



## Publication list for Post-Harvest and Agro-Processing Technologies Division

*ARC Infruitec-Nietvoorbij*

Updated: 28 March 2022

**2022**

### Peer-reviewed articles:

1. **Human, C.\***, **De Beer, D.**, **Joubert, E.**, 2022. Effect of electrospraying conditions on the properties of aspalathin-Eudragit S100 nanoparticles and assessment of orogastrointestinal stability and intestinal permeability. *Food Frontiers*. <https://doi.org/10.1002/fft2.131>
2. **Jolly, N.\***, Mehlomakulu, N.N., Nortje, S., Beukes, L., **Hoff, J.**, Booyse M., 3, Erten, H., 2022. Non-*Saccharomyces* yeast for lowering wine alcohol levels: partial aeration versus standard conditions. *FEMS Yeast Research* 22. <https://doi.org/10.1093/femsyr/foac002>
3. Malyjurek, Z., **De Beer, D.**, Van Schoor, H., Colling, J., **Joubert, E.**, Walczak, B.\*, 2022. Class-modelling of overlapping classes. A two-step authentication approach. *Analytica Chimica Acta*, 1191, 339284. <https://doi.org/10.1016/j.aca.2021.339284>
4. Masike, K., De Villiers, A., **De Beer, D.**, **Joubert, E.**, Stander, M.A.\*, 2022. Application of direct injection-ion mobility spectrometry-mass spectrometry (DI-IMS-MS) for the analysis of honeybush and rooibos tea samples. *Journal of Food Composition and Analysis*, 106, 104308. <https://doi.org/10.1016/j.jfca.2021.104308>
5. Miller, N., Petrus, A., Moelich, E.I., Muller, M., **De Beer, D.**, Van der Rijst, M., Joubert, E.\*, 2022. Valorisation of ultrafiltration by-product of honeybush (*Cyclopia genistoides*) extract – application of heat treatment for aroma and flavour development. *Journal of the Science of Food and Agriculture*, 102, 1047-1055. <https://doi.org/10.1002/jsfa.11440>
6. Miller, N\*, **Joubert E.**, 2022. Critical assessment of in vitro screening of  $\alpha$ -glucosidase inhibitors from plants with acarbose as reference standard. *Planta Medica*. <https://doi.org/10.1055/a-1557-7379>

# 2021

## Peer-reviewed articles:

1. Alexander, L., Moelich, E.I., **De Beer, D.\***, Muller, M., Walczak, B., **Joubert, E.**, 2021. High-temperature oxidation reduces the bitterness of honeybush infusions depending on changes in phenolic composition. *LWT - Food Science and Technology*, 139, 110608. <https://doi.org/10.1016/j.lwt.2020.110608>
2. Dalicuba\*, M., Nel, A.P., **Van Jaarsveld, F.P.**, 2021. Ascorbic acid derivatives in Sauvignon blanc cultivar (*Vitis vinifera* L.) during berry development in Wellington and Elgin regions. *South African Journal for Enology and Viticulture*, 42 (2), 184-192. <https://doi.org/10.21548/42-2-4394>
3. **De Beer, D.\***, Du Preez, B.V.P., **Joubert, E.**, 2021. Development of HPLC method for quantification of phenolic compounds in *Cyclopia intermedia* (honeybush) herbal tea infusions. *Journal of Food Composition and Analysis*, 104, 104154. <https://doi.org/10.1016/j.jfca.2021.104154>
4. **Human, C.**, Danton, O., **De Beer, D.**, Maruyama, T., Alexander, L., Hamburger, M., **Joubert, E.\***, 2021. Identification of a novel di-C-glycosyl dihydrochalcone and its stability in a ready-to-drink beverage formulation with *Cyclopia subternata* extract as functional ingredient during thermal processing. *Food Chemistry*, 351, 129273. <https://doi.org/10.1016/j.foodchem.2021.129273>
5. **Human, C.**, **De Beer, D.\***, Muller, M., Van der Rijst, M., Aucamp, M., **Joubert, E.**, 2021. Shelf-life stability of ready-to-use green rooibos iced tea powder – Assessment of physical, chemical and sensory properties. *Molecules*, 26, 5260. <https://doi.org/10.3390/molecules26175260>
6. **Jolly, N.P.\***, Gerber, P., **Minnaar, P.**, **Booyse, M.** 2021. Bottle Fermented Sparkling Wine: Cork or Crown Closures during the Second Fermentation? *S. Afr. J. Enol. Vitic.* 42, 136- 153. <https://doi.org/10.21548/42-2-4522>
7. Małjurek, Z., Zawisza, B., **De Beer, D.**, **Joubert, E.**, Walczak, B.\*, 2021. Authentication of honeybush and rooibos herbal teas based on their elemental composition. *Food Control*, 123, 107757. <https://doi.org/10.1016/j.foodcont.2020.107757>
8. **Matrose, N.A.**, Obikeze, K., **Belay, Z.A.**, **Caleb, O.J.\*** 2021. Impact of spatial variation and extraction solvents on bioactive compounds, secondary metabolites and antifungal efficacy of South African Impepho [*Helichrysum odoratissimum* (L.) Sweet]. *Food Bioscience*, 42, 101139. <https://doi.org/10.1016/j.fbio.2021.101139>
9. **Matrose, N.A.**, Obikeze, K., **Belay, Z.A.**, **Caleb, O.J.\*** 2021. Plant extracts as alternative sources for post-harvest management of fungal pathogens: A Review. *Food Bioscience*, 41 100840. <https://doi.org/10.1016/j.fbio.2020.100840>
10. Mehlomakulu, N.N., **Hoff, J.W.**, Erten, H., Beukes, L., **Jolly, N.P.\***, 2021 Screening Non-*Saccharomyces* Yeasts as Low Ethanol Producing Starter Cultures *S. Afr. J. Enol. Vitic.* 42, 56-66. <https://doi.org/10.21548/42-1-4335>
11. Mewa-Ngongang, M., **du Plessis, H.W.**, Ntwampe, S.K.O., Akinpelu, E.A., Hutchinson, U.F., Chidi, B.S., Okudoh, V.I., **Jolly, N.P.**, 2021. Biological stoichiometric analysis during biopreservative production by non-*Saccharomyces* yeasts using grape pomace extracts as fermentation medium. *Fermentation* 7, 89. <https://doi.org/10.3390/fermentation7020089>
12. Miller, N., Malherbe, C.J., Gerber, W., Hamman, J.H., Van der Rijst, M., Aucamp, M., **Joubert, E.\***, 2021. Physicochemical stability of enriched phenolic fractions of *Cyclopia genistoides* and ex vivo bi-directional permeability of major xanthenes and benzophenones. *Planta Medica* 87, 325-335. <https://doi.org/10.1055/a-1265-1945>

