CURRICULUM VITAE
Jacob Weiner

Address

Department of Plant and Environmental Sciences
University of Copenhagen
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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,
Emeritus Professor, 2024-, Professor, 1998-2024, 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
Danish Natural Science Research Council, “Constant Final Yield of Plant Communities", 2015-2018
ISI Highly Cited Researcher (www.ISIhighlycited.com), original member, 2001
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

147 publications published/in press in international peer-reviewed journals
(14 sole author, 22 first author, 42 last author)
9 book chapters/invited papers (6 sole author)
4 chapters in conference proceedings, 2 book reviews, 6 popular articles, 1 government report
Over 13,500 citations in ISI Core Collection, H-Index = 55 (Web of Science database)
Over 23,000 total citations, H-Index = 69 (Google Scholar)
Individual H-Index, based on citations per author = 35 (Web of Science), 44 (Google Scholar)

Symposia, Conferences, Seminars and Workshops

27 invited symposia at international conferences (with published abstracts)	1983-
28 contributed papers at international conferences (with published abstracts)	1979-
over 155 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 - 2024
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

Ecology, Plant Ecology, Systematic Botany, Evolutionary Biology, General Biology, General Botany, Environmental Science, Sustainable Agriculture, Ecosystems Ecology, Applied Ecology, Climate Change

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
Junior Researcher 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

Yang, X.-W. Weiner, J. Fan, J.-W., Luo, W.-Y., Ren, J.-Y., Li, F.-M. and Du, Y.-L. 2024. Evolutionary Agroecology: individual fitness, population yield and resource availability in wheat. Basic and Applied Ecology 81, 53-58, doi: 10.1016/j.baae.2024.10.004

Huang, T.-T., Döring, T.F., Dang, P.-F., Weiner, J., Zhang, M.-X., Zhang, M.-M., Siddique, K.H.M., Schmid, B. and Qin, X.-L. 2024. Cultivar mixtures increase crop yields and temporal yield stability globally. A meta-analysis. Agronomy for Sustainable Development 44, 28, doi: 10.1007/s13593-024-00964-6.

Du, P., Zhu, Y.-H., Weiner, J., Sun, Z. and Li, F.-M. 2024. Reduced root cortical tissue with increased root xylem investment is associated with high wheat yields in central China. Plants 13, 1075, doi: 10.3390/plants13081075

Golan, G., Weiner, J., Zhao, Y. and Schnurbusch, T. 2024. Agroecological genetics of biomass allocation in wheat uncovers genotype interactions with canopy shade and plant size. New Phytologist 242, 107–120, doi: 10.1111/nph.19576

Chen, R. and Weiner, J. 2024. A general approach analyzing transient dynamics in plant biomass allocation patterns. Global Ecology and Conservation 49, doi: 10.1016/j.gecco.2023.e02783

Chen, R., Zhang, L., Tu, C., Huang, H. and Weiner, J. 2023. Potential role of kin selection in the transition from vegetative to reproductive allocation in plants. Journal of Plant Ecology 16, doi: 10.1093/jpe/rtad025

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

Cavalieri, A., Groβ, 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 a 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., Cavalieri, 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

Lu, P., Jiang, B. and Weiner, J. 2020. Crop spatial uniformity, yield and weed suppression. Advances in Agronomy 161, 117-178. doi: 10.1016/bs.agron.2019.12.003

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

Cavalieri, 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., Cavalieri, 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: 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, Cavalieri, 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_2 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.

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