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Equipe « **Biologie des algues et interactions avec l'environnement** »

UMR 8227, « Laboratoire de Biologie Intégrative des Modèles Marins »

Station Biologique de Roscoff

Revue à comité de lecture

1. Qikun Xing #, Léa Cabioch #, Antoine Desrut, Gildas Le Corguillé, Sylvie Rousvoal, Laurence Dartevelle, Elodie Rolland, Yann Guitton, Philippe Potin, Gabriel Markov, Sylvain Faugeron, Catherine Leblanc* (2023). Aldehyde-mediated defense responses in the brown alga *Laminaria digitata* affect a specialist limpet grazer. *The Plant Journal*. <https://onlinelibrary.wiley.com/doi/10.1111/tpj.16450>
2. Arnaud Belcour*, Jeanne Got, Méziane Aite, Ludovic Delage, Jonas Collen, Clémence Frioux, Catherine Leblanc, Simon Dittami, Samuel Blanquart, Gabriel V. Markov and Anne Siegel (2023). Inferring and comparing metabolisms across heterogeneous sets of annotated genomes using AuCoMe. *Genome Research*. <https://doi.org/10.1101/gr.277056.122>
3. Yoran Le Strat, Thierry Tonon*, Catherine Leblanc and Agnès Groisillier (2023). Characterization of Redox Sensitive Brown Algal Mannitol-1-Phosphatases. *Phycology*, 3(1), 1-12. doi.org/10.3390/phycolgy3010001
4. Fievet Bruno, Voiseux Claire, Leblanc Catherine, Maro Denis, Hebert Didier, Solier Luc, Godinot Claire* (2023). Iodine uptake in brown seaweed exposed to radioactive liquid discharges from the reprocessing plant of ORANO La Hague. *Journal of Environmental Radioactivity*, 256 (2023) 107045. doi.org/10.1016/j.jenvrad.2022.107045
5. Eugénie Grigorian, Thomas Roret, Mirjam Czjzek*, Catherine Leblanc and Ludovic Delage* (2022). X-ray structure and mechanism of ZgHAD, a L-2-haloacid dehalogenase from the marine Flavobacterium *Zobellia galactanivorans*. *Protein Science*. doi.org/10.1002/pro.4540
6. Hudson Jennifer, Deshpande Nandan, Leblanc Catherine and Egan Suhelen (2022). Pathogen exposure leads to a transcriptional downregulation of core cellular functions that may dampen the immune response in a macroalga. *Molecular Ecology*, 31, 3468-3480. dx.doi.org/10.1111/mec.16476.
7. Brunet Maéva, de Bettignies Florian, Le Duff Nolwen, Tanguy Gwenn, Davoult Dominique, Leblanc Catherine, Gobet Angélique* and Thomas François* (2021). Accumulation of detached kelp biomass in a subtidal temperate coastal ecosystem induces succession of epiphytic and sediment bacterial communities. *Environmental Microbiology*, 23(3), 1638–1655. doi.org/10.1111/1462-2920.15389
8. Creis Bendelac Emeline, Delage Ludovic, Vallet Laurent, Leblanc Catherine, Kruse Inken, Ar Gall Erwan*, Weinberger Florian and Potin Philippe* (2021). Induction of Phlorotannins and Gene Expression in the Brown Macroalga *Fucus vesiculosus* in Response to the Herbivore *Littorina littorea*. *Marine Drugs*, 19, 185. doi.org/10.3390/md19040185
9. Simon M. Dittami*, Enrique Arboleda, Jean-Christophe Auguet, Arite Bigalke, Enora Briand, Paco Cárdenas, Ulisse Cardini, Johan Decelle, Aschwin Engelen, Damien Eveillard, Claire M.M. Gachon, Sarah Griffiths, Tilmann Harder, Ehsan Kayal, Elena Kazamia, Francois H. Lallier, Mónica Medina, Ezequiel M. Marzinelli, Teresa Morganti, Laura Núñez Pons, Soizic Pardo, José

- Pintado Valverde, Mahasweta Saha, Marc-André Selosse, Derek Skillings, Willem Stock, Shinichi Sunagawa, Eve Toulza, Alexey Vorobev, Catherine Leblanc* and Fabrice Not* (2021). A community perspective on the concept of marine holobionts: state-of-the-art, challenges, and future directions. Recommended by Peer Community in Ecology (<https://doi.org/10.24072/pci.ecology.100045>). **PeerJ**, 9, e10911. doi.org/10.7717/peerj.10911
