FLPP
FUNDAMENTĀLO UN LIETIŠĶO PĒTĪJUMU PROJEKTI

## Projekta Izp-2020/1-0422 rezultāti

# Divdīgļlapju dzimtu augi un zaļās tehnoloģijas kā perspektīva alternatīva pieeja tokotrienolu pieejamības uzlabošanai no nekonvencionāliem avotiem

*Oriģināli zinātniskie raksti, kas publicēti zinātniskos žurnālos, rakstu krājumos vai konferenču rakstu krājumos, kuri ir indeksēti datu bāzēs Web of Science Core Collection, SCOPUS vai ERIH PLUS*

1. Analytical scale supercritical fluid chromatography for the analysis of nine tocochromanols in 24 different cold-pressed plant oils: Method development, validation, and isolation of tocotrienols and plastochromanol-8. Journal of Food Composition and Analysis (Q1 in Food Science), 2022, 110, 104586, https://doi.org/10.1016/j.jfca.2022.104586

2. Free and esterified tocopherols, tocotrienols and other extractable and non-extractable tocochromanolrelated molecules: Compendium of knowledge, future perspectives and recommendations for chromatographic techniques, tools, and approaches used for tocochromanol determination. Molecules (Q1 in Analytical Chemistry), 2022, 27, 6560, https://doi.org/10.3390/molecules27196560

3. Seven underutilized species of the Fabaceae family with high potential for industrial application as alternative sources of oil and lipophilic bioactive compounds. Industrial Crops and Products (Q1 in Agronomy and Crop Science), 2022, 186, 115251, https://doi.org/10.1016/j.indcrop.2022.115251.

4. Crab apple (Malus spp.) seed tocopherol profile: Impact of genotype, species, purpose and rootstock. Agronomy (Q1 in Agronomy and Crop Science), 2022, 12, 2736, https://doi.org/10.3390/agronomy12112736

5. Evaluation of selected medicinal, timber and ornamental legume species' seed oils as sources of bioactive lipophilic compounds. Molecules (Q1 in Analytical Chemistry), 2023, 28, 3994, https://doi.org/10.3390/molecules28103994.

6. Free tocopherols and tocotrienols in 82 plant species' oil: Chemotaxonomic relation as demonstrated by PCA and HCA. Food Research International (Q1 in Food Science), 2023, 164, 112386, https://doi.org/10.1016/j.foodres.2022.112386.

7. Lipophilic profile of mature seeds of unconventional edible tree legumes. European Food Research and Technology (Q1 in Food Science), 2023, 249, 1543–1550, https://doi.org/10.1007/s00217-023-04234-9.

8. Tocopherols in cultivated apple Malus sp. seeds: Composition, variability and specificity. Plants (Q1 in Plant Science), 2023, 12, 1169, https://doi.org/10.3390/plants12051169

9. Cranberry (Vaccinium macrocarpon Aiton) seeds: An exceptional source of tocotrienols. Scientia Horticulturae (Q1 in Horticulture), 2024, 331, 113107, https://doi.org/10.1016/j.scienta.2024.113107

10. Evaluation of RPLC stationary phases for tocopherol and tocotrienol positional isomer separation: Method development and profiling. Talanta (Q1 in Analytical Chemistry), 2024, 277, 126360, https://doi.org/10.1016/j.talanta.2024.126360

11. Phytochemicals in recovered seed oils from by-products of common quince (Cydonia oblonga) and Japanese quince (Chaenomeles japonica). European Journal of Lipid Science and Technology (Q2 in Food Science), 2024, 126, 2300265, https://doi.org/10.1002/ejlt.202300265.

12. Supercritical fluid chromatography with fluorescence detection for tocochromanol profiling in oils and seed ethanol extracts: A comparative study with NPLC. Microchemical Journal (Q1 in Analytical Chemistry), 20024, 199, 110225, https://doi.org/10.1016/j.microc.2024.110225.