

## 7. Literaturverzeichnis

- Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K. und Walter, P. (2002): Molecular biology of the cell. 4 Ed. New York: GARLAND SCIENCE: 1463 Seiten
- Allen, G.C., Spiker, S. und Thompson, W.F. (2000): Use of matrix attachment regions (MARs) to minimize transgene silencing. PLANT MOL BIOL. 43: 361-376
- Ammann, K., Jacot, Y. & Rufener Al Mazayad, P. (1996): Field release of transgenic crop in Switzerland, an ecological risk assessment. In: Schulte, E. und Käppeli, O. (Hrsg.), Gentechnisch veränderte krankheits- und schädlingsresistente Nutzpflanzen. SCHWERPUNKTPROGRAMM BIOTECHNOLOGIE DES SCHWEIZERISCHEN NATIONALFONDS, BERN. 101 – 158
- Aoki, K., Kragler, F. Xoconostle-Cázares, B. und Lucas, W.J. (2002): A subclass of plant heat shock cognate 70 chaperones carries a motif that facilitates trafficking through plasmodesmata. PROC NATL ACAD SCI USA. 99: 16342-16347
- Aoki, K., Suzui, N., Fujimaki, S., Dohmae, N., Yonekura-Sakakibara, K., Fujiwara, T., Hayashi, H., Yamaya, T. und Sakakibara, H. (2005): Destination-selective long-distance movement of phloem proteins. PLANT CELL. 17 (6): 1801-1814
- Arriola, P.E. und Ellstrand, N.C. (1996): Crop-to-weed gene flow in the genus *Sorghum* (*Poaceae*): Spontaneous interspecific hybridization between johnsongrass, *Sorghum halepense*, and crop *sorghum*, *S.-bicolor*. AM J BOT . 83: 1153-1159
- Arriola, P.E. und Ellstrand, N.C. (1997): Fitness of interspecific hybrids in the genus *Sorghum*: Persistence of crop genes in wild populations. ECOL APPL. 7: 512-518
- Auckerman, M.J. und Sakai, H. (2003): Regulation of flowering time and floral organ identity by a microRNA and its APETALA2-like target genes. PLANT CELL. 15: 2730-3741
- Banerjee, A.K., Chatterjee, M., Yu, Y., Suh, S.-G., Miller, W.A. und Hannapel, D.J. (2006): Dynamics of a mobile RNA of potato involved in a long-distance signalling pathway. PLANT CELL. 18: 3443–3457
- Bartsch, D., Cuguen, J., Biancardi, E. und Sweet, J. (2003): Environmental implications of gene flow from sugar beet to wild beet-current status and future research needs. ENVIRON BIOSAFETY RES. 2: 105-115
- Bartsch, D., Suhkopp, H. und Suhkopp, U. (1993): Introduction of plants with special regard to cultigens running wild. In: TRANSGENIC ORGANISMS: 135-151
- Baulcombe, D.C. (2004): RNA silencing in plants. NATURE. 431: 356-363
- Bevan, M. (1984): Binary *Agrobacterium* Vectors for plant transformation. NUCLEIC ACIDS RES. 12: 8711-8721
- Birch, R.G. (1997): Plant transformation: Problems and strategies for practical application. ANN REV PLANT PHYSIOL. 48: 297-326
- Blancas, L., Arias, D.M. und Ellstrand, N.C. (2002): Patterns of genetic diversity in sympatric and allopatric populations of maize and its wild relative teosinte in Mexico: Evidence for hybridization. GENE FLOW WORKSHOP. 31-38
- Blasse, W. (1982): Blüten und Früchten beim Obst. VEB DT LANDWIRTSCHAFTSVERLAG, BERLIN

- Boyko, A., Kathiria, P., Zemp, F.J., Yao, Y.L., Pogribny, I. und Kovalchuk, I., (2007): Transgenerational changes in the genome stability and methylation in pathogen-infected plants (Virus-induced plant genome instability). *NUCLEIC ACIDS RES.* 35 (5): 1714-1725
- Broothaerts, W. (2003): New findings in apple S-genotype analysis resolve previous confusion and request the re-numbering of some S-alleles. *THEOR APPL GENET.* 106: 703-714
- Butaye, K.M.J., Cammue, B.P.A., Delaure, S.L. und De Bolle, M.F.C. (2005): Approaches to minimize variation of transgene expression in plants. *MOL BREEDING.* 16 (1): 79-91
- Caboni, E., Lauri, P. und D'Angeli, S. (2000): In vitro plant regeneration from callus of shoot apices in apple shoot culture. *PLANT CELL REP.* 19: 775-760
- Cao, J. und Earle, E.D. (2003): Transgene expression in broccoli (*Brassica oleracea* var. *italica*) clones propagated in vitro via leaf explants. *PLANT CELL REP.* 21: 789-796
- Chakraborty, K. und Devakumar, C. (2005): Quantitative structure-activity relationship analysis as a tool to evaluate the mode of action of chemical hybridizing agents for wheat (*Triticum aestivum* L.). *J AGRIC FOOD CHEM.* 53 (9): 3468-75
- Chan, S. W., Henderson, I. R. und Jacobsen, S. E. (2005): Gardening the genome: DNA methylation in *Arabidopsis thaliana*. *NAT REV GENET.* 6: 351-360
- Chen, X. (2004): A microRNA as a translational repressor of APETALA2 in *Arabidopsis* flower development. *SCIENCE.* 303: 2022-2025
- Coart, E., Van Glabeke, S., De Loose, M., Larsen, A.S. und Roldan-Ruiz, I. (2006): Chloroplast diversity in the genus *Malus*: new insights into the relationship between the European wild apple (*Malus sylvestris* (L.) Mill.) and the domesticated apple (*Malus domestica* Borkh.). *MOL ECOL.* 15 (8): 2171-2182
- Coart, E., Vekemans, X., Smulders, M.J.M., Wagner, I., Van Huylenbroeck, J., Van Bockstaele, E. und Roldan-Ruiz, I. (2003): Genetic variation in the endangered wild apple (*Malus sylvestris* (L.) Mill.) in Belgium as revealed by amplified fragment length polymorphism and microsatellite markers. *MOL ECOL.* 12 (4): 845-857
- Conner, A.J. (1994): Analysis of containment and food safety issues associated with the release of transgenic potatoes. The molecular and cellular biology of the potato: 245-264. CAB. INTERNATIONAL, WALLINGFORD, UK.
- Conner, A.J., Mlynarova, L., Stiekema, W.J. und Nap, J.P. (1998): Meiotic stability of transgene expression is unaffected by flanking matrix-associated regions. *MOL BREEDING.* 4: 47-58
- Daniell, H. (2002): Molecular strategies for gene containment in transgenic crops. *NAT BIOTECHNOL.* 20 (6): 581-586
- Datla, R.S.S., Faouzi Bakkaoui, Hammerlindl, J. K., Pilate, G., Dunstan, D. I. und Crosby, W. L. (1993): Improved high-level constitutive foreign gene expression in plants using an AMV RNA4 untranslated leader sequence. *PLANT SCI.* 94: 139-149