10. Girard Jean, Lanneau Goulven, Delage Ludovic, Leroux Cédric, Belcour Arnaud, Got Jeanne, Collén Jonas, Boyen Catherine, Siegel Anne, Dittami Simon M., Leblanc Catherine, Markov Gabriel V.* (2021). Semi-quantitative targeted GC-MS profiling supports a late side-chain reductase cycloartenol-to-cholesterol biosynthesis pathway in brown algae **Frontiers in Plant Science**, section Marine and Freshwater Plants, 12, 648426. doi.org/10.3389/fpls.2021.648426
 11. Eugénie Grigorian, Agnès Groisillier, François Thomas, Catherine Leblanc*, Ludovic Delage* (2021). Functional characterization of a L-2-haloacid dehalogenase from *Zobellia galactanivorans* Dsij T suggests a role in haloacetic acid catabolism and a wide distribution in marine environments. **Frontiers in Microbiology**, section Aquatic Microbiology. doi.org/10.3389/fmicb.2021.725997
 12. Lebeau Diane, Leroy Nathalie, Doizi Denis, Wu Ting-Di, Guerquin-Kern Jean-Luc, Perrin Laura, Ortega Richard, Voiseux Claire, Fournier Jean-Baptiste, Potin Philippe, Fievet Bruno, Leblanc Catherine* (2021). Mass spectrometry – based imaging techniques for iodine-127 and iodine-129 detection and localization in the brown alga *Laminaria digitata*. **Journal of Environmental Radioactivity**, 231, 106552. doi.org/10.1016/j.jenvrad.2021.106552
 13. Paix Benoit, Potin Philippe, Schires Gaëtan, Le Poupon Christophe, Misson Benjamin, Leblanc Catherine, Culioli Gérald* and Briand Jean-François* (2021). Synergistic effects of temperature and light affect the relationship between *Taonia atomaria* and its epibacterial community : a controlled conditions study. **Environmental Microbiology**. doi.org/10.1111/1462-2920.15758
 14. Paix Benoît, Vieira Christophe, Potin Philippe, Leblanc Catherine, De Clerck Olivier, Briand Jean-François*, Culioli Gérald* (2021). French Mediterranean and Atlantic populations of the brown algal genus *Taonia* (Dictyotales) display differences in phylogeny, surface metabolomes and epibacterial communities. **Algal Research**, 59, 102452. doi.org/10.1016/j.algal.2021.102452
 15. Qikun Xing*, Miriam Bernard, Sylvie Rousvoal, Erwan Corre, Gabriel V. Markov, Akira F. Peters, Catherine Leblanc* (2021). Different early responses of Laminariales to an endophytic infection provide insights about kelp host specificity. **Frontiers in Marine Science**. doi.org/10.3389/fmars.2021.742469
 16. Xing Qikun, Rousvoal Sylvie, Leblanc Catherine* (2021). Transcriptome-wide identification and evaluation of optimal reference genes for RT-qPCR expression analysis of *Saccharina latissima* responses to biotic and abiotic stress. **Journal of Applied Phycology**, 33, 617–627. doi.org/10.1007/s10811-020-02279-x
 17. Belcour A.; Girard J.; Aite M.; Delage L.; Trottier C.; Marteau C.; Leroux C.; Dittami S. M.; Sauleau P.; Corre E.; Nicolas J.; Boyen C.; Leblanc C.; Collén J.; Siegel A. & Markov G. V.* (2020). Inferring biochemical reactions and metabolite structures to cope with metabolic pathway drift. **iScience**, 23(2), 100849. doi.org/10.1016/j.isci.2020.100849
 18. Bertille Burgunter-Delamare, Hetty KleinJan, Clemence Frioux, Enora Fremy, Margot Wagner, Erwan Corre, Alicia Le Salver, Cédric Leroux, Catherine Leblanc, Catherine Boyen, Anne Siegel, Simon M Dittami * (2020). Metabolic complementarity between a brown alga and associated cultivable bacteria provide indications of beneficial interactions. **Frontiers in Marine Science**, section Marine Ecosystem Ecology, 7, 85. doi.org/10.3389/fmars.2020.00085
 19. Canonge Julie, Philippot Murielle*, Leblanc Catherine, Potin Philippe, Bodin Manuelle (2020). Impedance flow cytometry early predicts embryo yields in wheat (*Triticum aestivum* L.) microspore cultures. **Plant Science**, 300, 110586. doi.org/10.1016/j.plantsci.2020.110586
 20. Simon M. Dittami*, Erwan Corre, Loraine Brillet-Guéguen, Agnieszka P. Lipinska, Noé Pontoizeau, Agnieszka P. Lipinska, Meziane Aite, Komlan Avia, Christophe Caron†, Chung Hyun Cho, Jonas Collén, Alexandre Cormier, Ludovic Delage, Sylvie Doubleau, Clémence Frioux,

