

Publication list of Stefan Scholten

Originalarbeiten / original papers

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Thiemann, A., Fu, J., Schrag, T., Melchinger, A., Frisch, M., **Scholten, S.** (2010) Correlation of parental line gene expression profiles with heterosis of grain yield and dry matter content. *Theor Appl Genet.* **120**, 401-413.

Frisch, M., Thiemann, A., Fu, J., Schrag, T. A., **Scholten, S.**, Melchinger, A. E. (2010) Transcriptome-based distance measures for grouping of germplasm and performance prediction in hybrid breeding. *Theor Appl Genet.* **120**, 441-450.

Fu, J., Thiemann, A., Schrag T. A., Melchinger, A. E., **Scholten, S.**, Frisch, M. (2010) Dissecting grain yield pathways and their interactions to grain dry matter content by a two-step correlation approach with the maize seedling transcriptome. *BMC Plant Biology*, **10**, 63.

Zhang J-E, Luo A, Xin H-P, Zhao J, Li S-S, Qu L-H, Ma L-G, **Scholten S**, Sun M-X (2011) Genes of Both Parental Origins Are Differentially Involved in Early Embryogenesis of a Tobacco Interspecies Hybrid. *PLoS ONE* **6**: e23153.

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Hu, H., Schrag, T.A., Peis, R., Unterseer, S., Schipprack, W., Chen, S., Lai, J., Yan, J., Prasanna, B.M., Nair, S.K., Chaikam, V., Rotarencu, V., Shatskaya, O.A., Zavalishina, A., **Scholten, S.**, Schön, C.C., Melchinger, A.E. (2016) The Genetic Basis of Haploid Induction in Maize Identified with a Novel Genome-Wide Association Method. *Genetics* **202**, 1267-76.

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Seifert F, Thiemann A, Grant-Downton R, Edelmann S, Rybka D, Schrag TA, Frisch M, Dickinson HG, Melchinger AE, Scholten S. 2018. Parental Expression Variation of Small RNAs Is Negatively Correlated with Grain Yield Heterosis in a Maize Breeding Population. *Front Plant Sci* **9**: 10444.

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Übersichtartikel und Buchkapitel / Reviews and book chapters

Scholten, S., Kranz, E. (2001) In vitro fertilization and expression of transgenes in gametes and zygotes. *Sex Plant Reprod* **14**, 35-40.

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Thiemann, A., Meyer, S., **Scholten, S.** (2009) Heterosis in Plants: Manifestation in early seed development and prediction approaches to assist hybrid breeding. *Chinese Science Bulletin* **54**, 2363-2375.

Scholten, S. Genomic imprinting in plant embryos (2010) *Epigenetics* **5**, 455-459.

Scholten, S., Thiemann, A. (2013) RNA-based Prediction of Heterosis and Hybrid Performance. In: Diagnostics in Plant Breeding. Eds. Lübberstedt, T, Varshney, R., Springer, Dordrecht.

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Sonstige Veröffentlichungen / other publications

Scholten, S (2001) Untersuchungen zur Expression von Transgenen in *in vitro* erzeugten Zygoten von Mais (*Zea mays* L.). Dissertation, Universität Hamburg, ISBN 3-8265-8564-X

Scholten, S (2007) Molekulargenetische Untersuchungen der parentalen Beiträge zur sexuellen Reproduktion von Mais (*Zea mays* L.). Forschungsbericht zur Habilitation, Universität Hamburg.

Patente

Scholten, S., Thiemann, A., Seifert, F., Frisch, M., Melchinger, A. E. (2015) Vorhersage von Hybridmerkmalen, Deutsches Patent (DE 10 2013 111 980 B3).

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