13. **Minnaar, P.**, Gerber, P., Booyse, M., **Jolly, N.\***, 2021. Phenolic Acids in Cork-Closed Bottle-Fermented Sparkling Wines. *S. Afr. J. Enol. Vitic.* <https://doi.org/10.21548/41-2-4336>
14. **Minnaar, P.\***, **Jolly, N.**, Beukes, L., Benito, S., 2021. Effect of alcoholic and acetous fermentations on the phenolic acids of Kei-apple (*Dovyalis caffra* L.) fruit. *J. Sci. Food Agric.* <https://doi.org/10.1002/jsfa.11071>
15. Nel\*, A.P., du Toit, W.J., **van Jaarsveld, F.P.**, 2021. Sensory Evaluation of Pinked Sauvignon Blanc Wines. *S. Afr. J. Enol. Vitic.*, 42, (2), 175-183. <https://doi.org/10.21548/42-2-4316>
16. Nyamende, N.E., Domtchouang F.R., **Belay, Z.A.**, Keyser, Z., Oyenih, A., **Caleb, O.J.\*** 2021. Alternative postharvest pre-treatment strategies for quality and microbial safety of 'Granny Smith' apple. *Heliyon*, 7, e07104. <https://doi.org/10.1016/j.heliyon.2021.e07104>
17. Patel, O., Muller, C.J.F., **Joubert, E.**, Rosenkranz, B., Louw, J., Awortwe, C., 2021. Therapeutic effects of an aspalathin-rich green rooibos extract, pioglitazone and atorvastatin combination therapy in diabetic db/db mice. *PLoS ONE* 16(5): e0251069. <https://doi.org/10.1371/journal.pone.0251069>
18. Stander, H.J., Muller, M., **Joubert, E.**, Labuschagné, I.F., **De Beer, D.\***, 2021. Potential of low-chill requiring and pink-fleshed apple cultivars for juice production. *Journal of Food Composition and Analysis*, 103, 104089. <https://doi.org/10.1016/j.jfca.2021.104089>
19. Samodien, S., De Kock, M., **Joubert, E.**, Swanevelder, S., Gelderblom, W.C.A.\* , 2021. Differential cytotoxicity of rooibos and green tea extracts against primary rat hepatocytes and human liver and colon cancer cells – causal role of major flavonoids. *Nutrition and Cancer*, 73, 2050-2064. <https://doi.org/10.1080/01635581.2020.1820054>
20. Todd, M., Guetterman, T., Sigge, G.O., **Joubert, E.\***, 2021. Multi-stakeholder perspectives on food labeling and health claims: Qualitative insights from South Africa. *Appetite*, 167, 105606. <https://doi.org/10.1016/j.appet.2021.105606>
21. Van Wyk, T.N., **van Jaarsveld, F.**, **Caleb, O.J.** 2021. Metal concentration in grape spirits. *South African Journal of Enology and Viticulture*, 42(1), 36-43. <https://doi.org/10.21548/42-1-4238>
22. Walters, N.A., **De Beer, D.\***, De Villiers, A., Danton, O., Hamburger, M., **Joubert, E.**, 2021. Comprehensive off-line CCC×LC-DAD-MS separation of *Cyclopia pubescens* Eckl. & Zeyh. phenolic compounds and structural elucidation of isolated compounds. *Phytochemical Analysis*, 32, 347-361. <https://doi.org/10.1002/pca.2981>
23. Williams, M., Khan, W., Ntushelo, N., & **Hart, R.** 2021. An indigenous *Saccharomyces cerevisiae* yeast strain isolated from Paarl regional Shiraz grapes to enhance Shiraz wine typicity. *OENO One*, 55(2), 209-225. <https://doi.org/10.20870/oeno-one.2021.55.2.4552>
24. Zawisza, B.\*, Musielak, M., **De Beer, D.**, Joubert, E., **Walczak, B.**, 2021. Non-destructive elemental analysis of herbal teas from South Africa. *Journal of Food Composition and Analysis*, 102, 104041. <https://doi.org/10.1016/j.jfca.2021.1024041>

## 2020

### Peer-reviewed articles:

1. Agapouda, A., Butterweck, V., Hamburger, M., **De Beer, D.**, **Joubert, E.**, Eckert, A., 2020. Honeybush extracts (*Cyclopia* spp.) rescue mitochondrial functions and bioenergetics against

- oxidative injury. *Oxidative Medicine and Cellular Longevity*, 2020, 1948602, <https://doi.org/10.1155/2020/1948602>
2. Belay, Z.A., **Caleb, O.J.**, Vorster, A., van Heerden, C., Opara, U.L., 2020. Transcriptomic changes associated with husk scald incidence on pomegranate fruit peel during cold storage. *Food Research International*, 135, 109285. <https://doi.org/10.1016/j.foodres.2020.109285>
  3. Dlodla, P.V., Johnson, R., Mazibuko-Mbeje, S.E., Muller, C.J.F., Louw, J., **Joubert, E.**, Orlando, P., Silvestri, S., Chellan, N., Nkambule, B.P., Essop, M.F., Tiano, L., 2020. Fermented rooibos extract attenuates hyperglycemia-induced myocardial oxidative damage by improving mitochondrial energetics and intracellular antioxidant capacity. *South African Journal of Botany*, 131, 143-150, <https://doi.org/10.1016/j.sajb.2020.02.003>
  4. Du Preez, B.V.P., **De Beer, D.**, Moelich, E.J., Muller, M., **Joubert, E.\***, 2020. Development of chemical-based reference standards for rooibos and honeybush aroma lexicons. *Food Research International*, 127, 108734, <https://doi.org/10.1016/j.foodres.2019.108734>
  5. Elegbede, R.D., Ilomuanya , M.O.\*, Sowemimo, A.A., Nneji, A., **Joubert, E.**, **De Beer, D.**, Koekemoer, T., Van de Venter, M., 2020. Effect of *Aspalathus linearis* extract loaded hydrogel on surgical wound healing in Sprague Dawley rats. *Wound Medicine*, 29, 100186, <https://doi.org/10.1016/j.wndm.2020.100186>
  6. Huang, S-H., Lin, C-Y., Kao, Y-H., Muller, C.J.F., **Joubert, E.**, Chuu, C-P., 2020. Rooibos suppresses migration and invasion of prostate cancer cells via inhibition of YAP signaling and paxillin. *Phytomedicine*, 69, 15321, <https://doi.org/10.1016/j.phymed.2020.153210>
  7. Human, C., **De Beer, D.**, Aucamp, M., Marx, I.J., **Malherbe, C.J.**, Viljoen-Bloom, M., Van der Rijst, M., **Joubert, E.\***, 2020. Preparation of rooibos extract-chitosan microparticles: Phytochemical characterization and stability of aspalathin during accelerated storage. *LWT-Food Science and Technology*, 117, 108653, <https://doi.org/10.1016/j.lwt.2019.108653>
  8. Hutchinson, U.F.\*, Ntwampe, S.K., Chidi, B.S., Mewa-Ngongang, M., **du Plessis, H. W.**, Booyse, M., & **Jolly, N.P.\***, 2020. Reusability of Immobilized Cells for Subsequent Balsamic-Styled Vinegar Fermentations. *Fermentation*, 6(4), 103. <https://doi.org/10.3390/fermentation6040103>
  9. Ilomuanya, M.O.\*, Adebona, A.C., Wang, W., Sowemimo, A.A., Eziegbo, C., Silva, B.O., Adeosun, S.O., **Joubert, E.**, **De Beer, D.**, 2020. Development and characterization of collagen-based electrospun scaffolds containing silver sulphadiazine and *Aspalathus linearis* extract for potential wound healing applications. *SN Applied Sciences*, 2, 881, <https://doi.org/10.1007/s42452-020-2701-8>
  10. Mabizela, G.S., Muller, M., **De Beer, D.**, Van der Rijst, M., Slabbert, M.M., **Joubert, E.\***, Bester, C.\*, 2020. Effect of genotype and harvest season on quality characteristics of *C. subternata*: phenolic content and sensory profile. *South African Journal of Botany*, 132, 491-501, <https://doi.org/10.1016/j.sajb.2020.06.010>
  11. Mathabe, P.M.K., Belay, Z.A., Ndlovu, T., **Caleb, O.J.\***, 2020. Progress in proteomic profiling of horticultural commodities during postharvest handling and storage: A Review. *Scientia Horticulturae*, 261, 108996 <https://doi.org/10.1016/j.scienta.2019.108996>
  12. Miller, N., **Malherbe, C.J.**, **Joubert, E.\***, 2020. Xanthone- and benzophenone-enriched nutraceutical: development of a scalable fractionation process and effect of batch-to-batch variation of the raw material (*Cyclopia genistoides*). *Separation and Purification Technology*, 237, 116465, <https://doi.org/10.1016/j.seppur.2019.116465>
  13. Miller, N., **Malherbe, C.J.**, **Joubert, E.\***, 2020. In vitro  $\alpha$ -glucosidase inhibition by honeybush (*Cyclopia genistoides*) food ingredient extract — potential for dose reduction of acarbose through synergism. *Food & Function*, 11, 6476-6486, <https://doi.org/10.1039/D0FO01306D>