- Angélique Gobet, Irene González-Navarrete, Agnès Groisillier, Cécile Hervé, Didier Jollivet, Hetty KleinJan, Catherine Leblanc, Xi Liu, Dominique Marie, Gabriel V. Markov, André E. Minoche., Misharl Monsoor, Pierre Pericard, Marie-Mathilde Perrineau, Akira F. Peters, Anne Siegel, Amandine Siméon, Camille Trotter, Hwan Su Yoon, Heinz Himmelbauer, Catherine Boyen, Thierry Tonon (2020). The genome of *Ectocarpus subulatus* – a highly stress-tolerant brown alga. **Marine Genomics**, 52, 100740. doi.org/10.1016/j.margen.2020.100740
21. Roussel S.*, Poitevin P., Day R., Legrand F., Stiger-Pouvreau V., Leblanc C. and Huchette S. (2020). Foraging strategy of a large marine herbivore, *Haliotis tuberculata*: a generalist that prefers a mixed diet, but with consistent individual foraging activity. **Ethology**, 126, 716–726. doi.org/10.1111/eth.13020
 22. François Thomas*, Simon M. Dittami, Maéva Brunet, Nolwen Le Duff, Gwenn Tanguy, Catherine Leblanc and Angélique Gobet* (2020). Evaluation of a new primer combination to minimize plastid contamination in 16S rDNA metabarcoding analyses of alga-associated bacterial communities. **Environmental Microbiology Reports**, 12(1), 30–37. doi.org/10.1111/1758-2229.12806
 23. Claire Vigor *, Camille Oger, Guillaume Reversat, Amandine Rocher, Bingqing Zhou, Amandyne Linares-maurizi, Alexandre Guy, Valérie Bultel-Poncé, Jean-Marie Galano, Joseph Vercauteren, Thierry Durand, Philippe Potin, Thierry Tonon, Catherine Leblanc (2020). Isoprostanoid Profiling of Marine Microalgae. **Biomolecules**, 10, 1073. doi.org/10.3390/biom10071073
 24. Bernard M.*, Rousvoal S., Collet N., Le Goff T., Jacquemin B., Peters, A.F., Potin, P. & Leblanc C.* (2019). A highly prevalent filamentous algal endophyte in natural populations of the sugar kelp *Saccharina latissima* is not detected during cultivation in Northern Brittany. **Aquatic Living Resources**, 32, 21. doi.org/10.1051/alr/2019019
 25. Bernard M., Strittmatter M., Murua P., Heesch S., Cho G. Y., Leblanc C., Peters A. F. (2019). Diversity, biogeography and host specificity of kelp endophytes with a focus on the genera *Laminarionema* and *Laminariocolax* (Ectocarpales, Phaeophyceae). **European Journal of Phycology**, 54, 39-51. doi.org/10.1080/09670262.2018.1502816
 26. Nègre Delphine, Aite Méziane, Belcour Arnaud, Frioux Clémence, Brillet–Guéguen, Loraine, Liu Xi, Bordron Philippe, Godfroy Olivier, Lipinska Agnieszka P., Leblanc Catherine, Siegel Anne, Dittami Simon M., Corre Erwan and Markov Gabriel V. (2019). Genome-Scale Metabolic Networks Shed Light on the Carotenoid Biosynthesis Pathway in the Brown Algae *Saccharina japonica* and *Cladosiphon okamuranus*. **Antioxidants**, 8 (11), 564. doi.org/10.3390/antiox8110564t
 27. Roussel S., Caralp C., Leblanc C., Le Grand F., Stiger V., Coulombet C., Le Goic N. & Huchette S. (2019). Impact of nine macroalgal diets on growth and initial reproductive investment in juvenile abalone *Haliotis tuberculata*. **Aquaculture**, 513, 734385. doi.org/10.1016/j.aquaculture.2019.734385
 28. Bernard M., Rousvoal S., Jacquemin B., Ballenghien M., Peters A.F. and Leblanc C. (2018). qPCR-based relative quantification of the brown algal endophyte *Laminarionema elsbetiae* in *Saccharina latissima*: variation and dynamics of host – endophyte interactions. **Journal of Applied Phycology**. 30, 2901-2911. doi.org/10.1007/s10811-017-1367-0
 29. Markov G., Girard J., Laudet V., Leblanc C. (2018). Hormonally active phytochemicals from macroalgae: a largely untapped source of ligands for orphanizing nuclear receptors in emerging marine animal models. **General and Comparative Endocrinology**, 265, 41–45. doi.org/10.1016/j.ygcen.2018.06.004