- De Bolle, M.F.C., Butaye, K.M.J., Coucke, W.J.W., Goderis, I.J.W.M., Wouters, P.F.J., van Boxel, N., Broekaert, W.F. und Cammue, B.P.A. (2003) Analysis of the influence of promoter elements and a matrix attachment region on the inter-individual variation of transgene expression in populations of *Arabidopsis thaliana*. PLANT SCI. 165 : 169-179
- De Nettancourt, D. (2001): Incompatibility and incongruity in wild and cultivated plants. SPRINGER VERLAG, BERLIN, HEIDELBERG, NEW YORK.
- Depicker, A., Sanders, M. und Meyer, P.T. (2005): Transgene silencing. In "Plant Epigenetics" ed. Meyer, P. BLACKWELL, OXFORD: 1-32
- Deroles, S.C. und Gardner, R.C. (1988): Expression and inheritance of kanamycin resistance in a large number of transgenic petunias generated by *Agrobacterium*-mediated transformation. PLANT MOL BIOL. 11: 355-364
- Derrick, P.M., Barker, H. und Oparka, K.J. (1990): Effect of virus infection on symplastic transport of fluorescent tracers in *Nicotiana clevelandii* leaf epidermis. PLANTA 181: 555-559
- Destefano-Beltran, L.J.C. (1991): The introduction into tobacco plants of genes which encodes some of the natural components of the humoral immune response of *Hyolophora cecropia*. PH.D. DISSERTATION. LOUISIANA STATE UNIVERSITY, BATON ROUGE, L.A.
- De Souza, A.J., Mendes, B.M.J. und Mourao, F.D.A (2007): Gene silencing: Concepts, applications, and perspectives in woody plants. SCIENTIA AGRICOLA. 64 (6): 645-656
- Dietzsch, A. (1982): Der Einfluss einiger Faktoren auf die Intensität des Bestäubungs- und Befruchtungsprozesses und ihre Wirkung auf die Fruchtbarkeit und äußere Merkmale in Apfelanlagen des Anbaugebietes Halle. DISSERTATION, INSTITUT FÜR OBSTFORSCHUNG DRESDEN-PILLNITZ.
- Dominguez, A., Cervera, M., Perez, R.M., Romero, J., Fagoaga, C., Cubero, J., Lopez, M.M., Juarez, J.A., Navarro, L. und Pena L. (2004): Characterisation of regenerates obtained under selective conditions after *Agrobacterium*-mediated transformation of citrus explants reveals production of silenced and chimeric plants at unexpected high frequencies. MOL BREED. 14: 171-183
- Doney, D.L., Whitney, E.D., Terry, J., Frese, L. und Fitzgerald, P. (1990): The distribution and dispersal of *Beta vulgaris* L. ssp. *maritima* germplasm in England, Wales and Ireland. SUGAR BEETS RESEARCH. 27: 29-37
- Dougherty, W.G. und Parks, T.D. (1995): Transgenes and gene suppression - Telling us something new. CURR OPIN CELL BIOL. 7: 399-405
- Driesel, A.J. und Danneberg, G. (1996): Stand der Sicherheitsforschung zur Freisetzung transgener Organismen- Auswertung internationaler und nationaler Erkenntnisse. FORSCHUNGSBERICHT IM AUFTRAG DES UMWELT-BUNDESAMTES, TEXTE 43/96, BERLIN.
- Durka, W. (2002): Schriftenreihe für Vegetationskunde. BUNDESAMT FÜR NATURSCHUTZ. 2002: 133-175
- Dzhangaliev, A.D., Salova, T.N. und Turekhanova, P.M. (2001): The wild fruit and nut plants of Kazakhstan. HORT REV. 29: 305-371
- Eastham, K. und Sweet, J. (2002): Genetically modified organisms (GMOs): the significance of gene flow through pollen transfer. ENVIRON ISSUE REP. 28: 75p

- El Ouakfaoui, S. und Miki, B. (2005): The stability of the *Arabidopsis* transcriptome in transgenic plants expressing the marker genes *nptII* and *uidA*. PLANT J. 41: 791-800
- Ellstrand, N.C. (1992): Gene flow by pollen - Implications for plant conservation genetics. OIKOS. 63: 77-86
- Ellstrand, N.C. und Hoffman, C.A. (1990): Hybridization as an avenue of escape for engineered genes - Strategies for risk reduction. BIOSCIENCE. 40: 438-442
- Elmayan, T. und Vaucheret, H. (1996): Expression of single copies of a strongly expressed 35S transgene can be silenced post-transcriptionally. PLANT J. 9: 787-797
- Fagard, M. und Vaucheret, H. (2000): (Trans)gene silencing in plants: How many mechanisms? ANNU REV PLANT PHYS. 51: 167-194
- Feyissa, T., Welander, M. und Negash, L. (2007): Genetic stability, ex vitro rooting and gene expression studies in *Hagenia abyssinica*. BIOLOGIA PLANTARUM. 51 (1): 15-21
- Filiti, N. und Montalti, P. (1982): In vitro germination and tube growth of apple pollen as affected by cold storage. RIV.ORTOFLOFRUTT. IT. 66: 361-368
- Finnegan, E.J. und Kovac, K.A. (2000): Plant DNA methyltransferases. PLANT MOL BIOL. 43: 189-201
- Fischer, C. (2001): Befruchtungsverhältnisse der Pillnitzer Apfelsorten. OBSTBAU. 26: 181-183
- Fischer, C. (2002): Blüh- und Befruchtungsverhalten beim Apfel. ERWERBS-OBSTBAU. 44: 33-39
- Fischer, M. (1995): Farbatlas Obstsorten. EUGEN ULMER VERLAG, STUTTGART.
- Flachowsky, H., Riedel, M. Reim, S. und Hanke, M-V. (2008): Evaluation of the uniformity and stability of T-DNA integration and gene expression in transgenic apple plants. ELECTRON J BIOTECHNOL. 11 (1)
- Fladung, M. (1999): Gene stability in transgenic aspen (*Populus*). I. Flanking DNA sequences and T-DNA structure. MOL GEN GENET. 260: 574-581
- Fladung, M. und Hönicka, H. (2004): Erzeugung transgener steriler Zitterpappeln zur Verhinderung eines vertikalen Gentransfers in forstliche Ökosysteme. GESUNDE PFLANZEN 56: 195-200
- Forsbach, A., Schubert, D., Lechtenberg, B., Gils, M. und Schmidt R (2003): A comprehensive characterization of single-copy T-DNA insertions in the *Arabidopsis thaliana* genome. PLANT MOL BIOL. 52: 161-176
- Forte, A. V. und Ignatov, A. N. (2002): Phylogeny of the *Malus* (apple tree) species, inferred from the morphological traits and molecular DNA analysis. RUSSIAN J GENET 38: 1150-1160.
- Francis, K.E. und Spiker, S. (2005): Identification of *Arabidopsis thaliana* transformants without selection reveals a high occurrence of silenced T-DNA integrations. PLANT J. 41: 464-477
- Free, J.B. (1962): The Behaviour of Honeybees Visiting Field Beans (*Vicia faba*) J ANIM ECOL. 31: 497-502
- Free, J.B. (1966): The Foraging Areas of Honeybees in an Orchard of Standard Apple Trees. J APPL ECOL. 3: 261-268

- Free, J.B. und Spencer-Booth, Y. (1964): The foraging behaviour of honeybees in an orchard of dwarf apple trees. *J HORTIC SCI.* 39: 54–60
- Friedrich, G. (1993): Handbuch des Obstbaus. VERLAG EUGEN ULMER, STUTTGART.
- Frisch, D.A., Harrishaller, L.W., Yokubaitis, N.T., Thomas, T.L., Hardin, S.H. und Hall, T.C. (1995): Complete sequence of the binary vector Bin-19. *PLANT MOL BIOL.* 27: 405-409
- Fuchs, M. und Gonsalves, D. (2007): Safety of virus-resistant transgenic plants two decades after their introduction: Lessons from realistic field risk assessment Studies. *ANNU REV PHYTOPATHOL.* 45: 173-202
- Fukuda, A., Fujimaki, S., Mori, T., Suzui, N., Ishiyama, K., Hayakawa, T., Yamaya, T., Fujiwara, T., Yoneyama, T. und Hayashi H. (2005): Differential distribution of proteins expressed in companion cells in the sieve element-companion cell complex of rice plants. *PLANT CELL PHYSIOL.* 46 (11): 1779-1786
- Galun, E. (2005): RNA silencing in plants. *IN VITRO CELL DEV-PL.* 41: 113-123
- Gau, A.E., Koutb, M., Piotrowski, M. und Kloppstech, K. (2004): Accumulation of pathogenesis-related proteins in the apoplast of susceptible cultivar of apple (*Malus domestica* cv. Elstar) after infection by *Venturia inaequalis* and constitutive expression of PR genes in the resistant cultivar Remo. *EUR J PLANT PATHOL.* 110: 703-711
- Gebhard, F. und Smalla, K. (1998): Transformation of *Acinetobacter* sp. BD413 by transgenic sugar beet DNA. *ENVIRONM MICROBIOL.* 64: 1550-1554
- Gedloff, G.H., Bowen, B. und Buchholz, W.G. (1990): Quantitation of chloramphenicol acetyl transferase in transgenic tobacco plants by ELISA and correlation with gene copy number. *PLANT MOL BIOL.* 14: 575-583
- Geibel, M., Dehmer, K.J. und Forsline, P.L. (2000): Biological diversity in *Malus sieversii* population from central asia. *ACTA HORT.* 538: 43-49
- Gerdemann-Knörk, M. und Tegender, M. (1997): Kompendium der für Freisetzung relevanten Pflanzen; hier *Brassicaceae*, *Beta vulgaris*, *Linum usitatissimum*. *TEXTE DES UMWELTBUNDESAMTES.* 38: 1-221
- Gheysen, G., Villarroel, R. und van Montagu (1991): Illegitimate recombination in plants: A model for T-DNA integration. *GENES DEV.* 5: 287-297
- Ghoshroy, S., Lartey, R., Sheng, J. und Citovsky, V. (1997): Transport of proteins and nucleic acids through plasmodesmata. *ANN REV PLANT PHYS.* 48: 27-50
- Gianfranceschi, L., Seglias, N., Tarchini, R., Komjanc, M. und Gessler, C. (1998): Simple sequence repeats for the genetic analysis of apple. *THEOR APPL GENET.* 96: 1069-1076
- Godefroy-Colburn, T., Ravelonandro, M. und Pinck, L. (1985): Cap accessibility correlates with the initiation efficiency of alfalfa mosaic virus RNAs. *EUR J BIOCHEM.* 147 (3): 549–552.
- Godoy, J.A. und Jordano, P. (2001): Seed dispersal by animals: Exact identification of source trees with endocarp DNA microsatellites. *MOL ECOL.* 10: 2275-2283
- Goldwin, G.K. (1978): Improved fruit setting with plant growth hormones. *ACTA HORT.* 80: 115-121