14. Mphahlele, R.R., **Caleb, O.J.\***, Ngcobo, M.E.K., 2020. Effects of packaging and duration on quality of minimally processed and unpitted litchi cv. 'Mauritius' under low storage temperature. *Helyion*, **6**, e03229. <https://doi.org/10.1016/j.heliyon.2020.e03229>
15. Muller, M., **De Beer, D.**, Truzzi, C., Annibadi, A., Carloni, P., Girolametti, F., Damiani, E., **Joubert, E.\***, 2020. Cold brewing of rooibos tea affects its sensory profile and physicochemical properties compared to regular hot, and boiled brewing. *LWT - Food Science and Technology*, **132**, 109919, <https://doi.org/10.1016/j.lwt.2020.109919>
16. Nel, A.P., du Toit, W.J., van Jaarsveld, F.P., 2020. Pinking in White Wines - A Review. *South African Journal for Enology and Viticulture*. **41**(2), 151-157. DOI: <https://doi.org/10.21548/41-2-3952>
17. Nsumpi, A.N., **Belay, Z.A., Caleb, O.J.\*** 2020. Good intentions, bad outcomes: Impact of mixed-fruit loading on banana fruit protein expression, physiological responses and quality. *Food Packaging and Shelf Life*, **26**, 100594. <https://doi.org/10.1016/j.fpsl.2020.100594>
18. Viraragavan, A., Hlengwa, N., **De Beer, D.**, Riedel, S., Miller, N., Walczak, B., Bowles, S., Muller, C.J.F.\* , **Joubert, E.\***, 2020. Model development for predicting in vitro bio-capacity of green rooibos extract based on composition for application as screening tool in quality control. *Food & Function*, **11**, 3084-3094, <https://doi.org/10.1039/C9FO02480H>
19. Yoshida, T.\* , **Malherbe, C.J.**, Okon, K., Miura, Y., Hattori, M., Matsuda, H., Muller, C.J.F., **Joubert, E.**, 2020. Enhanced production of Th1- and Th2-type antibodies and induction of regulatory T cells in mice by oral administration of *Cyclopia* extracts with similar phenolic composition to honeybush herbal tea. *Journal of Functional Foods*, **64**, 103704, <https://doi.org/10.1016/j.jff.2019.103704>
20. Ziqubu, K., **Joubert, E.**, Muller, C.J., Louw, J., Tiano, L., Nkambule, B.B., Kappo, A., Mazibuko-Mbeje, S.E., 2020. Isoorientin: A dietary flavone with the potential to ameliorate diverse metabolic complications. *Pharmacological Research*, **158**, 104867, <https://doi.org/10.1016/j.phrs.2020.104867>

### Invited Book Chapters:

1. Mphahlele, R.R., Belay, Z.A., Mditshwa, A. **Caleb, O.J.\***, (*in press*). Postharvest handling of fresh produce. In: *Food Science and Technology: Trends and Future Prospects*, Ijabadeniyi O. A. (Ed.), Walter de Gruyter GmbH, Berlin, Germany. <https://doi.org/10.1515/9783110667462-002>

## 2019

### Peer-reviewed articles:

1. Abrahams, S., Samodien, S., Lilly, M., **Joubert, E.**, Gelderblom, W.\* , 2019. Differential modulation of gene expression encoding hepatic and renal xenobiotic metabolising enzymes by an aspalathin-enriched rooibos extract and aspalathin. *Planta Medica*, **85**, 6-13, DOI: 10.1055/a-0656-7500
2. Alexander, L., **De Beer, D.**, Muller, M., Van der Rijst, M., **Joubert, E.\***, 2019. Impact of steam-treatment on shelf-life stability of a xanthone-rich green herbal tea (*Cyclopia maculata* Andrews Kies) - identifying quality changes during storage. *Journal of the Science of Food and Agriculture*, **99**, 1334–1341, DOI: 10.1002/jsfa.9308
3. Alexander, L., **De Beer, D.**, Muller, M., Van der Rijst, M., **Joubert, E.\***, 2019. Bitter profiling of phenolic fractions of green *Cyclopia genistoides* herbal tea. *Food Chemistry*, **276**, 626-635, DOI: 10.1016/j.foodchem.2018.10.030

