

List of publications: Thomas Fester

Research papers: Plant cell organelles

- Thomas Fester, Wolfgang Schuster (1995) Potato mitochondrial manganese superoxide dismutase is an RNA-binding protein.
Biochemistry and Molecular Biology International **36**, 67–75
[Abstract: PMID 7545053](#)
- Wei Yu, Thomas Fester, Herrmann Bock, Wolfgang Schuster (1995) RNA editing in higher plant mitochondria: Analysis of biochemistry specificity.
Biochimie **77**, 79–86
[Abstract: PMID 7599280](#)
- Hugo Sanchez, Thomas Fester, Sebastian Kloska, Werner Schroeder, Wolfgang Schuster (1996) Transfer of *rps19* to the nucleus involved the gain of an RNP-binding motif which may functionally replace RPS13 in *Arabidopsis thaliana*. The EMBO Journal **15**, 2138–2149
[Abstract: PMID 8641279](#)
- Thomas Fester, Elisabeth Völkle, Hainfried E.A. Schenk (1996) Purification and partial characterization of the glucose-6-phosphate-dehydrogenase from Cyanoplasts in *Cyanophora paradoxa*.
International Journal on Endocytobiosis and Cell Research **11**, 159–176
- Thomas Fester, Hainfried E.A. Schenk (1997) Glucose-6-Phosphate Dehydrogenase Isoenzymes from *Cyanophora paradoxa*: Examination of Their Metabolic Integration Within the Meta-Endocytobiotic System.
In Eukaryotism and Symbiosis – Intertaxonic Combination versus Symbiotic Adaptation
Editors: H.E.A. Schenk, R.G. Herrmann, K.W. Jeon, N.E.Müller, W. Schwemmler; pages 243–251

Research papers: Arbuscular Mycorrhiza

- Thomas Fester, Walter Maier, Dieter Strack (1999) Accumulation of secondary compounds in barley and wheat roots in response to inoculation with an arbuscular mycorrhizal fungus and co-inoculation with rhizosphere bacteria.
Mycorrhiza **8**, 241–246
- Michael H. Walter, Thomas Fester, Dieter Strack (2000) Arbuscular mycorrhizal fungi induce the non-mevalonate methylerythritol phosphate pathway of isoprenoid biosynthesis correlated with accumulation of the "yellow pigment" and other apocarotenoids.
The Plant Journal **21**, 571–578
[Abstract: PMID 10758508](#)
- Thomas Fester, Dieter Strack, Bettina Hause (2001) Reorganization of tobacco root plastids during arbuscule development.
Planta **213**, 864–868
[Abstract: PMID 11722122](#)
- Thomas Fester, Manfred Kiess, Dieter Strack (2002) A mycorrhiza-responsive protein in wheat roots.
Mycorrhiza **12**, 219–222
[Abstract: PMID 12189477](#)
- Thomas Fester, Bettina Hause, Diana Schmidt, Kristine Halfmann, Jürgen Schmidt, Victor Wray, Gerd Hause, Dieter Strack (2002) Occurrence and localization of apocarotenoids in arbuscular mycorrhizal roots.
Plant and Cell Physiology **43**, 256–265
[Abstract: PMID 11917079](#)

