

## Popular scientific project description for project funded by Ekthagastiftelsen

Popular scientific project description is to be submitted within 2 months of project grant.

Application number:	2021-67
Project title:	“Studies of the variability of biologically active and anticancer compounds in organically and biodynamically grown and fermented fireweed leaves”
Receiver of grant (name, address):	Elvyra Jarienė, Vytautas Magnus University, Faculty of Agronomy, Institute of Agricultural and Food Science, Studentų str. 11, 53361 Kauno District, Lithuania.
Contact / project manager:	Elvyra Jarienė, elvyra.jariene@vdu.lt
Project start (yyyy-mm-dd): *	2022-02-01
Project end (yyyy-mm-dd): *	2024-01-31
By Ekthagastiftelsen granted sum:	1.320.000 SEK

Project description: (max 150 words)

The aim project is to investigate the influence of biodynamic (BD) growing technology and the parameters of solid-phase fermentation (SPF) on the variation of biologically active substances in leaves of fireweed. Field experiment will be conducted in 2022-2023 in organic farm. The plants and soil of the fireweed will be sprayed with BD preparations according to the methodologies used in European biodynamic farms. Antioxidant activity, content of polyphenols, oenothien B as well SPF different duration and the effect of fireweed extracts on proliferation of colorectal adenocarcinoma will be carry out. This is the first such type of scientific experiment that will analyzes the leaves of organically and biodynamically grown and fermented fireweed, and the variation of the biologically active substances contained therein, depending on the method of cultivation and fermentation. We support the idea that a person is very closely connected with the surrounding environment - each one is influenced.

\* Dates for project start and end should be the dates for which the grant is received (Not dates for total project if longer than period for which grant is received)