Scientific publications

1. Kobus-Cisowska, J., Szymanowska, D., Szczepaniak, O. M., Gramza-Michałowska, A., Kmiecik, D., Kulczyński, B., Szulc, P., **Górnaś, P.** (2019). *Composition of polyphenols of asparagus spears (Asparagus officinalis) and their antioxidant potential*. **Ciência Rural**, 49, e20180863. http://www.scielo.br/scielo.php?pid=S0103-84782019000400751&script=sci_arttext
2. **Górnaś, P.**, Rudzińska, M., Grygier, A., Ying, Q., Mišina, I., Urvaka, E., Rungis, D. (2019). *Sustainable valorization of oak acorns as a potential source of oil rich in bioactive compounds*. **Process Safety and Environmental Protection**, 128, 244–250. https://www.sciencedirect.com/science/article/pii/S0957582019301156
3. Urvaka, E., Mišina, I., Soliven, A., **Górnaś, P.** (2019). *Rapid separation of all four tocopherol homologues in selected fruit seeds via supercritical fluid chromatography using a solid-core C18 column*. **Journal of Chemistry**, 5307340. DOI : 10.1155/2019/5307340. https://www.hindawi.com/journals/jchem/2019/5307340/abs/
4. **Górnaś, P.**, Czubinski, J., Rudzińska, M., Grygier, A., Ying, Q., Chakradhari, S., Sahu, P. K., Mišina, I., Urvaka, E., Patel K. S. (2019). *Selected uncommon legumes as a source of essential fatty acids, tocopherols, tocotrienols, sterols, carotenoids, and squalene*. **Plant Foods for Human Nutrition**, 74, 91–98. https://link.springer.com/article/10.1007/s11130-018-0706-x
5. **Górnaś, P.**, Picron, J. F. Perkons, I., Mišina, I., Rudzińska, M. Sobieszczańska, N., Chakradhari, S., Patel, K. S. (2019). *Profiling of the beneficial and potentially harmful components of Trichodesma indicum seed and seed oil obtained by ultrasound-assisted extraction*. **Journal of the American Oil Chemists' Society**, 96, 249–259. https://aocs.onlinelibrary.wiley.com/doi/abs/10.1002/aocs.12181
6. **Górnaś, P.**, Rudzińska, M., Grygier, A., Sahu, P. K., Patel K. S. (2018). *Tephrosia apollinea seed: a new rich source of essential polyunsaturated fatty acids, tocopherols, sterols, and squalene*. **Natural Product Research**. DOI: 10.1080/14786419.2018.1525373 https://www.tandfonline.com/doi/abs/10.1080/14786419.2018.1525373
7. **Górnaś, P.**, Siger, A., Rudzińska, M., Grygier, A., Marszałkiewicz, S., Ying, Q., Sobieszczańska, N., Segliņa, D. (2019). *Impact of the Extraction Technique and Genotype on the Oil Yield and Composition of Lipophilic Compounds in the Oil Recovered from Japanese Quince (Chaenomeles japonica) Seeds*. **European Journal of Lipid Science and Technology**, 121, 1800262. DOI: 10.1002/ejlt.201800262 https://onlinelibrary.wiley.com/doi/full/10.1002/ejlt.201800262
8. **Górnaś, P.**, Rudzińska, M., Grygier, A., Lācis, G. (2019). *Diversity of oil yield, fatty acids, tocopherols, tocotrienols, and sterols in the seeds of 19 interspecific grapes crosses*. **Journal of the Science of Food and Agriculture**, 99, 2078–2087. https://onlinelibrary.wiley.com/doi/full/10.1002/jsfa.9400
9. Czubinski, J., Wroblewska, K., Czyzniejewski, M., **Górnaś, P.**, Kachlicki, P., Siger, A. (2019). *Bioaccessibility of defatted lupin seed phenolic compounds in a standardized static in vitro digestion system*. **Food Research International**, 116, 1126–1134. https://www.sciencedirect.com/science/article/pii/S0963996918307804
10. **Górnaś, P.** (2019). *Oak Quercus rubra L. and Quercus robur L. acorns as an unconventional source of gamma- and beta-tocopherol.* **European Food Research and Technology**, 245, 257–261. https://link.springer.com/article/10.1007/s00217-018-3150-0
11. Pugajeva, I., Perkons, I., **Górnaś, P.** (2018). Identification and determination of stilbenes by Q-TOF in grape skins, seeds, juice and stems. Journal of Food Composition and Analysis, 74, 44–52.