 30. Vigor C., Reversat G.; Rocher A.; Oger C.; Galano J.-M.; Vercauteren J.; Durand T.; Tonon T.; Leblanc C.; Potin P. (2018). Isoprostanoids quantitative profiling of marine red and brown macroalgae. **Food Chemistry**, 268 (1), 452-462. doi.org/10.1016/j.foodchem.2018.06.111

31. Radlow M., Czjzek M., Jeudy A., Dabin J., Delage L., Leblanc C. and Hartung J. (2018). Insights from X-Ray-Diffraction and Density Functional Theory Reveal Mode of Vanadate Binding to Homohexameric Bromoperoxidase II from *Ascophyllum nodosum* and Mechanism of Bromide Oxidation. **ACS Chemical Biology**, 13 (5), 1243-1259. doi.org/10.1021/acscchembio.8b00041
32. Gobet A., Mest L., Perennou M., Dittami S., Caralp C., Coulombet C., Huchette S., Roussel S., Michel G. and Leblanc C. (2018). Seasonal and diet-driven patterns of a core microbiota associated to macroalgal digestion in a generalist marine herbivore. **Microbiome**, 6, 60. doi.org/10.1186/s40168-018-0430-7
33. Ritter A., Cabioch L., Brillet-Guéguen L., Corre E., Cosse A., Dartevelle L., Duruflé H., Fasshauer C., Goulitquer S., Thomas F., Correa J. A., Potin P, Faugeron S. and Leblanc C. (2017). Herbivore-induced chemical and molecular responses of the kelps *Laminaria digitata* and *Lessonia spicata*. **Plos One**, 12(3), e0173315. doi.org/10.1371/journal.pone.0173315
34. Barbeyron T, Thomas F, Barbe V, Teeling H, Schenowitz C, Dossat C, Goesmann A, Leblanc C., Glöckner FO, Czjzek M, Amann R and Michel G. (2016) Habitat and taxon as driving forces of carbohydrate catabolism in marine heterotrophic bacteria: example of the model algae-associated bacterium *Zobellia galactanivorans*. **Environmental Microbiology**, 18(12), 4610–4627. doi.org/10.1111/1462-2920.13584
35. Aljabal M., Picot A., Turner M., Goulitquer S., Charton S., Leblanc C., Neema C., Hallier S. (2015). Impact of abiotic stresses on the protection efficacy of defence elicitors and on metabolic regulation in tomato leaves infected by *Botrytis cinerea*. **European Journal of Plant Pathology**, 142, 223-237
36. Creis E., Delage L., Charton S., Goulitquer S., Leblanc C., Potin P., Ar Gall E. (2015). Constitutive or inducible protective mechanisms against UV-B radiation in the brown alga *Fucus vesiculosus*? A study of gene expression and phlorotannin content responses. **Plos One**, 10(6), e0128003
37. Leblanc C., Vilter H., Fournier J.-B., Delage L., Potin P., Rebuffet E., Michel G., Solari P. L., Feiters M. C., Czjzek M. (2015). Vanadium haloperoxidases: from the discovery 30 years ago to X-Ray crystallographic and V K-edge absorption spectroscopic studies. **Coordination Chemistry Reviews**, 301–302, 134–146. doi.org/10.1016/j.ccr.2015.02.013
38. Dittami S. M., Barbeyron T., Boyen C., Cambefort J., Collet G., Delage L., Gobet A., Groisillier A., Leblanc C., Michel G., Scornet D., Siegel A., Tapia J. E., Tonon T. (2014). Genome and metabolic network of “Candidatus *Phaeomarinobacter ectocarpus*” Ec32, a new candidate genus of Alphaproteobacteria frequently associated with brown algae. **Frontiers in Genetics**. doi.org/10.3389/fgene.2014.00241
39. Fournier J.-B., Rebuffet E., Delage L., Grijol R., Meslet-Cladière L., Rzonca J., Potin P., Michel G., Czjzek M., Leblanc C. (2014). The Bacterial Vanadium Iodoperoxidase from the Marine Flavobacteriaceae *Zobellia galactanivorans* Reveals Novel Molecular and Evolutionary Features of Halide Specificity in the Vanadium Haloperoxidase Enzyme Family. **Applied and Environmental Microbiology**, 80(24), 7561-7573. doi.org/10.1128/AEM.02430-14
40. Küpper F. C., Leblanc C., Meyer-Klaucke W., Potin P., Feiters M. C. (2014). Different speciation for bromine in brown and red algae, revealed by in vivo X-ray absorption spectroscopic studies. **Journal of Phycology**, 50, 652–664.