4. Belay, Z.A., **Caleb, O.J.**, Mahajan, P.V., Fröhling, A., Opara, U.L.\* , 2019. A simplex lattice design to optimize active modified atmosphere for storing pomegranate (cv. Wonderful) arils: Part I, determining optimum gas for physiological responses. *Biosystems Engineering*, 178, 309-321, DOI: 10.1016/j.biosystemseng.2018.11.008
5. Belay, Z.A., **Caleb, O.J.**, Mahajan, P.V., Fröhling, A., Opara, U.L.\* , 2019. A simplex lattice design to optimize active modified atmosphere for storing pomegranate (cv. Wonderful) arils: Part II, Determining optimum gas for maintaining quality attributes. *Biosystems Engineering*, 178, 322 - 335, DOI: 10.1016/j.biosystemseng.2018.11.009
6. Belay, Z.A., **Caleb, O.J.**, Mahajan, P.V., Opara, U.L.\* , 2019. Response of pomegranate arils (cv. Wonderful) to low O<sub>2</sub> stress under active modified atmosphere condition. *Journal of the Science of Food and Agriculture*, 99, 1088-1097, DOI:10.1002/jsfa.9276
7. Belay, Z.A., **Caleb, O.J.**, & Opara, U.L.\* , 2019. Influence of initial gas modification on physicochemical quality attributes and molecular changes in fresh and fresh-cut fruit during modified atmosphere packaging. *Food Packaging and Shelf Life*. DOI:10.1016/j.fpsl.2019.100359
8. Bovi, G.G., **Caleb, O.J.**, Rauh, C. & Mahajan, P.V.\* 2019. Condensation regulation of packaged strawberries under fluctuating storage temperature. *Packaging Science and Technology*. DOI:10.1002/pts.2470
9. **Caleb, O.J.\***, Ilte, K., Herppich, W.B., Geyer, M., Mahajan, P.V., 2019. Impacts of minimal processing and hot water dipping of 'Sonata' strawberries on volatiles emitted during storage. *Scientia Horticulturae*, 243, 385-391, DOI: 10.1016/j.scienta.2018.08.054
10. Damiani, E., Carloni, P., Rocchetti, G.\* , Senizza, B., Tiano, L., **Joubert, E.**, **De Beer, D.**, Lucini, L., 2019. Impact of cold vs hot brewing on the phenolic profile and antioxidant capacity of rooibos (*Aspalathus linearis*) herbal tea. *Antioxidants*, 8, 499, DOI: 10.3390/antiox8100499
11. **De Beer, D.\***, Tobin, J., Walczak, B., Van der Rijst, M., **Joubert, E.**, 2019. Phenolic composition of rooibos changes during simulated fermentation: effect of endogenous enzymes and fermentation temperature on reaction kinetics. *Food Research International*, 121, 185-196, DOI: 10.1016/j.foodres.2019.03.041
12. **Du Plessis, H.\***, Du Toit, M., Nieuwoudt, H., Van der Rijst, M., **Hoff, J.**, **Jolly, N.**, 2019. Modulation of Wine Flavor using *Hanseniaspora uvarum* in Combination with Different *Saccharomyces cerevisiae*, Lactic Acid Bacteria Strains and Malolactic Fermentation Strategies. *Fermentation*, 5(3), 64, DOI:10.3390/fermentation5030064
13. Dzedze, N.\* , **Van Breda, V.\*\***, **Hart, R.S.**, Van Wyk, J., 2019. Wine chemical, sensory, aroma compound and protein analysis of wines produced from chemical and biological fungicide treated Chenin blanc grapes. *Food Control*, 105, 265–276, DOI: 10.1016/j.foodcont.2019.06.007
14. **Hart, R.S.\***, **Jolly, N.P.**, & Ndimba, B.K. 2019. Characterisation of hybrid yeasts for the production of varietal Sauvignon blanc wine—A review. *Journal of Microbiological Methods*, 105699, DOI: 10.1016/j.mimet.2019.105699
15. Huang, S-H., Tseng, J-C., Lin, C-Y., Kuo, Y-Y., Wang, B-J., Kao, Y-H., Muller, C.J.F., **Joubert, E.**, Chuu, C-P.\* , 2019. Rooibos suppresses proliferation of castration-resistant prostate cancer Cells via inhibition of Akt signaling. *Phytomedicine*, 64, 153068, DOI: 10.1016/j.phymed.2019.153068
16. Human, C., **De Beer, D.\***, Van der Rijst, M., Aucamp, M., **Joubert, E.**, 2019. Electro spraying as a suitable method for nanoencapsulation of the hydrophilic bioactive dihydrochalcone, aspalathin. *Food Chemistry*, 276, 467-474, DOI: 10.1016/j.foodchem.2018.10.016
17. Hunlun, C.\* , **De Beer, D.**, Sigge, G.O., Van Wyk, J., 2019. Phenolic composition and total antioxidant capacity of South African frozen concentrated orange juice as affected by varietal,

seasonal and regional differences. *Journal of the Science of Food Agriculture*, 99, 1029–1037, DOI: 10.1002/jsfa.9267

18. Hutchinson, U.F.\*, Gqozo, S., **Jolly, N.P.**, Chidi, B. S., **Du Plessis, H.W.**, Mewa-Ngongang, M., & Ntwampe, S.K., 2019. Aeration, agitation and cell immobilization on corncobs and oak wood chips effects on Balsamic-styled vinegar production. *Foods*, 8(8), 303, DOI:10.3390/foods8020051
19. Jack, B.U.\*, **Malherbe, C.J.**, Mamushi, M., Muller, C.J.F., **Joubert, E.**, Louw, J., Pfeiffer, C., 2019. Adipose tissue as a possible therapeutic target for polyphenols: a case for *Cyclopia* extracts as anti-obesity nutraceuticals. *Biomedicine & Pharmacotherapy*, 120, 109439, DOI: 10.1016/j.biopha.2019.109439
20. **Joubert, E.\***, **De Beer, D.**, **Malherbe, C.J.**, Muller, M., Louw, A., Gelderblom, W.C.A., 2019. Formal honeybush tea industry reaches 20-year milestone – progress of product research targeting phenolic composition, quality and bioactivity. *South African Journal of Botany*, 127, 58-78. DOI: 10.1016/j.sajb.2019.08.027
21. Malyjurek, Z., **De Beer, D.**, **Joubert, E.**, Walczak, B.\*, 2019. Working with log-ratios. *Analytica Chimica Acta*, 1059, 16-27, DOI: 10.1016/j.aca.2019.01.041
22. Mazibuko-Mbeje, S.E.\*, Dlodla, P.V., Johnson, R., Ghoor, S., Roux, C., **Joubert, E.**, Louw, J., Opuka, A.R., Muller, C.J.F., 2019. Aspalathin-enriched green rooibos extract reduces hepatic insulin resistance by modulating PI3K/AKT and AMPK pathways. *International Journal of Molecular Sciences*, 20(3), 633, DOI:10.3390/ijms20030633
23. Mazibuko-Mbeje, S.E.\*, Dlodla, P.V., Johnson, R., **Joubert, E.**, Louw, J., Ziqubu, K., Tiano, L., Silvestri, S., Orlando, P., Opoku, A.R., Muller, C.J.F., 2019. Aspalathin, a natural product with the potential to reverse hepatic insulin resistance by improving energy metabolism and mitochondrial respiration. *PLoS ONE* 14(5): e0216172, DOI: 10.1371/journal.pone.0216172
24. Mewa-Ngongang, M.\*, **du Plessis, H.W.**, Hlangwani, E., Ntwampe, S.K.O., Chidi, B.S., Hutchinson, U.F., **Jolly, N.P.**, 2019. Activity Interactions of Crude Biopreservatives against Spoilage Yeast Consortia. *Fermentation*, 5(3), 53, DOI:10.3390/fermentation5030053
25. Mewa-Ngongang, M.\*, **du Plessis, H.W.**, Ntwampe, S.K., Chidi, B.S., Hutchinson, U.F., Mekuto, L., **Jolly, N.P.**, 2019. Grape pomace extracts as fermentation medium for the production of potential biopreservation compounds. *Foods*, 8(2), 51, DOI:10.3390/foods8020051
26. Mewa-Ngongang, M.\*, **Du Plessis, H.W.**, Ntwampe, S.K.O., Chidi, B.S., Hutchinson, U.F., Mekuto, L. and **Jolly, N.P.**, 2019. The use of *Candida pyralidae* and *Pichia kluyveri* to control spoilage microorganisms of raw fruits used for beverage production. *Foods*, 8(10), 454, DOI:10.3390/foods8100454
27. **Minnaar\***, **P.P.**, **Du Plessis, H.W.**, **Jolly, N.P.**, Van der Rijst, M., Du Toit, M., 2019. Non-*Saccharomyces* Yeast and Lactic Acid Bacteria in Co-Inoculated Fermentations with Two *Saccharomyces cerevisiae* Yeast Strains: a Strategy to Improve the Phenolic Content of Syrah Wine. *Food Chemistry: X*, 4, 100070. DOI: 10.1016/j.fochx.2019.100070
28. Ndlovu, T.\*, **van Jaarsveld, F.**, **Caleb, O.J.**, 2019. French and Mediterranean-style diets: Contradictions, misconceptions and scientific facts-A Review. *Food Research International*, 116, 840-858, DOI:10.1016/j.foodres.2018.09.020
29. Miller, N., Bosman, S.C., **Malherbe, C.J.\***, **De Beer, D.**, **Joubert, E.**, 2019. Membrane selection and optimisation of tangential flow ultrafiltration of *Cyclopia genistoides* extract for benzophenone and xanthone enrichment. *Food Chemistry*, 292, 121-128, DOI:10.1016/j.foodchem.2019.04.047
30. Orlando, P., Chellan, C., Louw, J., Tiano, L.\*, Cirilli, I., Dlodla, P., **Joubert, E.**, Muller, C.J.F., 2019. Green aspalathin rich rooibos extract lowers LDL-cholesterol and oxidative status in high fat diet-induced diabetic Vervet monkeys. *Molecules*, 24, 1713; DOI: 10.3390/molecules24091713

