Liste de publications de EIB

Articles dans des revues avec comité de lecture

A paraître

Montis, A., Delporte, C., Noda, Y., Stoffelen, P., Stévigny, C., Hermans, C., Van Antwerpen, P., & Souard, F. (2024). Targeted metabolomics and transcript profiling of methyltransferases in three coffee species. *Plant science*.

Mokaya, H. H., Nkoba, K., Ndunda, R. R., & Vereecken, N. (2022). Characterization of honeys produced by sympatric species of Afrotropical stingless bees (Hymenoptera, Meliponini). *Food chemistry*, 366, 130597. doi:10.1016/j.foodchem.2021.130597

Weekers, T., Marshall, L., Leclercq, N., Wood, T. J., Cejas, D., Drepper, B., Hutchinson, L. L., Michez, D., Molenberg, J. M., Smagghe, G. G., Vandamme, P., & Vereecken, N. (2022). Dominance of honey bees is negatively associated with wild bee diversity in commercial apple orchards regardless of management practices. *Agriculture, ecosystems & environment*, 323, 107697. doi:10.1016/j.agee.2021.107697

Chaussebourg, L., Baijot, F., Maughan, N., Visser, M., & Kevin, M. (2024). Re-evaluating the baking value of bread grain: Towards an agroecological transition in Walloon Alternative Bread Supply Chains. *Agriculture and human values*.

2024

Erazo, D., Grant, L., Ghisbain, G., Marini, G., Colón-González, F. F., Wint, W. G., Rizzoli, A., Van Bortel, W., Vogels, C. C., Grubaugh, N., Mengel, M., Frieler, K., Thiery, W., & Dellicour, S. (2024). Contribution of climate change to the spatial expansion of West Nile virus in Europe. *Nature communications*, 15(1), 1196. doi:10.1038/s41467-024-45290-3

Zoungrana, A., Cissé, M., Traoré, M., De Cannière, C., Bationo, B. A., Visser, M., & Traoré, S. (2024). Influence of agroforestry systems on earthworm diversity and soil properties in a Sudano-Sahelian landscape. *Geoderma Regional*, 37, e00786. doi:10.1016/j.geodrs.2024.e00786

Bauduin, T., Gypens, N., & Borges, A. V. (2024). Seasonal and spatial variations of greenhouse gas (CO2, CH4 and N2O) emissions from urban ponds in Brussels. *Water research*, 253, 121257.

Koch, R. T., Erazo, D., Folly, A. A., Johnson, N. E., Dellicour, S., Grubaugh, N., & Vogels, C. C. (2024). Genomic epidemiology of West Nile virus in Europe. *One Health*, 18, 100664. doi:10.1016/j.onehlt.2023.100664

Ginevra, L., Charlotte, S., Hayley, C., Fanny, H., Deirdre, B., Jean-François, F., Graham, C. T., & George, I. (2024). Do fish gut microbiotas vary across spatial scales? A case study of Diplodus vulgaris in the Mediterranean Sea. *Animal Microbiome*, 6(1), 32. doi:10.1186/s42523-024-00319-2

Beaugendre, A., Godin, B., Mingeot, D., & Visser, M. (2024). Baking quality of wheat variety mixtures: Describing the mechanisms for mixture effects. *Journal of cereal science*, 117, 103933. doi:10.1016/j.jcs.2024.103933

Rodriguez Jimenez, A., Breine, A., Whiteway, C., Dechamps, E., George, I., & Van Der Henst, C. (2024). Bactericidal effect of bacteria isolated from the marine sponges Hymeniacidon perlevis and Halichondria panicea against carbapenem-resistant Acinetobacter baumannii. *Letters in applied microbiology*, 77(5), ovae035. doi:10.1093/lambio/ovae035

Rodriguez Jimenez, A., Breine, A., Whiteway, C., Dechamps, E., George, I., & Van der Henst, C. (2024). Bactericidal effect of bacteria isolated from the marine sponges Hymeniacidon perlevis and Halichondria panicea against carbapenem-resistant Acinetobacter baumannii. *Letters in applied microbiology*, 77(5). doi:10.1093/lambio/ovae035

Ennes Silva, F., Luna, L. W., Batista, R., Röhe, F., Gubili, C., Farias, I. P., Hrbek, T., Valsecchi, J., Ribas, C., McDevitt, A. A., Dellicour, S., Flot, J.-F., & Boubli, J. P. (2024). Impact of Quaternary Amazonian river dynamics on the diversification of uakari monkeys (genus Cacajao). *Journal of biogeography*. doi:10.1111/jbi.14844

Horaud, M., Arizmendi-Meija, R., Nebot-Colomer, E., López-Sendino, P., Antunes, A., Dellicour, S., Viard, F., Leblois, R., Linares, C., Garrabou, J., & Ledoux, J. B. (2024). Comparative population genetics of habitat-forming octocorals in two marine protected areas: eco-evolutionary and management implications. *Conservation genetics*, 25(2), 319-334. doi:10.1007/s10592-023-01573-8

Salzano, F., Aulitto, M., Fiorentino, G., Cannella, D., Peeters, E., & Limauro, D. (2024). A novel endo-1,4-#-xylanase from Alicyclobacillus mali FL18: Biochemical characterization and its synergistic action with #-xylosidase in hemicellulose deconstruction. *International journal of biological macromolecules*, 264, 130550. doi:10.1016/j.ijbiomac.2024.130550

