

Selected Publications

Joji Muramoto

Department of Environmental Studies
University of California, Santa Cruz,
1156 High Street, Santa Cruz, CA 95064. U.S.A.
Phone: (831) 247-3804. E-mail: joji@ucsc.edu

- Muramoto, J., Shennan, C., Zavatta, M., Baird, G., Toyama, L., Mazzola, M. 2015. Effect of Anaerobic Soil Disinfestation and Mustard Seed Meal for Control of Charcoal Rot in California Strawberries. *International Journal of Fruit Science*. In review.
- Mazzola, M., Hewavitharana, S. S., Strauss, S. L., Shennan, C., and Muramoto, J. 2015. Anaerobic soil disinfestation and Brassica seed meal amendment alter soil biology and system resistance. *International Journal of Fruit Science*. In review.
- Muramoto, J. 2015. Assessing Soil Health: A Perspective from Organic Strawberry Fields in California, U.S.A. *Soil Microorganisms* (in Japanese), In press.
- Shennan, C., J. Muramoto, G. Baird, M. Zavatta, L. Toyama, M. Mazzola, and S.T. Koike, . 2015. Anaerobic soil disinfestation (ASD): a strategy for control of soil borne diseases in strawberry production. *Acta Horticulturae* (ISHS), In review.
- Shennan, C., J. Muramoto, G. Baird, M. Zavatta, L. Toyama, A. Gershenson, M. Los Huertos, S. Kortman, K. Klonsky, M. Gaskell, S.T. Koike, R. Smith, and M. Bolda. 2015. CAL-Collaborative Organic Research and Extension Network: on-farm research to improve strawberry/vegetable rotation systems in coastal California. *Acta Horticulturae* (ISHS), In review.
- Muramoto, J., Shennan, C., Baird, G., Zavatta, M., Koike, S.T., Daugovish, O., Bolda, M.P., Dara, S.K., Klonsky, K., Mazzola, M. 2014. Optimizing Anaerobic Soil Disinfestation for California Strawberries. *Acta Horticulturae* (ISHS) 1044:215-220
- Zavatta, M., Shennan, C., Muramoto, J., Baird, G., Koike, S.T., Bolda, M.P., Klonsky, K. 2014. Integrated Rotation Systems for Soilborne Disease, Weed and Fertility Management in Strawberry/Vegetable Production. *Acta Horticulturae* (ISHS) 1044:269-274
- Shennan, C. Muramoto, J., Mazzola, M., Butler, D., Roskopf, E., Kokalis-Burelle, N., Momma, K., Kobara, Y., Lamers, J. 2014. Anaerobic Soil Disinfestation for Soil Borne Disease Control in Strawberry and Vegetable Systems: Current Knowledge and Future Directions. *Acta Horticulturae* (ISHS) 1044:165-175
- Muramoto J., Gliessman S.R., Koike, S.T., Shennan C., Bull, C.T., Klonsky, K., and Swezey, S. 2014. Integrated biological and cultural practices can reduce crop rotation period of organic strawberries. *Agroecology and Sustainable Food Systems*. 38:603–631.
- Butler, D.M., Kokalis-Burelle, N., Albano, J.P., McCollum, T.G., Muramoto, J., Shennan, C., and Roskopf, E.N. 2014. Anaerobic Soil Disinfestation (ASD) Combined with Soil Solarization as a Methyl Bromide Alternative: Vegetable Crop Performance and Soil Nutrient Dynamics. *Plant and Soil* 378 (1-2):365-381.
- Zavatta, M., Shennan, C., Muramoto, J., and Mazzola, M. 2014. Evaluating C-sources for anaerobic soil disinfestation. 2014 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions, 12-1- 12-4. Nov. 4-6, 2014. Orlando, FL.
- Shennan, C., Muramoto, J., Zavatta, M., and Mazzola, M. 2014. Non-fumigant approaches for controlling fusarium wilt and charcoal rot of strawberry. 2014 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions, 11-1- 11-4. Nov. 4-6, 2014. Orlando, FL.
- Shennan, C., Muramoto, J., Baird, G., Fennimore, S., Mazzola, M., Lazarovits, G., Martin, F., Subbarao, K., Dara, S., 2014. Non-fumigant strategies for soilborne disease control in California strawberry

