

Dr. Robert L. Geneve, Professor

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Education

- Ph.D.** Horticulture, University of Minnesota, 1982-1985.
- M.S.** Horticulture, Pennsylvania State University, 1977-78.
- B.S.** Horticulture, University of Maryland, 1973-77

Editorship (Since 2009)

- Editor – International Plant Propagator’s Society. 2018 to present.
- Editorial Board – Propagation of Ornamental Plants. 2003 to present.
- Associate editor – Seed Technology. 2008 to present.
- Science Editor, North American - Scientia Horticulturae. 2001 to 2009.

Recognition

- Porter Henegar Memorial Award for Horticultural Research, Southern Nursery Association, 2019.
- Award of Merit, International Plant Propagators’ Society, Eastern Region; 2014.
- George E. Mitchell Jr. Award for Outstanding Faculty Service to Graduate Students; 2006.
- Fellow – American Society for Horticultural Sciences, 2005.
- Fellow - International Plant Propagators’ Society, 2003.

Publications (Since 2010)

- Geneve, R.L., S.T. Kester and S. Dutton. 2020. Seed and cutting propagation of swamp privet (*Forestiera acuminata* (Michx.) Poir.). *Propagation of Ornamental Plants* 19:113-117.
- Wilson, S.B., R.L. Geneve and F.T. Davies, Jr. 2018. An online study tool for reviewing plant propagation terms and concepts. *HortTechnology* 28:851-854.
<https://doi.org/10.21273/HORTTECH04184-18>
- Wilson, S.B., R.L. Geneve and F.T. Davies, Jr. 2018. Reflections on nearly sixty years of changes for the textbook “Plant Propagation: Principles and Practices. *Acta Horticulturae* 1212: 291-296. <https://doi.org/10.17660/ActaHortic.2018.1212.68>
- AL-Amery, M*, Geneve, R.L., M.F. Sanches, P.R. Armstrong, E.B. Maghirang, C. Lee, R.D. Vieira, and D.F. Hildebrand. 2018. Near-infrared spectroscopy used to predict seed germination and vigour in soybean seed lots. *Seed Science Research* 1–8 <https://doi.org/10.1017/S0960258518000119>
- Geneve, R.L. and S.T. Kester. 2018. Morphophysiological dormancy in *Heptacodium*. *Seed Science Research* 1-5 <https://doi.org/10.1017/S0960258518000053>
- Geneve, R.L., C.C. Baskin, J.M. Baskin, K.M.G. Jayasuriya, and N.S. Gama-Arachchige. 2018. Functional morpho-anatomy of water gap complexes in physically dormant seed. *Seed Science Research* 1-6 <https://doi.org/10.1017/S0960258518000089>

