

# **BOUREAU Tristan**

Maitre de Conférences Classe Normale

Université d'Angers.

Habilitation à Diriger les Recherches depuis 2015.

## Publications :

### Articles publiés dans des revues internationales à comité de lecture:

- 1- Méline V, Brin C, Lebreton G, Ledroit L, Sochard D, Hunault G, **Boureau T**, Belin E., 2020. « A Computation Method Based on the Combination of Chlorophyll Fluorescence Parameters to Improve the Discrimination of Visually Similar Phenotypes Induced by Bacterial Virulence Factors ». *Frontiers in Plant Science*. 2020 Vol 26:11:213. doi: 10.3389/fpls.2020.00213.
- 2- Méline V., Delage W., Brin C., Li-Marchetti C., Sochard D., Arlat M., Rousseau C., Darrasse A., Briand M., Lebreton G., Portier P., Fischer-Le Saux M., Durand K., Jacques M. - A., Belin E., **Boureau T.**, 2019. « Role of the acquisition of a Type 3 Secretion System in the emergence of novel pathogenic strains of *Xanthomonas* ». *Molecular Plant Pathology*. Vol. 20 n°1 p. 33-50
- 3- Chambon A., **Boureau T.**, Lardeux F., Saubion F., 2019. « Accelerated algorithm for computation of all prime patterns in logical analysis of data ». In : 8th International, Conference on Pattern Recognition Applications and Methods (ICPRAM). 19-21/02/2019, Prague. SciTePress, Proceedings of the 8th International Conference on Pattern Recognition Applications and Methods : ICPRAM, 2019, vol. 1, p. 210-220. ISBN : 978-989-758-351-3.
- 4- A Chambon, F Lardeux, F Saubion, **T Boureau**, 2019. Attributes for Understanding Groups of Binary Data. International Conference on Pattern Recognition Applications and Methods, 48-70
- 5- Courtial J., Hamama L., Helesbeux J. - J., Lecomte M., Renaux Y., Guichard E., Voisine L., Yovanopoulos C., Hamon B., Ogé L., Richomme P., Briard M., **Boureau T.**, Gagné S., Poupard P., Berruyer R., 2018. « Aldaulactone – an original phytotoxic secondary metabolite involved in the aggressiveness of *Alternaria dauci* on carrot ». *Frontiers in Plant Science*. 2018. Vol. 9 p. 502.
- 6- Chambon A., **Boureau T.**, Lardeux F., Saubion F., 2018. « Logical characterization of groups of data: a comparative study ». *Applied Intelligence*. Vol. 48 n°8 p. 2284-2303
- 7- Denancé N., Szurek B., Doyle E. L., Lauber E., Fontaine-Bodin L., Carrère S., Guy E., Hajri A., Cerutti A., **Boureau T.**, Poussier S., Arlat M., Bogdanove A. J., Noël L. D., 2018. « Two ancestral genes shaped the *Xanthomonas campestris* TAL effector gene repertoire ». *New Phytologist*. 2018. Vol. 219 n°1 p. 391-407
- 8- Jacques M-A, Arlat M, Boulanger A, **Boureau T**, et al., 2016. Ecology, Physiology, and Genomics to Understand Host Specificity in *Xanthomonas*. *Annual Review of Phytopathology*
- 9- Merda D, Bonneau S, Guimbaud J-F, Durand K, Brin C, Darrasse A, **Boureau T**, Lemaire C, Jacques M-A and Fischer-Le Saux M. The role of nonpathogenic bacterial strains in shaping emergences of new epidemic clones in agroecosystems. *Environmental Microbiology Reports*.