Oct. 1, 2015

- production systems. California Strawberry Commission Annual Production Research Report 2012-2013. 153-171.
- Muramoto J., Gliessman S.R., Shennan C., Pisani Gareau T., Monsen K.L., Leap J., Nieto D., Bryer J., Pedersen S., Koike S.T., Smith R.F., Bolda M.P., Gaskell M., Daugovish O., Klonsky K., Bull C. T., Salas W., Li C., and Oomen, G.J.M. 2013 The Organic Research Network Project on the Central Coast of California. *Acta Horticulturae (ISHS)* 1001:35-45.
- Fennimore, S. A., Serohijos, R., Samtani, J.B., Ajwa, H.A. Subbarao, K.V. Martin, F.N., Daugovish, O. Legard, D. Browne, G.T. Muramoto, J. Shennan, C. and Klonsky, K. 2013. Methods to facilitate the adoption of alternatives to methyl bromide soil fumigation by California strawberry growers. *California Agriculture*, July-Sep. 2013 139-146
- Hilimire, K, Gliessman, S. R., Muramoto, J. 2013. Soil fertility and crop growth under poultry/crop integration. *Renewable Agriculture and Food Systems*, 28(2):173-182.
doi:10.1017/S174217051200021X
- Shennan, C., Muramoto, J., Fennimore, S., Mazzola, M., and Lazarovits, G. 2013. Non-fumigant strategies for soilborne disease control in California strawberry production systems. California Strawberry Commission Annual Production Research Report 2011-2012. 145-159. Nov. 3-5, 2013. San Diego, CA.
- Shennan, C., Muramoto, J., Baird, G., Koike, S.T., Bolda, M.P., Mazzola, M. 2013. Optimizing anaerobic soil disinfestation for soilborne disease control. Proceedings of the Annual International Conference on Methyl Bromide Alternatives and Emission Reductions, 13-1 – 13-4. Nov. 3-5, 2013. San Diego, CA.
- Muramoto, J. and Gaskell, M. 2012 Nitrogen Management in Organic Strawberries. in Organic Strawberry Production Manual. pp.43-53. University of California Agriculture and Natural Resources, Oakland, CA
- Muramoto, J. and Gliessman, S. R. 2012 Bioindicators: Farming Practices and Sustainability, In Encyclopedia of Environmental Management; S.E. Jorgensen, ed. Taylor & Francis: New York, 2013; Vol. I, 370–376
- Butler, D.M., Kokalis-Burelle, N., Muramoto, J., Shennan, C., McCollum, T.G. and Roskopf, E.N. 2012. Impact of anaerobic soil disinfestation combined with soil solarization on plant-parasitic nematodes and introduced inoculum of soilborne plant pathogens in raised-bed vegetable production. *Crop Protection* 39:33-40.
- Shennan, C., Muramoto, J., Baird, G., Fennimore, S., Koike, S.T., Bolda, M.P., Daugovish, O., Dara, S., Mazzola, M., Lazarovits, G. 2012. Non-fumigant strategies for soilborne disease control in California strawberry production systems. Proceedings for the Annual International Conference on Methyl Bromide Alternatives and Emission Reductions, 16-1 – 16-4, Nov. 6-8, 2012. Orlando, FL.
- Mazzola, M., Shennan, C., and Muramoto, J. 2012. Application sequence and soil biology influence anaerobic soil disinfestation induced disease suppression. Proceedings for the Annual International Conference on Methyl Bromide Alternatives and Emission Reductions, 57-1 – 57-3. Nov. 6-8, 2012. Orlando, FL.
- Shennan, C, Muramoto, J., Baird, G., Daugovish, O., Koike, S., and Bolda, M. 2011. Anaerobic soil disinfestation : California. Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions, San Diego, CA. p 44.1 – 44.4
- Muramoto, J., Smith, R., Shennan, C, Klonsky, K.M., Leap, J., Silva Ruiz, M and Gliessman S. R. 2011. Nitrogen contribution of legume/cereal mix winter cover crops and organic fertilizers to an organic broccoli crop. *HortScience* 46:1154-1162
- Muramoto, J. 2011. Past and present of family farms in the US: Introducing “The Fate of Family Farming: Variation of an American Idea” by Ronald Jager. *San-Ai Kyoiku Report*, 20: 7-18 (in Japanese).

