



Cornell University
New York State
Agricultural Experiment Station



BIOGRAPHICAL SKETCH

DAVID MARK GADOURY

1978 B.S., Agricultural Technology, University of Rhode Island

1981 M.S., Plant Pathology, University of New Hampshire

1984 Ph.D., Plant Pathology, University of New Hampshire

Professional Societies and Working Groups

American Phytopathological Society
International Powdery & Downy Mildew Workshop
Deciduous Tree Fruit Disease Workers

Professional Experience

- 1993- present Senior research associate, Department of Plant Pathology, Cornell University, New York State Agricultural Experiment Station, Geneva.
- 2005- present Adjunct faculty, Plant Health and Plant Protection Division, NiBio, Norwegian Institute of Agriculture and Environmental Research

Publications summary

138 refereed journal articles, 30 books, book chapters, and proceedings, 90 published abstracts of presentations at scientific meetings, 37 extension bulletins, 10 technical bulletins, and 1 patent

Current Research Summary

Epidemiology and management of powdery mildews
Interactions between climate, phenology, and host susceptibility

Awards, Honors and Appointments

- 1991 American Phytopathological Society: Lee M. Hutchins Award
2008 Fellow of the American Phytopathological Society
2011- present Internal Communications Officer, American Phytopathological Society

Selected Recent Publications

- Teh, S.L., Fresnedo-Ramirez, J., Clark, M.D., **Gadoury, D.M.**, Sun, Q., Cadle-Davidson, L., and Luby, J. 2017. Genetic dissection of powdery mildew resistance in interspecific half-sib grapevine families using SNP-based maps. *Mol. Breeding* 37:1-16.
- Yang, S., Fresnedo-Ramírez, J., Wang, M., Cote, L., Schweitzer, P., Barba, P., Takacs, E.M., Clark, M., Luby, J., Manns, D.C., Sacks, G., Mansfield, A.K., Londo, J., Fennell, A., **Gadoury, D.**, Reisch, B., Cadle-Davidson, L., and Sun, Q. 2016. A next-generation

marker genotyping platform (AmpSeq) in heterozygous crops: a case study for marker-assisted selection in grapevine. *Horticulture Research* (2016) 3, 16002; doi:10.1038/hortres.2016.2.

