

## CURRICULUM VITAE

Jacob Weiner

### Address

Department of Plant and Environmental Sciences  
University of Copenhagen  
Thorvaldsensvej 40  
DK-1871 Frederiksberg, Denmark

tel: +45 3533 2822  
E-mail: jw@plen.ku.dk  
<http://www.jacobweiner.dk>

### Education

University of Oregon, Department of Biology, Ph.D., 1978  
University of Michigan, Department of Botany, M.S., 1974  
Antioch College, B.A., 1970

### Positions Held

University of Copenhagen, Department of Plant and Environmental Sciences, Professor, 1998-,  
Associate Professor, 1996-98  
Lanzhou University, Adjunct Professor, 2012-  
Beijing Normal University, Adjunct Professor, 2014-2019  
National Center for Ecological Analysis and Synthesis, Sabbatical Fellow, 2007-08  
Swarthmore College, Department of Biology, Professor, 1992-96, Chairman 1990-92  
Associate Professor, 1984-92, Assistant Professor, 1978-84  
Harvard University, Department of Organismal and Evolutionary Biology, Bullard Fellow, 1994-95  
Research Center Jülich, Working Group in Theoretical Ecology, Visiting Scientist, 1992-93  
University of Basel, Botanical Institute, Visiting Scientist, 1990  
Imperial College at Silwood Park, Department of Biology, Visiting Researcher, 1989-90  
Smithsonian Environmental Research Center, Postdoctoral Fellow, 1985  
University College of North Wales, School of Plant Biology, Visiting Researcher, 1981-82  
Harvard University, Gray Herbarium, Visiting Scientist, 1981  
Eastern Oregon State College, Lily White Field Station, Instructor, 1977  
City of New York, Department of Air Pollution Control, Research Assistant, 1970-71

### Professional Societies

Botanical Society of America  
British Ecological Society  
Ecological Society of America  
International Society for Ecological Modelling  
Nordic Society Oikos

### Grants and Awards

Distinguished Fellow of the Botanical Society of America, 2016  
ISI Highly Cited Researcher ([www.ISIhighlycited.com](http://www.ISIhighlycited.com)), original member, 2001  
Danish Natural Science Research Council, "Constant Final Yield of Plant Communities", 2015-2018  
EU 7th Framework Program Collaborative Project, "Optimising Subsidiary Crop Applications  
in Rotations", 2012-2016.  
Knight's Cross of the Order of the Dannebrog, 2011  
University of Copenhagen, Program of Excellence, "Evolutionary Agroecology: Developing High  
Density, Communal Crop Plants for Weed Suppression and Increased Sustainability", 2008-2013  
National Center for Ecological Analysis and Synthesis, Sabbatical Fellowship, 2007-2008  
Danish Environmental Protection Agency, "Increasing the Suppression of Weeds by Cereal Crops  
Through Increased Crop Spatial Uniformity and Density", 2007-2009.  
Danish Natural Science Research Council, "The Allometry of Reproductive Allocation in Annual  
Plants", 2005-2009  
Danish Agricultural Research Council, "Population Density, Spatial Structure and Weed Suppression  
by Cereal Crops", 2001-2004.  
Danish Strategic Environmental Research Program, "Environmental Consequences of Transgenic  
Disease Resistant Crop Plants" Sub-Project: "Disease and Plant Invasions", 1997-2000  
Roche Research Foundation, Switzerland - Research Grant, 1995-97  
Harvard University, Bullard Fellowship, 1994-95  
German Academic Exchange Service (DAAD) - German Study Grant, 1992  
Fulbright Scholar Program - Grant-in-Aid Award, 1989-90

U.S. National Science Foundation, Research Opportunity Award, 1990  
 U.S. National Science Foundation, US-UK Cooperative Sciences Program -  
 "Competition, Herbivory and Size Variability in Plant Populations," 1989-90  
 Swarthmore College - Lang Faculty Fellowship, 1989-90  
 U.S. National Science Foundation, Program in Population Biology and Physiological Ecology  
 "Size Distributions, Competition and Allometry in *Impatiens pallida* Populations", 1986-89  
 Research Corporation - Cottrell College Science Grant, 1984-85  
 Smithsonian Institution Postdoctoral Fellowship, 1984-85  
 Swarthmore College - Mellon Faculty Fellowship, 1981-82  
 U.S. National Science Foundation, Program in Population Biology,  
 Research Opportunity Award, 1981  
 U.S. National Institutes of Health, Systems Biology Training Grant, 1977-78  
 Sigma Xi, Grant-in-Aid of Research, 1977

