

NCERA-193 publications 2009-2010

Manuscripts:

- Bethke, J. A., and R. A. Cloyd. 2009. Pesticide use in ornamental production: what are the benefits? *Pest Manag. Sci.* 65: 345-350.
- Bonello, P. 2010. Potential of induced resistance as a tool for the management of pathogens and insects in trees. *New Zealand Journal of Forestry Science*. Vol. 40: S15-S24.
- Campomizzi, A. J., M. L. Morrison, S. L. Farrell, R. N. Wilkins, B. M. Drees, and J. M. Packard. 2009. Red imported fire ants can decrease songbird nest survival. *Condor* 111:534-537.
- Cardina, J., C.P. Herms, and D.A. Herms. 2010. Phenological indicators for emergence of large and smooth crabgrass (*Digitaria sanguinalis* and *D. ischaemum*) *Weed Technology*, In press.
- Cloyd, R. A., C. L. Galle, S. R. Keith, and K. E. Kemp. 2010. Effect of fungicides and miticides with mitochondria electron transport inhibiting activity on the twospotted spider mite, *Tetranychus urticae* (Acari: Tetranychidae). *HortScience* 45(4): 687-689.
- Cloyd, R. A. 2009. Western flower thrips (*Frankliniella occidentalis*) management on ornamental crops grown in greenhouses: Have we reached an impasse? *Pest Technol.* 3(1): 1-9.
- Cloyd, R. A., N. R. Timmons, J. M. Goebel, and K. E. Kemp. 2009. Effect of pesticides on adult rove beetle *Atheta coriaria* (Coleoptera: Staphylinidae) survival in growing medium. *J. Econ. Entomol.* 102(5): 1750-1758.
- Cloyd, R. A., K. A. Marley, R. A. Larson, and B. Arieli. 2009. Attractiveness of parboiled rice hulls to the fungus gnat, *Bradysia* sp. nr *coprophila* (Diptera: Sciaridae), adult relative to standard growing medium components. *HortScience* 44(5): 1366-1369.
- Cloyd, R. A., C. L. Galle, S. R. Keith, N. A. Kalscheur, and K. E. Kemp. 2009. Effect of commercially available plant-derived essential oil products on arthropod pests. *J. Econ. Entomol.* 102(4): 1567-1579.
- Cloyd, R. A. 2009. Getting mixed-up: are greenhouse producers adopting appropriate pesticide mixtures to manage arthropod pests? *HortTechnology* 19(3): 638-646.
- Cloyd, R. A., C. L. Galle, S. R. Keith, and K. E. Kemp. 2009. Evaluation of persistence of selected miticides against the twospotted spider mite, *Tetranychus urticae*. *HortScience* 44(2): 476-480.
- Condra, J.M., Brady C.M., and Potter D.A. Resistance of landscape-suitable elms to Japanese

beetle, gall aphids, and leaf miners, with notes on life history of *Orchestes alni* and *Agromyza aristata* in Kentucky. *Arboriculture & Urban Forestry*. (NCERA-193 member John Hartman was a collaborator, though not a co-author, and the research was conducted in NCERA-193 managed National Elm Trial plots).

Dai, W., Magnusson, V.A., and Walla, J.A. 2009. Transformation of poplar trees with the PAP-Y gene for disease resistance. (Abstr.) *In Vitro Cellular and Developmental Biology – Plant*. 45:S77.

Drees, B. M. 2009. Red imported fire ant management, impact of educational programs and considerations for recent incursions, *International Turfgrass Society, Research Journal* Volume 11, pages 631-637.

Egan, J.M., Jacobi W.R., Negron J.F., Smith, S.L. and Cluck, D. R. 2010. Forest thinning and subsequent bark beetle-caused mortality in Northeastern California. *Forest Ecol. Management*. doi:10.1016/j.foreco.2010.08.030

Eyles A, Bonello P, Ganley R, Mohammed C. 2010. Induced resistance to pests and pathogens in trees. *New Phytologist*. <http://dx.doi.org/10.1111/j.1469-8137.2009.03127.x> (IF: 5.178)

Figueroa, R., D.A. Herms, J. Cardina, and D. Doohan. 2010. Maternal environment effects on common groundsel (*Senecio vulgaris*) seed dormancy. *Weed Science* 58:160-166.

Geils, B.A., Klopfenstein, N.B., Kim, M.-S., Spaine, P., Richardson, B.A., Zambino, P.J., Shaw, C.G., Walla, J., Bulluck, R., Redmond, L., Smith, K. 2009. Recovery plan for Scots pine blister rust caused by *Cronartium flaccidum* and *Peridermium pini*. National Plant Disease Recovery System, a cooperative project of the American Phytopathological Society and the United States Department of Agriculture. Online at <<http://www.ars.usda.gov/research/npdrr>>.

