

List of publications

H-index : 11

Articles published in indexed journals

1. **Vasseur F.**, Fouqueau L., de Vienne D., Nidelet T., Violle C., Weigel D. (2019). Nonlinear phenotypic variation uncovers the emergence of heterosis in *Arabidopsis thaliana*. *PLoS Biology*, 17(4): e3000214.
2. Exposito-Alonso M., Rodríguez RG., Barragán C., Capovilla G., Chae E., Devos J., Dogan E.S., Friedemann C., Gross C., Lang P., Lundberg D., Middendorf V., Kageyama J., Karasov T., Kersten S., Petersen S., Rabbani L., Regalado J., Reinelt L., Rowan B., Seymour D.K., Symeonidi E., Schwab R., Tran D.T.N., Venkataramani K., Van de Weyer A.L., **Vasseur F.**, Wang G., Wedegärtner R., Weiss F., Wu R., Xi W., Zaidem M., Zhu W., García-Arenal F., Burbano H.A., Bossdorf O., Nielsen R., Weigel D. (2019). Natural selection on the *Arabidopsis thaliana* genome in present and future climates. *Nature*, 573: 126–129. *: **co-first authors**.
3. Kazakou E.*, **Vasseur F.***, Sartori K., Baron E., Rowe N., Vile D. & Violle C. (2019). Secondary metabolites have more influence than morpho-physiological traits on litter decomposability across genotypes of *Arabidopsis thaliana*. *New Phytologist* (in press). doi: 10.1111/nph.15983.
4. Sartori K.F.*, **Vasseur F.***, Violle C., Baron E., Gerard M., Rowe N., Ayala-Garay O., Christophe A., De Jalon L.G., Masclef D., Harscouet E. (2019). Leaf economics guides slow-fast adaptation across the geographic range of *A. thaliana*. *Scientific Reports*, 573: 126–129. *: **co-first authors**.
5. **Vasseur F.**, Sartori K., Baron E., Fort F., Kazakou E., Segrestin J., Garnier E., Vile D., Violle C. (2018) Climate as a driver of adaptive variations in ecological strategies in *Arabidopsis thaliana*. *Annals of Botany* 122(6):935-45.
6. **Vasseur F.**, Wang G., Bresson J., Schwab R., Weigel D. (2018) Image-based methods for phenotyping growth dynamics and fitness in *Arabidopsis thaliana*. *Plant Methods* 14(1): 63.
7. **Vasseur F.**, Exposito-Alonso M., Ayala-Garay O., Wang, G., Enquist B.J., Vile D., Violle C., Weigel, D. (2018) Adaptive diversification of growth allometry in the plant *Arabidopsis thaliana*. *Proceedings of the National Academy of Sciences USA*, 115 (13), 3416-3421.
8. Exposito-Alonso M., **Vasseur F.**, Ding W., Wang G., Burbano H.A., Weigel D. (2018). Genomic basis and evolutionary potential for extreme drought adaptation in *Arabidopsis thaliana*. *Nature ecology & evolution* 2(2): 352.
9. Seymour D.K., Chae E., Grimm D.G., Pizarro C.M., Haring-Muller A., **Vasseur F.**, Rakitsch B., Borgwardt K.M., Koenig D., Weigel D. (2016). The genetic architecture of non-additive inheritance in *Arabidopsis thaliana* hybrids. *Proceedings of the National Academy of Sciences USA*, 113(46): E7317–E7326.
10. Blonder B., **Vasseur F.**, Violle, C., Shipley B., Enquist B.J., Vile D. (2015). Testing models for the leaf economics spectrum with leaf and whole-plant traits in *Arabidopsis thaliana*. *AoB Plants*, plv049.
11. **Bresson J.***, **Vasseur F.***, Dauzat M., Koch G., Granier C., Vile D. (2015). Quantifying spatial heterogeneity of chlorophyll fluorescence during plant growth and in response to water stress. *Plant methods*, 11(1): 23. *: **co-first authors**.
12. Bresson J., **Vasseur F.**, Dauzat M., Labadie M., Varoquaux F., Touraine B., Vile D. (2014). Interact to survive: *Phyllobacterium brassicacearum* improves *Arabidopsis* tolerance to severe water deficit and growth recovery. *Plos One*, e107607.