### Research Interests

Several areas of ecology and botany, including

- plant-plant interactions
- plant growth and resource allocation
- individual variation within plant populations
- crop-weed interactions
- application of ecological and evolutionary theory to plant production systems

### Publication Statistics

140 publications published /in press in international peer-reviewed journals  
 (14 sole author, 22 first author, 20 second of two authors)  
 9 book chapters /invited papers (6 sole author)  
 4 chapters in conference proceedings, 2 book reviews, 6 popular articles, 1 government report  
 Over 11,700 citations in ISI Core Collection, H-Index = 52 (ISI Web of Science database)  
 Over 21,000 total citations, H-Index = 66 (Google Scholar)  
 Individual (original) H-index, based on citations per author = 34 (ISI), 42 (Google Scholar)

### Symposia, Conferences, Seminars and Workshops

26 invited symposia at international conferences (with published abstracts)	1983-
28 contributed papers at international conferences (with published abstracts)	1979-
over 150 invited seminars at universities and research institutes	1980-
numerous invited international workshops	1982-

### Professional Service

Steering Committee, Research Center for Global Food Security and Ecosystems, University of Hohenheim.	2019 -
Chairman, Scientific Council, Center for Ecological Research, Polish Academy of Sciences	2007 - 2013
Associate Editor, Ecology	2004 - 2019
Associate Editor, Journal of Ecology	1996 - 2006
External examiner for numerous Ph.D. thesis	1990 -
Manuscript reviewer for over 60 international scientific journals	1979 -
Proposal reviewer for granting agencies in the U.S., Canada and Europe	1979 -

### Courses taught

Tutorials in Population Genetics, Biostatistics, Environmental Studies, Forest Ecology, Tropical Ecology  
 Short courses in Plant Population Ecology, Plant Competition, Writing and Publishing a Scientific Paper in Ecology

### **University Service**

#### University of Copenhagen / Royal Veterinary and Agricultural University (1998-)

Copenhagen Plant Science Center Lecture, 2015  
Department Research Committee, 1999-2003, 2007, 2010-12, 2015-2019  
Theme Leader, Copenhagen Plant Science Center, 2011 - 2014  
Research Farm and Greenhouse Open House, 2007, 2009, 2011, 2013, 2015  
JuniorForsker Cafe, 2008  
University Green Services Committees, 2005-2010  
Board of the Center for Ecology and Environment, 1998-2002  
Ecology Committee for Forestry Studies, 1998-99  
Numerous academic search and evaluation committees, 1999-  
Chairman for numerous Ph.D. evaluation committees

#### Swarthmore College (1978-96)

Chairman, Department of Biology, 1990-92  
Chairman, Environmental Studies Program, 1991-96  
Membership of 27 Faculty Committees, 1979-96  
Curator, Swarthmore College Herbarium, 1978-96  
College-wide lectures/presentations, 1980, 1982, 1986, 1991, 1996