- 10- Rousseau C, Hunault G, Gaillard S, Bourbeillon J, Montiel G, Simier P, Campion C, Jacques M-A, Belin E, **Boureau T.**, 2015. Phenoplant: a web resource for the exploration of large chlorophyll fluorescence image datasets. *Plant Methods*.
- 11- Cesbron S, Briand M, Essakhi S, Gironde S, **Boureau T**, Manceau C, Fischer-Le Saux M and Jacques M-A, 2015. Comparative genomics of pathogenic and nonpathogenic strains of *Xanthomonas arboricola* unveil molecular and evolutionary events linked to pathoadaptation. *Frontiers in Plant Science*.
- 12- Degrave A, Siamer S, **Boureau T**, Barny M-A, 2015. The AvrE superfamily: Ancestral type III effectors involved in suppression of PAMP-triggered immunity. *Molecular Plant Pathology*.
- 13- Belin E, Rousseau D, **Boureau T**, Caffier V. 2013. Thermography versus chlorophyll fluorescence imaging for detection and quantification of apple scab. *Computers and Electronics in Agriculture*.
- 14- **Boureau T**, Kerkoud M, Chhel F, Hunault G, Darrasse A, Brin C, Durand K, Hajri A, Poussier S, Manceau C, Lardeux F, Saubion F, Jacques MA., 2013. A multiplex-PCR assay for identification of the quarantine plant pathogen *Xanthomonas axonopodis* pv. phaseoli. *Journal of Microbiological Methods*.
- 15- Escalon A, Javeugny S, Vernière C, Noël LD, Vital K, Poussier S, Hajri A, **Boureau T**, Pruvost O, Arlat M, Gagnevin L., 2013. Variations in type III effector repertoires, pathological 1 phenotypes and host range of *Xanthomonas citri* pv. citri pathotypes. *Molecular Plant Pathology*.
- 16- Mhedbi-Hajri N, Hajri A, **Boureau T**, Darrasse A, Durand K, Brin C, Fischer-Le Saux M, Manceau C, Poussier S, Pruvost O, Lemaire C and Jacques M-A., 2013. Evolutionary history of the plant pathogenic bacterium *Xanthomonas axonopodis*. *Plos One*.
- 17- Siamer S, Gaubert S, **Boureau T**, Brisset M and Barny M-A, 2013. Mutational analysis of a predicted double  $\square$ -propeller domain of the DspA/E effector of *Erwinia amylovora*. *FEMS Letters*.
- 18- Rousseau C, Belin B, Bove E, Rousseau D, Fabre F, Berruyer R, Guillaumès J, Manceau C, Jacques M-A and **Boureau T**, 2013. High throughput quantitative phenotyping of plant resistance using chlorophyll fluorescence image analysis. *Plant Methods*
- 19- Guy E, Genissel A, Hajri A, Chabannes M, David P, Carrere S, Lautier M, Roux B, **Boureau T**, Arlat M, Poussier S, Noel L, 2013. Natural genetic variation of *Xanthomonas campestris* pv. *campestris* pathogenicity on *Arabidopsis* revealed by association and reverse genetics. *MBio*.
- 20- Darrasse A, Carrère S, Barbe V, **Boureau T**, Arrieta-Ortiz ML, Bonneau S, Briand M, Brin C, Cocianich S, Durand K, Fouteau S, Gagnevin L, Guérin F, Guy E, Indiana A, Koebnik R, Lauber E, Munoz A, Noël LD, Pieretti I, Poussier S, Pruvost O, Robène-Soustrade I, Rott P, Royer M, Serres-Giardi L, Szurek B, van Sluys MA, Verdier V, Vernière C, Arlat M, Manceau C, Jacques MA, 2013. Genome sequence of *Xanthomonas fuscans* subsp. *fuscans* strain 4834-R reveals that flagellar motility is not a general feature of xanthomonads. *BMC Genomics*.