41. Thomas F., Cosse A., Le Panse S., Kloareg B., Potin P., Leblanc C. (2014). Kelps feature systemic defense responses: insights into the evolution of innate immunity in multicellular Eukaryotes. **New Phytologist**, 204, 567–576. doi.org/10.1111/nph.12925
42. Jonas Collén, Betina Porcel, Wilfrid Carré, Steven G. Ball, Cristian Chaparro, Thierry Tonon, Tristan Barbeyron, Gurvan Michel, Benjamin Noel, Klaus Valentin, Marek Elias, François Artiguenave, Alok Arun, Jean-Marc Aury, José F. Barbosa-Neto, John H. Bothwell, François-Yves Bouget, Loraine Brillet, Francisco Cabello-Hurtado, Salvador Capella-Gutiérrez, Bénédicte Charrier, Lionel Cladière, J. Mark Cock, Susana M. Coelho, Christophe Colleoni, Mirjam Czjzek, Corinne Da Silva, Ludovic Delage, France Denoëud, Philippe Deschamps, Simon M. Dittami,

- Toni Gabaldón, Claire M. M. Gachon, Agnès Groisillier, Cécile Hervé, Kamel Jabbari, Michael Katinka, Bernard Kloareg, Nathalie Kowalczyk, Karine Labadie, Catherine Leblanc, Pascal J. Lopez, Deirdre H. McLachlan, Laurence Meslet-Cladiere, Ahmed Moustafa, Zofia Nehr, Pi Nyvall Collén, Olivier Panaud, Frédéric Partensky, Julie Poulain, Stefan A. Rensing, Sylvie Rousvoal, Gaele Samson, Aikaterini Symeonidi, Jean Weissenbach, Antonios Zambounis, Patrick Wincker, and Catherine Boyen (2013). Genome structure and metabolic features in the red seaweed *Chondrus crispus* shed light on evolution of the Archaeplastida. **PNAS**, 110 (13), 5247-5252.
43. Janouškovec J., Liu S.-L., Martone P. T., Carré W., Leblanc C., Collén J., and Keeling P. J. (2013). Evolution of red algal plastid genomes: ancient architectures, introns, horizontal gene transfer, and taxonomic utility of plastid markers. **Plos One**, 8(3), e59001. doi.org/10.1371/journal.pone.0059001
 44. Küpper F.C, Carpenter L.J., Leblanc C., Toyama C., Uchida Y., Maskrey B. H., Robinson J., Verhaeghe E. F., Malin G., Luther III G. W., Kroneck P.M.H., Kloareg B., Meyer-Klaucke W., Muramatsu Y., Ian L. Megson I.L., Potin P, Feiters M.C. (2013). *In vivo* speciation studies and antioxidant properties of bromine in *Laminaria digitata* reinforce the significance of iodine accumulation for kelps. **J. Exp. Bot.**, 64 (10), 2653–2664.
 45. Meslet-Cladière, L., Delage L., Leroux C. J.-J., Goulitquer S., Leblanc C., Creis E., Gall E.A., Stiger-Pouvreau V., Czjzek M., and Potin P. (2013). Structure/Function Analysis of a Type III Polyketide Synthase in the Brown Alga *Ectocarpus siliculosus* Reveals a Biochemical Pathway in Phlorotannin Monomer Biosynthesis. **The Plant Cell**, 25, 3089–3103.
 46. Wischang, D., M. Radlow, H. Schulz, H. Vilter, L. Viehweger, M.O. Altmeyer, C. Kegler, J. Herrmann, R. Müller, F. Gaillard, L. Delage, C. Leblanc, and J. Hartung, (2012). Molecular Cloning, Structure, and Reactivity of the Second Bromoperoxidase from *Ascophyllum nodosum*. **Bioorganic Chemistry**, 44, 25–34.
 47. Delage L., Leblanc C., Nyvall P., Gschloess B., Oudot M.-P., Sterck L., Poulain J., Aury J.-M., Cock J. M. (2011). *In Silico* Survey of the Mitochondrial Protein Uptake and Maturation Systems in the Brown Alga *Ectocarpus siliculosus*. **Plos One**, 6(5), e19540. doi.org/10.1371/journal.pone.0019540.