Ayitey, S., Nijamdeen, T. W. G. F. M. T., Peiris, H., Arachchilage, S. K., George, I., Dahdouh-Guebas, F., & Deepananda, K. H. M. A. K. (2024). Human health risk attributed to consumption of seafood and recreation swimming in Negombo Lagoon, Sri Lanka: An assessment on lagoon water and inhabitant oysters (Crassostrea cucullata Born, 1778). *Marine pollution bulletin.*, 201, 116189. doi:10.1016/j.marpolbul.2024.116189

Cotteleer, L., Longo, R., Debaste, F., & Parente, A. (2024). Flow-based stress-blended eddy simulation: A local RANS/LES turbulence model for urban flow CFD simulations. *Results in Engineering*, 21, 101679. doi:10.1016/j.rineng.2023.101679

Marshall, L., Leclercq, N., Carvalheiro, L. G. G. L., Dathe, H., Jacobi, H. B., Kuhlmann, M., Potts, S., Rasmont, P., Roberts, S. P. M., & Vereecken, N. (2024). Understanding and addressing shortfalls in European wild bee data. *Biological Conservation*, 290, 110455. doi:10.1016/j.biocon.2024.110455

Ndungu, N., Noiset, P., Chege, M., Waweru, J. W., Sharifu, N., Vereecken, N., & Kiatoko, N. (2024). Taxonomic patterns of host plants and its impact on honey properties by two

sympatric Afrotropical stingless bee species in Zanzibar (Tanzania). *African journal of ecology*, 62(2). doi:10.1111/aje.13257

Gräf, T., Martinez, A. A., Bello, G., Dellicour, S., Lemey, P., Colizza, V., Mazzoli, M., Poletto, C., Cardoso, V. L. O., da Silva, A. F., Motta, F. C., Resende, P. C., Siqueira, M. M., Franco, L., Gresh, L., Gabastou, J. M., Rodriguez, A., Vicari, A., Aldighieri, S., Mendez-Rico, J., & Leite, J. A. (2024). Dispersion patterns of SARS-CoV-2 variants Gamma, Lambda and Mu in Latin America and the Caribbean. *Nature communications*, 15(1), 1837. doi:10.1038/s41467-024-46143-9

Noiset, P., Ndunda, R. R., Mokaya, H. H., Chege, M., Ndungu, N., Sharifu, N., Vereecken, N., & Nkoba, K. (2024). Insularity and its impact on stingless bee honey properties: A case study in the Zanzibar Archipelago (Tanzania). *JSFA reports*. doi:10.1002/jsf2.170

Sanogo, I. N., Guinat, C., Dellicour, S., Diakité, M. A., Niang, M., Koita, O. O., Camus, C., & Ducatez, M. (2024). Genetic insights of H9N2 avian influenza viruses circulating in Mali and phylogeographic patterns in Northern and Western Africa. *Virus evolution*, 10(1), veae011. doi:10.1093/ve/veae011

2023

Kegode, T., Mokaya, H., Chogo, S., Noiset, P., Vereecken, N., Tamiru, A., Subramanian, S., & Kiatoko, N. (2023). Differences in the biochemical content and radical scavenging activity of propolis from different parts of a Meliponula ferruginea hive. *Royal Society open science*, 10(12). doi:10.1098/rsos.230241

Geenen, C., Thibaut, J., Laenen, L., Raymenants, J., Cuypers, L., Maes, P., Dellicour, S., & André, E. (2023). Unravelling the effect of New Year's Eve celebrations on SARS-CoV-2 transmission. *Scientific reports*, 13(1), 22195. doi:10.1038/s41598-023-49678-x

Lilli, G., Sirot, C., Campbell, H., Brophy, D., Graham, C. T., & George, I. (2023). Geographic origin and host's phylogeny are predictors of the gut mucosal microbiota diversity and composition in Mediterranean scorpionfishes (Scorpaena spp.). *Frontiers in marine science*, 10. doi:10.3389/fmars.2023.1286706

Chaoua, S., Flahaut, S., Hiligsmann, S., Mansour, M., Cornu, B., Songulashvili, G., & Kacem Chaouche, N. (2023). Assessment of Green Processes for Tomato Waste Biovalorization: Spotlight on the Innovative Pulsed Electric Field–Laccase Synergy for Enhanced Sugar and Phenol Extraction Yields. *Bioenergy Research*. doi:10.1007/s12155-023-10708-1

Rudin, C., Bollen, N., Hong, S. L., Wegner, F., Politi, L., Mellou, K., Geenen, C., Gorissen, S., Verhasselt, B., Durkin, K., Henin, C., Logist, A. S., Dellicour, S., Resa, T., Stadler, T., Maes, P., Cuypers, L., André, E., Egli, A., & Baele, G. (2023). Investigation of an international water polo tournament in Czechia as a potential source for early introduction of the SARS-CoV-2 Omicron variant into Belgium, Switzerland and Germany, November 2021. *Euro surveillance*, 28(45). doi:10.2807/1560-7917.ES.2023.28.45.2300018

Brienza, F., Cannella, D., Montesdeoca, D., Cybulska, I., & Debecker, D. D. (2023). A guide to lignin valorization in biorefineries: traditional, recent, and forthcoming approaches

to convert raw lignocellulose into valuable materials and chemicals. *RSC Sustainability*, 2(1), 37-90. doi:10.1039/d3su00140g