13. **Vasseur F.**, Bontpart T., Dauzat M., Granier C., Vile D. (2014). Multivariate genetic analysis of plant responses to water deficit and high temperature revealed contrasting adaptive strategies. *Journal of Experimental Botany*, 65(22): 6457-6469.
14. Lièvre M., Wuyts N., Cookson S. J., Bresson J., Dapp M., **Vasseur F.**, Massonet C., Tisé S., Bettembourg M., Balsera C., Bédié A., Bouvery F., Dauzat M., Rolland G., Vile D., Granier, C. (2013). Phenotyping the kinematics of leaf development in flowering plants: recommendations and pitfalls. *Wiley Interdisciplinary Reviews: Developmental Biology*, 2(6): 809-821.
15. **Vasseur F.**, Violle C., Enquist B.J., Granier C., Vile D. (2012). A common genetic basis to the origin of the leaf economics spectrum and metabolic scaling allometry. *Ecology Letters*, 15(10): 1149-1157.
16. Randoux M., Jeauffre J., Thouroude T., **Vasseur F.**, Hamama L., Juchaux M., Sakr S., Foucher F. (2012). Gibberellins regulate the transcription of the continuous flowering regulator, RoKSN, a rose TFL1 homologue. *Journal of Experimental Botany*, 63(18): 6543-6554.
17. Vile D., Pervent M., Belluau M., **Vasseur F.**, Bresson J., Muller B., Granier C., Simonneau T. (2012). Arabidopsis growth under prolonged high temperature and water deficit: independent or interactive effects? *Plant Cell and Environment*, 35(4): 702-718.
18. **Vasseur F.**, Pantin F., Vile D. (2011). Changes in light intensity reveal a major role for carbon balance in Arabidopsis responses to high temperature. *Plant Cell and Environment*, 34(9): 1563-1576.

Article published in non-indexed journals

1. Dauzat M., Dambreville A., Bresson J., Vile D., Muller B., Negre V., Koch G., **Vasseur F.**, Bediee A., Desigaux M. and Fourreau D. (2016) PHENOPSIS Quelles évolutions technologiques du premier automate de phénotypage des plantes? *Cahier des Techniques de l'INRA*, 89, p.np.

Oral communications published in conference paper

1. **Vasseur F.**, Scheepens J., Vile D., Garnier E., Exposito-Alonso M., Kazakou E., Lenormand T., Bossdorf O., Weigel D. and Violle C. (2018) AraBreed: testing ecological theories with experimental evolution in a model plant species. *Oral communication*. International Conference on Ecological Sciences (Rennes, France).
2. **Vasseur F.**, Scheepens J., Vile D., Garnier E., Exposito-Alonso M., Kazakou E., Lenormand T., Bossdorf O., Weigel D. and Violle C. (2018) AraBreed: testing ecological theories with experimental evolution in a model plant species. *Poster*. II Joint Congress on Evolutionary Biology (Montpellier, France).
3. **Vasseur F.**, Exposito-Alonso M., Ayala-Garay O., Wang G., Violle C., Vile D., Weigel, D. (2017) Adaptive diversification of plant allometry in *Arabidopsis thaliana*. *Poster*. 39th New Phytologist Symposium (Exeter, UK).
4. **Vasseur F.**, Exposito-Alonso M., Ayala-Garay O., Wang G., Violle C., Vile D., Weigel, D. (2016) Local adaptation explains intraspecific diversification of allometric relationships. *Oral communication*. 46th Annual Meeting of the Ecological Society of Germany, Austria and Switzerland (Marburg, Germany).
5. **Vasseur F.**, Exposito-Alonso M., Ayala-Garay O., Wang G., Violle C., Vile D., Weigel, D. (2016) Adaptive diversification of plant allometry in *Arabidopsis thaliana*. *Poster*. Gordon Research Conference (Portland, USA).

6. **Vasseur F. (2016)** Growth scaling irregularities explained by local adaptation in *Arabidopsis thaliana*. *Poster*. EMBL symposia – New Model Systems for Linking Evolution and Ecology (Heidelberg, Germany).
7. **Vasseur F., Ayala-Garay O., Exposito-Alonso M., Wang G., Violle C., Vile D., Weigel, D. (2015)** Local adaptation of the growth strategies across the range of *A. thaliana*. *Poster*. International Conference on Arabidopsis Research (Paris, France).
8. **Vasseur F., Chae E., Seymour D., Scacchi E., Wang G., Weigel D. (2014)** Comparison of growth and defense related traits in a set of Arabidopsis hybrids. *Poster*. RegioPlant Meeting (Hohenheim, Germany).
9. **Vasseur F. (2013)** To grow or defend? Genome-wide association study of a fundamental trade-off in plant. *Oral communication*. Triangle Meeting (Cologne, Germany).
10. **Vasseur F., Violle C., Enquist B.J., Granier C., Vile D. (2012)**. A common genetic basis to the origin of the leaf economics spectrum and metabolic scaling allometry. *Poster*. Gordon Research Conference (Portland, USA).
11. **Vasseur F., Vile D. (2012)** Genetic determinisms of plant plasticity: disentangling crypticgenetic variation from plant allometry. *Poster*. International Conference on Arabidopsis Research (Vienna, Austria).
12. **Vasseur F., Pantin F., Dauzat M., Rolland G., Bédiée A., Muller B., Granier C. Vile D. (2010)** Arabidopsis response to high temperature is mediated by light intensity. *Oral communication*. Federation of European Societies of Plant Biology, FESPB (Valencia, Spain).