https://www.sciencedirect.com/science/article/pii/S088915751830855X
12. Radenkovs, V., Juhnevica-Radenkova, K., **Górnaś, P.**, Seglina, D. (2018). *Non-waste technology through the enzymatic hydrolysis of agro-industrial by-products.* **Trends in Food Science & Technology**, 77, 64–76. https://www.sciencedirect.com/science/article/pii/S0924224417301255
13. **Górnaś, P.**, Ramos, M.J., Montano, M.C., Rudzińska, M., Radziejewska-Kubzdela, E., Grygier, A. (2018). *Fruit pits recovered from 14 genotypes of apricot (Prunus armeniaca L.) as potential biodiesel feedstock.* **European Journal of Lipid Science and Technology**, 120, 1700147. https://onlinelibrary.wiley.com/doi/abs/10.1002/ejlt.201700147
14. Bajerska, J., Chmurzynska, A., Mildner-Szkudlarz, S., Drzymała-Czyż, S., **Górnaś, P.**, Waśkiewicz, A., Muzsik, A., Podgórski, T., Nowaczyk, P., Woźniewicz, M. (2018). *Effects of unextruded and extruded cranberry pomace on selected metabolic parameters in high-fat diet fed rats.* **Acta Scientiarum Polonorum Technologia Alimentaria**, 17, 91–100. https://www.food.actapol.net/pub/10_1_2018.pdf
15. **Górnaś, P.**, Radziejewska-Kubzdela, E., Mišina, I., Biegańska-Marecik, R., Grygier, A., Rudzińska, M. (2017). *Tocopherols, tocotrienols and carotenoids in kernel oils recovered from 15 apricot (Prunus armeniaca L.) genotypes.* **Journal of the American Oil Chemists' Society**, 94, 693–699. https://link.springer.com/article/10.1007/s11746-017-2978-y
16. **Górnaś, P.**, Rudzińska, M., Soliven, A. (2017). *Industrial by-products of plum Prunus domestica L. and Prunuscerasifera Ehrh. as potential biodiesel feedstock: Impact of variety.* **Industrial Crops and Products**, 100, 77–84. http://www.sciencedirect.com/science/article/pii/S0926669017301048
17. Siger, A., Józefiak, M., **Górnaś, P.** (2017). *Cold-pressed and hot-pressed rapeseed oil: The effects of roasting and seed moisture on the antioxidant activity, canolol, and tocopherol level.* **Acta Scientiarum Polonorum Technologia Alimentaria**, 16, 69–81. http://www.food.actapol.net/volume16/issue1/abstract-7.html
18. Rudzińska, M., **Górnaś, P.**, Raczyk, M., Soliven, A. (2017). *Sterols and squalene in apricot (Prunus armeniaca L.) kernel oils: The variety as a key factor.* **Natural Product Research**, 31, 84–88. http://www.tandfonline.com/doi/abs/10.1080/14786419.2015.1135146
19. **Górnaś, P.**, Mišina, I., Krasnova, I., Segliņa, D. (2016). *Tocopherol and tocotrienol contents in the sea buckthorn berry beverages in Baltic countries: Impact of the cultivar.* **Fruits**, 71, 399–405. http://www.fruits-journal.org/articles/fruits/abs/2016/06/fruits150111/fruits150111.html
20. **Górnaś, P.**, Rudzińska, M., Raczyk, M., Mišina, I., Segliņa, 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%2Fs11130-016-0538-5
21. Mildner-Szkudlarz, S., Bajerska, J., **Górnaś, P.**, Segliņa, 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
22. **Górnaś, 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
23. **Górnaś, P.**, Rudzińska, M., Raczyk, M., Mišina, I., Soliven, A., Segliņa, 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