31. Patel, O., Muller, C.J.F.\*, **Joubert, E.**, Rosenkranz, B., Taylor, M.J.C., Louw, J., Awortwe, C., 2019. Pharmacokinetic interaction of green rooibos extract with atorvastatin and metformin in rats. *Frontiers in Pharmacology*, 10, 1243, DOI: 10.3389/fphar.2019.01243
32. Pathak, N., **Caleb, O.J.**, Rauh, C., Mahajan, P.V.\*, 2019. Efficacy of photocatalysis and photolysis systems for the removal of ethylene under different storage conditions. *Postharvest Biology Technology*, 147, 68-77, DOI: 10.1016/j.postharvbio.2018.09.006
33. Sishi, M., Muller, M., **De Beer, D.**, Van der Rijst, M., **Joubert, E.\***, 2019. Rooibos agro-processing waste as herbal tea products – optimisation of soluble solids extraction from dust and application to improve sensory profile, colour and flavonoid content of stem infusions. *Journal of the Science of Food and Agriculture*, 99, 3653-3661, DOI: 10.1002/jsfa.9587
34. Stander, M.A., **Joubert, E.**, **De Beer, D.\***, 2019. Revisiting the caffeine-free status of rooibos and honeybush herbal teas – importance of method specificity. *Journal of Food Composition and Analysis*, 76, 39-43, DOI: 10.1016/j.jfca.2018.12.002
35. Walters, N.A., **De Beer, D.\***, De Villiers, A., Walczak, B., **Joubert, E.**, 2019. Genotypic variation in phenolic composition of *Cyclopia pubescens* (honeybush tea) seedling plants. *Journal of Food Composition and Analysis*, 78, 129–137. DOI: 10.1016/j.jfca.2019.02.006

### Invited Book Chapters and Semi-Scientific articles:

36. Opara, U.L.\*, **Caleb, O.J.**, Belay, Z.A. 2019. Modified atmosphere packaging for food preservation. In: Food Quality and Shelf Life, Charis M. Galanakis (Ed.), Elsevier Academic Press, Pp. 235-259.

## 2018

### Peer-reviewed articles:

1. Alexander, L., **De Beer, D.**, Muller, M., Van der Rijst, M., **Joubert, E.\***, 2018. Steam treatment of green *Cyclopia longifolia* - delivering herbal tea with improved aroma and high bioactive content. *South African Journal of Botany*, 114, 316-322, DOI: 10.1016/j.sajb.2017.11.013
2. **De Beer, D.\***, Pauck, C.E., Aucamp, M., Liebenberg, W., Stieger, N., **Joubert, E.**, 2018. Phenolic and physicochemical stability of a functional beverage powder mixture during storage: effect of the microencapsulant inulin and food ingredients. *Journal of the Science of Food and Agriculture*, 98, 2925-2934, DOI:10.1002/jsfa.8787
3. Beelders, T., **De Beer, D.**, Kidd, M., **Joubert, E.\***, 2018. Modelling of thermal degradation kinetics of the C-glucosyl xanthone mangiferin in an aqueous model solution as a function of pH and temperature. *Food Research International* 103, 103-109, DOI: 10.1016/j.foodres.2017.10.020
4. Belay, Z.A., **Caleb, O.J.**, Mahajan, P.V., Opara, U.L.\*, 2018. Design of active modified atmosphere and humidity packaging (MAHP) for 'Wonderful' Pomegranate arils. *Food and Bioprocess Technology*, 11(8), 1478-1494, DOI:10.1007/s11947-018-2119-0
5. Bovi, G.G., **Caleb, O.J.**, Klaus, E., Tintchev, F., Rauh, C., Mahajan P.V.\*, 2018. Moisture absorption kinetics of FruitPad for packaging of fresh strawberry. *Journal of Food Engineering*, 223,248-254, DOI:10.1016/j.jfoodeng.2017.10.012
6. Bovi, G.G., **Caleb, O.J.**, Ilte, K., Rauh, C., Mahajan, P.V., 2018. Impact of modified atmosphere and humidity packaging on the quality, off-odour development and volatiles of 'Elsanta' strawberries *Food Packaging and Shelf life* 16: 204-210, DOI:10.1016/j.fpsl.2018.04.002



