Stephen R. Kaffka, University of California Davis

Stephen Kaffka is Director of the California Biomass Collaborative and extension specialist in the Department of Plant Sciences at the University of California, Davis. He is chair of the BioEnergy Work Group for the University of California's Division of Agriculture and Natural Resources. He participates on several advisory committees for the California Energy Commission and California Air Resources Board, including *ex officio* member of the Bioenergy Interagency Work Group. From 2003 to 2007 he was director of the Long Term Research on Agricultural Systems Project. As director he led the development of current and new projects focusing on sustainable agriculture. His commodity assignments include sugar and oilseed crops. Since coming to U.C. Davis in 1992, he has also carried out research on water quality and agriculture in the Upper Klamath Basin, and the reuse of saline drainage water for crop, forage, energy biomass feed stocks and livestock production in salt affected areas of the San Joaquin Valley. He has received meritorious service awards form the American Society of Sugar Beet Technologists and the Soil and Water Conservation Society, is past president of the California chapter of the American Society of Agronomy, and past section leader for American Society of Agronomy's division on environmental quality. He has MS and Ph.D. degrees from Cornell University in agronomy and a B.S. from the University of California at Santa Cruz in biology.

Dr. Kaffka's current projects are listed below:

(1) Economic analysis of potential biofuel crops in California's diverse farming regions and potential wildlife impacts of biofuel crop production. (Funding: CEC via CIEE and UCSB)

(2) Best management practices and environmental impact assessment of new biofuel crops. (Funding: CEC/CDFA)

(3) Assessment of food processing wastes, and their energy potential, in California. (Funding: CEC)

(4) Biomass management zones. Forestry based bioenergy in California. (Funding: CEC)

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EDUCATION:

BS: Biological Sciences, University of California, Santa Cruz (1979),
Hohenheim University, (Germany) Agricultural Sciences (1980),
MS: Agronomy, Cornell University (1984),
PhD: Agronomy, Cornell University (1986)

PROFESSIONAL SOCIETIES AND RELEVANT PROFESSIONAL SERVICES AND ACTIVITIES:

American Society of Agronomy (1981-present) A5 (Environmental Quality) program chair (2007), Crop Science Society (1981-present), Soil Science Society of America (1986-present), California Chapter, American Society of Agronomy (1994-present), American Society of Sugarbeet Technologists (1993-present)-Distinguished service award, 2006, International Institute for Sugarbeet Research (1995-present), SERA-17 (regional research group focusing on P management and cycling) 2000 to present. International Society for Organic Farming Research (2003 to present).

Director, California Biomass Collaborative 2007 to present.
Director, Long Term Research on Agricultural Systems Project, College of Agricultural and Natural Resources, University of California, Davis. 2003 to 2007.
Co-Chair, Bioenergy Work Group, Chair, Sugarbeet Work Group,
Co-chair, UC Water Quality Work Group.
California Chapter, American Society of Agronomy. (Board of Directors: 1995 to 2002. *President*: 2001).
American Society of Sugarbeet Technologists. Board of Directors. (2000 to 2004).
Salinity Technical Advisory Committee, State Water Resources Control Board. 2007 to present
Ex-officio member, California Bioenergy Interagency Working Group 2008 to present.

Selected publications:

Kaffka, S.R., 2009. *Book Review*: Water War in the Klamath Basin, Macho Law, Combat Biology and Dirty Politics. (in press). Vadose Zone Journal.
Kaffka, S.R., (in press). Can we grow biofuel feedstock crops in California sustainably? California Agriculture.
Jenkins, B.M, Williams, R.B., Parker, N., Tittmann, P., Hart, Q., Gildart, M.C., Kaffka, S.R., **Hartsough, B.R., Dempster, P.** (in press). California Biomass Resources, Potentials, Logistics, and Current Uses. California Agriculture.
Grattan,S.R., J.D. Oster, S.E. Benes, and S.R. Kaffka. 2009. Use of saline drainage waters for irrigation. In. (W.W. Wallendar and K.K. Tanji, eds). Agricultural Salinity Assessment and Management (2nd edition). ASCE (In press)
Grattan,S.R., J.D. Oster, S.E. Benes, and S.R. Kaffka. 2009. Drainage water reuse: Concepts, practices and potential crops. (A. Chang, editor). UC University Press (In press)