- 21- Arrieta-Ortiz ML, Rodríguez-R LM, Pérez-Quintero AL, Poulin L, Díaz AC, Arias Rojas N, Trujillo C, Restrepo Benavides M, Bart R, Boch J, **Boureau T**, Darrasse A, David P, Dugé de Bernonville T, Fontanilla P, Gagnevin L, Guérin F, Jacques MA, Lauber E, Lefevre P, Medina C, Medina E, Montenegro N, Muñoz Bodnar A, Noël LD, Ortiz Quiñones JF, Osorio D, Pardo C, Patil PB, Poussier S, Pruvost O, Robène-Soustrade I, Ryan RP, Tabima J, Urrego Morales OG, Vernière C, Carrere S, Verdier V, Szurek B, Restrepo S, López C, Koebnik R, Bernal A., **2013.** Genomic Survey of Pathogenicity Determinants and VNTR Markers in the Cassava Bacterial Pathogen *Xanthomonas axonopodis* pv. *Manihotis* Strain CIO151. *PLoS One*.
- 22- Darrasse A, Bolot S, Serres-Giardi L, Charbit E, **Boureau T**, Fischer-Le Saux M, Briand M, Arlat M, Gagnevin L, Koebnik R, Noël L, Carrère S, Jacques M-A, **2013.** High-quality draft genome sequences of *Xanthomonas axonopodis* pv. *glycines* strains CFBP 2526 and CFBP 7119. *Genome Announcements*.
- 23- Jacques M-A, Bolot S, Charbit E, Darrasse A, Briand M, Arlat M, Gagnevin L, Koebnik R, Noël L. D., Portier P, Carrère S, **Boureau T**, **2013.** High-quality draft genome sequence of *Xanthomonas alfalfae* subsp. *alfalfae* strain CFBP 3836. *Genome Announcements*.
- 24- Hajri A, Pothier JF, Fischer-Le Saux M, Bonneau S, Poussier S, **Boureau T**, Duffy B, Manceau C, **2012.** Type three effector genes distribution and sequence analysis provides new insights into pathogenicity of plant pathogenic *Xanthomonas arboricola*. *Applied and Environmental Microbiology*.
- 25- **Boureau T**, Perino C, Gaubert S, Siemer S, Patriti O, Degrave A, Fagard M, Chevreau E and Barny M-A, **2011.** The HrpN effector of *Erwinia amylovora*, which is involved in type III translocation, participates, directly or indirectly, in callose elicitation during fire blight disease. *Molecular Plant Microbes Interactions*
- 26- Hajri A, Brin C, Zhao S, David P, Feng JX, Koebnik R, Szurek B, Verdier V, Poussier S., **Boureau T**, **2011.** Multilocus sequence analysis and type III effector repertoire mining provide new insights into the evolutionary history and virulence of *Xanthomonas oryzae*. *Molecular Plant Pathology*
- 27- Darrasse A, Darsonval A, **Boureau T**, Brisset M-N, Durand K, and Jacques M-A, **2010.** Transmission of Plant-Pathogenic Bacteria by Nonhost Seeds without Induction of an Associated Defense Reaction at Emergence. *Applied and Environmental Microbiology*
- 28- Hajri A, Brin C, Hunault G, Lardeux F, Lemaire C, Manceau C, Poussier P, **Boureau T**, **2009.** A «Repertoire for Repertoire» Hypothesis: Repertoires of Type Three Effectors are Candidate Determinants of Host Specificity in *Xanthomonas*. *PLoS ONE*
- 29- Ryan R, Koebnik R, Szurek B, **Boureau T**, Bernal A, Bogdanove A, Dow J-M., **2009.** Passing GO (gene ontology) in plant pathogen biology: a report from the *Xanthomonas* Genomics Conference. *Cellular Microbiology*
- 30- **Boureau T**, ElMaarouf-Bouteau H, Garnier A, Brisset M-N, Perino C, Pucheu I, Barny M-A, **2006.** DspA/E, a type III effector essential for *Erwinia amylovora* pathogenicity and growth *in planta*, induces cell death in host apple and non-host tobacco plants. *Molecular Plant-Microbe Interactions*.
- 31- **Boureau T**, Jacques M-A, Berruyer R, Dessaux Y, Dominguez D, Morris C.E., **2004.** Comparison of the Phenotypes and Genotypes of Biofilm and Solitary Epiphytic Bacterial Populations on Broad-Leaved Endive. *Microbial Ecology*.
- 32- **Boureau T**, Routtu J, Roine E, Taira S, Romantschuk M., **2002.** Localization of *hrpA*-induced *Pseudomonas syringae* pv. *tomato* DC3000 in infected tomato leaves. *Molecular Plant Pathology*
- 33- Li C-M, Brown I, Mansfield J, Stevens C, **Boureau T**, Romantschuk M., and Taira S, **2002.** The Hrp pilus of *Pseudomonas syringae* elongates from its tip and acts as a conduit for translocation of the effector protein HrpZ. *EMBO J*.
- 34- **Patent: Boureau T.**, Chhel F, Hunault G., Kerkoud M., Lardeux F, Manceau C, Poussier S, Saubion F, **2012.** Procédé de dépistage de *Xanthomonas axonopodis* pv. *phaseoli*. Publication FR2970480A1. N° d'enregistrement 1150388.

