

Scientific publications

1. Górnáś, P., Miśina, I., Krasnova, I., Seglińa, D. (2016). *Tocopherol and tocotrienol contents in the sea buckthorn berry beverages in Baltic countries: Impact of the cultivar.* **Fruits**, 71, 1–7.
<http://link.springer.com/article/10.1007%2Fs11130-016-0538-5>
2. Górnáś, P., Rudzińska, M., Raczyk, M., Miśina, I., Seglińa, D. (2016). *Impact of the cultivar on the profile and concentration of lipophilic bioactive compounds in kernel oils recovered from sweet cherry (*Prunus avium L.*) by-products.* **Plant Foods for Human Nutrition**, 71, 158–164.
<http://link.springer.com/article/10.1007%2Fs11130-016-0539-4>
3. Mildner-Szkudlarz, S., Bajerska, J., Górnáś, P., Seglińa, D., Pilarska, A., Jesionowski, T. (2016). *Raspberry and cranberry pomace: its implications on physical properties and bioactive compounds stability during the muffins making process.* **Plant Foods for Human Nutrition**, 71, 165–173.
<http://link.springer.com/article/10.1007%2Fs11130-016-0539-4>
4. Górnáś, P., Rudzińska, M. (2016). *Seeds recovered from industry by-products of nine fruit species with a high potential utility as a source of unconventional oil for biodiesel, cosmetic and pharmaceutical sectors.* **Industrial Crops and Products**, 83, 329–338.
<http://www.sciencedirect.com/science/article/pii/S0926669016300218>
5. Górnáś, P., Rudzińska, M., Raczyk, M., Miśina, I., Soliven, A., Seglińa, D. (2016). *Composition of bioactive compounds in kernel oils recovered from sour cherry (*Prunus cerasus L.*) by-products: Impact of the cultivar on potential applications.* **Industrial Crops and Products**, 82, 44–50.
<http://www.sciencedirect.com/science/article/pii/S0926669015305999>
6. Górnáś, P., Rudzińska, M., Raczyk, M., Miśina, I., Soliven, A., Lācis, G., Seglińa, D. (2016). *Impact of the species and variety on the concentrations of minor lipophilic bioactive compounds in oils recovered from plum kernels.* **Journal of Agricultural and Food Chemistry**, 64, 898–905.
<http://pubs.acs.org/doi/abs/10.1021/acs.jafc.5b05330?journalCode=jafcau&>
7. Górnáś, P., Juhneviča-Radenkova, K., Radenkova, V., Miśina, I., Pugajeva, I., Soliven, A., Seglińa, D. (2016). *The impact of different baking conditions on the stability of the extractable polyphenols in muffins enriched by strawberry, sour cherry, raspberry or black currant pomace.* **LWT - Food Science and Technology**, 65, 946–953.
<http://www.sciencedirect.com/science/article/pii/S0023643815302000>
8. Górnáś, P., Rudzińska, M., Raczyk, M., Miśina, I., Soliven, A., Seglińa, D. (2016). *Chemical composition of seed oils recovered from different pear (*Pyrus communis L.*) cultivars.* **Journal of the American Oil Chemists' Society**, 93, 267–274.
<http://link.springer.com/article/10.1007%2Fs11746-015-2768-3>
9. Rudzińska, M., Górnáś, P., Raczyk, M., Soliven, A. (2016). *Sterols and squalene in apricot (*Prunus armeniaca L.*) kernel oils: The variety as a key factor.* **Natural Product Research**, DOI:10.1080/14786419.2015.1135146.
<http://www.tandfonline.com/doi/abs/10.1080/14786419.2015.1135146?journalCode=gnpl20>
10. Górnáś, P., Radenkova, V., Pugajeva, I., Soliven, A., Needs, P.W., Kroon, P.A. (2016): *Varied composition of tocochromanols in different types of bran: rye, wheat, oat, spelt, buckwheat, corn and rice.* **International Journal of Food Properties**, 19, 1757–1764.
<http://www.tandfonline.com/doi/abs/10.1080/10942912.2015.1107843>
11. Górnáś, P., Rudzińska, M., Raczyk, M., Soliven, A. (2016). *Lipophilic bioactive compounds in the oils recovered from cereal by-products.* **Journal of the Science of Food and Agriculture**, 96, 3256–3265.