- Golecki, B., Schulz, A., Carstens-Behrens, U. und Kollmann, R. (1998): Evidence for graft transmission of structural phloem proteins or their precursors in heterografts of *Cucurbitacea*. *PLANTA*. 206: 630-640
- Goulao, L. und Oliveira, C.M. (2001): Molecular characterisation of cultivars of apple (*Malus x domestica* BORKH.) using microsatellite (SSR and ISSR) markers. *EUPHYTICA*. 122: 81-89
- Gressel, J. und Al-Ahmad, H. (1999): Tandem constructs: Preventing the rise of superweeds. *TRENDS BIOTECHNOL*. 17:361-366
- Guilford, P., Prakash, S., Zhu, J.M., Rikkerink, E., Gardiner, S., Bassett, H. und Forster, R. (1997): Microsatellites in *Malus x domestica* (apple): Abundance, polymorphism and cultivar identification. *THEOR APPL GEN*. 94: 249-254
- Gura, T. (2000): A silence that speaks volumes. *NATURE*. 404: 804-808
- Hagemann, R. (1999): Allgemeine Genetik. SPEKTRUM AKADEMISCHER VERLAG. HEIDELBERG, BERLIN.
- Hamilton, A.J. und Baulcombe, D.C. (1999): A species of small antisense RNA in posttranscriptional gene silencing in plants. *SCIENCE*. 286: 950-952
- Hamilton, C.M. (1997): A binary-BAC system for plant transformation with high-molecular-weight DNA. *GENE*. 200: 107-116
- Hanelt, P. (2006): Mansfeld's Encyclopaedia of agricultural and horticultural crops. [1]
- Hanke, V. (2004): The long and tortuous path from the leaf piece to the genetically engineered apple tree. *ACTA HORT*. 663: 511-513
- Hanke, V., Hiller, I., Klotzsche, G., Winkler, K., Egerer, J., Richter, K., Norelli, J.F. and Aldwinckle, H.S. (2000): Transformation in apple for increased disease resistance. *ACTA HORT*. 538: 611-616
- Hänisch ten Cate, C.H., Loonen, A.E.H.M., Ottavani, M.P., Ennik, L., Van Eldick, G. und Siekema, W.J. (1991): Frequent and spontaneous deletion of ri T-DNA in *Agrobacterium rhizogenes* transformed potato roots and regenerated plants. *MOL GEN GENET*. 264: 82-88
- Hanna, W.W. und Burton, G.W. (1992): Genetics of red and purple plant colour in pearl millet. *J HERED*. 83: 386-388
- Harris, S. A., Robinson, J. P. und Juniper, B. E. (2002): Genetic clues to the origin of the apple. *TRENDS GENET*. 18 (8): 426-430
- Haupt, S., Oparka, K.J., Sauer, N. und Neumann, S. (2001): Macromolecular trafficking between *Nicotiana tabacum* and the holoparasite *Cuscuta reflexa*. *J EXP BOT*. 52: 173-177
- Haywood, V., Yu, T.-S., Huang, N.-C. und Lucas, W.J. (2005): Phloem long-distance trafficking of GIBBERELLIC ACID-INSENSITIVE RNA regulates leaf development. *PLANT J*. 42: 49-68
- Heidenreich, B. (1999): Analyse und Bewertung der Risikoforschung zur Freisetzung gentechnisch veränderter Mikroorganismen. DISSERTATION FB BIOLOGIE, UNIVERSITÄT HAMBURG, 1999
- Henderson, I.R. und Jacobsen, S.E. (2007): Epigenetic inheritance in plants. *NATURE*. 447 (7143): 418-424
- Hills, M.J., Hall, L., Arnison, P.G. und Good, A.G. (2007): Genetic use restriction technologies (GURTs): strategies to impede transgene movement. *TRENDS PLANT SCI*. 12 (4): 177-183

- Hobbs., S., Kpodar, P. und DeLong, M.O. (1990): The effect of T-DNA copy number, position and methylation on reporter gene expression in tobacco transformants. *PLANT MOL BIOL.* 15: 851-864
- Höfer, M.: Der Kulturapfel - Eine 12.000-jährige Geschichte [online] <http://www.obstbau.org/content/service/wissenswertes/kulturapfel.php>
- Hoffmann, M. und Köhler, W. (1999): Modellierung von Genfluss und Verwilderung bei transgenen Zuckerrüben (*Beta vulgaris* convar. *altissima* DÖLL). BMBF, STATUSSEMINAR, BRAUNSCHWEIG: 101-110
- Hokanson, S.C., Szewc-McFadden, A.K., Lamboy, W.F. und McFerson, J.R. (1998): Microsatellite (SSR) markers reveal genetic identities, genetic diversity and relationships in a *Malus x domestica* Borkh. core subset collection. *THEOR APPL GEN.* 97: 671-683
- Hönicka, H. und Fladung, M. (2003): Evaluation of strategies for avoiding vertical gene transfer. Proceedings international congress 'BIOFOR 02'-Sustainable Forestry, Wood products and Biotechnology; Victoria-Gasteiz, Spanien, NEIKER (Instituto Vasco de Investigacion y Desarrollo Agrario): 221-226
- Hönicka, H. und Fladung, M. (2006): Biosafety in *Populus* spp. And other forest trees: From non-native species to taxa derived from traditional breeding and genetic engineering. *TREES STRUCT FUNCT.* 20 (5): 259-266
- Hood, E.E., Gelvin, S.B., Melchers, L.S. und Hoekema, A. (1993): New *Agrobacterium* helper plasmids for gene transfer to plants. *TRANSGENIC RES.* 2: 208-218
- Hormaza, J.I. (2002): Molecular characterization and similarity relationships among apricot (*Prunus armeniaca* L.) genotypes using simple sequence repeats. *THEOR APP GEN.* 104: 321-328
- Howard-Till, R.A. und Yao, M.C. (2007): Tudor nuclease genes and programmed DNA rearrangements in *Tetrahymena thermophila*. *EUKARYOT CELL.* 6 (10): 1795-804.
- Hudson, L.C., Chamberlain, D. und Stewart, C.N.J. (2001): GFP-tagged pollen to monitor gene flow of transgenic plants. *MOL ECOL NOTES.* 1: 321-324
- Huss-Marp, J. (2000): Untersuchung zur relativen Luftfeuchte für die Allergenfreisetzung aus Pollen. DISSERTATION, TECHNISCHE UNIVERSITÄT MÜNCHEN.
- Imlau, A., Truernit, E. und Sauer, N. (1999). Cell-to-cell and long-distance trafficking of the green fluorescent protein in the phloem and symplastic unloading of the protein into sink tissues. *PLANT CELL.* 11: 309-322
- Ingram, J. (2000) Report on the separation distances required to ensure cross-pollination is below specified limits in non-seed crops of sugar beet, maize and oilseed rape. National Institute of Agricultural Botany, Cambridge UK. published by MINISTRY OF AGRICULTURE FISHERIES AND FOOD - UK (MAFF).
- Itaya, A., Ma, F., Qi, Y., Matsuda, Y., Zhu, Y., Liang, G. und Ding, B. (2002): Plasmodesma-mediated selective protein traffic between "symplasmically isolated" cells probed by a viral movement protein. *PLANT CELL.* 14: 2071-2083
- Jackson, J.P., Lindroth, A.M., Cao, X.F. und Jacobsen, S.E. (2002): Control of CpNpG DNA methylation by the kryptonite histone H3 methyltransferase. *NATURE.* 416: 556-560