Gandhi, K.J.K., A.I. Cognato, D.M. Lightle, B.J. Mosley, D.G. Nielsen, and D.A. Herms. 2010. Species composition, semiochemical responses, and seasonal activity of bark and ambrosia beetles (Coleoptera: Curculionidae: Scolytinae) in northeastern Ohio. *Journal of Economic Entomology* 103:1187-1195 (DOI: 10.1603/EC10026).

Gandhi, J.K.J., and D.A. Herms. 2010. North American arthropods at risk due to widespread *Fraxinus* mortality caused by the alien emerald ash borer. *Biological Invasions* 12:1839-1846 (DOI 10.1007/s10530-009-9594-1).

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- Goebel, P.C., M.S. Bumgardner, D.A. Herms, and A. Sabula 2010. Failure to phytosanitize firewood infested with emerald ash borer (*Agrilus planipennis*) in a small dry kiln using ISPM-15 standards. *Journal of Economic Entomology* 103:597-602.
- Gontijo, L. M., D. C. Margolies, J. R. Nechols, and R. A. Cloyd. 2010. Plant architecture, prey distribution and predator release strategy interact to affect foraging efficiency of the predatory mite *Phytoseilus persimilis* (Acari: Phytoseiidae) on cucumber. *Biol. Control* 53: 136-141.
- Goodrich, B.A., Koski, R.D. and W.R. Jacobi. 2009. Changes in soils and vegetation along roads treated with magnesium chloride for dust suppression. *Water, Air, and Soil Pollution* 198: 165-188.
- Goodrich, B. A., Koski, R.D. and W.R. Jacobi. 2009. Monitoring surface water chemistry near magnesium chloride dust suppressant treated roads in Colorado. *J. Environ. Qual.* 38(6):2373-81.
- Hartman, J, Dixon E, and Bernick S. 2010. Evaluation of therapeutic treatments to manage oak bacterial leaf scorch. *Arboriculture & Urban Forestry.* 36(3): 140-146.
- Hogendorp, B. K., R. A. Cloyd, C. Xu, and J. M. Swiader. 2010. Effect of silicon-based fertilizer applications on nymphal development and adult emergence of the greenhouse whitefly (Hemiptera: Aleyrodidae) feeding on poinsettia. *J. Entomol. Sci.* 45(2): 150-169.
- Hogendorp, B. K., R. A. Cloyd, and J. M. Swiader. 2009. Effect of silicon-based fertilizer applications on the reproduction and development of the citrus mealybug (Hemiptera: Pseudococcidae) feeding on green coleus. *J. Econ. Entomol.* 102(6): 2198-2208.
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- Kearns, H. S. J., Jacobi, W. R., and Geils, B. W. 2009. A method for estimating white pine blister rust canker age on limber pine in the central Rocky Mountains. *Forest Pathology* 39:177-191.
- Kleczewski, Nathan M., Daniel A. Herms and Pierluigi Bonello. 2010. Effects of soil type, fertilization and drought on carbon allocation to root growth and partitioning between secondary metabolism and ectomycorrhizae of *Betula papyrifera*. *Tree Physiology* 30: 807-817.

- Raffa, K.F., Aukema, B., Bentz, B.J, Carroll, A., Erbilgin, E., Herms, D.A., Hicke, J.A., Hofstetter, R.W., Katovich, S., Lindgren, B.S., Logan, L., Mattson, W.J., Munson, A.S., Robison, D.J, Six, D.L, Tobin, P.C., Townsend, P.A., Wallin, K.F. 2009. A literal use of "forest health" safeguards against misuse and misapplication. *Journal of Forestry* 107:276-277.
- Ranger, C.M., M.E. Reding, K..J.K. Gandhi, J.B. Oliver, P.B. Schultz, and D.A. Herms. 2010. Species dependent influence of (-)- α -pinene on attraction of ambrosia beetles to ethanol-baited traps in nursery agroecosystems. *Journal of Economic Entomology*. Submitted August 2010.
- Ranger, C.M., M.E. Reding, A.B. Persad, and D.A. Herms. 2010. Ability of stress-related volatiles to attract and induce attacks by *Xylosandrus germanus* and other ambrosia beetles. *Agricultural and Forest Entomology* 12:177-185 (DOI: 10.1111/j.1461-9563.2009.00469.x)
- Raupp, M.J., P.M. Shrewsbury, and D.A. Herms. 2010. Ecology of herbivorous arthropods in urban landscapes. *Annual Review of Entomology* 55:19-38.
- Smitley, D.R., Doccola J.J., and Cox D.L. 2010. Multiple-year protection of ash trees from emerald ash borer with a single trunk injection of ememectin benzoate, and single-year protection with an imidacloprid basal drench. *Arboriculture & Urban Forestry*. 36(5): 206-211.
- Vassiliou, V. A. And B. M. Drees. 2008. A Study of Applied Research Methods and Techniques for Landscape Arthropods: The crape myrtle aphid *Tinocallis kahawaluokalani* (Kirkaldy) (Hemiptera: Aphididae), in Texas. *J. Agric. And Urban. Entomol.* 25(3):205-221.
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- Wang, H., Walla, J.A., and Dai, W.-H. 2009. Identification of molecular markers linked to X-disease resistance in chokecherry (*Prunus virginiana* L.): inoculation, verification, and early screening. (Abstr.) *Plant and Animal Genome*. Online at <http://www.intl-pag.org/16/abstracts/PAG16_P03f_195.html>.
- Walla, J., and Kinzer, K. 2009. Brown rot on stone fruits and other hosts in North Dakota. *North Dakota Crop and Pest Report*, Issue 5, June 11, 2009. Online at <http://www.ag.ndsu.nodak.edu/aginfo/entomology/ndsucpr/Years/2009/June/11/forestry.htm#BROWN>
- Wallis C, Eyles A, Chorbadjian RA, Riedl K, Schwartz S, Hansen R, Cipollini D, Herms DA,