Publications  
Jacob Weiner

Articles in international peer-reviewed journals

- Xi, Y., Wang, D., Weiner, J., Du, Y.-L. and Li, F.-M. 2023. Time to onset of flowering, water use, and yield in wheat. Agronomy **13**, 1217. doi: 10.3390/agronomy13051217.
- Weiner, J. 2023. Weed suppression by cereals: Beyond "competitive ability". Weed Research **63**, 133-138 doi: 10.1111/wre.12572.
- Cai, J., Weiner, J., Luo, W., Feng, X., Yang, G., Lü, X.-T., Li, M.-H., Jiang, Y., Han, X. 2023. Functional structure mediates the responses of productivity to addition of three nitrogen compounds in a meadow steppe. Oecologia **201**, 575–584. doi: 10.1007/s00442-022-05310-9.
- Zhang, W.-P., Li, Z.-X., Gao, S.-N., Yang, H., Xu, H.-S., Yang, X., Suri, G., Weiner, J., Fornara, D. and Li, L. 2023. Resistance vs. surrender: Different responses of functional traits of soybean and peanut to intercropping with maize. Field Crops Research **291**, 108779 doi: 10.1016/j.fcr.2022.108779
- Cavaliere, A., Groß, D., Dutay, A. and Weiner, J. 2022. Do plant communities show Constant Final Yield? Ecology **103**, e3802. doi: 10.1002/ecy.3802
- Xi, N., Wu, Y., Weiner, J. and Zhang, D.-Y. 2022. Does weed suppression by high crop density depend on crop spatial pattern and soil water availability? Basic and Applied Ecology **61**, 20-29. doi: 10.1016/j.baae.2022.03.001
- Zhu, Y.-H., Weiner, J., Jin, Y., Yu, M.-X. and Li, F.-M. 2022. Biomass allocation in response to root interactions in wheat cultivars support predictions of evolutionary agroecology theory. Frontiers in Plant Science **13**. doi: 10.3389/fpls.2022.858636
- Ali, M., Shabbir, A., Mahmood, Z. and Weiner, J. 2022. Effect of wheat density and cultivar on growth and reproduction of the weed *Medicago polymorpha*, wheat growth and yield. Weed Biology and Management **22**, 3-12. doi: 10.1111/wbm.12245
- Weiner, J., Du, Y.-L., Zhao, Y.-M. and Li, F.-M. 2021. Allometry and yield stability of cereals. Frontiers in Plant Science **12**. doi: 10.3389/fpls.2021.681490.
- Damgaard, C. and Weiner, J. 2021. The need for alternative plant species interaction models. Journal of Plant Ecology **14**, 771-780. doi: 10.1093/jpe/rtab030 (Editor's Choice article)
- Jensen, P.M., Sørensen, M. and Weiner, J. 2021. Human Total Fertility Rate affected by ambient temperatures in both the present and previous generations. International Journal of Biometeorology **65**, 837–1848. doi: 10.1007/s00484-021-02140-x
- Shi, Z., Weiner, J., Cavaliere, A., Liu, H., Li, T., Cai, J. and Jiang, Y. 2021. The interaction between N and P fertilization on grassland soil acid buffering capacity is regulated by precipitation. Soil Science and Plant Nutrition. doi: 10.1080/00380768.2021.1892457
- Wu, Y., Xi, N., Weiner, J. and Zhang, D.-Y. 2021. Differences in weed suppression between two modern and two old wheat cultivars at different sowing densities. Agronomy **11**, 253, doi: 10.3390/agronomy11020253.
- Yang, R., Weiner, J., Shia, X., Wang, Y., Zhang, R., Zan, S. 2021. Effect of reductive soil disinfestation on the chemical and microbial characteristics of rhizosphere soils associated with *Salvia miltiorrhiza* production in three cropping systems. Applied Soil Ecology, 103865. doi: 10.1016/j.apsoil.2020.103865
- Du, Y.-L., Xi, Y., Cui, T., Anten, N.P.R., Weiner, J., Li, X., Turner, N.C., Zhao, Y.-M. and Li, F.-M. 2020. Yield components, reproductive allometry and the tradeoff between grain yield and yield stability in dryland spring wheat. Field Crops Research **257**, 107930. doi: 10.1016/j.fcr.2020.107930