7. Bovi, G.G., Rux, G., **Caleb, O.J.**, Herppich, W.B., Linke, M., Rauh, C., Mahajan, P.V.\*, 2018. A comprehensive case study on mass loss of packaged and unpackaged strawberries. *Biosystems Engineering*, 174, 1-9, DOI: 10.1016/j.biosystemseng.2018.06.012
8. **Chidi, B.S.\***, Mafata, M., Notshokovu, N.Z., **van Jaarsveld, F.**, 2018. Impact of grape temperature at pressing on organic acids and oenological characteristics of Méthode Cap Classique wines. *South African Journal of Enology and Viticulture* 39, 106-115, DOI: 10.21548/39-1-2467
9. Danton, O., Alexander, L., Hunlun, C., **De Beer, D.**, Hamburger, M.\*, **Joubert, E.\***, 2018. Bitter taste impact and thermal conversion of a naringenin glycoside from *Cyclopia genistoides*. *Journal of Natural Products*, 81, 2743-2749, DOI: 10.1021/acs.jnatprod.8b00710
10. Dlodla, P.V., Gabuza, K.B., Muller, C.J.F., **Joubert, E.**, Louw, J., Johnson, R.\*, 2018. Aspalathin, a C-glucosyl dihydrochalcone from rooibos improves the hypoglycemic potential of metformin in type 2 diabetic (db/db) mice. *Physiological Research*, 67, 813-818. ISSN 1802-9973 (online).
11. Jack, B., **Malherbe, C.J.\***, Willenburg, E.L., **De Beer, D.**, Huisamen, B., **Joubert, E.**, Muller, C.J.F., Louw, J., Pfeiffer, C.\*, 2018. Polyphenol-enriched fractions of *Cyclopia intermedia* selectively affect lipogenesis and lipolysis in 3T3-L1 adipocytes. *Planta Medica*, 84, 100-110. DOI: 10.1055/s-0043-119463
12. Johnson, R., **De Beer, D.**, Dlodla, P., Muller, C.J.F., **Joubert, E.\***, 2018. Aspalathin from rooibos (*Aspalathus linearis*): A bioactive C-glucosyl dihydrochalcone with potential to target the metabolic syndrome. *Planta Medica*, 84, 568-583. DOI: 10.1055/s-0044-100622
13. Kawhena, T.G., Opara, U.L.\*, **Botes, W.J.**, Fawole, O.A., 2018. Effect of repeated low oxygen stress (RLOS) on physiological disorders, physico-chemical properties and sensory parameters of 'Packhams's Triumph' pears. *Acta Horticulturae*, 1201, 65-74, DOI: 10.17660/ActaHortic.2018.1201.10
14. Mafata, M., Buica, A., du Toit, W., Panzeri, V., **van Jaarsveld, F.P.\***, 2018. The effect of grape temperature on the sensory perception of Méthode Cap Classique wines. *South African Journal of Enology and Viticulture*, 39, 132-140, DOI: 10.21548/39-1-2620
15. Mafata, M., Buica, A., du Toit, W., **van Jaarsveld, F.P.\***, 2018. The effect of grape temperature at pressing on phenolic extraction and evolution in Méthode Cap Classique wines throughout winemaking. *South African Journal of Enology and Viticulture*, 39, 141-148, DOI: 10.21548/39-1-2621
16. Mashabela, M., **Caleb, O.J.**, Sivakumara, D., Mahajan, P.V.\*, 2018. Understanding the physiological response of fresh-cut cauliflower for developing a suitable packaging system. *Food Packaging and Shelf Life*, 17, 179-186, DOI: 10.1016/j.fpsl.2018.07.002
17. Matsikidze, S.N., **Botes, W.J.**, Huysamer, M., Hoffman, E.W.\*, 2018. Feasibility of automatic ventilation technology for sea freight of *Protea* cut flower products. *Acta Horticulturae*, 1201, 455-462, DOI: 10.17660/ActaHortic.2018.1201.61
18. Miller, N., **De Beer, D.**, Aucamp, M., **Joubert, E.\***, 2018. Inulin as microencapsulating agent improves physicochemical properties of spray-dried aspalathin-rich green rooibos (*Aspalathus linearis*) extract with  $\alpha$ -glucosidase inhibitory activity. *Journal of Functional Foods*, 48, 400-409. DOI: 10.1016/j.jff.2018.07.028
19. Muller, C.J.F., **Malherbe, C.J.**, Chellan, N., Yagasaki, K., Miura, Y., **Joubert, E.\***, 2018. Potential of rooibos, its major C-glucosyl flavonoids and Z-2-( $\beta$ -D-glucopyranosyloxy)-3-phenylpropenoic acid in prevention of metabolic syndrome. *Critical Reviews in Food Science and Nutrition*, 58, 227-246, DOI:10.1080/10408398.2016.1157568
20. Munhuweyi, K., **Caleb, O.J.**, van Reenen AJ, Opara, U.L.\*, 2018. Physical and antifungal properties of active cinnamon and oregano essential oil based  $\beta$ -cyclodextrin microcapsules and

electrospun nanofibrous films for antimicrobial packaging. *LWT – Food Science Technol.*, **87**, 413-422, DOI:10.1016/j.lwt.2017.09.012

21. Murakami, S., Miura, Y., Hattori, M., Matsudai, H., **Malherbe, C.J.**, Muller, C.J.F., **Joubert, E.**, Yoshida, T.\*, 2018. *Cyclopia* extracts enhance Th1-, Th2- and Th17-type T cell responses and induce Foxp3+ cells in murine cell culture. *Planta Medica*, 84, 311-319, DOI: 10.1055/s-0043-121270
22. Ntlhokwe, G., Muller, M., **Joubert, E.**, Tredoux, A.G., De Villiers, A.\*, 2018. Detailed qualitative analysis of honeybush tea (*Cyclopia* spp.) volatiles by comprehensive two-dimensional gas chromatography coupled to time-of-flight mass spectrometry and relation with sensory data. *Journal of Chromatography A*, 1536, 37-150, DOI:10.1016/j.chroma.2017.08.054
23. Oyenih, O.R., Krygsman, A., Verhoog, N., **De Beer, D.**, Saayman, M.J., Louw, A.\*, 2018. Chemoprevention of LA7-induced mammary tumour growth by SM6Met, a well characterized *Cyclopia* extract. *Frontiers in Pharmacology*, 6, Article 650, DOI:10.3389/fphar.2018.00650
24. **Robertson, L.**, Muller, M., **De Beer, D.**, Van der Rijst, M., Bester, C., **Joubert, E.\***, 2018. Development of species-specific aroma wheels for *Cyclopia genistoides*, *C. subternata* and *C. maculata* herbal teas and benchmarking sensory and phenolic profiles of selections and progenies of *C. subternata*. *South African Journal of Botany*, 114, 295-302, DOI 10.1016/j.sajb.2017.11.019