- Cadle-Davidson, L., **Gadoury, D.M.**, Fresnedo-Ramírez, J., Yang, S., Barba, P. Sun, Q., Demmings, E.M., Seem, R.C., Schaub, M., Nowogrodzki, A., Kasinathan, H., Ledbetter, C., and Reisch, B.I. 2016. Lessons from a phenotyping center revealed by the genome-guided mapping of powdery mildew resistance loci. *Phytopathology* 106:1159-1169.
- Suthaparan, A., Solhaug, K.A., Bjugstad, N., Gislerød, H.R., **Gadoury, D.M.**, and Stensvand, A. 2016. Suppression of powdery mildews by UV-B: Application frequency and timing, dose, reflectance, and automation. *Plant Dis.* 100:1643-1650.
- Moyer, M.M., **Gadoury, D.M.**, Wilcox, W.F., and Seem, R.C. 2016. Weather during critical epidemiological periods and subsequent severity of powdery mildew on grape berries. *Plant Dis.* 100:116-124.
- Asalf, B., **Gadoury, D.M.** Tronsmo, A-M., Seem, R.C., and Stensvand, A. 2016. Effects of development of ontogenic resistance in strawberry leaves upon pre- and post-germination growth and sporulation of *Podosphaera aphanis*. *Plant Dis.* 100:72-78.
- Moyer, M.M, Londo, J., **Gadoury, D.M.**, and Cadle-Davidson, L. 2015. Cold Stress-Induced Disease Resistance (SIDR): indirect effects of low temperatures on host-pathogen interactions and disease progress in the grapevine powdery mildew pathosystem. *Eur. J. Plant Pathol.* DOI 10.1007/s10658-015-0745-1.
- Feechan, A., Kocsis, M., Riaz, S., Zhang, W., Walker, Dry, I.B., Reisch, B, **Gadoury, D.M.**, and Cadle-Davidson, L. 2015. Strategies for *RUN1* deployment using *RUN2* and *REN2* to manage grapevine powdery mildew informed by studies of race-specificity. *Phytopathology* 105:1104-1113.
- Wolfenbarger, S.N., Twomey, M.C., **Gadoury, D.M.**, Knaus, B.J., Grunwald, N.J., and Gent, D.H. 2015. Identification and distribution of mating-type idiomorphs in populations of *Podosphaera macularis* and development of chasmothecia of the fungus. *Plant Pathology* 64:1094-1102.
- Asalf, B., **Gadoury, D.M.**, Tronsmo, A.M., Seem, R.C., Dobson, A., Peres, N.A., and Stensvand, A. 2014. Ontogenic resistance of leaves and fruit, and how leaf folding influences the distribution of powdery mildew on strawberry plants colonized by *Podosphaera aphanis*. *Phytopathology* 104:954-963.
- Moyer, M.M., **Gadoury, D.M.**, Wilcox, W.F., and Seem, R.C. 2014. Release of *Erysiphe necator* ascospores and impact of early season disease pressure on *Vitis vinifera* fruit infection. *Amer. J. Enol. Vitic.* doi: 10.5344/ajev.2014.13111.
- Nordskog, B., Elameen, A., **Gadoury, D.M.**, and Hermansen, A. 2014. Virulence characteristics of *Bremia lactucae* populations in Norway. *Eur. J. Plant Pathol.* 139:679-686.
- Suthaparan, A., Stensvand, A., Solhaug, K.A., Torre, S., Telfer, K.H., Ruud, A.K., Mortensen, L.M., **Gadoury, D.M.**, Seem, R.C., and Gislerød, H.R. 2014. Suppression of cucumber powdery mildew (*Podosphaera xanthii*) by supplemental UV-B radiation in greenhouses can be augmented or reduced by background radiation quality. *Plant Dis.* 98:1349-1357.
- Rouxel, M., Mestre, P., Baudoin, A., Carisse, O., Delière, L., Ellis, M.A., **Gadoury, D.**, Lu, J., Nita, M., Richard-Cervera, S., Schilder, A., Wise, A, and Delmotte, F. 2014.

Geographic Distribution of Species of *Plasmopara viticola* Causing Downy Mildew on Wild and Cultivated Grapes in Eastern North America. *Phytopathology* 104:692-701.

Aslaf, B., **Gadoury, D. M.**, Tronsmo, A. M., Seem, R. C., Cadle-Davidson, L., Brewer, M. T., and Stensvand, A. 2013. Temperature regulates the initiation of chasmothecia in powdery mildew of strawberry. *Phytopathology* 103:717-724.

Suthaparan, A., Torre, S., Mortensen, L.M., Solhaug, K.A., **Gadoury, D.M.**, and Stensvand, A. 2012. Interruption of the night period by UV-B suppresses powdery mildew of rose and cucumber. *Acta Hort.* 956:617-620.

Gadoury, D.M., Wakefield, L.M., Cadle-Davidson, L., Dry, I.B., and Seem, R.C. 2012. Effects of prior vegetative growth, inoculum density, light, and mating on conidiation of *Erysiphe necator*. *Phytopathology* 102:65-72.

Suthaparan, A., Stensvand, A., Solhaug, K.A., Torre, S., Mortensen, L.M., **Gadoury, D.M.**, Seem, R.C., and Giselrød, H.R. 2012. Suppression of powdery mildew (*Podosphaera pannosa*) in greenhouse roses by brief exposure to supplemental UV-B lighting. *Plant Dis.* 96:1653-1660.

Cadle-Davidson, L., Mahanil, S., **Gadoury, D.M.**, Kozma, P., and Reisch, B.I. 2011. Natural infection of *Run1*-positive vines by naïve genotypes of *Erysiphe necator*. *Vitis* 50:173-175.

Wakefield, L., **Gadoury, D.M.**, Seem, R.C., Milgroom, M.G., Sun, Q., and Cadle-Davidson L. 2011. Differential Gene Expression During Conidiation in the Grape Powdery Mildew Pathogen, *Erysiphe necator*. *Phytopathology* 101:839-846.