Oct. 1, 2015

- Muramoto, J., Hidaka, K., and Mineta, T. 2010. Japan – finding opportunities in the current crisis, In Gliessman, S. R. and Rosemeyer, M. E. Eds. *Converting to Sustainable Agroecosystems: Principles, Processes, and Practices*, CRC press, Boca Raton, FL, pp. 273-301
- Gliessman, S.R., and Muramoto, J. 2010. California (USA) - the conversion of strawberry production, In Gliessman, S. R. and Rosemeyer, M. E. Eds. *Converting to Sustainable Agroecosystems: Principles, Processes, and Practices*, CRC press, Boca Raton, FL, pp. 117-131
- Shennan, C, Muramoto, J., Koike, S., Bolda, M., Daugovish, O., Mochizuki, M., Rosskopf, E., Kokalis-Burelle, N., and Butler, D. 2010 Optimizing anaerobic soil disinfestation for strawberry production in California. *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*. 23-1 – 23-4
- Shennan, C., J. Muramoto, S.T. Koike, and O. Daugovish. 2010. Optimizing anaerobic soil disinfestation for non-fumigated strawberry production in California. *California Strawberry Commission Annual Production Research Report 2008-2009*. 113-121.
- Rosskopf, E.N., Kokalis-Burelle, N., Butler, D, Muramoto, J., and Shennan, C, 2010 Development of anaerobic soil disinfestation for Florida vegetable and flower production. *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*. 84-1 – 84-2
- Gaskell, M., Bolda, M., Muramoto, J., and Daugovish, O. 2009. Strawberry nitrogen fertilization from organic nutrient sources. *Acta Horticulturae (ISHS)* 842:385-388.
- Shennan, C, Muramoto, J., Koike, S., Bolda, M., and Daugovish, O. 2009. Optimizing anaerobic soil disinfestation for non-fumigated strawberry production in California. *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*: 101.1-101.3.
- Butler, D.M., Rosskopf, E.N., Kokalis-Burelle, N., Muramoto, J. and Shennan, C. 2009. Field evaluation of anaerobic soil disinfestation in a bell pepper-eggplant double crop. In *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*; 43-1 – 4.
- Li, C., Salas, W. and Muramoto, J. 2009. Process Based Models for Optimizing N management in California cropping systems: Application of DNDC model for nutrient management for organic broccoli production. *Conference proceedings 2009 California Soil and Plant Conference*, 92-98.
- Muramoto, J. 2009. California strawberry production at a turning point (part 2): non-chemical alternatives to methyl bromide fumigation and organic strawberry production. *San-Ai Nogyo Report* 19:1-11 (In Japanese)
- Muramoto, J., Shennan, C., Fitzgerald, A., Koike, S., Bolda, M., Daugovish, O., Rosskopf, E.N., Burelle, N.K., and Butler, D.M. 2008. Effect of anaerobic soil disinfestation on weed seed germination. *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*: 109.1-109.3.
- Shennan, C., Muramoto, J., Bolda, M. P., Koike, S. T., Daugovish, O., Rosskopf, E. N., Burelle, N. K., Klonsky, K. 2007. Optimizing anaerobic soil disinfestation: An alternative to soil fumigation? *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions* 40.1-40.4.
- Muramoto, J. and Gliessman, S. R., 2006. Bioindicators: Use for assessing sustainability of farming practices. In: David Pimentel (Editor). *Encyclopedia of Pest Management*. Marcel Dekker, Taylor & Francis Group, LLC. DOI: 10.1081/E-EPM-120037741. pp. 1-5. Online: <http://www.dekker.com/sdek/abstract~db=enc~content=a713627001>
- Bull, C. T., Muramoto, J., Koike, S. T., Leap, J., Shennan, C. and Goldman, P. 2005. Strawberry cultivars and mycorrhizal inoculants evaluated in California organic production fields. *Crop Management*. DOI: 10.1094/CM-2005-0527-02-RS. Online: <http://www.plantmanagementnetwork.org/pub/cm/research/2005/strawberry/>
- Muramoto, J., Gliessman, S. R., Schmida, D., Shennan, C., and Swezey, S. 2004. Nitrogen dynamics in an organic strawberry production system. *Proceedings of California Organic Production and*