Schar, D., Zhang, Z., Pires, J., Vrancken, B., Suchard, M. M., Lemey, P., Ip, M., Gilbert, M., Van Boeckel, T., & Dellicour, S. (2023). Dispersal history and bidirectional human-fish host switching of invasive, hypervirulent Streptococcus agalactiae sequence type 283. *PLOS global public health*, 3(10 October), e0002454. doi:10.1371/journal.pgph.0002454

Hettiarachchi, A., Cnockaert, M., Joossens, M., Gekière, A., Meeus, I., Vereecken, N., Michez, D., Smagghe, G. G., & Vandamme, P. (2023). The wild solitary bees Andrena vaga, Anthophora plumipes, Colletes cunicularius, and Osmia cornuta microbiota are host specific and dominated by endosymbionts and environmental microorganisms. *Microbial ecology*. doi:10.1007/s00248-023-02304-9

Héger, M., Noiset, P., Nkoba, K., & Vereecken, N. (2023). Traditional ecological knowledge and non-food uses of stingless bee honey in Kenya's last pocket of tropical rainforest. *Journal of ethnobiology and ethnomedicine*, 19(1). doi:10.1186/s13002-023-00614-3

Marshall, L., Leclercq, N., Weekers, T., El Abdouni, I., Carvalheiro, L. G., Kuhlmann, M., Michez, D., Rasmont, P., Roberts, S. P. M., Smagghe, G. G., Vandamme, P., Wood, T. J., & Vereecken, N. (2023). Potential for climate change driven spatial mismatches between apple crops and their wild bee pollinators at a continental scale. *Global environmental change*, 83, 102742. doi:10.1016/j.gloenvcha.2023.102742

Hettiarachchi, A., Cnockaert, M., Joossens, M., Laureys, D., De Clippeleer, J., Vereecken, N., Michez, D., Smagghe, G. G., de Graaf, D., & Vandamme, P. (2023). Convivina is a specialised core gut symbiont of the invasive hornet Vespa velutina. *Insect molecular biology*, 32(5), 510-527. doi:10.1111/imb.12847

Tuerlings, T., Hettiarachchi, A., Joossens, M., Geslin, B., Vereecken, N., Michez, D., Smagghe, G. G., & Vandamme, P. (2023). Microbiota and pathogens in an invasive bee: Megachile sculpturalis from native and invaded regions. *Insect molecular biology*, 32(5), 544-557. doi:10.1111/imb.12849

Botero, J., Sombolestani, A. S., Cnockaert, M., Peeters, C., Borremans, W., De Vuyst, L., Vereecken, N., Michez, D., Smagghe, G. G., Bonilla-Rosso, G., Engel, P., & Vandamme, P. (2023). A phylogenomic and comparative genomic analysis of Commensalibacter, a versatile insect symbiont. *Animal Microbiome*, 5(1). doi:10.1186/s42523-023-00248-6

Reverté, S., Leclercq, N., Marshall, L., Roberts, S. P. M., & Vereecken, N. (2023). National records of 3000 European bee and hoverfly species: A contribution to pollinator conservation. *Insect Conservation and Diversity*. doi:10.1111/icad.12680

Denayer, S., Dufrasne, F. E., Monsieurs, B., van Eycken, R., Houben, S., Seyler, L., Demuyser, T., van Nedervelde, E., Bourgeois, M., Delaere, B., Magerman, K., Jouck, D., Lissoir, B., Sion, C., Reynders, M., Petit, E., Dauby, N., Hainaut, M., Laenen, L., Maes, P., Baele, G., Dellicour, S., Cuypers, L., André, E., Couvreur, S., Brondeel, R., Barbezange, C., Bossuyt, N., & van Gucht, S. (2023). Genomic monitoring of SARS#CoV#2 variants

using sentinel SARI hospital surveillance. *Influenza and Other Respiratory Viruses*, 17(10). doi:10.1111/irv.13202

Hufsky, F., Abecasis, A. A., Babaian, A., Beck, S., Brierley, L., Dellicour, S., Eggeling, C., Elena, S. S., Gieraths, U., Ha, A. A., Harvey, W., Jones, T. C., Lamkiewicz, K., Lovate, G. L., Lücking, D., Machyna, M., Nishimura, L., Nocke, M. M., Renard, B. B., Sakaguchi, S., Sakellaridi, L., Spangenberg, J., Tarradas-Alemany, M., Triebel, S., Vakulenko, Y., Wijesekara, R. Y., González-Candelas, F., Krautwurst, S., Pérez-Cataluña, A., Randazzo, W., Sánchez, G., & Marz, M. (2023). The International Virus Bioinformatics Meeting 2023. *Viruses*, 15(10), 2031. doi:10.3390/v15102031

Djelid, H., Flahaut, S., Oudjama, Y., Vander Wauven, C., & Kacem Chaouche, N. (2023). High NaCl concentrations induce the resistance to thermal denaturation of an extremely halotolerant (salt-activated) #-mannanase from Bacillus velezensis H1. *World journal of microbiology & biotechnology*, 39, 304-315.