- Cavaliere, A., Bak, F., Garcia, A.M., Weiner, J., Nicolaisen, M.H. and Nybroe, O. 2020. Effects of intra- and interspecific plant density on rhizosphere bacterial communities. Frontiers in Microbiology **11**, 1045. doi: 10.3389/fmicb.2020.01045
- Wan, N.-F., Su, H., Cavaliere, A., Brack, B., Wang, J.-Y., Weiner, J., Fan, N.-N., Ji, X.-Y., Jiang, J.-X. 2020. Multispecies co-culture promotes ecological intensification of vegetable production. Journal of Cleaner Production **257**, 120851. doi: 10.1016/j.jclepro.2020.120851
- Weiner J. 2019. Looking in the wrong direction for higher-yielding crop genotypes. Trends in Plant Science **24**, 927-933.
- Zhu, Y.-H., Weiner J. and Li, F.-M. 2019. Root proliferation in response to neighboring roots in wheat (*Triticum aestivum*). Basic and Applied Ecology **39**, 10-14. doi: 10.1016/j.baae.2019.07.001
- Wan, N.-F., Shuang-Xi Li, S.-X, Tao-Li, Cavaliere, A., Weiner, J., Zheng, X.-Q, Ji, X.-Y, Zhang, J.-Q., Zhang, H.-L., Zhang, H., Bai, N.-L., Chen, Y.-J., Zhang, H.-Y., Tao, X.-B., Zhang, H.-L., Lv, W.-G., Jiang, J.-X. and Li, B. 2019. Ecological intensification of rice production through rice-fish co-culture. Journal of Cleaner Production **234**, 1002-1012. doi: 10.1016/j.jclepro.2019.06.238
- Bjørn, M.C., Weiner, J., Kollmann, J. and Ørgaard, M. 2019. Increasing local biodiversity in urban environments: Community development in semi-natural species-rich forb vegetation. Landscape and Urban Planning **184**, 23-31.
- Zhu, Y.-H., Weiner J., Yu, M.-X. and Li, F.-M. 2019. Evolutionary agroecology: trends in root architecture during wheat breeding. Evolutionary Applications **12**, 733-743.
- Rasmussen, C.R., Weisbach, A.N., Thorup-Kristensen, K. and Weiner J. 2019. Size-asymmetric root competition in deep, nutrient-poor soil. Journal of Plant Ecology **12**, 78-88. (Editor's Choice article)
- Qiu, S., Xu, X., Liu, S., Liu, W., Liu, J., Nie, M., Shi, F., Zhang, Y., Weiner, J. and Li, B. 2018. Latitudinal pattern of flowering synchrony in an invasive wind-pollinated plant. Proceedings of the Royal Society, Series B, **285**. doi: 10.1098/rspb.2018.1072.
- Wan, N.-F., Cai, Y.-M., Shen, Y.-J., Ji, X.-Y., Li, J., Wu, X.-W., Zheng, X.R., Cheng, X.-R., Jiang, Y.-P., Chen, X., Weiner, J., Jiang, J.-X., Nie, M., Ju, R.-T., Yuan, T., Tang, J.-J., Tian, W.-D., Zhang, H. and Li, B. 2018. Increasing plant diversity with border crops reduces insecticide use and increases crop yield in urban agriculture. eLife, doi: 10.7554/eLife.35103.
- Yang, Y.-B., Weiner, J., Wang, G. and Ren, Z.-W. 2018. Convergence of community composition during secondary succession on Zokor rodent mounds on the Tibetan Plateau. Journal of Plant Ecology **11**, 453-464.
- Wang, P., Shu, M., Mou, P. and Weiner, J. 2018. Fine root responses to temporal nutrient heterogeneity and competition in seedlings of two tree species with different rooting strategies. Ecology and Evolution **8**, 3367-3375.
- Husáková, I., Weiner, J. and Münzbergová, Z. 2018. Species traits and shoot-root biomass allocation in 20 dry-grassland species. Journal of Plant Ecology **11**, 273-285. (Editor's Choice article)
- Yuan, J., Wang, P., Weiner, J., Bian, H., Tang, Z. and Sheng, L. 2017. The effects of soil drying on the growth of a dominant peatland species, *Carex lasiocarpa*. Wetlands **37**, 1135-1143.
- Wille, W.K.-M., Pipper, C.B., Rosenqvist, E., Andersen, S.B. and Weiner, J. 2017. Reducing shade avoidance in a cereal crop. AoB Plants **9**, doi: 10.1093/aobpla/plx039. (Editor's Choice article)
- Weiner, J., Du, Y.-L., Zhang, C., Qin, X.-L., Li, F.-M. 2017. Evolutionary agroecology: Individual fitness and population yield in wheat (*Triticum aestivum*). Ecology **98**, 2261-2266.
- Weiner, J. 2017. Applying plant ecological knowledge to increase agricultural sustainability. Journal of Ecology **105**, 865-870.