- James, D.J., Passey, A.J., Barbara, D.J. und Bevan, M. (1989): Genetic-transformation of Apple (*Malus pumila* Mill.) using a disarmed Ti-binary vector. PLANT CELL REP 7(8): 658-661
- Janssen, I., Geissler, S. und Müller, W. (1995): Analyse ökologischer Auswirkungen von land- und forstwirtschaftlichen Nutzpflanzen und eingeführten standortfremden Pflanzen. Bericht des Österreichischen Ökologischen Instituts, Wien
- Jiang, N. G. (1986): An preliminary study on the center of origin of genus *Malus* Miller. J SOUTHWEST AGRIC UNIV. 1: 94-96
- Jorgensen, R.A., Cluster, P.D., English, J.J., Que, Q.D. und Napoli, C.A. (1996): Chalcone synthase co-suppression phenotypes in petunia flowers: Comparison of sense vs. antisense constructs and single-copy vs. complex T-DNA sequences. PLANT MOL BIOL. 31: 957-973
- Kehr, J. und Buhtz, A. (2008): Long distance transport and movement of RNA through the phloem. J EXP BOT. 59 (1): 85-92
- Keil, M., Sánchez-Serano, J.J. und Willmitzer, L. (1989): Both wound-inducible and tuber-specific expression are mediated by the promoter of a single member of the potato proteinase inhibitor II gene family. EMBO J. 8: 1323-1330
- Kim, M., Canio, W., Kessler, S. und Sinha, N. (2001): Developmental changes due to long-distance movement of a homeobox fusion transcript in tomato. SCIENCE 293: 287-289
- Kim, S. I., Veena und Gelvin S.B. (2007): Genome-wide analysis of Agrobacterium T-DNA integration sites in the *Arabidopsis* genome generated under non-selective conditions. PLANT J. 51 (5): 779-791
- Kim, S.R., Lee, J., Jun und S.H. (2003): Transgene structures in T-DNA inserted rice plants. PLANT MOL BIOL. 52: 761-773
- Kim, W.S. und Geider, K. (2000): Characterization of a viral EPS-depolymerase, a potential tool for control of fire blight. PHYTOPATHOLOGY. 90: 1263-1268
- Kim, W.S., Salm, H. und Geider, K. (2004): Expression of bacteriophage phi Ea1h lysozyme in *Escherichia coli* and its activity in growth inhibition of *Erwinia amylovora*. MICROBIOLOGY-SGM. 150: 2707-2714
- Kirkpatrick, K. J. und Wilson, H. D. (1988): Interspecific gene flow in *Cucurbita*: *C. texana* vs. *C. pepo*. AMER J BOT. 75: 519-527
- Klose, R. J. und Bird, A. P. (2006): Genomic DNA methylation: the mark and its mediators. TRENDS BIOCHEM SCI. 31: 89-97
- Ko, K., Brown, S.K., Norelli, J., Düring, K. und Aldwinckle, H.S. (1997): Construction of plasmid binary vectors for enhanced fire blight resistance in apple. PHYTOPATHOLOGIE. 87: 53-53
- Ko, K., Norelli, J.L., Reynoird, J.P., Boresjza-Wysocka, E., Brown, S.K. und Aldwinckle, H.S. (2000): Effect of untranslated leader sequence of AMV RNA 4 and signal peptide of pathogenesis-related protein 1b on Attacin gene expression, and resistance to fire blight in transgenic apple. BIOTECHNOL LETT. 22: 373-381
- Koechlin, F. (2003): Fact Sheet: Koexistenz II: Praktische Aspekte. aus: Florianne Koechlin, Moratorium für kommerzielle Freisetzungen von gentechnisch veränderten Organismen. Unmögliche Koexistenz, WoZ. SCHWEIZERISCHE ARBEITSGRUPPE GENTECHNOLOGIE SAG.



- Kollmann, R. und Glockmann, C. (1991): Studies on graft unions. III. On the mechanism of secondary formation of plasmodesmata at the graft interface. PROTOPLASMA. 165: 71-85
- Kollmann, R. und Schulz, A. (1993): Phloem regeneration. PROG BOT. 54: 63-78
- Koncz, C., Nemeth, K., Redei, G.P. und Schell, J. (1992): T-DNA insertional mutagenesis in *Arabidopsis*. PLANT MOL BIOL. 20: 963-976
- Koopman, W.J., Li, Y., Coart, E., van de Weg, W.E., Vosman, B., Roldan-Ruiz, I. und Smulders, M.J. (2007): Linked vs unlinked markers: multilocus microsatellite haplotype-sharing as a tool to estimate gene flow and introgression. MOL ECOL. 16 (2): 243-256
- Koorneef, M., Alonso-Blanco, C. und Vreugdenhil, D. (2004): Naturally Occurring Genetic Variation in *Arabidopsis thaliana*. ANNU REV PLANT BIOL 55: 141–172
- Kooter, J.M., Matzke, M.A. und Meyer, P. (1999): Listening to the silent genes: transgene silencing, gene regulation and pathogen control. TRENDS PLANT SCI. 4: 340-347
- Kooter, J.M., Matzke, M.A. und Meyer, P. (1999): Listening to the silent genes: transgene silencing, gene regulation and pathogen control. TRENDS PLANT SCI. 4: 340-347
- Kovalchuk, I., Kovalchuk, O. und Hohn, B. (2000): Genome-wide variation of the somatic mutation frequency in transgenic plants. EMBO J. 17: 4431–4438
- Kriete, G., Niehaus, K., Perlick, A.M., Pühler, A. und Broer, I. (1996): Male sterility in transgenic tobacco plants induced by tapetum- specific deacetylation of the externally applied nontoxic compound N-acetyl-L-phosphinothricin. PLANT J. 9: 809-818
- Kron, P., Husband, B.C. und Kevan, P.G. (2001a): Across- and along-row pollen dispersal in high-density apple orchards: Insights from allozyme markers. J HORT SCI BIOTECHNOL. 76: 286-294
- Kron, P., Husband, B.C. und Kevan, P.G. und Belaoussoff, S. (2001b): Factors affecting pollen dispersal in high-density apple orchards. HORT SCI. 101: 133-135
- Kuhlmann, M. und Nellen, W. (2004): RNA interference. IN VITRO CELL DEV-PL. 3: 142-150
- Kumar, S. und Fladung, M. (2002): Transgene integration in aspen: Structures of integration sites and mechanism of T-DNA integration. PLANT J. 31: 543-551
- Kutzelnigg, H. und Silbereisen, R. (1994): Maloideae. in: Hegi, G.: ILLUSTRIERTE FLORA VON MITTELEUROPA – Band IV.
- Lancaster, J.E. (1992): Regulation of skin color in apples. CRIT REV PLANT SCI. 10: 487-502
- Lapins, K.O. (1976): Inheritance of compact growth type in apple. J AM SOC HORTIC SCI. 101: 133-135
- Larkin, P.J. und Scowcroft, W.R. (1981): Somaclonal Variation - A Novel Source of Variability from Cell-Cultures for Plant Improvement. THEOR APPL GENET. 60 (4): 197-214
- Lechtenberg, B., Schubert, D., Forsbach, A., Gils, M. und Schmidt, R. (2003): Neither inverted repeat T-DNA configuration nor arrangements of tandemly repeated transgenes are sufficient to trigger transgene silencing. PLANT J. 34: 507-517