Reverté, S., Gérard, M., Bodson, M., Descamps, C., Gosselin, M., Jacquemart, A., Louvieaux, J., Smagghe, G. G., Vandamme, P., Vereecken, N., & Michez, D. (2023). Intraspecific size shifts in generalist bumblebees and flowers lead to low functional consequences. *Ecosphere*, 14(9). doi:10.1002/ecs2.4640

Kanazoe, I. W., Nombré, I., Ouédraogo, S., Boussim, J. I., & Vereecken, N. (2023). Influence of climatic factors and floristic diversity on the foraging activity of Apis mellifera adansonii Latreille in a West African Savannah. *African journal of ecology*, 61(3), 660-674. doi:10.1111/aje.13159

Warrit, N., & Vereecken, N. (2023). Opportunities and challenges in Asian bee research and conservation. *Biological Conservation*, 285, 110173. doi:10.1016/j.biocon.2023.110173

Tou, I., Azri, Y., George, I., Bouzid, O., Khemili-Talbi, S., Sadi, M., Kebbouche-Gana, S., Anzil, A., & Laichouchi, A. (2023). Bacterial community issued from a Chlorophytum plant-microbial fuel cell for electricity generation. *Biofuels*, 1-10. doi:10.1080/17597269.2023.2261751

Zoungrana, A., De Cannière, C., Cissé, M., Bationo, B. A., Traoré, S., & Visser, M. (2023). Does the social status of farmers determine the sustainable management of agroforestry parklands located near protected areas in Burkina Faso (West Africa)? *Global Ecology and Conservation*, 44, e02476. doi:10.1016/j.gecco.2023.e02476

Okoro, O., Preat, V., Karimi, K., Nie, L., Debaste, F., & Shavandi, A. (2023). Optimizing the subcritical water valorization of insect (Hermetia illucens l.) farming waste for biodiesel production. *Chemical engineering research & design*, 196, 413-426. doi:10.1016/j.cherd.2023.06.043

Anyieni, R. M., Karanja, J. M., Gikungu, M. W., & Vereecken, N. (2023). Apple flower-visiting insects' diversity and abundance in selected central Kenya orchards. *Journal of Agriculture, Science and Technology*, 22(4), 41-52. doi:10.4314/jagst.v22i4.3

Symanczik, S., Lipp, C., Mäder, P., Thonar, C., & Kundel, D. (2023). Limited effectiveness of selected bioeffectors combined with recycling phosphorus fertilizers for maize

cultivation under Swiss farming conditions. *Frontiers in Plant Science*, 14. doi:10.3389/fpls.2023.1239393

Cuypers, L., Keyaerts, E., Hong, S. L., Gorissen, S., Menezes, S. M., Starick, M., Van Elslande, J., Weemaes, M., Wawina-Bokalanga, T., Marti-Carreras, J., Vanmechelen, B., Van Holm, B., Bloemen, M., Dogne, J.-M., Dufrasne, F., Durkin, K., Ruelle, J., De Mendonça, R., Wollants, E., Vermeersch, P., COVID-19 Genomics Belgium Consortium,, Boulouffe, C., Djiena, A., Broucke, C., Catry, B., Lagrou, K., Van Ranst, M., Neyts, J., Baele, G., Maes, P., André, E., Dellicour, S., Van Weyenbergh, J., et al. (2023). Immunovirological and environmental screening reveals actionable risk factors for fatal COVID-19 during post-vaccination nursing home outbreaks. *Nature aging*, 3(6), 722-733. doi:10.1038/s43587-023-00421-1

Bonal, M., Goetghebuer, L., Joseph, C., Gonze, D., Faust, K., & George, I. (2023). Deciphering Interactions Within a 4-Strain Riverine Bacterial Community. *Current microbiology*, 80(8), 238. doi:10.1007/s00284-023-03342-9

Gares, M., Benaissa, A., Hiligsmann, S., Cherfia, R., Flahaut, S., Alloun, W., Djelid, H., Chaoua, S., & Kacem Chaouche, N. (2023). Box-Behnken design optimization of xylanase and cellulase production by Aspergillus fumigatus on Stipa tenacissima biomass. *Mycologia*.

Marshall, L., Ascher, J. S. A., Villagra, C., Beaugendre, A., Herrera, V., Henríquez# Piskulich, P., Vera, A., & Vereecken, N. (2023). Chilean bee diversity: Contrasting patterns of species and phylogenetic turnover along a large#scale ecological gradient. *Ecosphere*, 14(5). doi:10.1002/ecs2.4535

Ndungu, N., Vereecken, N., Gerard, M., Kariuki, S., Kati, L. K., Youbissi, A., Nassong, S., Hundt, B., Jaramillo, J., & Nkoba, K. (2023). Can the shape of the wing help in the identification of African stingless bee species? (Hymenoptera: Apidae: Meliponini). *International journal of tropical insect science*, 43(2), 749-759. doi:10.1007/s42690-023-00980-1

Dellicour, S., Hong, S. S., Hill, V., Dimartino, D., Marier, C., Zappile, P., Harkins, G. W., Lemey, P., Baele, G., Duerr, R., & Heguy, A. (2023). Variant-specific introduction and dispersal dynamics of SARS-CoV-2 in New York City – from Alpha to Omicron. *P L o S Pathogens*, 19(4), e1011348. doi:10.1371/journal.ppat.1011348

Bukamba Tshanga, C., Malumba, P., Kambashi, B., Bindelle, J., & Debaste, F. (2023). Dynamic vapour sorption isotherms and isosteric heats of sorption of two edible insects (Cirina forda and Rhyncophorus phoenicis). *Journal of insects as food and feed*. doi:https://doi.org/10.3920/JIFF2022.0080

Leclercq, N., Marshall, L., Caruso, G., Schiel, K., Weekers, T., Carvalheiro, L. G., Dathe, H., Kuhlmann, M., Michez, D., Potts, S. G., Rasmont, P., Roberts, S. P. M., Smagghe, G. G., Vandamme, P., & Vereecken, N. (2023). European bee diversity: Taxonomic and phylogenetic patterns. *Journal of biogeography*. doi:10.1111/jbi.14614