24. **Górnaś, P.**, Rudzińska, M., Raczyk, M., Mišina, I., Soliven, A., Lācis, G., Segliņa, 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&
25. **Górnaś, P.**, Juhņeviča-Radenkova, K., Radenkovs, V., Mišina, I., Pugajeva, I., Soliven, A. Segliņa, 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
26. **Górnaś, P.**, Rudzińska, M., Raczyk, M., Mišina, I., Soliven, A., Segliņa, 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
27. **Górnaś, P.**, Radenkovs, 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
28. **Górnaś, 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
29. Bajerska, J., Mildner-Szkudlarz, S., **Górnaś, P.**, Seglina, 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
30. **Górnaś, 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
31. **Górnaś, 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
32. Neunert, G., **Górnaś, 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
33. **Górnaś, 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
34. **Górnaś, P.**, Mišina, I., Grāvīte, I., Lācis, G., Radenkovs, 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

35. **Górnaś, 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
36. **Górnaś, P.**, Mišina, I., Lāce, B., Lācis, G., Seglina, D. (2015). *Tocochromanols composition in seeds recovered from different pear cultivars: RP-HPLC/FLD and RP-UPLC-ESI/MS^n study*. **LWT - Food Science and Technology**, 62, 104–107.
http://www.sciencedirect.com/science/article/pii/S0023643815000419
37. **Górnaś, 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/MS^n study*. **Natural Product Research**, 29, 1222–1227.
http://www.tandfonline.com/doi/abs/10.1080/14786419.2014.997727?journalCode=gnpl20
38. Makarova, E., **Górnaś, P.**, Konrade, I., Tirzite, D., Cirule, H., Gulbe, A., Pugajeva, I., Seglina, 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
39. **Górnaś, 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/MS^n study*. **European Food Research and Technology**, 240, 663–667.
http://link.springer.com/article/10.1007%2Fs00217-014-2382-x
40. **Górnaś, 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
41. **Górnaś, 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 α/β/γ/δ 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
42. **Górnaś, 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/MS^n study*. **European Food Research and Technology**, 239, 519–524.
http://link.springer.com/article/10.1007%2Fs00217-014-2247-3
43. **Górnaś, P.**, Siger, A., Polewski, K., Pugajeva, I., Waśkiewicz, A. (2014). *Factors affecting tocopherol contents in coffee brews: NP-HPLC/FLD, RP-UPLC-ESI/MS^n and spectroscopic study*. **European Food Research and Technology**, 238, 259–264.
http://link.springer.com/article/10.1007%2Fs00217-013-2103-x
44. **Górnaś, 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
45. **Górnaś, 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/MS^n study*. **Food Additives and Contaminants - Part A**, 31, 567–573.

http://www.tandfonline.com/doi/abs/10.1080/19440049.2014.884285
46. **Górnaś, 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/MS^n and NP-HPLC/FLD study*. **Journal of Food Composition and Analysis**, 36, 117–123.
http://www.sciencedirect.com/science/article/pii/S0889157514001446
47. **Górnaś, 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
48. **Górnaś, 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
49. **Górnaś, 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
50. **Górnaś, P.**, Siger, A., Juhņeviča1, 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
51. **Górnaś, 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
52. 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
53. **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
54. 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
55. 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
56. **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

57. **Górnaś, P.**, Dwiecki, K., Nogala-Kałucka, M., Polewski, K. (2006). *Propyl gallate-betacyclodextrin 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
58. 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
59. 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
60. **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
61. 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