- Leljak-Levanic, D., Bauer, N., Mihaljevic, S. und Jelaska, S. (2004): Changes in DNA methylation during somatic embryogenesis in *Curcubita pepo* L.. PLANT CELL REP. 23: 120-127
- Lepinasse, Y. und Godicheau, M. (1980): Création et description d'une plante haploïde de Pommier (*Malus pumila* Mill.). ANN AMÉLIORE PLANTE. 30: 39-44
- Lepinasse, Y., Godicheau, M. und Duron, M. (1983): Potential value and method of Producing haploids in the apple tree, *Malus pumila* (Mill.). ACTA HORT. 131: 223-229
- Li, Y. N. (1989): An investigation of the genetic center of *Malus pumila* and *Malus* Miller in the world. ACTA HORT SINICA. 16: 101-108
- Liebhart, R., Gianfranceschi, L., Koller, B., Ryder, C.D., Tarchini, R., Van de Weg, E. und Gessler, C. (2002): Development and characterisation of 140 new microsatellites in apple (*Malus x domestica* Borkh.). MOL BREEDING. 10: 217-241
- Lindroth, A.M., Cao, X.F., Jackson, J.P., Zilberman, D., McCallum, C.M., Henikoff, S. und Jacobsen, S.E. (2001): Requirement of chromoethylase 3 for maintenance of CpXpG methylation. SCIENCE. 292: 2077-2080
- Lippmann, Z. und Martienssen, R. (2004): The role of RNA interference in heterochromatic silencing. NATURE. 431: 364-370
- Liu, Y., Song, X. Gorovsky, M.A. und Karrer, K.M. (2005): Elimination of foreign DNA during somatic differentiation in *Tetrahymena thermophila* shows position effect and is dosage dependents. EUKARYONT CELL. 4: 421-431
- Lodish, H., Berk, A., Zipursky, S.L., Matsudaira, P., Kaiser, C.A., Kreiger, M., Scott, M.P. Baltimore, D. und Darnell, J. (2005): Biologia celular e molecular. 5 ed. Porto Alegre: ARTMED. 1054 Seiten
- Lottspeich, F. und Zorbas, H., Hrsg. (1998): Bioanalytik. SPEKTRUM AKADEMISCHER VERLAG, HEIDELBERG
- Lough, T.J. und Lucas, W.J. (2006): Integrative plant biology: role of phloem long-distance macromolecular trafficking. ANN REV PLANT BIOL. 57: 203-232
- Maghuly, F., Machado, A.D., Leopold, S., Khan, M.A., Katinger, H. und Laimer, M. (2007): Long-term stability of marker gene expression in *Prunus subhirtella*: A model fruit tree species. J BIOTECHNOL. 127 (2): 310-321
- Maliga, P. (2004): Plastid transformation in higher plants. ANN REV PLANT BIOL. 55: 289-313.
- Maniatis, T., Fritsch, E.F. und Sambrook, J. (1982): Molecular cloning: A laboratory manual. COLD SPRING HARBOUR LABORATORY PRESS NEW YORK.
- Maqbool, S.B. und Christou, P. (1999): Multiple traits of agronomic importance in transgenic indica rice plants: Analysis of transgene interaction patterns, expression levels and stability. MOL BREED. 5: 471-480
- Marenkova, T.V. und Deinko, E.V. (2006): A change in the stability of marker *nptII* and *uidA* gene expression in transgenic tobacco plants. RUSSIAN J GENET. 42 (5): 518-525
- Matzke, M.A., Aufsatz, W., Kanno, T., Mette, M.F. und Matzke, A.J. (2002): Homology-dependent gene silencing and host defense in plants. ADV GENET. 46: 235-275

- Matzke, M.A., Primig, M., Trnovsky, J. und Matzke, A.J.M. (1989): Reversible methylation and inactivation of marker genes in sequentially transformed tobacco plants. *EMBO J.* 8: 643-649
- Mayer, D.F., Johansen, C.A. und Lunden, J.D. (1989): Honey bee foraging behaviour on ornamental crabapple pollinizers and commercial apple. *HORT SCI.* 24: 510-512
- McCallum, C., Comai, L., Greene, E.A. und Henikoff, S. (2000): Targeted screening for induced mutations. *NAT BIOTECHNOL* 18: 455-457
- Meins, F. (2000): RNA degradation and models for post-transcriptional gene silencing. *PLANT MOL BIOL.* 43: 261-273
- Meister, G. und Tuschl, T. (2004): Mechanisms of gene silencing by double-stranded RNA. *NATURE.* 431: 343-349
- Melander, M., Kamnert, I., Hapstad, I., Liljeroth, E. und Bryngelsson, T. (2006): Stability of transgene integration and expression in subsequent generations of doubled haploid oilseed rape transformed with chitinase and beta-1,3-glucanase genes in a double-gene. *PLANT CELL REP.* 25 (9): 942-952
- Messeguer, J. (2001): Gene flow assessment in transgenic plants. *PLANT CELL.* 73: 201-212
- Mette, M., van der Winden, J., Matzke, M.A. und Matzke, A.J.M. (1999): Production of aberrant promoter transcripts contributes to methylation and silencing of unlinked homologous promoters in trans. *EMBO J.* 18: 241-248
- Mette, M.F., Aufsatz, W., van der Winden, J., Matzke, M.A. und Matzke, A.J.M. (2000): Transcriptional silencing and promoter methylation triggered by double-stranded RNA. *EMBO J.* 19: 5194-5201
- Meza, T.J., Stangeland, B., Mercy, I.S., Skarn, M., Nymoen, D.A., Berg, A., Butenko, M.A., Hakelin, A-M., Haslekas, C., Meza-Zepeda, L.A. und Aalen, R.B. (2002): Analysis of single-copy *Arabidopsis* T-DNA-transformed lines showed that the presence of vector backbone sequences, short inverted repeats and DNA methylation is not sufficient or necessary for the induction of transgenes silencing. *NUCLEIC ACIDS RES.* 30: 4556-4566
- Mikkelsen, T.R., Andersen, B. und Jørgensen, R.B. (1996): The risk of crop transgene spread. *NATURE.* 380: 31-31
- Morel, J.B. und Vaucheret, H. (2000): Post-transcriptional gene silencing mutants. *PLANT MOL BIOL.* 43: 275-284
- Müller, W. (2002) GVO-freie Bewirtschaftungsgebiete - Konzeption und Analyse von Umsetzungsschritten. *BUNDESMINISTERIUMS FÜR SOZIALE SICHERHEIT UND GENERATIONEN, FORSCHUNGSBERICHTE 8/02.*
- Murashige, T. und Skoog, F. (1962): A revised medium for rapid growth and bio assays with tobacco tissue cultures. *PHYSIOL PLANTARUM.* 15: 473-497
- Muskens, M.W.M., Vissers, A.P.A., Mol, J.N.M. und Kooter, J. M. (2000): Role of inverted DNA repeats in transcriptional and post-transcriptional gene silencing. *PLANT MOL BIOL.* 43: 243-260
- Nacry, P., Camilleri, C., Courtial, B., Caboche, M. und Bouchez, D. (1998): Major chromosomal rearrangements induced by T-DNA transformation in *Arabidopsis*. *GENET* 149: 641-650

- Nagaya, S., Kato, K., Ninomiya, Y., Horie, R., Sekine, M., Yoshida, K. und Shinmyo, A. (2005): Expression of randomly integrated single complete copy transgenes does not vary in *Arabidopsis thaliana*. PLANT CELL PHYSIOL. 46: 438-444
- Nakano, A., Suzuki, G., Yamamoto, M., Turnbull, K., Rahman, S. und Mukai, Y. (2005): Rearrangements of large-insert T-DNAs in transgenic rice. MOL GENET GENOMICS. 273 (2): 123-129
- Napoli, C., Lemieux, C. und Jorgensen, R. (1990): Introduction of a chimeric chalcone synthase gene into petunia results in reversible co-suppression of homologous genes in trans. PLANT CELL. 2: 279-289
- Nehra, N.S., Kartha, K.K., Stushnoff, C. und Giles, K.L. (1992): The influence of plant-growth regulator concentrations and callus age on somaclonal variation in callus- culture regenerants of strawberry. PLANT CELL TISS ORG. 29: 257-268
- Neuroth, B. (1997): Kompendium der für die Freisetzung relevanten Pflanzen; hier *Solanaceae, Poaceae, Leguminosae*. TEXTE DES UMWELTBUNDESAMTES. 62: 1-341
- Norelli, J.L., Mills, J. und Aldwinckle, H.S. (1996): Leaf wounding increases efficiency of *Agrobacterium*-mediated transformation of apple. HORT SCI. 31: 1-2
- Norris, C.E., Simpson, E.C., Sweet, J.B. und Thomas, J.E. (1999): Monitoring weedness and persistence of genetically modified oilseed rape (*Brassica napus*) in the UK. BRITISH CROP PROTECTION COUNCIL: 255-260
- Ogasawara, T., Chikagawa, Y., Arakawa, F., Nozaki, A., Itoh, Y., Sasaki, K., Umetsu, H., Watanabe, T., Akiyama, H., Maitani, T., Toyoda, M., Kamada, H., Goda, Y. und Ozeki, Y. (2005): Frequency of mutations of the transgene, which might result in the loss of the glyphosate-tolerant phenotype, was lowered in Roundup Ready R soybeans. J HEALTH SCI. 51 (2): 197-201
- Okazaki, K. und Hinata, K. (1987): Repressing the expression of self- incompatibility in crucifers by short-term high- temperature treatment. THEOR APPL GENET. 73: 496-500
- Ooms, G., Hooykaas, P.J.J., Van Veen, R.J.M., Van Beelen, P., Regensburgtuink, T.J.G. und Schilperoort, R.A. (1982): Octopine Ti- plasmid deletion mutants of *Agrobacterium tumefaciens* with emphasis on the right side of the T- region. PLASMID. 7: 15-29
- Oparka, K.J.; Cruz, S.S. (2000): The great escape: Phloem transport and unloading of macromolecules. ANNU REV PLANT PHYS. 51: 323-347
- Ottenschlager, I., Barinova, I., Voronin, V., Dahl, M., Heberle-Bors, E. und Touraev, A. (1999): Green fluorescent protein (GFP) as a marker during pollen development. TRANSGENIC RES. 8: 279-294
- Palauqui, J.C. und Vaucheret, H. (1998) Transgenes are dispensable for the RNA degradation step of co-suppression. PROC NATL ACAD SCI. USA. 95: 9675-9680
- Papazova, N., Windels, P., Depicker, A., Taverniers, I., Roldan-ruiz, I., Milcamps, A., Van Bockstaele, E., Van Den Eede, G. und De Loose, M. (2006): Sequence stability of the T-DNA-plant junctions in tissue culture in *Arabidopsis* transgenic lines. PLANT CELL REP. 25 (12): 1362-1368