An, X., Totozafy, J.-C., Peaucelle, A., Jones, C. Y., Willats, W. W., Höfte, H., Corso, M., & Verbruggen, N. (2023). Contrasting Cd accumulation of Arabidopsis halleri populations:

a role for (1#4)-#-galactan in pectin. *Journal of hazardous materials*, 445, 130581. doi:10.1016/j.jhazmat.2022.130581

Jauregui, I., Vega-Mas, I., Delaplace, P., Vanderschuren, H., & Thonar, C. (2023). An optimized hydroponic pipeline for large#scale identification of wheat genotypes with resilient biological nitrification inhibition activity. *New phytologist*. doi:10.1111/nph.18807

Van Borm, S., Boseret, G., Dellicour, S., Steensels, M., Roupie, V., Vandenbussche, F., Mathijs, E., Vilain, A., Driesen, M., Dispas, M., Delcloo, A., Lemey, P., Mertens, I., Gilbert, M., Lambrecht, B., & Van Den Berg, T. (2023). Combined Phylogeographic Analyses and Epidemiologic Contact Tracing to Characterize Atypically Pathogenic Avian Influenza (H3N1) Epidemic, Belgium, 2019. *Emerging infectious diseases*, 29(2), 351-359. doi:10.3201/eid2902.220765

Mulchandani, R., Wang, Y., Gilbert, M., & Van Boeckel, T. (2023). Global trends in antimicrobial use in food-producing animals: 2020 to 2030. *PLOS global public health*, 3(2), e0001305. doi:10.1371/journal.pgph.0001305

Chaoua, S., Kacem Chaouche, N., Songulashvili, G., Gares, M., Hiligsmann, S., & Flahaut, S. (2023). Yellow laccase produced by Trametes versicolor K1 on tomato waste: A comparative study with the blue one produced on semi-synthetic medium. *Journal of biotechnology*, 361, 99-109.

Rich, S. S., Richards, V., Mavian, C., Magalis, B. R., Grubaugh, N., Rasmussen, S. A., Dellicour, S., Vrancken, B., Carrington, C., Fisk-Hoffman, R., Danso-Odei, D., Chacreton, D., Shapiro, J., Seraphin, M. N., Hepp, C., Black, A., Dennis, A., Trovão, N. S., Vandamme, A.-M., Rasmussen, A., Lauzardo, M., Dean, N., Salemi, M., & Prosperi, M. (2023). Application of Phylodynamic Tools to Inform the Public Health Response to COVID-19: Qualitative Analysis of Expert Opinions. *JMIR Formative Research*, 7, e39409. doi:10.2196/39409

Layan, M., Müller, N., Dellicour, S., De Maio, N., Bourhy, H., Cauchemez, S., & Baele, G. (2023). Impact and mitigation of sampling bias to determine viral spread: Evaluating discrete phylogeography through CTMC modeling and structured coalescent model approximations. *Virus evolution*, 9(1), vead010. doi:10.1093/ve/vead010

2022

Noiset, P., Cabirol, N., Rojas-Oropeza, M., Warrit, N., Nkoba, K., & Vereecken, N. (2022). Honey compositional convergence and the parallel domestication of social bees. *Scientific Reports*, 12(1). doi:10.1038/s41598-022-23310-w

Matvijev, K., Dellicour, S., Kaymak, E., & Hardy, O. J. (2022). Spatially explicit phylogeographical reconstruction sheds light on the history of the forest cover in the Congo Basin. *Journal of biogeography*, 49(12), 2256-2268. doi:10.1111/jbi.14507

Klitting, R., Kafetzopoulou, L. E., Thiery, W., Dudas, G., Gryseels, S., Kotamarthi, A., Vrancken, B., Gangavarapu, K., Momoh, M., Sandi, J. D., Goba, A., Alhasan, F., Grant, D. S., Okogbenin, S., Ogbaini-Emovo, E., Garry, R. R., Smither, A. A., Zeller, M., Pauthner, M. M., McGraw, M., Hughes, L. L., Duraffour, S., Günther, S., Suchard, M. M., Lemey, P., Andersen, K. G., & Dellicour, S. (2022). Predicting the evolution of the Lassa virus

endemic area and population at risk over the next decades. *Nature communications*, 13(1), 5596. doi:10.1038/s41467-022-33112-3

Pires, J., Huber, L., Hickman, R., Dellicour, S., Lunha, K., Leangapichart, T., Jiwakanon, J., Magnusson, U., Sunde, M., Järhult, J. J., & Van Boeckel, T. (2022). Genome-associations of extended-spectrum ß-lactamase producing (ESBL) or AmpC producing E. coli in small and medium pig farms from Khon Kaen province, Thailand. *BMC Microbiology*, 22(1), 253. doi:10.1186/s12866-022-02646-3

Zhao, Q., Dupas, M.-C., Axelsson, C., Artois, J., Robinson, T. P., & Gilbert, M. (2022). Distribution and intensification of pig production in China 2007–2017. *Environmental Research Letters*, 17(12), 124001. doi:10.1088/1748-9326/aca16b

Huet, A., Sbarciog, M., & Bogaerts, P. (2022). Macroscopic Modeling of Intracellular Trehalose Concentration in Saccharomyces cerevisiae Fed-batch Cultures. *IFAC-PapersOnLine*, 55(20), 391-396. doi:10.1016/j.ifacol.2022.09.126