- *Gregory, T. and R.L. Geneve. 2018. Use of K-IBA as a foliar spray for softwood cutting propagation. *Acta Horticulturae* 1212:173-176.
<https://doi.org/10.17660/ActaHortic.2018.1212.33>
- *Lewis, V. and R.L. Geneve. 2018. Developing a modified hydroponic stock plant system for minicuttings of redbud. *Acta Horticulturae* 1212:177-180.
<https://doi.org/10.17660/ActaHortic.2018.1212.34>
- Geneve, R.L. 2018. What's old and new about phase change and propagation. *Acta Horticulturae* 1212: 149-154. <https://doi.org/10.17660/ActaHortic.2018.1212.29>
- Geneve, R.L. 2018. Impact of seed technology on seed germination in horticultural crops. *Acta Horticulturae* 1212:1-4.
<https://doi.org/10.17660/ActaHortic.2018.1212.1>
- Geneve, R.L., *E.W. Janes and S.T. Kester. 2018. Cardinal temperatures and thermal time for seed germination of industrial hemp. *Acta Horticulturae* 1174:325-330.
<https://doi.org/10.17660/ActaHortic.2017.1174.65>
- Geneve, R.L., D.F. Hildebrand, T.D. Phillips, M. AL-Amery and S.T. Kester. 2017. Stress influences seed germination in mucilage-producing chia. *Crop Science* 57:2160-2169. <https://doi:10.2135/cropsci2016.08.0703>
- Nambuthiri, S., *E. Hagen, A. Fulcher and R.L. Geneve. 2017. Evaluating a physiological-based, on-demand irrigation system for container-grown woody plants with different water requirements. *HortScience* 52:251-257.
<https://doi:10.21273/HORTSCI10603-16>
- Geneve, R.L. 2017. An introduction to pot-in-pot nursery irrigation. *Acta Horticulturae* 1174:19-22. <https://doi.org/10.17660/ActaHortic.2017.1174.5>.
- Geneve, R.L., S. Nambuthiri, *E. Hagen, and A. Fulcher. 2016. A new irrigation application efficiency calculation for sprinkler irrigated container plants grown under sensor based irrigation scheduling. *Acta Horticulturae* 1112:17-22.
- Jacobsen, K.L., * V.M. Anderson, D.D. Archbold, R.L. Geneve, and D.L. Ingram. 2016. Fertility source and drought stress effects on plant growth and essential oil production of *Calendula officinalis*. *HortScience* 51:342-348.
- Nambuthiri, S., A. Fulcher, A. Koeser, R.L. Geneve and G. Niu. 2015. Moving towards sustainability with alternative containers for greenhouse and nursery crop production: A review and research update. *HortTechnology* 25:8-16.
- Brumfield, R.G., A.J. DeVincentis, *X. Wang, R.T. Fernandez, S. Nambuthiri, R.L. Geneve, A.K. Koeser, G. Bi, *Y. Sun, G. Niu, D. Cochran and A. Fulcher. 2015. Economics of utilizing alternative containers in ornamental crop production systems. *HortTechnology* 25:17-25.
- Evans, M.R., A. Koeser, G. Bi, S. Nambuthiri, R. L. Geneve, K. Jacobsen, S. Lovell, and R. Stewart. 2015. Impact of biocontainers with and without shuttle trays on water use in the production of a containerized ornamental greenhouse crop. *HortTechnology* 25: 35-41.
- *Wang, X., R.T. Fernandez, B.M. Cregg, R. Auras, A. Fulcher, G. Niu, *Y. Sun, G. Bi, S. Nambuthiri and R.L. Geneve. 2015. Multi-state evaluation of plant performance in plastic containers and alternative nursery containers. *HortTechnology* 25:42-49.

- Nambuthiri, S., R.L. Geneve, R.T. Fernandez, G. Bi, G. Niu, and *X. Wang. 2015. Substrate temperature in plastic and alternative nursery containers. *HortTechnology* 25: 50-56.
- *Li, T., G. Bi, G. Niu, S. Nambuthiri, R.L. Geneve, *X. Wang, R.T. Fernandez, A. Fulcher, *Y. Sun, X. Zhao, R.J. Stewart. 2015. Feasibility of using biocontainers in pot-in-pot system for nursery production of river birch. *HortTechnology* 25:57-62.
- *Hagen, E, S. Nambuthiri, A. Fulcher, and R.L. Geneve. 2014. Comparing substrate moisture-based daily water use and on-demand irrigation regimes for oakleaf hydrangea grown in two container sizes. *Scientia Horticulturae* 179:132-139.
- Caliskan, S., Kester, S.T. and R.L. Geneve. 2014. A laboratory exercise in physiological seed dormancy using eastern redbud (*Cercis canadensis*). *HortTechnology* 24:403-406.
- *Gama-Arachchige, N.S., J.M. Baskin, R.L. Geneve and C.C. Baskin. 2013. Identification and characterization of 10 new water gaps in seeds and fruits with physical dormancy and classification of water-gap complexes. *Annals of Botany* 112:69-84.
- *Wood, L.A., S.T. Kester, and R.L. Geneve. 2013. The physiological basis for ethylene-induced dormancy release and germination in three *Echinacea* species (*E. purpurea*, *E. tennesseensis*, and *E. simulata*). *Scientia Horticulturae* 156:67-72.
- *Gama-Arachchige, N.S., J.M. Baskin, R.L. Geneve and C.C. Baskin. 2013. Quantitative analysis of the thermal requirements for stepwise physical dormancy-break in seeds of winter annual *Geranium carolinianum* (Geraniaceae). *Annals of Botany* 111:849-858.
- *Finneseth, C.H. and R.L. Geneve. 2012. Physical enhancement improves seed lot quality in eastern gamagrass (*Tripsacum dactyloides*). *Acta Horticulturae* 938:69-75.
- *Fulcher, A., J. Buxton and R.L. Geneve. 2012. Using the relationship between container substrate moisture and photosynthesis to schedule irrigation in *Hibiscus rosa-sinensis*. *Scientia Horticulturae* 138:221-226.
- *Gama-Arachchige, N.S., J.M. Baskin, R.L. Geneve and C.C. Baskin. 2012. The autumn effect: timing of physical dormancy break in seeds of two winter annual species of Geraniaceae by a stepwise process. *Annals of Botany* 110:637-651.
- *Finneseth, C.H. and R.L. Geneve. 2012. A standard laboratory method to assess purity and germination in eastern gamagrass seed lots. *Seed Technology* 34:89-109.
- *Jamboonsri, W., T. D. Phillips, R. L. Geneve, J.P. Cahill and D.F. Hildebrand. 2012. Extending the range of an ancient crop; a new $\omega 3$ source. *Genetic Resources and Crop Evolution* 59:171-178.
- *Fulcher, A. and R.L. Geneve. 2011. Relationship between photosynthesis and substrate moisture for container-grown *Hibiscus* and *Cornus*. *Acta Horticulturae* 922:183-186.
- Paparozzi, E.T., A. W., Kimberly, R.L. Geneve, H. Hatterman-Valenti, C. Haynes, H. Kraus, C. Mc Kenney and P. Pitts. 2011. The AG*IDEA alliance and horticulture graduate certificate programs. *HortTechnology* 21:688-691.
- *Gama-Arachchige, N.S., J.M. Baskin, R.L. Geneve and C.C. Baskin. 2011. Acquisition of physical dormancy and ontogeny of the micropyle-water gap complex in