 48. Leblanc C., Schaal G., Cosse A., Destombe C., Valero M., Riera P., Potin P. (2011). Trophic and biotic interactions in *Laminaria digitata* beds: which factors could influence the persistence of marine kelp forests in northern Brittany? **Cahiers de Biologie Marine**, 52, 415-427.
 49. Thomas F., Cosse A., Goulitquer S., Raimund S., Morin P., Valero M., Leblanc C. and Potin P. (2011). Waterborne Signaling Primes the Expression of Elicitor-Induced Genes and Buffers the Oxidative Responses in the Brown Alga *Laminaria digitata*. **Plos One**, 6(6), e21475. doi.org/10.1371/journal.pone.0021475.
 50. Cock J. M., Sterck L., Rouzé P., Scornet D., Allen A. E., Amoutzias G., Anthouard V., Artiguenave F., Aury J.-M., Badger J. H., Beszteri B., Billiau K., Bonnet E., Bothwell J. H. F., Bowler C., Boyen C., Brownlee C., Carrano C. J., Charrier B., Cho G. Y., Coelho S. M., Collén J., Corre E., Da Silva C., Delage L., Delaroque N., Dittami S. M., Doulbeau S., Elias M., Farnham G., Gachon C. M. M., Gschloessl B., Heesch S., Jabbari K., Jubin C., Kawai H., Kimura K., Kloareg B., Küpper F. C., Lang D., Le Bail A., Leblanc C., Lerouge P., Lohr M., Lopez P. J., Martens C., Maumus F., Michel G., Miranda-Saavedra D., Morales J., Moreau H., Motomura T., Nagasato C., Napoli C. A., Nelson D. R., Nyvall-Collén P., Peters A. F., Pommier C., Potin P., Poulain J., Quesneville H., Read B. A., Rensing S. A., Ritter A., Rousvoal S., Samanta M., Samson G., Schroeder D. C., Ségurens B., Strittmatter M., Tonon T., Tregear J., Valentin K., von Dassow P., Yamagishi T., Van de Peer Y. & Wincker P. (2010) The *Ectocarpus* genome and the independent evolution of multicellularity in the brown algae. **Nature**, 465, 617–621.
 51. La Barre S., Potin P., Leblanc C., and Delage L. (2010): The Halogenated Metabolism of Brown Algae (Phaeophyta), Its Biological Importance and Its Environmental Significance. **Mar. Drugs**, 8(4), 988-1010. doi.org/10.3390/md8040988

52. Ball S. M., Hollingsworth A. M., Humbles J., Leblanc C., Potin P., and McFiggans G. (2010). Spectroscopic studies of molecular iodine emitted into the gas phase by seaweed. **Atmos. Chem. Phys.**, 10, 6237–6254. IF 5.9.
53. Leigh R. J., Ball S. M., Whitehead J., Leblanc C., Shillings A. J. L., Mahajan A. S., Oetjen H., Dorsey J. R., Gallagher M., Jones R. L., Plane J. M. C., Potin P. and McFiggans G. (2010). Measurements and modelling of molecular iodine emissions, transport and photodestruction in the coastal region around Roscoff. **Atmos. Chem. Phys.**, 10, 11823-11838.
54. McFiggans G., Bale C. S. E., Ball S. M., Beames J. M., Bloss W. J., Carpenter L. J., Dorsey J., Dunk R., Flynn M. J., Furneaux K. L., Gallagher M.W., Heard D.E., Hollingsworth A.M., Hornsby K., Ingham T., Jones C. E., Jones R. L., Kramer L. J., Langridge J. M., Leblanc C., LeCrane J.-P., Lee J. D., Leigh R. J., Longley I., Mahajan A. S., Monks P. S., Oetjen H., Orr-Ewing A. J., Plane J. M. C., Potin P., Shillings A. J. L., Thomas F., von Glasow R., Wada R., Whalley L. K., and Whitehead J. D. (2010). Iodine-mediated coastal particle formation: an overview of the Reactive Halogens in the Marine Boundary Layer (RHAMBLE) Roscoff coastal study. **Atmos. Chem. Phys.**, 10, 2975–2999.
55. Cosse A., Potin P. and Leblanc C. (2009). Patterns of gene expression induced by oligogulonates reveals conserved and environment-specific molecular defense responses in the brown algal kelp *Laminaria digitata*. **New Phytol.**, 182, 239–250.
