

CURRICULUM VITAE

Mark S. Brunell

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EDUCATION

- B. A. Department of Biological Science
California State University, Fullerton
1988
- M. A. Department of Biological Science
California State University, Fullerton
1991
- Ph.D. Department of Botany and Plant Sciences
University of California, Riverside
1996

PROFESSIONAL EXPERIENCE

- 2002 - present *Assistant Professor*, Department of Biological Sciences, University of the Pacific. Courses taught: General Biology for Non-majors and majors, Plant Kingdom, California Flora.
- 2000 – 2002 *Assistant Professor*, Department of Biology, Southwest Missouri State University. Courses taught: General Biology for Non-majors, Identification of Woody Plants.
- 1997-2000 *Assistant Professor*, Department of Biology, Lamar University. Courses taught: General Biology for Majors, General Botany, Plant Taxonomy, Undergraduate Seminar, Graduate Seminar.
- 1997 *Instructor*, “Environmental Science”, Connections Program, University of Redlands
- 1996-97 *Post-doctoral Researcher*, Department of Botany and Plant Sciences, University of California, Riverside
- 1996 *Instructor*, “Biological Science”, PACE Program, Los Angeles Harbor College
- 1996 *Lecturer*, “Biology of Higher Plants”, Department of Biology, California State University, San Bernardino
- 1996 *Lecturer*, “Local Flora”, Department of Biology, California State University, San Bernardino

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- American Society of Plant Taxonomists, California Botanical Society
- Reviewer for *Madroño*, *Systematic Botany*, *Plant Systematics and Evolution*, *Canadian Journal of Botany*, and *Sida*
- Master's Thesis Committee Member, Lamar University; Pre-Professional Advising Committee, Lamar University
- Second Vice President of the California Botanical Society, 2003
- Master's Thesis Advisor, University of the Pacific, 2006

RESEARCH INTERESTS

Plant and Microbial Molecular Systematics, Plant and Microbial Taxonomy, Evolution, Biogeography, Ecology, Conservation Biology.

AWARDS and HONORS

- Outstanding Teaching Assistant, University of California, Riverside. 1996.
- I am a member of Who's Who in Sciences Higher Education (WWSHE).

GRANTS

- Departmental Associations Council Research Grant, California State University, Fullerton, \$400 (*Eriastrum* project)
- Graduate Student Research Grant, American Society of Plant Taxonomists, \$650
- Graduate Dean's Dissertation Research Grant, University of California, Riverside, \$1000
- Minigrant Travel Award, Graduate Student Council, University of California, Riverside, \$200
- Research Fellowship, Santa Barbara Botanic Garden, \$1000 (*Eriastrum* project)
- Lamar University Research Enhancement Grants, \$10,000 (*Pallavicinia* project)
- Eberhardt Research Fellowship, Prairie Dawn study, 2003, \$2952
- Palm hybridization study, funded by the International Palm Society, 2003, \$2000
- Phytoplankton Grazing Augmentation Study, funded by California Bay-Delta Authority (CBDA), \$78,115.
- Investigation of the Causes of the San Joaquin River Hypoxia, funded by California Bay-Delta Authority (CBDA), \$96,000
- SAAG Grant, "Population genetic structure of the *Monardella crispera* complex", 2005, \$2500
- Travel Minigrant for Monardella project, Lawrence R. Heckard Fund of the Jepson Herbarium, \$550
- Thomas J. Long Foundation Fellowship for 2006-2007, "Video-microscope Stations for Bio 51 Laboratory", \$15,000

CONTRIBUTED PAPERS / PRESENTATIONS

Brunell, M.S. and L. H. Rieseberg. 1991. Is the geographically restricted Santa Ana River Woolly-Star genetically depauperate? Supplement to American Journal of Botany 78(6):168. Presented at the AIBS annual meeting, San Antonio, Texas.

Brunell, M.S. and R. Whitkus. 1993. Patterns of morphological variation in Eriastrum densifolium (Polemoniaceae). Supplement to American Journal of Botany 80(6):134. Presented at the AIBS annual meeting, Ames, Iowa.