#### **Invited Book Chapters and Semi-Scientific articles:**

25. Bovi, G.G.\*, **Caleb, O.J.**, Herppich, W.B., Mahajan P.V. 2018. Mechanisms and modeling of water loss in horticultural products. Reference Module in Food Science. Elsevier, pp. 1–5, DOI:10.1016/B978-0-08-100596-5.21897-0
26. **Caleb, O.J.**, Geyer, M., Mahajan, P. 2018. Packaging of fresh - cut fruits and vegetables. Chapter 8 in: M. Siddiqui, M. Rahman, A. Wani, (eds.), *Innovative Packaging of Fruits and Vegetables Strategies for Safety and Quality Maintenance*. Apple Academic Press, Oakville, Canada, pp. 199-209
27. **Caleb, O.J.**, Geyer, M., Mahajan, P. 2018. Mathematical modeling for micro-perforated films of fruits and vegetables used in packaging. Chapter 11 in: M. Siddiqui, M. Rahman, A. Wani, (eds.), *Innovative Packaging of Fruits and Vegetables Strategies for Safety and Quality Maintenance*. Apple Academic Press, Oakville, Canada, pp. 259-273
28. Chidi, B.S.\*, Notshokovu, Z., Mafata, M. & **van Jaarsveld, F.**, 2018. Organic acids of MCC wines – a function of grape temperature prior to pressing. *Wineland*, 1 Sept, 2018, *Oenology Research*, Winetech Technical
29. **Du Plessis, H.\***, Du Toit, M., **Hoff, J.**, **Hart, R.**, **Ndimba, B.**, **Jolly, N.**, 2018. Non-*Saccharomyces* yeasts and malolactic fermentation. *WineLand*, November (Winetech Technical No. 351), 60-61.
30. Mafata, M., Buica, A., du Toit, W., Panzeri, V., **van Jaarsveld, F.P.\***, 2018. Sparkling wine (Part 1): Sensory perception of traditional style sparkling wine. *Wineland*, 1 Jan, 2018, *Oenology research*, Winetech Technical
31. Mafata, M., Buica, A., du Toit, W., Panzeri, V., **van Jaarsveld, F.P.\***, 2018. Sparkling wine (Part 2): Do chilled grapes make better MCC? *Wineland*, 1 Feb, 2018, *Oenology research*, Winetech Technical
32. Mafata, M., Buica, A., du Toit, W., **van Jaarsveld, F.P.\***, 2018. Sparkling wine (Part 3): Phenolic composition of traditional style sparkling wine. *Wineland*, 1 Mar, 2018, *Oenology research*, Winetech Technical

33. Mafata, M., Buica, A., du Toit, W., **van Jaarsveld, F.P.\***, 2018. Sparkling wine (Part 4): The truth about chilled MCC grapes. *Wineland*, 1 Apr, 2018, Oenology research, Winetech Technical
34. Nel, A.\*, **Jaarsveld, F.**, 2018. Guidelines to reduce pinking potential in white wines. *Wineland*, 1 Mar, 2018, Oenology research, Winetech Technical

## 2017

### Peer-reviewed articles:

1. Alexander, L., **De Beer, D.**, Muller, M., Van der Rijst, M., **Joubert, E.\***, 2017. Modifying the sensory profile of green honeybush (*Cyclopia maculata*) herbal tea through steam treatment. *LWT-Food Science and Technology*, 82, 49-57, DOI: 10.1016/j.lwt.2017.04.018
2. Arries, W.J., Tredoux, A.G.J., **De Beer, D.**, **Joubert, E.**, De Villiers, A\*, 2017. Evaluation of capillary electrophoresis for the analysis of rooibos and honeybush tea phenolics. *Electrophoresis*, 38, 897-905, DOI: 10.1002/elps.201600349
3. Beelders, T., **De Beer, D.**, Ferreira, D., Kidd, M., **Joubert, E.\***, 2017. Thermal stability of the functional ingredients, glucosylated benzophenones and xanthenes of honeybush (*Cyclopia genistoides*), in an aqueous model solution. *Food Chemistry*, 233, 412-421, DOI: 10.1016/j.foodchem.2017.04.083
4. Belay, Z.A., **Caleb, O.J.**, Opara, U.L.\* , 2017. Enzyme kinetics modelling approach to evaluate the impact of high CO<sub>2</sub> and super-atmospheric O<sub>2</sub> concentration on respiration rate of pomegranate arils. *CYTA - Journal of Food*, 15, 608-616, DOI:10.1080/19476337.2017.1324524
5. Belay, Z.A., **Caleb, O.J.**, Mahajan P.V., Opara, UL.\* , 2017. Application of simplex lattice mixture design for optimization of active modified atmosphere for pomegranate arils (cv. Wonderful) base on microbial criteria. *Food Packaging and Shelf life*, 14, 72-77, DOI:10.1016/j.fpsl.2017.08.002
6. Bergh A.J., Muller, M., Van der Rijst, M., **Joubert, E.\***, 2017. Optimisation and validation of high-temperature oxidation of *Cyclopia intermedia* (honeybush) – From laboratory to factory. *South African Journal of Botany*, 110, 152-160, DOI: 10.1016/j.sajb.2016.11.012
7. Bosman, S.C., **De Beer, D.**, Beelders, T., Willenburg, E.L., **Malherbe, C.J.**, Walczak, B., **Joubert, E.\***, 2017. Simultaneous optimisation of extraction of xanthone and benzophenone  $\alpha$ -glucosidase inhibitors from *Cyclopia genistoides* and identification of superior genotypes for propagation. *Journal of Functional Foods*, 33, 21-31, DOI: 10.1016/j.jff.2017.03.011
8. Bowles, S.\* , **Joubert, E.**, **De Beer, D.**, Louw, J., Brunschwig, C., Njoroge, M., Lawrence, N., Wiesner, L., Chibale, K., Muller, C., 2017. Intestinal transport characteristics and metabolism of the C-glucosyl dihydrochalcone aspalathin. *Molecules*, 22, 554, DOI: 10.3390/molecules22040554
9. Bowles, S.L.\* , Ntamo, Y., **Malherbe, C.J.**, Kappo, A.M.P., Louw, J., Muller, C.J.F., 2017. Intestinal transport and absorption of bioactive phenolic compounds from a chemically characterized aqueous extract of *Athrixia phylicoides*. *Journal of Ethnopharmacology*, 200, 45-50, DOI: 10.1016/j.jep.2017.02.019
10. **De Beer, D.**, Miller, N., **Joubert, E.\***, 2017. Production of dihydrochalcone-rich green rooibos (*Aspalathus linearis*) extract taking into account seasonal and batch-to-batch variation in phenolic composition of plant material. *South African Journal of Botany*, 110, 143-148, DOI: 10.1016/j.sajb.2016.02.198