developing seeds of *Geranium carolinianum* L. (Geraniaceae). *Annals of Botany* 108:51-64.

- *Fulcher, A., T.* Steele, E. Wilkerson, R.L. Geneve, and R. S. Gates. 2011. Using transpiration chambers to detect initial transpiration in cuttings and quantify transpiration in seedlings. *Acta Horticulturae* 893:1037-1042.
- *Gama-Arachchige, N.S., J.M. Baskin, R.L. Geneve and C.C. Baskin. 2010. Identification and characterization of the water gap in physically dormant seeds of Geraniaceae, with special reference to *Geranium carolinianum* L. *Annals of Botany* 105:977-990.

*indicates graduate or undergraduate student.

Books (since 2010)

- Geneve, R.L. (ed.) 2019. Combined Proceedings, International Plant Propagators' Society. Vol. 69. Curran Associates, Inc, Red Hook, NY.
- Geneve, R.L. (ed.) 2018. Combined Proceedings, International Plant Propagators' Society. Vol. 68. Curran Associates, Inc, Red Hook, NY.
- Davies, F. T. Jr., R. L. Geneve and Sandra B. Wilson. 2018. *Hartmann and Kester's Plant Propagation: Principles and Practices*. Boston: Prentice-Hall. Ninth edition.

Book Chapters (since 2010)

- Nambuthiri, S., A. Fulcher, and R.L. Geneve. 2015. Microirrigation systems for pot-n-pot nursery production. In: *Recent Advances in Sustainable Micro Irrigation*. Vol. 4. Management, Performance, and Applications of Micro Irrigation Systems. M.R. Goyal (ed.). Apple Press, Waretown, NJ. Chapter 21: pp. 295-309.
- Geneve, R.L. 2010. Propagation by seed. In: *Horticulturist's Certification Study Guide*. G.E. Fitzpatrick (ed.). American Society for Horticultural Science, Alexandria, VA. pp. 51-60.
- Geneve, R.L. 2010. Propagation from non-meristematic tissues - Organogenesis. In: *Plant Cell Culture, Development and Biotechnology*. R.N. Trigiano and D. J. Gray (eds.). CRC Press, LLC, Boca Raton, Florida. pp. 243-256.

Grants and Contracts (PI or co-PI since 2010)

- Sources included USDA – SCRI, NIFA, Hatch Multistate, Horticultural Research Institute, and Kentucky Landscape and Nursery Industry = \$974,365.