56. Le Corguillé G., Pearson G., Valente M., Viegas C., Gschloessl B., Corre E., Bailly X., Peters A. F., Jubin C., Vacherie B., Cock J. M. and Leblanc C. (2009) Plastid genomes of two brown algae, *Ectocarpus siliculosus* and *Fucus vesiculosus*: further insights on the evolution of red-algal derived plastids. **BMC Evol. Biol.** 9, 253.
57. Verhaeghe E., Buisson D., Zekri E., Leblanc C., Potin P. and Ambroise Y. (2008). A colorimetric assay for steady-state analyses of iodo- and bromoperoxidase activities. **Anal. Biochem.**, 379, 60-65.
58. Verhaeghe E., Fraysse A., Guerquin-Kern J.-L., Wu T.-D., Devès G., Mioskowski, C., Leblanc C., Ortega R., Ambroise Y. and Potin P. (2008). Micro-chemical imaging of iodine distribution in the brown alga *Laminaria digitata* suggests a new mechanism for its accumulation. **J. Biol. Inorg. Chem.**, 13, 257-269.
59. Leblanc C., Colin C., Cosse A., Delage L., La Barre S., Morin P., Fiévet B., Voiseux C., Ambroise Y., Verhaeghe E., Amouroux D., Donard O., Tessier E. and Potin P. (2006). Iodine transfers in the coastal marine environment: the key role of brown algae and of their vanadium-dependent haloperoxidases, **Biochimie**, 88, 1773–1785.
60. Colin C., Leblanc C., Michel G., Wagner E., Leize-Wagner E., Van Dorsselaer A. and Potin P. (2005). Vanadium-dependent iodoperoxidases in *Laminaria digitata*, a novel biochemical function diverging from brown algal bromoperoxidases. **J. Biol. Inorg. Chem.**, 10, 156-166.
61. Feiters M.C., Leblanc C., Küpper F.C., Meyer-Klaucke W., Michel G. and Potin P. (2005). Bromine is an endogenous component of a vanadium bromoperoxidase. **J. Am. Chem. Soc.**, 127, 15340-15341.
62. Roeder V., Collén J., Rousvoal S., Corre E., Leblanc C. and Boyen C. (2005). Identification of stress genes transcripts in *Laminaria digitata* (Phaeophyceae) protoplast cultures by expressed sequence tag analysis. **J. Phycol.**, 41, 1227-1235.
63. Colin C., Leblanc C., Wagner E., Delage L., Leize-Wagner E., Van Dorsselaer A., Kloareg B. and Potin P. (2003). The brown algal kelp *Laminaria digitata* features distinct bromoperoxidase and iodoperoxidase activities. **J. Biol. Chem.**, 278, 23545-23552.
64. Leblanc C., Falciatore A., Watanabe M. and Bowler C. (1999). Semi-quantitative RT-PCR analysis of photoregulated gene expression in marine diatoms. **Plant Mol. Biol.** 40, 1031-1044.
65. Falciatore A., Casotti R., Leblanc C., Abrescia C. and Bowler C. (1999). Transformation of non-selectable reporter genes in marine diatoms. **Marine Biotech.** 1, 239-251.

66. Leblanc C., Richard O., Kloareg B., Viehmann S., Zetsche K. and Boyen C. (1997). Origin and evolution of mitochondria: what have we learnt from red algae ? **Curr. Genet.** 31, 193-207.
67. Leblanc C., Boyen C. and Loiseaux-de Goër S. (1995). Organisation of the plastid genome of the rhodophyte *Chondrus crispus*. Sequence and phylogeny of the 16S rRNA gene. **Eur. J. Phycol.** 30, 133-140.
68. Leblanc C., Kloareg B. Loiseaux-de Goër S. and Boyen C. (1995). The mitochondrial small subunit rRNA from the red alga *Chondrus crispus* (Gigartinales, Rhodophytes): DNA sequence, structure and evolutionary implications. **J. Mol. Evol.** 41, 196-202.
69. Leblanc C., Boyen C., Richard O., Bonnard G., Grienenberger J.M. and Kloareg B. (1995). Complete sequence of the mitochondrial DNA of the rhodophyte alga *Chondrus crispus* (Gigartinales). Gene content and genome organization. **J. Mol. Biol.** 250, 484-495.
70. Fontaine J.M, Rousvoal S., Leblanc C., Kloareg B. and Loiseaux-de Goër S. (1995). The mitochondrial 23S rRNA gene of the brown alga *Pylaiella littoralis* is split by four group IIB introns from a different lineage than other described mitochondrial introns. **J. Mol. Biol.** 251, 378-389.