<http://onlinelibrary.wiley.com/doi/10.1002/jsfa.7511/abstract>
12. Bajerska, J., Mildner-Szkudlarz, S., Górnáś, P., Seglińa, D. (2016). *The effects of muffins enriched with sour cherry pomace on acceptability, glycemic response, satiety and energy*

- intake: a randomized crossover trial.* **Journal of the Science of Food and Agriculture**, 96, 2486–2493.
<http://onlinelibrary.wiley.com/doi/10.1002/jsfa.7369/abstract;jsessionid=243B915DE0AD9E869AA00E9050FC72F2.f04t02>
13. Górnáš, P., Šnē, E., Siger, A., Segliņa, D. (2016). *Sea buckthorn (Hippophae rhamnoides L.) vegetative parts as an unconventional source of lipophilic antioxidants.* **Saudi Journal of Biological Sciences**, 23, 512–516.
<http://www.sciencedirect.com/science/article/pii/S1319562X15001308>
14. Górnáš, P., Dwiecki, K., Siger, A., Tomaszewska-Gras, J., Michalak, M., Polewski, K. (2016). *Contribution of phenolic acids isolated from green and roasted boiled-type coffee brews to total coffee antioxidant capacity.* **European Food Research and Technology**, 242, 641–653.
<http://link.springer.com/article/10.1007/s00217-015-2572-1>
15. Neunert, G., Górnáš, P., Dwiecki, K., Siger, A., Polewski, K. (2015). *Synergistic and antagonistic effects between alpha-tocopherol and phenolic acids in liposome system: spectroscopic study.* **European Food Research and Technology**, 241, 749–757.
<http://link.springer.com/article/10.1007/s00217-015-2500-4>
16. Górnáš, P., Mišina, I., Olšteine, A., Krasnova, I., Pugajeva, I., Lācis, G., Siger, A., Michalak, M., Soliven, A., Segliņa D. (2015). *Phenolic compounds in different fruit parts of crab apple: Dihydrochalcones as promising quality markers of industrial apple pomace by-products.* **Industrial Crops and Products**, 74, 607–612.
<http://www.sciencedirect.com/science/article/pii/S0926669015301114>
17. Górnáš, P., Mišina, I., Grāvīte, I., Lācis, G., Radenkova, V., Olšteine, A., Segliņa, D., Kaufmane, E., Rubauskis, E. (2015). *Composition of tocochromanols in the kernels recovered from plum pits: the impact of the varieties and species on the potential utility value for industrial application.* **European Food Research and Technology**, 241, 513–520.
<http://link.springer.com/article/10.1007/s00217-015-2480-4>
18. Górnáš, P., Siger, A. (2015). *Simplified sample preparation and rapid detection by RP-HPLC/FLD of tocopherols and tocotrienols in margarines: Preliminary screening of plant fats – potential quality markers.* **European Journal of Lipid Science and Technology**, 117, 1589–1597.
<http://onlinelibrary.wiley.com/doi/10.1002/ejlt.201400435/abstract>
19. Górnáš, P., Mišina, I., Lāce, B., Lācis, G., Segliņa, D. (2015). *Tocochromanols composition in seeds recovered from different pear cultivars: RP-HPLC/FLD and RP-UPLC-ESI/MSⁿ study.* **LWT - Food Science and Technology**, 62, 104–107.
<http://www.sciencedirect.com/science/article/pii/S0023643815000419>
20. Górnáš, P., Mišina, I., Grāvīte, I., Soliven, A., Kaufmane, E., Segliņa, D. (2015). *Tocochromanols composition in kernels recovered from different apricot varieties: RP-HPLC/FLD and RP-UPLC-ESI/MSⁿ study.* **Natural Product Research**, 29, 1222–1227.
<http://www.tandfonline.com/doi/abs/10.1080/14786419.2014.997727?journalCode=gnpl20>
21. Makarova, E., Górnáš, P., Konrade, I., Tirzite, D., Cirule, H., Gulbe, A., Pugajeva, I., Segliņa, D., Dambrova, M. (2015). *Acute anti-hyperglycaemic effects of an unripe apple preparation containing phlorizin in healthy volunteers: a preliminary study.* **Journal of the Science of Food and Agriculture**, 95, 560–568.
<http://onlinelibrary.wiley.com/doi/10.1002/jsfa.6779/abstract>
22. Górnáš, P., Mišina, I., Ruisa, S., Rubauskis, E., Lācis, G., Segliņa, D. (2015). *Composition of tocochromanols in kernels recovered from different sweet cherry (*Prunus avium* L.) cultivars: RP-HPLC/FLD and RP-UPLC-ESI/MSⁿ study.* **European Food Research and Technology**, 240, 663–667.