Maton, M., Bogaerts, P., & Wouwer, A. V. (2022). A systematic elementary flux mode selection procedure for deriving macroscopic bioreaction models from metabolic networks. *Journal of process control*, 118, 170-184. doi:10.1016/j.jprocont.2022.09.002

Maton, M., Bogaerts, P., & Wouwer, A. V. (2022). Hybrid Dynamic Models of Bioprocesses Based on Elementary Flux Modes and Multilayer Perceptrons. *Processes*, 10(10), 2084. doi:10.3390/pr10102084

Hart, A. F., Verbeeck, J., Ariza, D., Cejas, D., Ghisbain, G., Honchar, H., Radchenko, V., Straka, J., Ljubomirov, T., Lecocq, T., Dániel-Ferreira, J., Flaminio, S., Bortolotti, L., Karise, R., Meeus, I., Smagghe, G. G., Vereecken, N., Vandamme, P., Michez, D., & Maebe, K. (2022). Signals of adaptation to agricultural stress in the genomes of two European bumblebees. *Frontiers in Genetics*, 13. doi:10.3389/fgene.2022.993416

Maréchal, K., Denys, M., Maughan, N., Plateau, L., & Visser, M. (2022). La recherche-action participative SPINCOOP: récit de la coopération entre maraîchers et chercheurs dans l'adaptation du modèle SPIN Farming à Bruxelles. *Industrie et technologies*, 7(4), 1-15. doi:10.21494/ISTE.OP.2022.0874

Djelid, H., Flahaut, S., Wauven, C. V., Oudjama, Y., Hiligsmann, S., Cornu, B., Cherfia, R., Gares, M., & Chaouche, N. K. (2022). Production of a halotolerant endo#1,4###glucanase by a newly isolated Bacillus velezensis H1 on olive mill wastes without pretreatment: purification and characterization of the enzyme. *Archives of microbiology*.

Rivière, Q., Corso, M., Ciortan, M., Noël, G., Verbruggen, N., & Defrance, M. (2022). Exploiting Genomic Features to Improve the Prediction of Transcription Factor-Binding Sites in Plants. *Plant and Cell Physiology*, 63(10), 1457-1473. doi:10.1093/pcp/pcac095

McCrone, J. J., Hill, V., Bajaj, S., Pena, R. E., Lambert, B. B., Inward, R., Bhatt, S., Volz, E., Ruis, C., Dellicour, S., Baele, G., Zarebski, A. E., Sadilek, A., Wu, N., Schneider, A., Ji, X., Raghwani, J., Jackson, B., Colquhoun, R., O'Toole, Á. N., Peacock, T. T., Twohig, K., Thelwall, S., Dabrera, G., Myers, R., Faria, N. R., Huber, C., Bogoch, I. I., Khan, K., du Plessis, L., Barrett, J. C., Aanensen, D. M., Barclay, W. W., Chand, M., Connor, T., Loman, N., Suchard, M. M., Pybus, O. G., Rambaut, A., & Kraemer, M. U. G.

(2022). Context-specific emergence and growth of the SARS-CoV-2 Delta variant. *Nature (London)*, 610(7930), 154-160. doi:10.1038/s41586-022-05200-3

Cuypers, L., Dellicour, S., Hong, S. S., Potter, B., Verhasselt, B., Vereecke, N., Lambrechts, L., Durkin, K., Bours, V., Klamer, S., Bayon-Vicente, G., Vael, C., Ariën, K., De Mendonça, R., Soetens, O., Michel, C., Bearzatto, B., Naesens, R., Gras, J., Vankeerberghen, A., Matheeussen, V., Martens, G. A., Obbels, D., Lemmens, A., Van den Poel, B., Van Even, E., De Rauw, K., Waumans, L., Reynders, M., Degosserie, J., André, E., Maes, P., & Baele, G. (2022). Two Years of Genomic Surveillance in Belgium during the SARS-CoV-2 Pandemic to Attain Country-Wide Coverage and Monitor the Introduction and Spread of Emerging Variants. *Viruses*, 14(10), 2301. doi:10.3390/v14102301

Seabra, S. S., Libin, P., Theys, K., Zhukova, A., Potter, B., Nebenzahl-Guimaraes, H., Gorbalenya, A. A., Sidorov, I., Pimentel, V., Pingarilho, M., De Vasconcelos, A. T. R., Dellicour, S., Khouri, R., Gascuel, O., Vandamme, A.-M., Baele, G., Cuypers, L., & Abecasis, A. A. (2022). Genome-wide diversity of Zika virus: Exploring spatio-temporal dynamics to guide a new nomenclature proposal. *Virus evolution*, 8(1), veac029. doi:10.1093/ve/veac029

Rodriguez Jimenez, A., Guiglielmoni, N., Goetghebuer, L., Dechamps, E., George, I., & Flot, J.-F. (2022). Comparative genome analysis of Vagococcus fluvialis reveals abundance of mobile genetic elements in sponge-isolated strains. *BMC genomics*, 23(1), 618. doi:10.1186/s12864-022-08842-9

Sbarciog, M., Huet, A., & Bogaerts, P. (2022). A Simulation Study on Model-Based Optimization of Intracellular Trehalose Accumulation in Saccharomyces cerevisiae Fed-Batch Cultures. *IFAC-PapersOnLine*, 55, 762--767.