- Cai, J., Weiner, J., Wang, R., Luo, W., Zhang, Y., Liu, H., Xu, Z., Li, H., Zhang, Y., Jiang, Y. 2017. Effects of nitrogen and water addition on trace element stoichiometry in five grassland species. Journal of Plant Research **130**, 659-668.
- Damgaard, C.F. and Weiner, J. 2017. It's about time - a critique of macroecological inferences concerning plant competition. Trends in Ecology and Evolution **32**, 86-8.
- Rasmussen, C.R. and Weiner, J. 2017. Modelling the effect of size-asymmetric competition on size inequality: Simple models with two plants. Ecological Modelling **343**, 101-108.
- Dueholm, B., Bruce, D., Weinstein, P., Semple, S., Møller, B.L. and Weiner, J. 2017. Spatial analysis of root hemiparasitic shrubs and their hosts: a search for spatial signatures of above- and belowground interactions. Plant Ecology **218**, 185-196.
- Wang, S., Callaway, R.M., Zhou, D.-W. and Weiner, J. 2017. Experience of inundation or drought alters the responses of plants to subsequent water conditions. Journal of Ecology **105**, 176-187.
- Luo, X., Mazer, S.J., Guo, H., Zhang, N., Weiner, J. and Hu, S. 2016. Higher Nitrogen:Phosphorous supply ratio increases proportional investment in above-ground biomass in five alpine plant species. Ecology and Evolution **6**, 8881-8892.
- DeMalach, N., Zaadi, E., Weiner, J. and Kadmon, R. 2016. Size asymmetry of resource competition and the structure of plant communities. Journal of Ecology **104**, 899-910.
- Wang, Y., Li, L., Zhou, D. and Weiner, J. 2016. The allometry of reproductive allocation in *Chtoris virgata* populations in response to simulated atmospheric nitrogen deposition. Basic and Applied Ecology **17**, 388-395.
- Li, L., Weiner, J., Wang, Y., Wang, S. and Zhou, D.-W. 2016. Yield-density relationships of above- and belowground organs in *Allium cepa* var. *aggregatum* populations. Plant Ecology **217**, 913-922.
- Pazzagli, P.T., Weiner, J. and Liu, F. 2016. Effects of elevated CO<sub>2</sub> on leaf gas exchange, plant water relations, and water use efficiency of two tomato cultivars grown under different irrigation regimes. Agricultural Water Management **169**, 26-33.
- Chu C.-J., Bartlett, M., Wang, Y.-S., He, F.L., Weiner, J. and Sack, L. 2016. Does climate directly influence NPP globally? Global Change Biology **22**, 12-24.
- Bjørn, M.C., Weiner, J. and Ørgaard, M. 2016. Is colourful self-sustaining forb vegetation mere fantasy? Urban Forestry and Urban Greening **16**, 75-79.
- Jacobsen, S.-E., Sørensen, M., Pedersen, S.M. and Weiner, J. 2015. Using our agrobiodiversity: Plant based solutions to feed the world. Agronomy for Sustainable Development **35**, 1217-1235.
- Yang, R., Guo, F., Zan, S., Zhou, G., Wille, W., Tang, J., Chen, X. and Weiner, J. 2015. Copper tolerant *Elsholtzia splendens* facilitates *Commelina communis* on a copper mine spoil. Plant and Soil **397**, 201-211.
- Zhang, W.-P., Liu, G.-C., Sun, J.-H., Zhang, L.-Z., Weiner, J., and Li, L. 2015. Growth trajectories and interspecific competitive dynamics in wheat/maize and barley/maize intercropping. Plant and Soil **397**, 227-238.
- Wang, P., Weiner, J., Cahill, J.F., Zhou, D., Song, Y. and Sheng, L. 2014. Shoot competition, root competition and reproductive allocation in *Chenopodium acuminatum*. Journal of Ecology **102**, 1688-1696.
- Marín, C. and Weiner, J. 2014. Effects of density and sowing pattern on weed suppression and grain yield in three varieties of maize under high weed pressure. Weed Research **54**, 467-474.
- Fibich, P., Lepš, J. and Weiner, J. 2014. Individual variability and mortality required for constant final yield in simulated plant populations. Theoretical Ecology **7**, 263-271.
- Hu, F.-Q., Mou, P.P., Weiner, J. and Li, S. 2014. Whole plant - local nutrient contrasts control root growth and death in *Ailanthus altissima* (Simaroubaceae). American Journal of Botany **101**, 812-819.