11. Dlodla, P.V.\*, **Joubert, E.**, Muller, C.J.F., Louw, J., Johnson, R., 2017. Hyperglycemia-induced oxidative stress and heart disease - cardioprotective effects of rooibos flavonoids and phenylpyruvic acid-2-O- $\beta$ -D-glucoside. *Nutrition & Metabolism* 14, 45, DOI: 10.1186/s12986-017-0200-8
12. Dlodla, P., Muller, C., **Joubert, E.**, Louw, J., Essop, M.F., Gabuza, K., Ghoor, S., Huisamen, B., Johnson, R.\*, 2017. Aspalathin protects the heart against hyperglycemia-induced oxidative damage by upregulating Nrf2 expression. *Molecules*, 22, 129, DOI: 10.3390/molecules22010129
13. **Du Plessis, H.W.\***, Du Toit, M., **Hoff, J.W.**, **Hart, R.S.**, Ndimba, B.K., **Jolly, N.P.**, 2017. Characterisation of Non-Saccharomyces yeasts using different methodologies and evaluation of their compatibility with malolactic fermentation. *South African Journal of Enology and Viticulture*, 38(1), 46-63
14. **Du Plessis, H.**, Du Toit, M., Nieuwoudt, H., Van Der Rijst, M., Kidd, M., & **Jolly, N.\***, 2017. Effect of *Saccharomyces*, non-*Saccharomyces* yeasts and malolactic fermentation strategies on fermentation kinetics and flavor of Shiraz Wines. *Fermentation*, 3(4), 64, DOI:10.3390/fermentation3040064
15. Erasmus, L.M., Theron, K.A., Muller, M., Van der Rijst, M., **Joubert, E.\***, 2017. Optimising high-temperature oxidation of *Cyclopia* species for maximum development of characteristic aroma notes of honeybush herbal tea infusions. *South African Journal of Botany*, 110, 144-151, DOI: 10.1016/j.sajb.2016.05.014
16. **Hart, R.S.\***, Ndimba, B.K. & **Jolly, N.P.**, 2017. Characterisation of thiol-releasing and lower volatile acidity forming intra-genus hybrid yeast strains for Sauvignon blanc wine. *South African Journal of Enology and Viticulture*, 38 (2), 144 – 155, DOI: 10.21548/38-2-1322
17. **Hart, R.S.\***, & Ndimba, B.K., & **Jolly, N.P.**, 2017. Characterisation and evaluation of thiol-releasing and lower volatile acidity forming intra-genus and inter-genus hybrid yeast strains for Sauvignon blanc wine. *African Journal of Microbiology Research*, 11(19), 740–755. DOI: 10.5897/AJMR2017.8515
18. Hunlun, C.\*, **De Beer, D.**, Sigge, G.O., Van Wyk, J., 2017. Characterisation of the flavonoid composition and total antioxidant capacity of juice from different citrus varieties from the Western Cape region. *Journal of Food Composition and Analysis*, 62, 115-125, DOI: 10.1016/j.jfca.2017.04.018
19. Jack, B.U., **Malherbe, C.J.**, Huisamen, B., Gabuza, K., Mazibuko-Mbeje, S., Schulze, A.E., **Joubert, E.**, Muller, C.J.F., Louw, J., Pfeiffer, C.\*, 2017. A polyphenol-enriched fraction of *Cyclopia intermedia* decreases lipid content in 3T3-L1 adipocytes and reduces body weight gain of obese db/db mice. *South African Journal of Botany*, 110, 216-229, DOI: 10.1016/j.sajb.2016.08.007
20. Jolley, B., Van der Rijst, M., **Joubert, E.**, Muller, M.\*, 2017. Sensory profile of rooibos originating from the Western and Northern Cape governed by production year and development of a rooibos aroma wheel. *South African Journal of Botany*, 110, 161-166, DOI: 10.1016/j.sajb.2016.08.005
21. **Joubert, E.\***, **De Beer, D.**, **Malherbe, C.J.**, 2017. Herbal teas – exploring untapped potential and strengthening commercialisation. *South African Journal of Botany*, 110, 1-3, DOI: 10.1016/j.sajb.2017.01.204
22. Gelderblom, W.C.A.\*, **Joubert, E.**, Gamielidien, K., Sissing, L., **Malherbe, C.J.**, Maritz, G., 2017. Rooibos (*Aspalathus linearis*), honeybush (*Cyclopia intermedia*) and cancer bush (*Sutherlandia frutescens* subsp. *microphylla*) protect against tobacco-specific mutagenesis in vitro. *South African Journal of Botany*, 110, 194-200, DOI: 10.1016/j.sajb.2016.06.004

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24. Mahajan P.V.\*, **Caleb, O.J.**, Gil, M., Izumi, H., Colelli, G., Watkins, C., Zude, M., 2017. Quality and safety of fresh horticultural commodities: Recent advances and Future perspectives. *Food Packaging and Shelf life*, 74, 2-11, DOI:10.1016/j.fpsl.2017.08.001
25. Marini, F., **De Beer, D.**, Walters, N.A., De Villiers, A., **Joubert, E.**, Walczak, B.\* , 2017. Multivariate analysis of variance of designed chromatographic data. A case study involving fermentation of rooibos tea. *Journal of Chromatography A*, 1489, 115-125, DOI: 10.1016/j.chroma.2017.02.007
26. Mewa-Ngongang, M., Ntwampe, S.K.O., **du Plessis, H.W.**, Mekuto, L., **Jolly, N.P.**, 2017. Biopreservatives from yeasts with antimicrobial activity against common food, agricultural produce and beverage spoilage organisms. In: Antimicrobial research: Novel bioknowledge and educational programs. (Ed: A. Méndez-Vilas). pp. 219-228
27. Mewa-Ngongang, M.\* , **du Plessis, H. W.**, Hutchinson, U. F., Mekuto, L., Ntwampe, S. K., 2017. Kinetic modelling and optimisation of antimicrobial compound production by *Candida pyralidae* KU736785 for control of *Candida guilliermondii*. *Food Science and Technology International*, 23(4) 358-370.
28. Miller, N., **De Beer, D.**, **Joubert, E.\***, 2017. Minimising variation in aspalathin content of aqueous green rooibos extract – optimising extraction and identifying critical material attributes. *Journal of the Science of Food and Agriculture*, DOI: 10.1002/jsfa.8370
29. **Minnaar, P.P.\***, **Du Plessis, H.W.**, Paulsen, V., Ntushelo, N., **Jolly, N.P.**, Du Toit, M. 2017. *Saccharomyces cerevisiae*, non-*Saccharomyces* yeasts and Lactic acid bacteria in sequential fermentations: Effect on phenolics and sensory attributes of South African Syrah wines. *South African Journal of Enology and Viticulture*, 38(2), 237-244, DOI:10.21548/38-2-1621
30. **Minnaar, P.P.\***, **Jolly, N.P.**, Paulsen, V., **Du Plessis, H.W.**, Van Der Rijst. M. 2017. *Schizosaccharomyces pombe* and *Saccharomyces cerevisiae* yeasts in sequential fermentations: Effect on phenolic acids of fermented Kei-apple (*Dovyalis caffra* L.) juice. *International Journal of Food Microbiology*, 257, 232-237.
31. Moelich, E.I.\*, Muller, M., **Joubert, E.**, Naes, T., Kidd, M., 2017. Validation of projective mapping as potential sensory screening tool for application by the honeybush herbal tea industry. *Food Research International*, 99, 275-286, DOI: 10.1016/j.foodres.2017.05.01
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33. North, M.\* , **Joubert, E.**, **De Beer, D.**, De Kock, K., Joubert, M., 2017. Effect of harvest date on growth, production and quality of honeybush (*Cyclopia genistoides* and *C. subternata*). *South African Journal of Botany*, 110, 132-137, DOI: 10.1016/j.sajb.2016.08.002
34. Ntlhokwe, G., Tredoux, A.G.J., Gorecki, T., Edwards, M., Vestner, J. Muller, M., Erasmus, L., **Joubert, E.**, Cronje, J.C., De Villiers, A.\* , 2017. Analysis of honeybush tea (*Cyclopia* spp.) volatiles by comprehensive two-dimensional gas chromatography using a single-stage thermal modulator. *Analytical and Bioanalytical Chemistry*, 409, 4127-4138, DOI: 10.1007/s00216-017-0360-4
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