<http://link.springer.com/article/10.1007%2Fs00217-014-2382-x>

23. Górnáš, P. (2015). Unique variability of tocopherol composition in various seed oils recovered from by-products of apple industry: Rapid and simple determination of all four homologues (α , β , γ and δ) by RP-HPLC/FLD. **Food Chemistry**, 172, 129–134.
<http://www.sciencedirect.com/science/article/pii/S0308814614014186>
24. Górnáš, P., Soliven A., Seglina, D. (2015). Seed oils recovered from industrial fruit by-products are a rich source of tocopherols and tocotrienols: Rapid separation of $\alpha/\beta/\gamma/\delta$ homologues by RP-HPLC/FLD. **European Journal of Lipid Science and Technology**, 117, 773–777.
<http://onlinelibrary.wiley.com/doi/10.1002/ejlt.201400566/abstract>
25. Górnáš, P., Pugajeva, I., Segliņa, D. (2014). Seeds recovered from by-products of selected fruit processing as a rich source of tocochromanols: RP-HPLC/FLD and RP-UPLC-ESI/MSⁿ study. **European Food Research and Technology**, 239, 519–524.
<http://link.springer.com/article/10.1007%2Fs00217-014-2247-3>
26. Górnáš, P., Siger, A., Polewski, K., Pugajeva, I., Waśkiewicz, A. (2014). Factors affecting tocopherol contents in coffee brews: NP-HPLC/FLD, RP-UPLC-ESI/MSⁿ and spectroscopic study. **European Food Research and Technology**, 238, 259–264.
<http://link.springer.com/article/10.1007%2Fs00217-013-2103-x>
27. Górnáš, P., Segliņa, D., Lacis, G., Pugajeva, I. (2014). Dessert and crab apple seeds as a promising and rich source of all four homologues of tocopherol (α , β , γ and δ). **LWT - Food Science and Technology**, 59, 211–214.
<http://www.sciencedirect.com/science/article/pii/S0023643814002758>
28. Górnáš, P., Siger, A., Pugajeva, I., Segliņa, D. (2014). Sesamin and sesamolin as unexpected contaminants in various cold-pressed plant oils: NP-HPLC/FLD/DAD and RP-UPLC-ESI/MSⁿ study. **Food Additives and Contaminants - Part A**, 31, 567–573.
<http://www.tandfonline.com/doi/abs/10.1080/19440049.2014.884285>
29. Górnáš, P., Siger, A., Pugajeva, I., Czubinski, J., Waśkiewicz, A., Polewski, K. (2014). New insights regarding tocopherols in Arabica and Robusta species coffee beans: RP-UPLC-ESI/MSⁿ and NP-HPLC/FLD study. **Journal of Food Composition and Analysis**, 36, 117–123.
<http://www.sciencedirect.com/science/article/pii/S0889157514001446>
30. Górnáš, P., Siger, A., Czubinski, J., Dwiecki, K., Segliņa, D., Nogala-Kalucka, M. (2014). An alternative RP-HPLC method for the separation and determination of tocopherol and tocotrienol homologues as butter authenticity markers: A comparative study between two European countries. **European Journal of Lipid Science and Technology**, 116, 895–903.
<http://onlinelibrary.wiley.com/doi/10.1002/ejlt.201300319/abstract>
31. Górnáš, P., Šne, E., Siger, A., Segliņa, D. (2014). Sea buckthorn (*Hippophae rhamnoides L.*) leaves as valuable source of lipophilic antioxidants: The effect of harvest time, sex, drying and extraction methods. **Industrial Crops and Products**, 60, 1–7.
<http://www.sciencedirect.com/science/article/pii/S0926669014003331>
32. Górnáš, P., Rudzińska, M., Segliņa, D. (2014). Lipophilic composition of eleven apple seed oils: A promising source of unconventional oil from industry by-products. **Industrial Crops and Products**, 60, 86–91.
<http://www.sciencedirect.com/science/article/pii/S0926669014003367>
33. Górnáš, P., Siger, A., Juhneviča1, K., Lācis, G., Šnē, E., Segliņa, D. (2014). Cold-pressed Japanese quince (*Chaenomeles japonica* (Thunb.) Lindl. ex Spach) seed oil as a rich source of α -tocopherol, carotenoids and phenolics: A comparison of the composition and antioxidant activity with nine other plant oils. **European Journal of Lipid Science and Technology**, 116, 563–570.
