

List of publications — Thomas Steinger (Nov 2018)

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Published articles in peer-reviewed journals:

Hu L.F., Robert C.A.M., Cadot S., Zhang X., Ye M., Li B., Manzo D., Chervet N., Steinger T., van der Heijden M.G.A., Schlaeppi K. & Erb M. (2018) Root exudate metabolites drive plant-soil feedbacks on growth and defense by shaping the rhizosphere microbiota. *Nature Communications* 9: 2738.

Dupuis B., Cadby J., Goy G., Tallant M., Derron J., Schwaerzel R., **Steinger T.** (2017) Control of potato virus Y (PVY) in seed potatoes by oil spraying, straw mulching, and intercropping. *Plant Pathology* 66: 960-969.

Steinger T., Goy G., Gilliland H., Hebeisen T., Derron J. (2015) Forecasting virus disease in seed potatoes using flight activity data of aphid vectors. *Annals of Applied Biology* 166: 410-419.

Steinger T., Gilliland H., Hebeisen T. (2014) Epidemiological analysis of risk factors for the spread of potato viruses in Switzerland. *Annals of Applied Biology* 164: 200-207.

Crémieux L., Bischoff A., Müller-Schärer H., and **Steinger T.** (2010) Gene flow from foreign provenances into local plant populations: Fitness consequences and implications for biodiversity restoration. *American Journal of Botany* 97: 94-100

Bischoff A., **Steinger T.**, and Müller-Schärer H. (2010) The importance of plant provenance and genotypic diversity of seed material used for ecological restoration. *Restoration Ecology* 18: 338-348

Treier U.A., Broennimann O., Normand S., Guisan A., Schaffner U., **Steinger T.**, and Müller-Schärer H. (2009) Shift in cytotype frequency and niche space in the invasive plant *Centaurea maculosa*. *Ecology* 90: 1366-1377

Crémieux L., Bischoff A., Smilauerova M., Lawson C.S., Mortimer S.R., Dolezal J., Lanta V., Edwards A.R., Brook A.J., Tscheulin T., Macel M., Leps J., Müller-Schärer H., and **Steinger T.** (2008) Potential contribution of natural enemies to patterns of local adaptation in plants. *New Phytologist* 180: 524-533

Handley R.J., **Steinger T.**, Treier U. and H. Müller-Schärer (2008) Testing the evolution of increased competitive ability (EICA) hypothesis in a novel framework. *Ecology* 89: 407-417

Fabbro T., A. Davison and **T. Steinger** (2007) Reliable confidence intervals in quantitative genetics: heritability. *Theoretical and Applied Genetics* 115: 933-944

Steinger T., A. Stephan & B. Schmid (2007) Predicting adaptive evolution under elevated atmospheric CO₂ in the perennial grass *Bromus erectus*. *Global Change Biology* 13: 1028- 1039

Macel M., Lawson C., Mortimer S., Šmilauerova M., Dolezal J., Lanta V., Bischoff A., Crémieux L., Edwards A., van der Putten W.H., Rodriguez-Barrueco C., Müller-Schärer H., and **Steinger T.** (2007) Climate versus soil factors in local adaptation of two common plant species. *Ecology* 88: 424-433

Bischoff A., Crémieux L., Šmilauerova M., Lawson C., Mortimer S., Dolezal J., Lanta V., Edwards A., Brooks A., Macel M., Leps J., **Steinger T.**, Müller-Schärer H. (2006) Detecting local adaptation in widespread grassland species – the importance of scale and local plant community. *Journal of Ecology* 94: 1130-1142

Bischoff A., B. Vonlanthen, **T. Steinger** & H. Müller-Schärer (2006) Seed provenance matters – effects on germination of four plant species used for ecological restoration. *Basic and Applied Ecology* 7: 347-359

Müller-Schärer H., U. Schaffner & **T. Steinger** (2004) Evolution in invasive plants: implications for biological control. *Trends in Ecology and Evolution* 19: 417-422

Müller-Schärer, H. & **Steinger, T.** (2004) Predicting evolutionary change in invasive, exotic plants and its consequences for plant-herbivore interactions, In: *Genetics, Evolution and Biological Control* (edited by L. E. Ehler, R. Sforza and T. Mateille). CABI Publishing, Wallingford, UK.

