geographical region of production, stage of harvesting and type and method of production of essential oil. All the organs consist of essential oil, organic acids , coumarins, flavonoids and pectins. The main components of fruits volatile oil are :lemonene selinene, santalol, sedanolide.

Literature data revealed that *A. graveolens* have many pharmacological activity as antifungal and antimicrobial, antihypertensive and hypolipidemic, diuretic, hepatoprotective, antioxidant, anticancer, antidiabetic, anti-inflammatory, analgesic, antiulcer, anti-spasmolytic, anti-infertility, antiplatelet, hypocholesterolemic, cardiotonic [1, 2].

We carried out determination of phenolic compounds in *Apium graveolens var. rapaceum* (edible rooted celery) leaves, petioles and roots, collected in September 2017. Flavanoids and hydroxycinamic acids were found in ethanol extract of all samples by TLC method using solvent system ethyl acetate-water-acetic acid (30:10:10).

In our further study, we will conduct a comparative phytochemical analysis of the biologically active compounds of various celery organs and their effect on the kidney function and the uric acid exchange.

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Study of the antioxidant properties of some medicinal plants in experimental gingivitis

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Introduction. According to WHO, periodontal disease is widespread among the population of the entire globe. The structure of periodontal diseases is dominated by inflammatory – gingivitis, periodontitis. Thus, the high prevalence of inflammatory periodontal diseases, significant changes in the dentofacial system of the diseased make this problem social, generally medical [2].

Strengthening of peroxidation processes play a significant role in the pathogenesis of many human diseases, including inflammatory lesions of periodontal tissues. In recent years, antioxidants have been increasingly used to stabilize cell membranes and improve reparative processes [6].

It should be noted that gingivitis in children is an independent nosological unit for which restitution of the structure and function of periodontal tissues is possible. Violation of the integrity and functioning of the oral epithelium may be a consequence of a change in the rate of cell renewal,