Brunell, M.S. and R. Whitkus. 1994. Subspecific relationships in Eriastrum densifolium (Polemoniaceae) based on RAPD markers. Supplement to American Journal of Botany 81(6):145. Presented at the AIBS annual meeting, Knoxville, Tennessee.

Engel, C.R., M.S. Brunell, M. Kobayashi, M. Okada, N. Ferguson, and R. Whitkus. 1995. RAPD markers support clonal nature of ancient creosote bush rings. Supplement to American Journal of Botany 82(6):127. Presented at the AIBS annual meeting, San Diego, California.

Tayyar, R., M. Brunell, A.J. Lukaszewski, and J.G. Waines. 1997. Translocations of rye chromosome 2R in wheat to study water-use efficiency. Poster presented at the Third International Triticeae Symposium, Aleppo, Syria.

Rybka, K., V. Korzun, M. Brunell, B. Lapinski, R. Whitkus, and A.J. Lukaszewski. 1999. Comprehensive mapping of recombinant wheat-rye chromosomes. Poster presented at the Plant and Animal Genome Conference, San Diego, California.

Brunell, M. 2004. Origin and relationships of the Brazoria palmetto (*Arecaceae: Sabal*) based on AFLP data. Presented at the Botany 2004 meeting at Snowbird, Utah.

Litton, G. and M. Brunell. 21 July 2004. Upstream studies linking the San Joaquin River to the deep water ship channel. Presented to the San Joaquin River Dissolved Oxygen Total Maximum Daily Load Technical Working Group (SJR DO TMDL TWG).

Litton, G. and M. Brunell. 18 Nov 2004. Nitrification in the San Joaquin River. Presented to the San Joaquin River Dissolved Oxygen Total Maximum Daily Load Technical Working Group (SJR DO TMDL TWG).

Litton, G. and M. Brunell. 2005. Evidence for modeling nitrification in the San Joaquin River as a two-step process. Presented at the California Water and Environmental Modeling Forum Annual Meeting at Asilomar Conference Center, Monterey, California.

Brunell, M. 13 April 2006. Origin and relationships of the Brazoria Palmetto (*Sabal*) based on AFLP markers. Invited public lecture, presented at the California Botanical Society seminar series, UC Berkeley.

Brunell, M. 19 May 2006. Origin and relationships of the Brazoria Palmetto (*Sabal*) based on AFLP markers. Invited seminar, presented at California State University, Stanislaus Biology Colloquium series.

Brunell, M., M. Elvin, and A. Sanders. 2006. The value of trichome characters for species and subspecies delimitation in Californian *Monardella* (Lamiaceae). Presented at the Botany 2006 meeting at Chico, CA.

PUBLICATIONS

Brunell, M.S. and L.H. Rieseberg. 1993. Genetic Variation in the Endangered Santa Ana River Woolly-Star, *Eriastrum densifolium* ssp. *sanctorum* (Polemoniaceae). *Plant Species Biology* 8:1-6.

Brunell, M.S. and R. Whitkus. 1997. RAPD marker variation in *Eriastrum densifolium* (Polemoniaceae): implications for subspecific delimitation and conservation. *Systematic Botany* 22(3):543 - 553.

Zwierzykowski, Z., R. Tayyar, M. Brunell and A.J. Lukaszewski. 1998. Genome recombination in intergeneric hybrids between tetraploid *Festuca pratensis* and *Lolium multiflorum*. *Journal of Heredity* 89(4):324 - 328.

Brunell, M.S. and R. Whitkus. 1999. Assessment of morphological variation in *Eriastrum densifolium* (Polemoniaceae): Implications for subspecific delimitation and conservation. *Systematic Botany* 23(3):351 - 368.

Brunell, M.S. and R. Whitkus. 1999. Analysis of cross-compatibility in *Eriastrum densifolium* (Benth.) Mason (Polemoniaceae). *Plant Systematics and Evolution* 215:241 - 254.

Brunell, M. S., A. J. Lukaszewski, and R. Whitkus. 1999. Development of arm specific RAPD markers for rye chromosome 2R in wheat. *Crop Science* 39:1702 - 1706.