- Papazova, N., Ghedira, R., Van Glabeke, S., Bartegi, A., Windels, P., Taverniers, I., Roldan-Ruiz, I., Van Bockstaele, E., Milcamps, A., Van Den Eede, G., Depicker, A. und De Loose, M. (2007): Stability of the T-DNA flanking regions in transgenic *Arabidopsis thaliana* plants under influence of abiotic stress and cultivation practices. *PLANT CELL REP.* 0721-7714 (Print) 1432-203X (Online)
- Papp, I., Mette, M.F., Aufsatz, W., Daxinger, L., Schauer, S.E., Ray, A., van der Winden, J., Matzke, M. und Matzke, A.J.M. (2003): Evidence for nuclear processing of plant micro RNA and short interfering RNA precursors. *PLANT PHYSIOL.* 132: 1382-1390
- Park, S.H., Rose, S.C., Zapata, C., Srivantanakul, M. und Smith, R.H. (1998): Cross-protection and selectable marker genes in plant transformation. *In Vitro Cell Dev Biol Plant.* 34: 117-121
- Park, Y.D., Papp, I., Moscone, E.A., Iglesias, V.A., Vaucheret, H., Matzke, A.J.M. und Matzke, M. (1996): Gene silencing mediated by promoter homology occurs at the level of transcription and results in meiotically heritable alterations in methylation and gene activity. *PLANT J.* 9: 183-194
- Peerbolte, R., Ruigrok, P., Wullems, G. und Schilperoort, R. (1987): T-DNA rearrangements due to tissue-culture - Somaclonal variation in crown gall tissues. *PLANT MOL BIOL.* 9: 51-57
- Pellmann, H., Reißer, W., Theophilou, S. und Schlegel, M. (1998): Begleitforschung zu Freisetzungen gentechnisch veränderter Pflanzen in Sachsen. *BUNDESGESUNDHEITSBLATT.* 12: 552-559
- Peterhans, A., Schlupmann, H., Basse, C. und Paszkowski, J. (1990): Intrachromosomal recombination in plants. *EMBO J.* 9: 3437-3445
- Petri, C. und Burgos, L. (2005): Transformation of fruit trees. Useful breeding tool or continued future prospect? *TRANSGENIC RES.* 14: 15-26
- Pickhardt, A. und Fluri, P. (2000): Die Bestäubung der Blütenpflanzen durch Bienen. Biologie, Ökologie, Ökonomie. *SCHWEIZERISCHES ZENTRUM FÜR BIENENFORSCHUNG, MITTEILUNG Nr. 38*
- Pickhardt, T. und De Kathen, A. (2002): Stabilität transgen-vermittelter Merkmale in gentechnisch veränderten Pflanzen mit dem Schwerpunkt transgene Gehölzarten und Stabilitätsgene. *FORSCHUNGSBERICHT DES UMWELTBUNDESAMTES BERLIN, ISSN 0722-186X*
- Pierantoni, L., Cho, K.-H., Shin, I.-S., Chiodini, R., Tartarini, S., Dondini, L., Kang, S.-J. und Sansavini, S. (2004): Characterisation and transferability of apple SSRs to two European pear  $F_1$  populations. *THEOR APPL GENET.* 109 (7): 1519-1524
- Pleasant, J.M., Hellmich, R.L., Dively, G.P., Sears, M.K., Stanley-Horn, D., Mattila, H.R., Foster, J.E., Clark, T.L. und Jones, G.D. (2001): Corn pollen deposition on milkweeds in and near cornfields. *PROC NATL ACAD SCI. USA.* 98: 11919-11924
- Ponomarenko, V. V. (1987): History of *Malus domestica* Borkh. Origin and evolution. *BOT. ZH.* 176: 10-18
- Porsch, P., Jahnke, A. und Düring, K. (1998): A plant transformation vector with a minimal T-DNA II. Irregular integration patterns of the T-DNA in the plant genome. *PLANT MOL BIOL.* 37 (3):5 81-585

- Pröls, F. und Meyer, P. (1992): The methylation patterns of chromosomal integration regions influence gene activity of transferred DNA in *Petunia hybrida*. PLANT J. 2: 465-475
- Puchta, H., Swoboda, P. und Hohn, B. (1995): Induction of Intrachromosomal homologous recombination in whole plants. PLANT J. 7: 203-210
- Que, Q.D., Wang, H.Y., English, J.J. und Jorgensen, R.A. (1997): The frequency and degree of co-suppression by sense chalcone synthase transgenes are dependent on transgene promoter strength and are reduced by premature nonsense codons in the transgene coding sequence. PLANT CELL. 9: 1357-1368
- Rachow-Brandt, G. und Kollmann, R. (1992): Studies on graft unions. IV. Assimilate transport and sieve element restitution on homo- and heterografts. J PLANT PHYSIOL. 139: 579-583
- Ramsey, G., Thompson, C.E., Neilson, S. und Mackay, G.R. (1999): Honey bees as vector of GM oilseed rape pollen. BCPC SYMPOSIUM PROC. 72: 203-208
- Raybould, A.F. und Gray, A.J. (1993): Genetically- modified crops and hybridization with wild relatives - A U.K. perspective. J APPL ECOL. 30: 199-219
- Reim, S., Flachowsky, H., Michael, M. und Hanke, M.-V. (2006): Assessing gene flow in apple using a descendant of *Malus sieversii* var. *sieversii* f. *niedzwetzkyana* as an identifier for pollen dispersal. ENVIRON BIOSAFETY RES. 5: 89-104
- Renckens, S., De Greve, H., Van Montagu, M. und Hernalsteens, J.P. (1992): *Petunia* plants escape from negative selection against a transgene by silencing the foreign DNA via methylation. MOL GEN GENET. 233: 53-64
- Risseuw, E., Franke Van Dijk, M.E.I. und Hooykaas, P.J.J. (1997): Gene targeting and instability of *Agrobacterium* T-DNA loci in the plant genome. PLANT J. 11: 717-728
- Roberts, A.G., Cruz, S.S., Roberts, I.M., Prior, D., Turgeon, R., und Oparka, K.J. (1997): Phloem unloading in sink leaves of *Nicotiana benthamiana*: Comparison of a fluorescent solute with a fluorescent virus. PLANT CELL. 9: 1381-1396
- Robinson, J.P., Harris, A.P. und Juniper, B.E. (2001): Taxonomy of the genus *Malus* Mill. (*Rosaceae*) with emphasis on the cultivated apple, *Malus x domestica* Borkh. PLANT SYST EVOL. 226: 35-58
- Ruiz-Medrano, R., Xoconostle-Cázares, B. und Lucas, W.J. (1990): Phloem long-distance transport of *CmNACP* mRNA: implications for supracellular regulation in plants. DEVELOPMENT 126: 4405-4419
- Saghai-Maroo, M.A., Soliman, K.M., Jorgensen, R.A. und Allard, R.W. (1984): Ribosomal DNA spacer-length polymorphism in barley: Mendelian inheritance, chromosomal location, and population dynamics. PROC. NATL. ACAD. SCI. USA. 81:8014 - 8019.
- Saure, C., Kühne, S. und Hommel, B. (1999): Untersuchungen zum Pollentransfer von transgenen Raps auf verwandte Kreuzblütler durch Wind und Insekten. BMBF, STATUSSEMINAR, BRAUNSCHWEIG.
- Scherthner, J. P., Fabijanski, S.F., Arnison, P. G., Racicot, M. und Robert, L.S. (2003): Control of seed germination in transgenic plants based on the segregation of a two-component genetic system. PROC NATL ACAD SCI U S A. 100 (11): 6855-6859

