## Metabolites of Polygonum L. Plants Having Antitumor Properties

Authors : Dmitriy Yu. Korulkin, Raissa A. Muzychkina

**Abstract :** The article represents the results of research of antitumor activity of different structural types of plant flavonoids extracted by authors from Polygonum L. plants in commercial reserves at the territory of the Republic of Kazakhstan. For the first time ever the results comparative research of antitumor activity of plant flavonoids of different structural groups and their synthetic derivatives have been represented. The results of determination of toxicity of flavonoids in single parenteral infusion conditions have been represented. Experimental substantiation of possible mechanisms of antiproliferative and cytotoxic action of flavonoids has been suggested. The perspectives of usage of plant flavonoids as medications and creation of effective dosage forms of antitumor medicines on their basis have been substantiated.

Keywords : antitumor activity, cytotoxicity, flavonoids, Polygonum L., secondary metabolites

**Conference Title :** ICLSBE 2015 : International Conference on Life Science and Biological Engineering **Conference Location :** Prague, Czechia

Conference Dates : July 09-10, 2015