PARMELIA PERLATA AS A PERSPECTIVE SOURCE FOR OBTAINING NEW DRUGS

Dagher A. K., Kyslychenko O. A., Lenchik L.V. The National University of Pharmacy, Kharkiv, Ukraine cnc@nuph.edu.ua

Parmelia prelata is dual organisms composed of a symbiotic relationship between an alga and a fungus. The fungus, usually an ascomycete, provides the plant its shape, and the alga provides the ability to photosynthesis. This successful combination is able to produce a more elaborate and durable organism than either partner alone. *Parmelia prelata* is able to colonize inhospitable areas such as bare rock. As pioneer plants, *Parmelia prelata* break down the rock surface and, eventually form soil conditions suitable for other plants. Only a few species of parmelia tolerate air polluted with sulphur dioxide so few survive in cities. *Parmelia prelata* is variable in shape, tubular, upright and branching, or flat and leaf-like or forming an amorphous greyish crust.

Parmelia prelata contain different compound like anthraquinone, hypericine, bianthrone, usnic acid, evernic acid, fumarprotocetraric acid, atranorin, chloroatranorin, protocetraric acid, 4-amino-3-hydroxy-6-methoxy-2-methylcyclohexa-1,3-diene-1-carbaldehyde, 5-amino-2-ethoxy-4-methylcyclo-1,3-diene-1carboxylic acid. All these compounds play a role in the treatment of many diseases, because of their effects - antioxidant, antiviral, antibacterial, anti diabetic, antihyperlipidimic, cytotoxic activity.

Different experiment are applied on parmelia specially on *Parmelia perlata*, and these experiences show positive result of the effect but till now the using of this plant isn't under any Pharmacopeia supervision.

Parmelia prelata thalli were taken as plant raw material for our study. The following values needed for working out the quality control procedures were determined: loss of weight during drying of plant raw material, content of total ash and ash non-soluble in 10% hydrochloric acid.

73