71. Boyen C., Leblanc C., Bonnard G., Grienenberger J.M. and Kloareg B. (1994). Nucleotide sequence of the *cox3* gene from *Chondrus crispus*: evidence that UGA encodes tryptophan and evolutionary implications. **Nucleic Acids Res.** 22, 1400-1403.
72. Boyen C., Leblanc C., Kloareg B. and Loiseaux-de Goër S. (1994). Physical map and gene organisation of the mitochondrial genome of *Chondrus crispus* (Rhodophyta, Gigartinales). **Plant Mol. Biol.** 26, 691-697.

Chapitres d'ouvrage, revues

1. S. Prado, C. Leblanc, S. Rebuffat (2016). Microbiome and chemical ecology. Chapter 4. In *New Advances in Chemical Ecology* (A.-G. Bagnères and M. Hossaert McKey, eds), Coll. ISTE-Wiley, p.71-94.
2. Collén J., Cornish M. L., Craigie J., Ficko-Blean E., Hervé C., Krueger-Hadfield S. A., Leblanc C., Michel G., Potin P., Tonon T., Boyen C. (2014). *Chondrus crispus* – A Present and Historical Model Organism for Red Seaweeds. In **Sea Plants, Advances in Botanical Research Book Series** (Bourgougnon N., ed.), vol.71, pp.53–89. IF 1.5, Q3.
3. Fournier J.-B. and Leblanc C. (2014). Halogenation and Vanadium Haloperoxidases. Chapter 10. In *Outstanding Marine Molecules and New Trends in Analytical Methods* (La Barre S. and Kornprobst J.-M., eds), Wiley, p.225-242.
4. Cock, J.M., L. Sterck, P. Rouzé, D. Scornet, A.E. Allen, G. Amoutzias, V. Anthouard, F. Artiguenave, J.-M. Aury, J.H. Badger, B. Beszteri, K. Billiau, E. Bonnet, J.H.F. Bothwell, C. Bowler, C. Boyen, C. Brownlee, C.J. Carrano, B. Charrier, G.Y. Cho, S.M. Coelho, J. Collén, E. Corre, C. Da Silva, L. Delage, N. Delaroque, S.M. Dittami, S. Doulbeau, M. Elias, G. Farnham, C.M.M. Gachon, B. Gschloessl, S. Heesch, K. Jabbari, C. Jubin, H. Kawai, K. Kimura, B. Kloareg, F.C. Küpper, D. Lang, A. Le Bail, C. Leblanc, P. Lerouge, M. Lohr, P.J. Lopez, C. Martens, F. Maumus, G. Michel, D. Miranda-Saavedra, J. Morales, H. Moreau, T. Motomura, C. Nagasato, C.A. Napoli, D.R. Nelson, P. Nyvall-Collén, A.F. Peters, C. Pommier, P. Potin, J. Poulain, H. Quesneville, B.A. Read, S.A. Rensing, A. Ritter, S. Rousvoal, M. Samanta, G. Samson, D.C. Schroeder, B. Ségurens, M. Strittmatter, T. Tonon, J. Tregear, K. Valentin, P. von Dassow, T. Yamagishi, Y. Van de Peer, and P. Wincker (2012). The *Ectocarpus* genome and brown algal genomics. In **Genomic Insights into the Biology of Algae, Advances in Botanical Research Book Series** (G. Piganeau, ed.), vol.64, pp.141-184. IF 1.5, Q3.
5. Leblanc C., Bertrand C., Cortesero A.-M. (2012). Armes chimiques pour organismes immobiles. Chapitre 7 du livre « **Ecologie chimique, le langage de la nature** », Editions CNRS/Cherche Midi.

6. Potin P, Fiévet B, Leblanc C, Darrouzet E, Ansoborlo E, Pourcher T (2009) Chapitre 26. Iode. In Toxicologie Nucléaire Environnementale et Humaine (Eds: Ménager Marie-Thérèse, Garnier–Laplace Jacqueline, Goyffon Max), Tec & Doc, Paris, Lavoisier, pp.483-499.
7. Cosse A., Leblanc C. and Potin P. (2007). Dynamic defense of marine macroalgae against pathogens: from early activated to gene-regulated responses. In **Advances in Botanical Research** (J.-C. Kader and M. Delseny, eds), vol.46, pp.221-266. IF 1.5, Q3.
8. Potin P. and Leblanc C. (2006). Phenolic-based adhesives of marine brown algae. In Biological adhesives (Smith A.M. and Callow J.A., eds.), Springer-Verlag, Berlin Heidelberg, pp. 105-124.