- Schmülling, T. und Schell, J. (1993): Transgenic tobacco plants regenerated from leaf disks can be periclinal chimeras. *PLANT MOL BIOL.* 21: 705- 708
- Schubert, D., Lechtenberg, B., Forsbach, A., Gils, M., Bahadur, S. und Schmidt, R. (2004): Silencing in *Arabidopsis* T-DNA transformants: the predominant role of a gene-specific RNA sensing mechanism versus position effects. *PLANT CELL.* 16: 2561-2572
- Schulte, E. und Käppeli, O. (Hrsg) (1996): Gentechnisch veränderte krankheits- und schädlingsresistente Nutzpflanzen- Eine Option für die Landwirtschaft? FACHSTELLE FÜR BIOSICHERHEITSFORSCHUNG UND ABSCHÄTZUNG VON TECHNIKFOLGEN DES SCHWERPUNKTPROGRAMMES BIOTECHNOLOGIE (BATS), BASEL.
- Schütte, G. (1998): Vertikaler Gentransfer. In: Nutzung der Gentechnik im Agrarsektor der USA- Die Diskussion von Versuchsergebnissen und Szenarien zur Biosicherheit. UBA-TEXTE. 47/98: 239-270
- Schütte, G., Stirn, S. und Beusmann, V. (2001): Transgene Nutzpflanzen. BIRKHÄUSER VERLAG, BASEL, BOSTON, BERLIN.
- Sears, M.K. und Stanley-Horn, D. (2000): Proceedings of the 6<sup>th</sup> International Symposium on the Biosafety of Genetically Modified Organisms. In: Fairbairn, C., Scoles, G. und McHughen, A. (eds): Proceedings of the 6<sup>th</sup> International Symposium on the Biosafety of Genetically Modified Organisms. UNIVERSITY EXTENSION PRESS. CANADA
- Seeley, T.D. (1995): The wisdom of the hive. HARVARD UNIVERSITY PRESS, CAMBRIDGE MASS.
- Sefc, K.M., Steinkellner, H., Wagner, H.W., Glossl, J. und Regner, F. (1997): Application of microsatellite markers to parentage studies in grapevine. *VITIS.* 36: 179-183
- Shiba, H. und Takayania, S. (2007): RNA silencing systems and their relevance to allele-specific DNA methylation in plants. *BIOSCI BIOTECH BIOCH.* 71 (11): 2632-2646
- Sijen, T. und Kooter, J.M. (2000): Post-transcriptional gene-silencing: RNAs on the attack or on the defense? *BIOESSAYS.* 22: 520-531
- Silbereisen, R., Götz, G. und Hartmann, W. (1996): Obstsorten Atlas. EUGEN ULMER VERLAG, STUTTGART, 2. Auflage
- Silfverberg-Dilworth, E., Matasci, C.L., Van de Weg, W.E., Van Kaauwen, M.P.W., Walser, M., Kodde, L.P., Soglio, V., Gianfranceschi, L., Durel, C.-E., Costa, F., Yamamoto, T., Koller, B., Gessler, C. und Patocchi, A. (2006): Microsatellite markers spanning the apple (*Malus x domestica* Borkh.) genome. *TREE GENET GENOMES.* 2 (4): 202-224
- Slatkin, M. (1987): Gene flow and the geographic structure of natural- populations. *SCIENCE.* 236: 787-792
- Spencer, T.M., O'Brien, J.V., Start, W.G., Adams, T.R., Gordonkamm, W.J. und Lemaux, P.G. (1992): Segregation of transgenes in maize. *PLANT MOL BIOL.* 18: 201-210
- Srivastava, V., Vasil, V. und Vasil, I.K. (1996): Molecular characterization of the fate of transgenes in transformed wheat (*Triticum aestivum* L). *THEOR APPL GEN.* 92: 1031-1037
- Stace, C. (1991): New flora of the British isles. CAMBRIDGE UNIVERSITY PRESS.

- Stadler, R., Wright, K.M., Lauterbach, C., Amon, G., Gahrtz, M., Feuerstein, A., Oparka, K.J. und Sauer, N. (2005): Expression of GFP-fusions in *Arabidopsis* companion cells reveals non-specific protein trafficking into sieve elements and identifies a novel post-phloem domain in roots. *PLANT J.* 41 (2): 319-331.
- Stam, M., Viterbo, A., Mol, J.N.M. und Kooter, J.M. (1998): Position-dependent methylation and transcriptional silencing of transgenes in inverted T-DNA repeats: Implications for posttranscriptional silencing of homologous host genes in plants. *MOL CELL BIOL.* 6165-6177
- Szabados, L., Kovács, I., Oberschall, A., Ábrahám, E., Kerekes, I., Zsigmond, L., Nagy, R., Alvarado, M., Krasovskaja, I., Gál, M., Berente, A., Rédei, G.P., Ben-Haim, A. und Koncz, C. (2002): Distribution of 1000 sequenced T-DNA tags in the *Arabidopsis* genome. *PLANT J.* 32: 233-242
- Tang, J., Scarth, R. und Fristensky, B. (2003): Effects of genomic position and copy number of Acyl-ACP thioesterase transgenes on the level of the target fatty acids in *Brassica napus* L.. *MOL BREEDING.* 12: 71-81
- Tax, F.E. und Vernon, D.M. (2001): T-DNA-associated duplication/translocations in *Arabidopsis*. Implications for mutant analysis and functional genomics. *PLANT PHYSIOL.* 126: 1527-1538
- Thomas, C.M. und Jones, J.D. (2007): Molecular analysis of *Agrobacterium* T-DNA integration in tomato reveals a role for left border sequence homology in most integration events. *MOL GENET GENOMICS.* 278 (4): 411-420
- Tiedemann, R. (1989): Graft union development and symplastic phloem contact in the heterograft *cucumis sativus* on *Cucurbita ficifolia*. *J PLANT PHYSIOL.* 134: 427-440
- Tiedemann, R. und Carsten-Behrens, U. (1994): Influence of grafting on the phloem protein patterns in *Cucurbitaceae*. I. Additional phloem exudate proteins in *Cucumis sativus* grafted on two *Cucurbita* species. *J PLANT PHYSIOL.* 143: 189-194
- Tolstrup, K., Andersen, S., Boelt, B., Buus, M., Gylling, M., Holm, P., Kjellsson, G., Pedersen, S., Ostergard, H. und Mikkelsen, S. (2003): Report from the Working Group on: The co-existence of genetically modified crops with conventional and organic crops. Conclusion and Summary. *MINISTRY OF FOOD, AGRICULTURE AND FISHERIES.*
- Torisky, R.S., Oh, M.H., Xu, W., Braam, J. und Clouse, S.D. (1997): Search for a brassinosteroid-response element in the TCH4 promoter of *Arabidopsis*. *PLANT PHYSIOL.* 114: 812-812
- Treu, R., Emberlin, J. (2000): Pollen dispersal in the crops Maize (*Zea mays*), Oil seed rape (*Brassica napus* ssp. *oleifera*), Potatoes (*Solanum tuberosum*), Sugar beet (*Beta vulgaris* ssp. *vulgaris*) and Wheat (*Triticum aestivum*). A report for the SOIL ASSOCIATION FROM THE NATIONAL POLLEN RESEARCH UNIT.
- Tzfira, T., Li, J.X., Lacroix, B. und Citovsky, V. (2004): *Agrobacterium* T-DNA integration: Molecules and models. *TRENDS GENET.* 20: 375-383
- Ueki, S. und Citovsky, V. (2001): RNA commutes to work: regulation of plant gene expression by systemically transported RNA molecules. *BIO ESSAYS.* 23: 1087-1090
- Ulian, E.C., Magill, J.M., Magill, C.W. und Smith, R.H. (1996): DNA methylation and expression of NPTII in transgenic petunias and progeny. *THEOR APPL GEN.* 92: 976-981