Bogaerts, P., & Wouwer, A. V. (2022). Special Issue: Mathematical Modeling and Control of Bioprocesses. *Processes*, 10(7), 1372. doi:10.3390/pr10071372

Dorji, K., Tashi, S., Biesmeijer, J. C., Leclercq, N., Vereecken, N., & Marshall, L. (2022). Pollinators and crops in Bhutan: insect abundance improves fruit quality in Himalayan apple orchards. *Journal of pollination ecology*, 31, 39-52. doi:10.26786/1920-7603(2022)670

Ollerton, J., Trunschke, J., Havens, K., Landaverde-González, P., Keller, A., Gilpin, A.-M., Rodrigo Rech, A., Baronio, G., Phillips, B. J., Mackin, C., Stanley, D. A., Treanore, E., Baker, E., Rotheray, E., Erickson, E., Fornoff, F., Brearley, F., Ballantyne, G., Iossa, G., Stone, G. N., Bartomeus, I., Stockan, J. A., Leguizamón, J., Prendergast, K. K., Rowley, L., Giovanetti, M., De Oliveira Bueno, R., Wesselingh, R. A., Mallinger, R., Edmondson, S., Howard, S. R., Leonhardt, S., Rojas-Nossa, S., Brett, M., Joaqui, T., Antoniazzi, R., Burton, V., Feng, H.-H., Tian, Z.-X., Xu, Q., Zhang, C., Shi, C.-L., Huang, S.-Q., Cole, L. J., Bendifallah, L., Ellis, E. E., Hegland, S. J., Straffon Díaz, S., Lander, T. A., Mayr, A. V., Dawson, R., Eeraerts, M., Armbruster, S., Walton, B., Adjlane, N., Falk, S., Mata, L., Goncalves Geiger, A., Carvell, C., Wallace, C., Ratto, F., Barberis, M., Kahane, F., Connop, S., Stip, A., Sigrist, M. R., Vereecken, N., Klein, A. M., Baldock, K. K., & Arnold, S. E. J. (2022). Pollinator-flower interactions in gardens during the COVID-19 pandemic lockdown of 2020. *Journal of pollination ecology*, 31, 87-96. doi:10.26786/1920-7603(2022)695

Zarattini, M., Choaibi, A., Magri, S., Hermans, C., & Cannella, D. (2022). The oxidized cellooligosaccharides confer thermotolerance in Arabidopsis by priming ethylene via heat shock factor A2. *Physiologia Plantarum*, 174(4), e13737. doi:10.1111/ppl.13737

Cornet, L., Cleenwerck, I., Praet, J., Leonard, R. R., Vereecken, N., Michez, D., Smagghe, G. G., Baurain, D., & Vandamme, P. A. R. P. (2022). Phylogenomic Analyses of Snodgrassella Isolates from Honeybees and Bumblebees Reveal Taxonomic and Functional Diversity. *mSystems*, 7(3). doi:10.1128/msystems.01500-21

Weekers, T., Marshall, L., Leclercq, N., Wood, T. J., Cejas, D., Drepper, B., Garratt, M. M., Hutchinson, L. L., Roberts, S. P. M., Bosch, J., Roquer-Beni, L., Lhomme, P., Michez, D., Molenberg, J. M., Smagghe, G. G., Vandamme, P. A. R. P., & Vereecken, N. (2022). Ecological, environmental, and management data indicate apple production is driven by wild bee diversity and management practices. *Ecological indicators*, 139, 108880. doi:10.1016/j.ecolind.2022.108880

Lanner, J., Dubos, N., Geslin, B., Leroy, B., Hernández-Castellano, C., Dubai#, J. B., Bortolotti, L., Calafat, J. D., #etkovi#, A., Flaminio, S., Le Féon, V., Margalef-Marrase, J., Orr, M., Pachinger, B., Ruzzier, E., Smagghe, G. G., Tuerlings, T., Vereecken, N., & Meimberg, H. (2022). On the road: Anthropogenic factors drive the invasion risk of a wild solitary bee species. *Science of the total environment*, 827, 154246. doi:10.1016/j.scitotenv.2022.154246

Boucherit, Z., Flahaut, S., Djoudi, B., Mouas, T. N., Mechakra, A., & Ameddah, S. (2022). Potential of Halophilic Penicillium chrysogenum Isolated from Algerian Saline Soil to Produce Laccase on Olive Oil Wastes. *Current microbiology*, 79(6), 178. doi:10.1007/s00284-022-02868-8

El Moussaoui, M., Maes, N., Hong, S. S., Lambert, N., Gofflot, S., Dellot, P., Belhadj, Y., Huynen, P., Hayette, M.-P., Meex, C., Bontems, S., Defêche, J., Godderis, L., Molenberghs, G., Meuris, C. C., Artesi, M., Durkin, K., Rahmouni, S., Grégoire, C., Beguin, Y., Moutschen, M., Dellicour, S., & Darcis, G. (2022). Evaluation of Screening Program and Phylogenetic Analysis of SARS-CoV-2 Infections among Hospital Healthcare Workers in Liège, Belgium. *Viruses*, 14(6), 1302. doi:10.3390/v14061302