- Yu, Z., Zhang, Q., Chen, W., Yang, H., Tang, J., Weiner, J. and Chen, X. 2014. Salt tolerance and stress level affect plant biomass–density relationships and neighbor effects. Acta Oecologica **58**, 1-4.
- Kiær, L.P., Weisbach, A.N. and Weiner, J. 2013. Root and shoot competition: A meta-analysis. Journal of Ecology **101**, 1298–1312.
- Jacobsen, S.-E., Sørensen, M., Pedersen, S.M. and Weiner, J. 2013. Feeding the world: Genetically modified crops versus agricultural biodiversity. Agronomy for Sustainable Development **33**, 651-662.
- Pan, X.-Y., Weiner, J. and Li, B. 2013. Size-symmetric competition in a shade-tolerant invasive plant. Journal of Systematics and Evolution **51**, 318–325.
- Lin, Y., Berger, U., Grimm, V., Huth, F. and Weiner, J. 2013. Plant interactions alter the predictions of metabolic scaling theory. PLOS ONE **8**, e57612.
- Li, L., Weiner, J., Zhou, D., Huang, Y. and Sheng, L. 2013. Initial density affects biomass – density and allometric relationships in self-thinning populations of *Fagopyrum esculentum*. Journal of Ecology **101**, 475-483.
- Qin, X.-L., Weiner, J., Qi, L., Xiong, Y.-C. and Li, F.-M. 2013. Allometric analysis of the effects of density on reproductive allocation and Harvest Index in 6 varieties of wheat (*Triticum*). Field Crops Research **144**, 162-166.
- Yu, Z., Zhang, Q., Yang, H., Tang, J., Weiner, J. and Chen, X. 2012. The effects of salt stress and mycorrhiza on neighbour effects and self-thinning in *Medicago sativa*. Basic and Applied Ecology **13**, 673-680.
- Olsen, J.M., Griepentrog, H.-W., Nielsen, J. and Weiner, J. 2012. How important are crop spatial pattern and density for weed suppression by spring wheat? Weed Science **60**, 501-509.
- Weiner, J. and Xiao, S. 2012. Variation in the degree of specialization can maintain local diversity in model communities. Theoretical Ecology **5**, 161-166.
- Guo, H., Weiner, J., Mazer, S.J., Zhao, Z., Du, G. and Li, B. 2012. Reproductive allometry in *Pedicularis* species changes with elevation. Journal of Ecology **100**, 452-458.
- Zhang, Q., Zhang, L., Weiner, J., Tang, J. and Chen, X. 2011. Arbuscular mycorrhizal fungi alter plant allometry and biomass-density relationships. Annals of Botany **107**, 407-412.
- Weiner, J. and Freckleton, R. 2010. Constant final yield. Annual Review of Ecology, Evolution and Systematics **41**, 173-192.
- Weiner, J., Andersen, S.B., Wille, W.K.-M., Griepentrog, H.-W. and Olsen, J.M. 2010. Evolutionary Agroecology - the potential for cooperative, high density, weed suppressing cereals. Evolutionary Applications **3**, 473-479. (listed on Faculty of 1000)
- Chu, C.-J., Weiner, J., Maestre, F.T., Wang, Y.-S., Morris, E.C., Xiao, S., Yuan, J.-L., Du, G.D. and Wang, G. 2010. Effects of positive interactions, size-symmetry of competition and abiotic stress on self-thinning in simulated plant populations. Annals of Botany **106**, 647-652.
- Weiner, J., Campbell, L.G., Pino, J. and Echarte L. 2009. The allometry of reproduction within plant populations. Journal of Ecology **97**, 1220-1233. (listed on Faculty of 1000)
- Chu, C.-J., Weiner, J., Maestre, F.T., Xiao, S., Wang, Y.-S., Li, Q., Yuan, J.-L., Zhao, L.-Q., Ren, Z.-W. and Wang, G. 2009. Positive interactions can increase size inequality in plant populations. Journal of Ecology **97**, 1401-1407.
- Weiner, J., Rosenmeier, L., Massoni, E.S., Vera, J.N., Hernández Plaza, E. and Sebastià, M.T. 2009. Is reproductive allocation in *Senecio vulgaris* plastic? Botany **87**, 475-481.