#### Chapitres d'ouvrages:

1. Martin Romantschuk, **Tristan Boureau**, Jarkko Routtu, Suvi Taira, Elina Roine, 2001. Expression of the *Pseudomonas syringae* Hrp pilus in planta. in Plant Pathogenic Bacteria. Proceedings of the 10th International Conference on Plant Pathogenic Bacteria, Prince Edward Island, CANADA. July 23-27, 2000. Ed. Solke de Boer, Kluwer Academic Publishers, London.
2. Martin Romantschuk, **Tristan Boureau**, Elina Roine, Minna Haapalainen, Suvi Taira, 2002. Pili and Flagella in leaf colonization by *Pseudomonas Syringae*. in Phyllosphere Microbiology, edited by S.E. Lindow, E.I. Hecht Poinar, and V. Elliot. APS Press.
3. Chun-Mei Li, Ian Brown, Conrad Stevens, John Mansfield, **Tristan Boureau**, Elina Hienonen, Martin Romantschuk, and Suvi Taira, 2003. The Hrp pilus of *Pseudomonas syringae*. in *Pseudomonas syringae* and Related Pathogens, pp285-292. Ed Kluwer Academic Publishers.
4. Marie-Anne Barny, **Tristan Boureau**, Alexandre Degrave, Mathilde Fagard, François Bouteau, Stéphane Gaubert, David Reboutier, Marie Noelle Brisset, 2008. Type III effectors of *E. amylovora*: Synergistic and antagonistic effects. in Proceedings of the eleventh international workshop on Fire Blight Book Series: ACTA HORTICULTURAE Volume: 793 Pages: 215-220.
5. **Tristan Boureau**, Sabrina Siemer, Stéphane Gaubert, Claude Perino, Alexandre Degrave, Mathilde Fagard, Marie-Anne Barny, 2011. The HrpN protein of the plant pathogen *Erwinia amylovora*, which participates to type III secretion translocation, triggers callose deposition on apple leaves. in Sobczewski, P.; Kaluzna, M.; Pulawska, J. Eds. Acta Horticulturae Issue: 896 Pages: 185-193
6. Fabien Chhel, Adrien Goëffon, Frédéric Lardeux, Frédéric Saubion F., Gilles Hunault, **Tristan Boureau**, 2011. Experimental Approach for Bacterial Strains Characterization. European Conference On Evolutionary Computation, Turin, April 2011. *in C. Pizzuti, M.D. Ritchie, and M. Giacobini (Eds.) EvoBIO 2011, LNCS 6623, pp. 135–140. Springer-Verlag Berlin Heidelberg.*
7. Fabien Chhel, Adrien Goëffon, Antoine Lafosse, Frédéric Lardeux, Frédéric Saubion, Gilles Hunault, **Tristan Boureau**, 2011. The bacterial strains characterization problem. in Proceedings of SAC'2011. pp.108~109
8. Yann Chéné, Etienne Belin, Philippe Lucidarme, François Chapeau-Blondeau, **Tristan Boureau**, David Rousseau, 2013. Des systèmes d'imagerie pour l'analyse anatomique et physiologique des plantes.

9. Yann Chéné, Etienne Belin, François Chapeau-Blondeau, Valérie Caffier, **Tristan Boureau**, David Rousseau, 2014. Anatomo-functional bimodality imaging for plant phenotyping : An insight through depth imaging coupled to thermal imaging, in Plant Image Analysis: Fundamentals and Applications, Chapter: 9, Publisher: CRC Press, Editors: S. Dutta Gupta, Y. Ibaraki, pp.179-199.

## Impact des publications

	Toutes	Depuis 2016
Citations	1422	757
indice h	20	17
indice i10	26	24