Agoti, C. C., Ochola-Oyier, L. I., Dellicour, S., Mohammed, K. S., Lambisia, A. A., de Laurent, Z. Z., Morobe, J. M., Mburu, M. M., Omuoyo, D. D., Ongera, E. E., Ndwiga, L., Maitha, E., Kitole, B., Suleiman, T., Mwakinangu, M., Nyambu, J. J., Otieno, J., Salim, B., Musyoki, J., Murunga, N., Otieno, E., Kiiru, J. N., Kasera, K., Amoth, P., Mwangangi, M., Aman, R., Kinyanjui, S., Warimwe, G., Phan, M. V. T., Agweyu, A., Cotton, M., Barasa, E., Tsofa, B., Nokes, D. J., Bejon, P., & Githinji, G. (2022). Transmission networks of SARS-CoV-2 in Coastal Kenya during the first two waves: A retrospective genomic study. *eLife*, 11, e71703. doi:10.7554/eLife.71703

Erazo Quintero, D., Vincenti Gonzalez, M. F., van Loenhout, J. J., Hubin, P., Vandromme, M., Maes, P., Taquet, M., van Weyenbergh, J., Catteau, L., & Dellicour, S. (2022). Investigating COVID-19 Vaccine Impact on the Risk of Hospitalisation through the Analysis of National Surveillance Data Collected in Belgium. *Viruses*, 14(6), 1315. doi:10.3390/v14061315

Leclercq, N., Marshall, L., Weekers, T., Anselmo, A., Benda, D., Bevk, D., Bogusch, P., Cejas, D., Drepper, B., Galloni, M., Gerard, M., Ghisbain, G., Hutchinson, L. L., Martinet,

B., Michez, D., Molenberg, J. M., Nikolic, P., Roberts, S. P. M., Smagghe, G. G., Straka, J., Vandamme, P. A. R. P., Wood, T. J., & Vereecken, N. (2022). A comparative analysis of crop pollinator survey methods along a large-scale climatic gradient. *Agriculture, ecosystems & environment*, 329, 107871. doi:10.1016/j.agee.2022.107871

Coutelier, M., Jacoupy, M., Janer, A., Renaud, F., Auger, N., Saripella, G.-V., Ancien, F., Pucci, F., Rooman, M., Gilis, D., Larivière, R., Sgarioto, N., Valter, R., Guillot-Noel, L., Le Ber, I., Sayah, S., Charles, P., Nümann, A., Pauly, M. G., Helmchen, C., Deininger, N., Haack, T., Brais, B., Brice, A., Trégouët, D.-A., El Hachimi, K., Shoubridge, E., Durr, A., & Stevanin, G. (2022). NPTX1 mutations trigger endoplasmic reticulum stress and cause autosomal dominant cerebellar ataxia. *Brain*, 145(4), 1519-1534. doi:10.1093/brain/awab407

Lapeyra Martin, J., John, U., Royer, C., & Gypens, N. (2022). Fantastic Beasts: Unfolding Mixoplankton Temporal Variability in the Belgian Coastal Zone Through DNA-Metabarcoding. *Frontiers in marine science*, 9, 786787. doi:10.3389/fmars.2022.786787

Kolbert, Z., Cuypers, A., & Verbruggen, N. (2022). Essential trace metals: Micronutrients with large impact. *Journal of Experimental Botany*, 73(6), 1685-1687. doi:10.1093/jxb/erac025

He, W. T., Bollen, N., Xu, Y., Zhao, J., Dellicour, S., Yan, Z., Gong, W., Zhang, C., Zhang, L., Lu, M., Lai, A., Suchard, M. M., Ji, X., Tu, C., Lemey, P., Baele, G., & Su, S. (2022). Phylogeography Reveals Association between Swine Trade and the Spread of Porcine Epidemic Diarrhea Virus in China and across the World. *Molecular biology and evolution*, 39(2), msab364. doi:10.1093/molbev/msab364

Fountain-Jones, N. N., Kraberger, S., Gagne, R. R., Gilbertson, M. M., Trumbo, D. D., Charleston, M., Salerno, P. P., Chris Funk, W., Crooks, K., Logan, K., Alldredge, M., Dellicour, S., Baele, G., Didelot, X., VandeWoude, S., Carver, S., & Craft, M. M. (2022). Hunting alters viral transmission and evolution in a large carnivore. *Nature Ecology and Evolution*, 6(2), 174-182. doi:10.1038/s41559-021-01635-5

Beaugendre, A., Mingeot, D. M., & Visser, M. (2022). Complex plant interactions in heterogeneous material require the ecological rethinking of sowing density recommendations for bread wheat. A review. *Agronomy for sustainable development*, 42(9). doi:10.1007/s13593-021-00735-7

Dellicour, S., Lemey, P., Suchard, M. A., Gilbert, M., & Baele, G. (2022). Accommodating sampling location uncertainty in continuous phylogeography. *Virus evolution*, 8(1). doi:10.1093/ve/veac041

Lapeyra Martin, J., Santi, I., Pitta, P., John, U., & Gypens, N. (2022). Towards quantitative metabarcoding of eukaryotic plankton: an approach to improve 18S rRNA gene copy number bias. *Metabarcoding and Metagenomics*, 6, e85794.

Nahata, K. K., Bielejec, F., Monetta, J., Dellicour, S., Rambaut, A., Suchard, M. M., Baele, G., & Lemey, P. (2022). SPREAD 4: online visualisation of pathogen phylogeographic reconstructions. *Virus evolution*, 8(2), veac088. doi:10.1093/ve/veac088

Blokker, T., Baele, G., Lemey, P., & Dellicour, S. (2022). Phycova - a tool for exploring covariates of pathogen spread. *Virus evolution*, 8(1), veac015. doi:10.1093/ve/veac015