Oct. 1, 2015

- Farming in the New Millennium: A Research Symposium. The International House, University of California, Berkeley, pp.131-134.
- Muramoto, J. and Werner, M. R., 2002. Mustard powder vermifuge: An alternative to formalin expulsion method for earthworm sampling. *Edaphologia*. 70:7-12
- Muramoto, J., Ellis, E. C., Li, Z., Machado, R. M., and Gliessman, S. R. 2001. Field-scale nutrient cycling and sustainability: Comparing natural and agricultural ecosystems. In: Stephen R. Gliessman (Editor). *Agroecosystem Sustainability: Developing Practical Strategies*. CRC Press. Boca Raton, FL, pp. 121-134.
- Muramoto, J. 2001. Can American small farms survive? Implications and background of report "A Time to Act" by USDA National Commission on Small Farms. *San-Ai Nougyo Report*, 10, 15-29 (in Japanese).
- Muramoto, J. 1999. Comparison of nitrate content in leafy vegetables from organic and conventional farms in California: Final Report Submitted to Organic Farming Research Foundation, Santa Cruz, CA. pp. 65. <http://www.agroecology.org/documents/Joji/leafnitrate.pdf>
- Goto, I., Muramoto, J. and Ninaki, M., 1992. Analysis of minerals in plant by closed PTFE vessel acid digestion method and ICP-AES. *Japanese Journal of Soil Science and Plant Nutrition*, 63, 3, 345-348 (in Japanese)
- Muramoto, J., Goto, I. and Ninaki, M., 1992. Rapid analysis of exchangeable cations and cation exchange capacity (CEC) of soils by a shaking extraction method. *Japanese Journal of Soil Science and Plant Nutrition*, 63, 2, 210-215 (in Japanese with English summary)
- Goto, I., Muramoto, J. and Ninaki, M., 1992. Determination of hot water soluble boron in soils by ICP-AES. *Japanese Journal of Soil Science and Plant Nutrition*, 63, 1, 53-57 (in Japanese with English summary)
- Goto, I., Muramoto, J. and Ninaki, M., 1991. Total analysis of major elements in reference soil samples (NDG-1~6) by lithium metaborate fusion ICP-AES. *Japanese Journal of Soil Science and Plant Nutrition*, 62, 5, 542-544 (in Japanese)
- Goto, I., Muramoto, J. and Ninaki, M., 1991. Total analysis of major elements in soils by lithium metaborate fusion ICP-AES. *Japanese Journal of Soil Science and Plant Nutrition*, 62, 5, 521-528 (in Japanese with English summary)
- Muramoto, J., 1990. Organic farming. In: K.Sakurai, A.Torii, H.Hirai, H.Hirotani and K.Yonebayashi (Editors), *The World of Soils*. Asakurashoten Publishing, Tokyo, pp.98-99. (in Japanese)
- Muramoto, J., 1990. Soil testing of organic farming and natural farming vegetable fields (Part 1). *Tsuchi to Kenkou*, 212, 8-26, Japanese Organic Agriculture Association (in Japanese)
- Muramoto, J., 1990. Soil testing of organic farming and natural farming vegetable fields (Part 2). *Tsuchi to Kenkou*, 213, 11-29 Japanese Organic Agriculture Association (in Japanese)
- Muramoto, J., Goto, I. and Ninaki, M., 1987. Determination of exchangeable cations in soils by inductively coupled plasma (ICP) emission spectrometry. *Japanese Journal of Soil Science and Plant Nutrition*, 58, 3, 358-361 (in Japanese with English summary)
- Muramoto, J., Goto, I. and Ninaki, M., 1987. Studies on analytical method of exchangeable cations in soils by inductively coupled plasma (ICP) emission spectrometry. *Japanese Journal of Soil Science and Plant Nutrition*, 58, 3, 350-357 (in Japanese with English summary)
- Goto, I., Muramoto, J. and Ninaki, M., 1986. Studies of agricultural utilization of sludge from water purification plants (Part 5) Behavior of manganese in the sludge. *Journal of Agricultural Science, Tokyo University of Agriculture*, 30, 4, 308-317 (in Japanese with English summary)