

Abstract

The hop plant (*Humulus lupulus*) is used not only in brewing but also in phytopharmacology and phytotherapy. Among the isolated or chemically produced substances used for healing are xanthohumol, 8-prenylnaringine and α and β -bitter acids. Nowadays, a lot of attention is paid to their effect on humans – especially to their anticancer activity. But there is a lack of information about the importance of these substances for the hop plant itself. Most of the plant secondary metabolites originally serve for protection of the plant against pathogens and herbivores. The selected metabolites are not an exception. The purpose of this work was to summarize the published data about the biological importance of selected hop secondary metabolites and the effects they have on other organisms than plants, with an emphasis on humans.