Invited Professional Presentations (since 2010)

- Grand Rapids Smart Gardening Conference. 2020. Smart Plants—Magical interactions between flowers and their pollinators. Grand Rapids, MI.
- Western Michigan Home and Garden Show. 2020. Preferred plants for pollinator gardens. Grand Rapids, MI. Featured speaker.
- Association of Specialty Cut Flower Growers Conference. 2020. Propagation basics for cut flower growers. Oberlin, OH.

- TriState Green Industries Conference. 2020. Taking a whorl around double flowers. Hamilton, OH.
- International Plant Propagator's Society – Eastern region annual meeting. 2019. Opportunities in hemp production. Madison, WI.
- Protecting Pollinators in Urban Landscapes. 2019. Floral adaptations – The magical interaction between flowers and pollinators. Cincinnati, OH. Keynote Lecture.
- International Conference on Next Generation Plant Production and Bioresources Utilization Technologies. 2019. Advances in Nursery Production. Guwahati, India. Keynote Lecture.
- Sustainable Urban Landscape Symposium: It's About Pollinators. 2018. The floral adaptations that create interactions between flowers and their pollinators. Cincinnati Zoo and Botanical Garden, Cincinnati, Ohio.
- The 12th International Society for Seed Science: Seeds as Systems. 2017. Water gap complexes in physically dormant seeds. Monterey, California.
- International Plant Propagator's Society – South Africa region annual meeting. 2017. (a) Flower morphology and pollination. (b) Seed vigor and germination. Tzaneen, South Africa.
- The 31th International Seed Testing Association Seed Congress. 2016. The involvement of enclosing maternal tissue layers in seed dormancy. Tallinn, Estonia.
- International Plant Propagator's Society – New Zealand region annual meeting. 2016. (a) Pot-in-pot nursery production. (b) Flowers are magic – Pollination-related adaptations in floral morphological. Christchurch, New Zealand.
- University of Florida. 2016. Physical seed dormancy. Departmental seminar. Gainesville, Florida.
- Texas A&M University. 2015. Seed germination in an ancient crop, Chia (*Salvia*): A Sticky situation. College Station, Texas.
- Twenty Ninth International Horticulture Congress. 2014. Irrigation application efficiency during overhead irrigation of container- grown nursery crops under sensor-based irrigation scheduling. Brisbane, Australia.
- International Plant Propagator's Society – South Africa region annual meeting. 2014. (a) Container nursery irrigation. (b) Successful cutting propagation is rooted in the basics. Johannesburg, South Africa.
- International Plant Propagator's Society – Eastern region annual meeting. 2013. How plant hormones work. Chicago, IL.
- The 30th International Seed Testing Association Seed Congress. 2013. A comparison of mucilage production in several members of the Lamiaceae. Antalya, Turkey.
- International Plant Propagator's Society – Eastern region annual meeting. 2012. Seed dormancy, Give your plants a wakeup call. Philadelphia, PA.
- The 6th International Symposium on Seed, Transplant and Stand Establishment of Horticultural Crops. Seed germination and mucilage production in chia (*Salvia hispanica*). Brazilia, Brazil. 2012.
- International Plant Propagator's Society – Southern region annual meeting. 2010. Searching for the water gap in physically dormant seeds. Raleigh, NC.
- Catholic University, Santiago Chile. 2010. Advances in seed and cutting propagation.
- Twenty Eighth International Horticulture Congress. Invasive woody plants in the nursery industry – a USA perspective. 2010. Lisbon, Portugal

TeachingAdministration

Academic and Horticulture Club advisor

Courses

PLS 320 – Woody Plant Materials, 4 credits. 2011 to present. This is a hybrid undergraduate course with lectures on-line and two lab sections. It is taught each Fall semester.

PLS 440 - Plant Propagation, 3 credits. 1991 to present. This undergraduate course has two one-hour lectures and one three-hour lab. It is taught each Spring semester.

PLS 399 – Experiential Learning, 3 credits. 2002 – present. I coordinate the required internship program for HPLS Horticulture and Science options.

PLS 490 – Topics in Plant and Soil Science (Capstone, HPLS Science option), 3 credits. 2002 to present.