- Thomas Fester, Diana Schmidt, Swanhild Lohse, Bettina Hause, Michael H. Walter, Giovanni Giuliano, Peter M. Bramley, Paul D. Fraser, Gerd Hause, Dieter Strack (2002) Stimulation of carotenoid metabolism in arbuscular mycorrhizal roots. *Planta* **216**, 148–154
[Abstract: PMID 12430024](#)
- Stanislav Isayenkov, Thomas Fester, Bettina Hause (2004) Rapid determination of fungal colonization and arbuscule formation in roots of *Medicago truncatula* using real-time (RT) PCR. *Journal of Plant Physiology* **161**, 1379–1383
[Abstract: PMID 15658808](#)
- Thomas Fester, Gerd Hause (2005) Accumulation of reactive oxygen species in arbuscular mycorrhizal roots. *Mycorrhiza* **15**, 373–379
[Abstract: PMID 15875223](#)
- Thomas Fester, Victor Wray, Manfred Nimtz, Dieter Strack (2005) Is stimulation of carotenoid biosynthesis in arbuscular mycorrhizal roots a general phenomenon? *Phytochemistry* **66**, 1781–1786
[Abstract: PMID 16002104](#)
- Swanhild Lohse, Willibald Schliemann, Christian Ammer, Joachim Kopka, Dieter Strack, Thomas Fester (2005) Organization and metabolism of plastids and mitochondria in arbuscular mycorrhizal roots of *Medicago truncatula*. *Plant Physiology* **139**, 329–340
[Abstract: PMID 16126866](#)
- Swanhild Lohse, Bettina Hause, Thomas Fester (2006) FtsZ characterization and immunolocalization in the two phases of plastid reorganization in arbuscular mycorrhizal roots of *Medicago truncatula*. *Plant and Cell Physiology*, **47**, 1124–1134
[Abstract: PMID 16854943](#)
- Willibald Schliemann, Jürgen Schmidt, Manfred Nimtz, Victor Wray, Thomas Fester, Dieter Strack (2006) Accumulation of apocarotenoids in mycorrhizal roots of *Ornithogalum umbellatum*. *Phytochemistry* **67**, 1196–1205
[Abstract: PMID 16790253](#)

Research papers: Other biotrophic plant-microbe interactions

- Thomas Fester, Howard Berg, Christopher G. Taylor (2008) An easy method for the microscopic analysis of plant biotrophic interactions. *Journal of Microscopy* **231**, 342–348
- Manjula Govindarajulu, James Mitch Elmore, Thomas Fester, Christopher G. Taylor (2008) Evaluation of Constitutive Viral Promoters in Transgenic Soybean Roots and Nodules, *Molecular plant-microbe interactions* **21**, 1027–1035
[Abstract: PMID 18616399](#)

Reviews: Arbuscular Mycorrhiza

- Dieter Strack, Thomas Fester, Bettina Hause, Michael H. Walter (2001) Die arbuskuläre Mykorrhiza. *Biologie in unserer Zeit* **31/2001**, 286–295
- Dieter Strack, Thomas Fester, Bettina Hause, Willibald Schliemann, Michael H. Walter (2003)

Arbuscular mycorrhiza: Biological, chemical, and molecular aspects.
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- Thomas Fester (2004) Plastiden bei der arbuskulären Mykorrhizasymbiose. In: Wurzelinduzierte Bodenvorgänge; 14. Borkheider Seminar zur Ökophysiologie des Wurzelraumes; Hrsg.: W. Merbach, K. Egle, J. Augustin. B.G. Teubner – Stuttgart, Leipzig, Wiesbaden; 39–42
- Bettina Hause, Thomas Fester (2005) Molecular and cell biology of arbuscular mycorrhizal symbiosis. *Planta* **221**, 184–196
[Abstract: PMID 15871030](#)
- Dieter Strack, Thomas Fester (2006) Isoprenoid metabolism and plastid reorganization in arbuscular mycorrhizal roots. *The New Phytologist* (Tansley Review) **172**, 22–34
[Abstract: PMID 16945086](#)
- Thomas Fester, Swanhild Lohse, Kristine Halfmann (2007) 'Chromoplast' development in arbuscular mycorrhizal roots. *Phytochemistry* **68**, 92–102
[Abstract: PMID 17137610](#)
- Michael H Walter, Daniela S Floss, Joachim Hans, Thomas Fester, Dieter Strack (2007) Apocarotenoid biosynthesis in arbuscular mycorrhizal roots: contributions from methylerythritol phosphate pathway isogenes and tools for its manipulation. *Phytochemistry* **68**, 130–138
[Abstract: PMID 17084869](#)
- Thomas Fester (2007) Plastid reorganization in arbuscular mycorrhizal roots. In: *Current Research in Plant Cell Compartments*. (Ed. Benoit Schoefs), **invited contribution, in press**
- Thomas Fester, Bettina Hause (2007) Drought and symbiosis – Why is ABA necessary for arbuscular mycorrhiza? *The New Phytologist* **175**, 383–386
[Abstract: PMID 17635214](#)

Reviews: Root knot nematodes

- Yuhong Li, Thomas Fester, Christopher G. Taylor (2008) Transcriptomic analysis of nematode infestation, **invited contribution, in press**
- R. Howard Berg, Thomas Fester, Christopher G. Taylor (2008) Development of the root knot giant cell, **invited contribution, in press**