

THE RESEARCH OF FRUITS OF LYCIUM ORDINARY – GOJI BERRIES

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Goji berries have received the great popularity in many countries of the world and they are widely advertised. Meanwhile, it is the fruit of a shrub in the nightshade family (Solanaceae) – *Lycium ordinary* or box-thorn (*Lycium barbarum* L.) – is originally from Central China which can be found almost all over Ukraine on abandoned lots, roadsides as hedges. Edible only dried fruits of this plant, fresh ones are poisonous. According to the information resources the dried fruits are red-orange, seeded, rich in vitamins of group B, C, E, contain 21 microelement including anticancer germanium, 18 aminoacids, 8 of which the human body doesn't produce, 4 irreplaceable polysaccharides which do not exist in products of food. The experience of east medicine which practices application of berries of - goji throughout many centuries speaks about their antioxidant, rejuvenating and immunomodulatory action, about ability to normalize pressure and the content of sugar, and lower the level of cholesterol. Many types of pharmacological activity are exposed to clinical trials of foreign scientists.

Considering prospects of a new type of medicinal raw materials with an available source of raw materials and fakes, which you can find in the market and namely berries of a goji, which are replaced by the fruits of a barberry, cranberries, carrying out the anatomic studying of fruits of *Lycium barbarum* and establishment of anatomic signs of their structure was the purpose of our work.

Cell of epidermis from a surface from rounded to extended with unevenly reinforced covers, are covered with a thick layer of longitudinal folded cuticle which has an appearance of the longitudinal long and short straight lines and curved folds located along a fruit. Cell of pulp are rounded, thin-walled with numerous spherical red chromoplasts. The seed rind consists of the epidermis and the mechanical layer. From the surface, the cells of mechanical tissue are parenchyma, with large blades, their covers are very thickened, winding, layered. The cells are rectangular, with slightly thickened upper and radical covers on the cross section of the epidermis. The cells of the mechanical layer have significant thickenings in the shape of horseshoe.