<http://onlinelibrary.wiley.com/doi/10.1002/ejlt.201300425/abstract>
34. Górnáš, P., Siger, A., Segliņa, D. (2013). Physicochemical characteristics of the cold-pressed Japanese quince seed oil: New promising unconventional bio-oil from by-

- products for the pharmaceutical and cosmetic industry.* **Industrial Crops and Products**, 48, 178–182.
<http://www.sciencedirect.com/science/article/pii/S0926669013001787>
35. Nogala-Kałucka, M., Dwiecki, K., Siger, A., **Górnaś, P.**, Polewski, K., Ciosek, S. (2013). *Antioxidant synergism and antagonism between tocotrienols, quercetin and rutin in model system.* **Acta Alimentaria**, 42, 360–370.
<http://www.akademiai.com/doi/abs/10.1556/AAlim.2012.0009?journalCode=066>
36. **Górnaś, P.**, Neunert, G., Baczyński, K., Polewski, K. (2009). *Beta-cyclodextrin complexes with chlorogenic and caffeic acids from coffee brew: Spectroscopic, thermodynamic and molecular modelling study.* **Food Chemistry**, 114, 190–196.
<http://www.sciencedirect.com/science/article/pii/S0308814608011114>
37. Dwiecki, K., **Górnaś, P.**, Jackowiak, H., Nogala-Kałucka, M., Polewski, K. (2007). *The effect of D-alpha-tocopherol on the solubilization of dipalmitoylphosphatidylcholine membrane by anionic detergent sodium dodecyl sulfate.* **Journal of Food Lipids**, 14, 50–61.
<http://onlinelibrary.wiley.com/doi/10.1111/j.1745-4522.2006.00070.x/abstract>
38. Dwiecki, K., **Górnaś, P.**, Wilk, A., Nogala-Kałucka, M., Polewski, K. (2007). *Spectroscopic studies of D-alpha-tocopherol concentration - induced transformation in egg phosphatidylcholine vesicles.* **Cellular and Molecular Biology Letters**, 12, 51–69.
<http://link.springer.com/article/10.2478%2Fs11658-006-0059-6>
39. **Górnaś, P.**, Siger, A., Dwiecki, K., Nogala-Kałucka, M., Polewski, K. (2006). *Determination of tocopherols content in sunflower oil during oxidation using fluorescence technique.* **Acta Scientiarum Polonorum**, 5, 157–164.
http://www.food.actapol.net/pub/15_2_2006.pdf
40. **Górnaś, P.**, Dwiecki, K., Nogala-Kałucka, M., Polewski, K. (2006). *Propyl gallate-beta cyclodextrin complexes. spectroscopic and thermodynamic studies.* **Acta Agrophysica**, 7, 73–80.
http://www.old.acta-agrophysica.org/artykuly/acta_agrophysica/ActaAgr_132_2006_7_1_73.pdf
41. Dwiecki, K., **Górnaś, P.**, Nogala-Kałucka, M., Polewski, K. (2006). *Spectral properties of propyl gallate in organic solvents and in heterogeneous environment.* **Acta Agrophysica**, 7, 39–48.
http://www.old.acta-agrophysica.org/artykuly/acta_agrophysica/ActaAgr_132_2006_7_1_39.pdf
42. Dwiecki, K., **Górnaś, P.**, Nogala-Kałucka, M., Witkowski, S., Polewski, K. (2005). *The impact of optical isomers of α-tocopherol on the permeability of lipid membrane.* **Food. Science. Technology. Quality.**, 2, 30–40.
http://www.pttz.org/zyw/wyd/czas/2005.%202%2843%29%20Supl/03_Dwiecki.pdf
43. **Górnaś, P.**, Siger, A., Nogala-Kałucka, M., Polewski, K. (2005). *The comparative analysis of oxidative changes and effectiveness of quenching free radicals while storing cold pressed vegetable oils and their refined equivalents.* **Food. Science. Technology. Quality.**, 2, 41–51.
http://www.pttz.org/zyw/wyd/czas/2005.%202%2843%29%20Supl/04_Gornas.pdf
44. Dwiecki, K., Siger, A., **Górnaś, P.**, Nogala-Kałucka, M., Polewski, K. (2004). *Interactions between the lipid membrane and D-α-tocopherol depending on its concentration.* **Food. Science. Technology. Quality.**, 3, 37–44.
http://www.pttz.org/zyw/wyd/czas/2004.%203%2840%29%20Supl/04_Dwiecki.pdf