Bonello P. 2010. Differential effects of nutrient availability on the secondary metabolism of Austrian pine (*Pinus nigra*) phloem and resistance to *Diplodia pinea*. *Forest Pathology*. <http://dx.doi.org/10.1111/j.1439-0329.2009.00636.x> (IF: 1.225)

Extension publications:

Cloyd, R. A. 2010. Fungus gnat management in greenhouses and nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2937. Kansas State University, Manhattan, KS. 4 pgs.

Cloyd, R. A. 2010. Western flower thrips management in greenhouse-grown crops. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2922. Kansas State University, Manhattan, KS. 8 pgs. (<http://www.ksre.ksu.edu/library/entml2/mf2922.pdf>)

Cloyd, R. A., and R. S. Cowles. 2009. Resistance management: resistance, mode of action, and pesticide rotation. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2905. Kansas State University, Manhattan, KS. 8 pgs. (<http://www.ksre.ksu.edu/library/entml2/mf2905.pdf>)

Cloyd, R. A. 2009. Mulches and living organisms. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2900. Kansas State University, Manhattan, KS. 2 pgs.

Cloyd, R. A., J. Quinn, and D. Trinklein. 2009. Integrated pest management in greenhouses and herbaceous nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2892. Kansas State University, Manhattan, KS. 7 pgs.

Cranshaw, W. S., and R. A. Cloyd. 2009. Fungus gnats as houseplant and indoor pests. *Insect Series Home & Garden*, no. 5.5584. Colorado State University, Fort Collins, CO. 3 pgs.

Cranshaw, WS, Thomas C, Kondratieff B, and Walker G. 2010. Life in a Colorado Water Garden. 28 pp.

Cranshaw, W. Colorado Bug Mugs. 44 online fact sheets available here: <http://www.colostate.edu/Dept/bspm/extension%20and%20outreach/bug%20mugs.html>

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Marr, C. W., T. Carey, R. Cloyd, and M. Kennelly. 2010. Kansas Garden Guide. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. S-51 (Rev.). Kansas State University, Manhattan, KS. 76 pgs.

Book Chapters:

Oi, D. H. and Drees, B. M. 2009. Chapter 30: Fire ant IPM. In Integrated Pest Management (E. B. Radcliffe, W. D. Hutchison and R. E. Cancelado, eds.) Cambridge Univ. Press, pages 390-401, 529 pages.

Proceedings and Technical Reports:

Hermes, D.A.. 2010. Multiyear evaluations of systemic insecticides for control of emerald ash borer. In: D. Lance, J. Buck, D. Binion, R. Reardon, and V. Mastro, compilers, Proceedings of the Emerald Ash Borer Research and Technology Development Meeting, October 20-21, 2009, Pittsburgh, Pennsylvania, pp. 71-75. USDA Forest Health Technology Enterprise Team, FHTET-2010-01. 136 pp.

Jacobi, W.R., B.A. Goodrich, R. D. Koski. 2009. Environmental effects of magnesium chloride based dust suppression products on roadside soils, vegetation and stream water chemistry. Colorado State University, Agricultural Experiment Station, Technical Report, TR09-04, 185pp.

Trade publications

Cranshaw W and Tisserat N. 2010. Thousand cankers disease – A recently recognized threat to North American black walnut. *Arborist News*. Feb.

Hermes, D.A., D.G. McCullough, D.R. Smitley, C.S. Sadof, R.C. Williamson, and P.L. Nixon. 2010. Professional options for treating EAB. *Lawn and Landscape* 31(5):88-92.

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Herms, D.A. 2009. Managing magnolia scale. *American Nurseryman* 209(1):10-11.