- UrRahman, H., James, D.J., Hadonou, A.M. und Caligari, P.D.S. (1997): The use of RAPD for verifying the apomictic status of seedlings of *Malus* species. THEOR APPL GEN. 95: 1080-1083
- Van Bel, A. J. E.: The phloem, a miracle of ingenuity (2003): PLANT CELL ENVIRON. 26: 125–149
- Van Bel, A.J.E. und Gaupels, F. (2004): Pathogen-induced resistance and alarm signals in the phloem. MOL PLANT PATHOL. 5: 495–504
- Vancanneyt, G., Schmidt R., O'Connor-Sanchez, A., Willmitzer, L. und Rocha-Sosa, M. (1990): Construction of an intron-containing marker gene: Splicing of the intron in transgenic plants and its use in monitoring early events in *Agrobacterium*-mediated plant transformation. MOL GEN GENET. 220: 245-250
- Vaucheret, H. und Fagard, M. (2001): Transcriptional gene silencing in plants: targets, inducers and regulators. TRENDS GENET. 17: 29-35
- Vavilov, N.I. (1930): Wild progenitors of the fruit trees of Turkestan and the Caucasus and the problem of the origin of fruit trees. PROC 9<sup>TH</sup> INT HORT CONGR: 271-286
- Voinnet, O. und Baulcombe, D.C. (1997): Systemic signalling in gene silencing. NATURE 389: 553
- Voinnet, O., Vain, P., Angell, S. und Baulcombe, D.C. (1998). Systemic spread of sequence-specific transgene RNA degradation in plants is initiated by localized introduction of ectopic promoterless DNA. CELL. 95: 177–187
- Wackernagel, W. und Lorenz, M.G. (1994): DNA-Entlassung aus Bakterien, DNA Überdauerung und genetische Transformation im natürlichen Lebensraum. In: BMFT (Ed.) BIOLOGISCHE SICHERHEIT, BONN. 3: 9-33
- Wagner, I. und Weeden, N.F. (2000): Isozymes in *Malus sylvestris*, *Malus domestica* and in related *Malus* species. ACTA HORT. 538: 51-56.
- Waigmann, E., Cohen, Y., McLean, G. und Zambryski, P. (1997). Plasmodesmata: gateways for information transfer. SOCIETY OF EXPERIMENTAL BIOLOGY, Symposium Series 51 (1029): 43-49
- Wakimoto, B. (1998): Beyond the nucleosome: Epigenetic aspects of position-effect variegation. DROSOPHILA CELL. 93: 321-324
- Wallrath, L.L. (1998): Unfolding the mysteries of heterochromatin. CURR OPIN GENET DEV. 8: 147-153
- Walz, C., Giavalisco, P., Schad, M., Juenger, M., Klose, J. und Kehr, J. (2004): Proteomics of cucurbit phloem exudate reveals a network of defence proteins. PHYTOCHEMISTRY 65: 1795-1804
- Wang, T., Li, Y., Shi, Y., Reboud, X., Darmency, H. und Gressel, J. (2004): Low frequency transmission of a plastid-encoded trait in *Setaria italica*. THEOR APPL GEN. 108 (2): 315-320.
- Waterhouse, P.M., Smith, N.A. und Wang, M.B. (1999): Virus resistance and gene silencing: Killing the messenger. TRENDS PLANT SCI. 4: 452-457
- Waterhouse, P.M., Wang, M.B. und Lough, T. (2001): Gene silencing as an adaptive defense against viruses. NATURE. 411: 834-842
- Weber, J.L. und Wong, C. (1993): Mutation of human short tandem repeats. HUM. MOL GENET. 2: 1123-1128

- Wertheim, S.J. (1991): *Malus* cv. Baskatong as an indicator of pollen spread in intensive apple orchards. J HORTIC SCI. 66: 635-642
- Westmann, A.L., Spira, T.P., Miller, M.B., Rajapakse, S., Tonkyn, D.W. und Abbott, A.G. (2002): Assessing gene escape from cultivated strawberry (*Fragaria x ananassa*) to native wild strawberry (*F. virginiana*). I. Molecular variation in *Fragaria* and identification of markers for detecting crop-wild gene flow. GENE FLOW WORKSHOP.
- Williams, R.R., Church, R.M., Wood, D.E.S. und Flook, V.A. (1979): Use of an anthocyanin progeny marker to determine the value of hive pollen dispensers in apple orchards. J HORTIC SCI. 54: 75-78
- Windels, P., De Buck, S., Van Bockstaele, E., De Loose, M. und Depicker, A. (2003): T-DNA integration in *Arabidopsis* chromosomes. Presence and origin of filler DNA sequences. PLANT PHYSIOL. 133: 2061-2068
- Winter, F., Janssen, H., Kennel, W., Link, H., Scheer, F. und Silbereisen, R. (1992): Lucas' Anleitung zum Obstbau. VERLAG EUGEN ULMER, STUTTGART.
- Wolf, S., Deom, C.M., Beachy, R.N. und Lucas, W.J. (1989): Movement protein of tobacco mosaic virus modifies plasmodesmatal size exclusion limit. SCIENCE 246: 377-379
- Yamamoto, T., Kimura, T., Saito, T., Kotobuki, K., Matsuta, N. und Liebhardt, R., Gessler, C., van de Weg, W.E. und Hayashi, T. (2004): Genetic linkage maps of Japanese and European pears aligned to the apple consensus map. ACTA HORT. 663: 51-56
- Yamamoto, T., Kimura, T., Terakami, S., Nishitani, C., Sawamura, Y., Saito, T., Kotobuki, K. und Hayashi, T. (2007): Integrated Reference Genetic Linkage Maps of Pear Based on SSR and AFLP Markers. BREED SCI. 57 (4): 321-329
- Yang, G.J., Lee, Y.H., Jiang, Y.M., Kumpatla, S.P., Hall, T.C. (2005): Organization, not duplication, triggers silencing in a complex transgene locus in rice. PLANT MOL BIOL. 58 (3): 351-366
- Yao, J. L., Dong, Y.H. und Morris, A.M. (2001): Parthenocarpic apple fruit production conferred by transposon insertion mutation in a MADS-box transcription factor. PNAS. 98 (3):1306-1311
- Yoo, B.C., Lee, J.Y. und Lucas, W. J. (2002): Analysis of the complexity of protein kinase within the phloem sieve tube system: Characterization of *Curcubita maxima* calmodulin-like domain protein kinase 1. J BIOL CHEM. 277: 15325-15332
- Zhang, S., Raina, S., Li, H., Li, J., Dec, E.; Ma, H. Huang ,H. und Fedoroff, N.V. (2003): Resources for targeted insertional and deletional mutagenesis in *Arabidopsis*. PLANT MOL BIOL. 53: 133-150
- Zhou, Z.Q. und Li, Y.N. (2000): The RAPD evidence for the phylogenetic relationship of the closely related species of cultivated apple. GENET RESOUR CROP EVOL. 47 (4): 353-357
- Zhou, Z. (1999): The apple genetic resources in China: The wild species and their distributions, informative characteristics and utilization. GENET RESOUR CROP EVOL. 46: 599-609
- Zhu, Y., Qi, Y., Xun, Y., Owens, R. und Ding, B. (2002): Movement of potato spindle tuber viroid reveals regulatory points of phloem-mediated RNA traffic. PLANT PHYSIOL. 130: 138-146

- 
- Zoglauer, K. und Aurich, C. (2000): Freisetzung Transgener Gehölze und Grundlagen für Confinements. FORSCHUNGSBERICHT IM AUFTRAG DES UMWELTBUNDESAMTES.
- Zohary, D. und Hopf, M. (1994): Domestication of plants on the old world. CLAREDON PRESS, OXFORD
- Zwintzschner, M. (1974): *Malus pumila* var. *niedzwetzkyana* als Partner in der Apfelzüchtung. Z. PFLANZENZÜCHTUNG. 74: 303-310