Haldimann P., **T. Steinger** & H. Müller-Schärer (2003) Low genetic differentiation among seasonal cohorts in *Senecio vulgaris* as revealed by amplified fragment length polymorphism analysis. *Molecular Ecology* 12: 2541-2551

Steinger T., B.A. Roy, and M.L. Stanton (2002) Evolution in stressful environments II.: Adaptive value and costs of plasticity in response to low light in *Sinapis arvensis*. *Journal of Evolutionary Biology* 16: 313-323

Steinger T., P. Haldimann, K. A. Leiss & H. Müller-Schärer (2002) Does natural selection promote population divergence? A comparative analysis of population structure using amplified fragment length polymorphism markers and quantitative traits. *Molecular Ecology* 11: 2583-2590

Kleijn D. and **T. Steinger** (2002) Contrasting effects of grazing and hay cutting on the spatial and genetic population structure of *Veratrum album*, an unpalatable, long-lived, clonal plant species. *Journal of Ecology* 90: 360-370

Groppe, K., **T. Steinger**, B. Schmid, B. Baur, and T. Boller (2001) Effects of habitat fragmentation on choke disease (*Epichloë bromicola*) in the grass *Bromus erectus*. *Journal of Ecology* 89: 247-255

Kollmann J., **T. Steinger**, and B.A. Roy (2000) Evidence of sexuality in European *Rubus* (Rosaceae) species based on AFLP and allozyme analysis. *Am. J. Botany* 87: 1592-1598

Steinger, T., Gall, R., & Schmid, B. (2000). Maternal and direct effects of elevated CO₂ on seed provisioning, germination, and seedling growth in *Bromus erectus*. *Oecologia* 123: 475-480

Groppe, K., **Steinger, T.**, Sanders, I., Schmid, B., Wiemken, A., and Boller, T. (1999). Interaction between the endophytic fungus *Epichloë bromicola* and the grass *Bromus erectus*: effects of endophyte infection, fungal concentration and environment on grass growth and flowering. *Molecular Ecology* 8: 1827-35

Steinger T., Lavign C., Birrer A., Groppe K. & Schmid B. (1997) Genetic variation in response to elevated CO₂ in three grassland perennials - a field experiment with two competition regimes. *Acta Oecologica* 18: 263-268

Steinger T., Ch. Körner, and B. Schmid (1995) Long-term persistence in a changing climate: DNA analysis suggests very old ages of clones of alpine *Carex curvula*. *Oecologia* 105:94-99

Steinger T. and H. Müller-Schärer (1992) Physiological and growth responses of *Centaurea maculosa* (Asteraceae) to root herbivory under varying levels of interspecific plant competition and soil nitrogen availability. *Oecologia* 91: 141-149

Book chapters

Lacomme C., Pickup J., Fox A., Glais L., Dupuis B., **Steinger T.**, Rolot J.-L., Valkonen J.P.T., Kruger K., Xianzhou N., Modic S., Mehle N., Ravnikar M., Hullé M. (2017) Transmission and Epidemiology of *Potato virus Y*. In: Lacomme C., Glais L., Bellstedt D.U., Dupuis B., Karasev A.V. Jacquot E. (eds.) *Potato virus Y: biodiversity, pathogenicity, epidemiology and management*. Springer Int. Publ.

Müller-Schärer H. & **T. Steinger** (1990) Separate and joint effects of root herbivores, plant competition and nitrogen shortage on resource allocation and components of reproduction in *Centaurea maculosa* (Compositae) In: Szentesi, A (ed) *Proceedings of the 7th International Symposium on Insect-Plant Relationships*. Hungarian Academy of Sciences, Budapest

Articles without peer-review

Ramseier H., Leprun M., **Steinger T.** (2016) Use of economic damage thresholds, forecasting systems and warning services in Switzerland. *Agrarforschung Schweiz*, 7: 98–103.

Schaub L., Furlan L., Toth M., **Steinger T.**, Carrasco L.R. and Toepfer S. (2011) Efficiency of pheromone traps for monitoring *Diabrotica virgifera virgifera* LeConte. *Bulletin OEPP/EPPO Bulletin* 41:189–194