- Wyszomirski, T. and Weiner, J. 2009. Variation in local density results in a positive correlation between plant neighbor sizes. American Naturalist **173**, 705-708.
- Erneberg, M., Strandberg, B., Strandberg, M., Jensen, B.D. and Weiner, J. 2008. Effects of soil disturbance and disease on growth and reproduction of *Lolium perenne* (Poaceae) introduced to semi-natural grasslands. Polish Journal of Ecology **56**, 593-604.
- Chu, C.-J., Maestre, F.T., Xiao, S., Weiner, J., Wang, Y.-S., Duan, Z.-H. and Wang, G. 2008. The balance between facilitation and resource competition determines biomass-density relationships in plant populations. Ecology Letters **11**, 1189-1197.
- Damgaard, C. and Weiner, J. 2008. Modelling the growth of individuals in crowded plant populations. Journal of Plant Ecology **1**, 111-116.
- Kristensen, L., Olsen, J. and Weiner, J. 2008. Crop density, sowing pattern and nitrogen fertilization effects on weed suppression and yield in spring wheat. Weed Science **56**, 97-102.
- Andersen, M.K., Hauggaard-Nielsen, H., Weiner, J. and Jensen, E.S. 2007. Evaluating competitive dynamics in two and three component intercrops. Journal of Applied Ecology **44**, 545-551.
- Olsen, J. and Weiner, J. 2007. The influence of *Triticum aestivum* density, sowing pattern and nitrogen fertilization on leaf area index and its spatial variation. Basic and Applied Ecology **8**, 252-257.
- Weiner, J. and Damgaard, C. 2006. Size-asymmetric competition and size-asymmetric growth in a spatially-explicit zone-of-influence model. Ecological Research **21**, 707-712.
- Olsen, J., Kristensen, L. and Weiner, J. 2006. Influence of sowing density and spatial pattern of spring wheat (*Triticum aestivum*) on suppression of different weed species. Weed Biology and Management **6**, 165-173.
- Thorsted, M.D., Weiner, J. and Olesen, J.E. 2006. Above-and below-ground competition between intercropped winter wheat *Triticum aestivum* and white clover *Trifolium repens*. Journal of Applied Ecology **43**, 237-245.
- Ramseier, D. and Weiner, J. 2006. Competitive effect is a linear function of neighbour biomass in experimental populations of *Kochia scoparia*. Journal of Ecology **94**, 305-309.
- Kristensen, L., Olsen, J., Weiner, J., Griepentrog, H.-W. and Nørremark, M. 2006. Describing the spatial pattern of crop plants with special reference to crop-weed competition studies. Field Crops Research **96**, 207-215.
- Thorsted, M.D., Olesen, J.E. and Weiner, J. 2006. Width of clover strips and wheat rows influence grain yield in winter wheat/white clover intercropping. Field Crops Research **95**, 280-290.
- Nord-Larsen, T., Damgaard, C. and Weiner, J. 2006. Quantifying size-asymmetric growth among individual beech trees (*Fagus sylvatica*). Canadian Journal of Forest Research **36**, 418-425.
- Thorsted, M.D., Olesen, J.E. and Weiner, J. 2006. Mechanical control of clover increases grain yield and nitrogen content in winter wheat/white clover intercropping. European Journal of Agronomy **24**, 149-155.
- Grimm, V., Revilla, E., Berger, U., Jeltsch, F., Mooij, W., Railsback, S.F., Thulke, H.-H., Weiner, J., Wiegand, T. and DeAngelis, D.L. 2005. Pattern-oriented modeling of agent-based complex systems: Lessons from ecology. Science **310**, 987-991.
- Olsen, J., Kristensen, L. and Weiner, J. 2005. Effects of density and spatial pattern of winter wheat on suppression of different weed species. Weed Science **53**, 690-694.
- Olsen, J., Kristensen, L., Weiner, J. and Griepentrog, H.W. 2005. Increased density and spatial uniformity increase weed suppression by spring wheat (*Triticum aestivum*). Weed Research **45**, 316-321.



- Weiner, J. 2004. Allocation, plasticity and allometry in plants. Perspectives in Plant Ecology, Evolution and Systematics **6**, 207-215.
- Vilà, M. and Weiner, J. 2004. Are invasive plant species better competitors than native plant species? - Evidence from pairwise experiments. Oikos **105**, 229-238.
- von Wettberg, E.J. and Weiner, J. 2004. Effects of distance to crop rows and to conspecific neighbours on the size of *Brassica napus* and *Veronica persica* weeds. Basic and Applied Ecology **5**, 35-41.
- Weiner, J. 2003. Ecology - the science of agriculture in the 21st century. Journal of Agricultural Science **141**, 371-377.
- von Wettberg, E.J. and Weiner, J. 2003. Larger *Triticum aestivum* plants do not preempt nutrient rich patches in a glasshouse experiment. Plant Ecology **169**, 85-92.
- Stoll, P., Weiner, J., Muller-Landau, H., Müller, E. and Hara, T. 2002. Size symmetry of competition alters biomass-density relations. Proceedings of the Royal Society, Series B, **296**, 2191-2195.
- Damgaard, C., Weiner, J. and Nagashima, H. 2002. Modelling individual growth and competition in plant populations: growth curves of *Chenopodium album* at two densities. Journal of Ecology **90**, 666-671.
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