Kaffka, S.R., 2009. *Review*: Kline, K., et al. 2009. In Defense of Biofuels, Done Right**.** *Issues in Science and Technology***:** http://www.issues.org/25.4/forum.html
Kaffka, S.R., 2009. Book Review: Developing and Extending Sustainable Agriculture, a New Social Contract. C.A. Francis et al. (eds). Vadose Zone Journal (on-line).
Corwin, D.L., Lesch, S.M., Oster, J.D., and Kaffka, S.R., 2008. Short-term sustainability of drainage water reuse: Spatio-temporal impacts on soil chemical properties. J. Environ. Qual. 37:S-8-24.
Mitchell, A.E., Hong, Y-J, Koh, E, Barrett, D.M., Bryant, D. E., Denison, R.F., Kaffka, S.R.; (2008). A ten-year comparison of the influence of organic and conventional crop management practices on the content of flavonoids in tomatoes, J. Agric. Food Chem. 55(15)6154-6159**.**
Oster, J.D., Wichelns, D, and Kaffka, S.R. (2008). Salt management-a key to irrigation sustainability in arid climates. Proceedings of the ICID, Sacramento. CA**,**
Wintermantel, W. M., and Kaffka, S.R. (2006). Sugar beet performance with curly top is related to virus accumulation and age at infection. Plant Disease 90:657-662.
D.L. Corwin, S.M. Lesch, J.D. Oster and S.R. **Kaffka**. (2006). Monitoring management-induced spatio–temporal changes in soil quality through soil sampling directed by apparent electrical conductivity. Geoderma, 131 (3/4)369-387.
Kaffka, S., Bryant, D. and Denison, F. (2005). Comparisons of organic and conventional maize and tomato cropping systems from a long-term experiment. P 218-221 in: Koepke, U., Niggli, U., Neuhoff, D., Cornish, P., Lockeretz, W., and Willer, H. (eds.). Researching Sustainable Systems. Proc. Of the First Scienctific Conference of the International Soceity for Organic Agriculture Research, 21-23 September 2005, Adelaide, Australia. Research Instiute of Organic Agriculutre (FiBL), Frick,Switzerland. 660p.
Kaffka, S.R., Lesch, S. M., Bali, K. and Corwin, D.L. (2005). Sugar beet yield in variable salt-affected fields and the use of geo-referenced electromagnetic induction assessment. Comp. and Electronics in Agric. 46(1-3)329-350.
Kaffka, S.R. and Hembree, K. (2004). The effects of saline soil and irrigation on sugarbeet stand establishment. J. of Sugar Beet Research, 41(3)61-72.
Kaffka, S., Oster, J., Maas, J., and Corwin, D. (2004). Forage production and soil reclamation using saline drainage water. Pg 247-253 IN: (ANON). Proceedings of the 2004 National Alfalfa Symposium, San Diego, California, Dec.13-15. 387pg.
Kaffka, S.R. (2004). Farming Systems, Soils, and Pest Management. In: Anon (ed.). Proceedings of the IVth California Conference on Biological Control. July 13-15, 2004. Berkeley, California
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Lark, R.M., Kaffka, S.R., and Corwin, D. L. (2003). Multi-resolution analysis of data on electrical conductivity of soil using wavelets. J. of Hydrology 272:276-290.
Kaffka, S.R., Wintermantel, W. M., and Lewellen, R. (2002). Comparisons of soil and seed applied systemic insecticides to control Beet Curly Top Virus in the San Joaquin Valley. J. of Sugar Beet Research. 39(3-4):59-74.
Kaffka, S.R., and Dhawan, A. (2002). Farming practices and water quality in the upper Klamath Basin. In: Stephens, L. (ed.) Helping Irrigated Agriculture Adjust to TMDLs. Pg 9-22 In: McGahan, J. C. and Anderson, S.S. (Eds.) Proceedings of the U. S. Committee on Irrigation and Drainage. October 23-26. 2002. Sacramento, CA.
Kaffka, S.R. and Danosky, E. (2002). Farming Practices and Water Quality in the Upper Klamath Basin. Final report to the California State Water Resources Control Board. Sacramento, California. 168 p.
Bassil, E.S., Kaffka, S.R., and Hutmacher, R. (2002). Response of safflower (*Carthamus tinctorius* Linn) to residual soil N following cotton (*Gossypium* spp.) in the San Joaquin Valley of California. J. Agric. Research, Cambridge. 8(1) 1-8.

Kaffka, S.R, Dhawan, A., and Kirby, D. (2002). Irrigation, agricultural drainage, and nutrient loading in the Upper Klamath Basin. Proc. International Ecosystem Health Congress., Sacramento, California. August 1999. Lewis/CRC press.
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State of California
Air Resources Board
Low Carbon Fuel Standard Expert Workgroup
Member Application Form (09/09 New)
SSD/CPB-Form #41

Low Carbon Fuel Standard
Expert Workgroup Member Application Form
Please submit a CV along with this form

APPLICANT: Stephen (First) R. (Middle) Kaffka (Last)

Employer: University of California, Davis

Current Job Title: Director: California Biomass Collaborative

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Broad Areas of Expertise:

Agronomy and crop production, agroecology, agricultural sustainability; biomass energy from diverse feedstocks and sources; biomass sustainability standards.

Years of Relevant Experience: > 30

Comments: As director of the California Biomass Collaborative, I am engaged with all sources and types of biomass energy. I have become knowledgeable about the interactions between public policies and alternative fuel development and production. I have testified numerous times before CARB and the CEC on these issues.

***Please return to*:**
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