

Curriculum Vitae

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Education:

1986 Ph.D. (Plant and Soil Sciences), University of Massachusetts, Amherst
1983 M.S. (Plant and Soil Sciences), University of Massachusetts, Amherst
1977 B.S. (Agronomy), Wilmington College, Wilmington, Ohio

Employment History:

1993-present Cooperative Extension Specialist and Agronomist in the Agriculture Experiment Station—Alfalfa and forage crops, University of California, Davis, California
1986-1993 Assistant Professor, University of Minnesota, St. Paul, Minnesota. Specialist in New and Alternative Crops.
1985-1986 Research Associate, University of Massachusetts, Amherst, Massachusetts.

Current Position Description:

Cooperative Extension Specialist and Experiment Station Scientist at UC Davis for alfalfa and forage cropping systems, and Chair, UC Alfalfa Workgroup. This position entails statewide responsibility for extension and research activities related to alfalfa and forage crops. Forages occupy about 1.8 million acres in California, the most prominent of which is alfalfa, worth about \$1 billion/year. Conducts educational activities (field days, symposia, newsletters, websites) pertaining to forage crops. Conducts field and laboratory research related to alfalfa and harvested forage crops. Works closely with CE Farm Advisors in the counties, with UC scientists, and with the alfalfa industry in California. Currently chair of the California Alfalfa Symposium, and past president of the National Forage Testing Association. Other interests include introduction of new crop species, crop ecology, and forage quality analysis methods.

Research Interests:

Alfalfa cultivar interactions with agronomic practices, economics of the cutting schedules and the yield-quality tradeoff in alfalfa, forage quality analysis methods, irrigation techniques, alternative forage crops, interactions of alfalfa and the environment.

Honors, Awards:

1984-85 - Fulbright Scholarship for overseas study (India).
1999 - Hilgaard Award for Outstanding Teaching - Extension Specialist. California Association of Farm Advisors and Specialists.
2000 - Award for Excellence - American Society of Agronomy Extension Publications Award - Newsletter category, (California Alfalfa & Forage Review, candidate is editor)
2000 - Extension Education Award - National Association of Farm Advisors and Specialists
2000 - Achievement Award - California Associations of Farm Advisors and Specialists

Industry, Professional Memberships

Chair, UC California Alfalfa Workgroup
Chair, California Hay Testing Consortium
Chair, California Alfalfa Symposium
President, National Forage Testing Association

California Alfalfa & Forage Association founding board member and Secretary
American Society of Agronomy
Crop Science Society of America
California Farm Bureau Federation, Hay Advisory Committee, UC Liaison
Alfalfa Council (national), Advisory Board
National Alfalfa Intensive Training Seminar Instructor

Consulting:

I have consulted with USDA overseas development projects, World Bank Oilseed Project, with private parties in Egypt, Saudi Arabia, Pakistan, China, and India. I have also consulted on subjects related to forage production, hay storage and marketing, spontaneous combustion of hay, hay quality, and the use of forages for mitigation of pollution including applications of effluent and industrial wastes. I have traveled overseas for scientific exchanges to Chile, Russia, India, Poland, and Egypt.

Partial List of Publications

(This is a partial list which includes samples of peer-reviewed (*), proceedings papers and extension articles— a complete list of publications available by contacting Dr. Putnam):

- 2002 Putnam, D.H. Producing Quality Alfalfa in the Western United States. Published IN China International Grasslands Symposium Proceedings. 20-23 May, 2002 Beijing, China.
- 2002* Long, R.F., M. Nett, **D.H. Putnam**, G. Shan, J. Schmierer, B. Reed. Insecticide Choice for Alfalfa may Protect Water Quality. *California Agriculture* 56(5):163:169.
- 2002* Orloff, S.B., **D.H. Putnam**, and S. Blank. 2002. Proper Harvest Timing can Improve Returns for Intermountain alfalfa. *California Agriculture* 56(6): 202-208
- 2001 **Putnam, D.H.**, M. Russelle, S. Orloff, J. Kuhn, L. Fitzhugh, L. Godfrey, A. Kiess, and R. Long. Alfalfa, Wildlife and the Environment—The importance and Benefits of Alfalfa in the 21st Century. 24 pages. California Alfalfa and Forage Association, Novato, CA.
- 2001 Ball, D.M., M. Collins, G.D. Lacefield, N.P. Martin, D.A. Mertens, K.E. Olson, **Putnam, D.H.**, D.J. Undersander, and M.W. Wolf. Understanding Forage Quality. American Farm Bureau Federation Publication 1-01. Park Ridge, IL 16 pages.
- 2001* Blank, S.C, S. Orloff, and **D. H. Putnam**. Sequential Stochastic Production Decisions for a Perennial Crop: The Yield/Quality Tradeoff for Alfalfa Hay. *Journal of Agricultural and Resource Economics* 26(2001): 195-211.
- 2001 **Putnam, D.H.** Emerging Issues of Importance to the Alfalfa Industry. In Proceedings 31st California Alfalfa/Forage Symposium, 12-13 December, 2001, Modesto, CA. Department of Agronomy and Range Science, UC Davis. <http://alfalfa.ucdavis.edu>.
- 2001 **Putnam, D.H.** Preventing the Off-site Movement of Pesticides in Alfalfa. In Proceedings, 31st California Alfalfa/Forage Symposium, 12-13 December, 2001, Modesto, CA. Department of Agronomy and Range Science, UC Davis. <http://alfalfa.ucdavis.edu>.
- 2001* **Putnam, D.H.**, R. Long, B.A. Reed, and W.A. Williams. Effect of Overseeding Forages into Alfalfa on Alfalfa Weevil, Forage Yield and Quality. *J. Agronomy and Crop Science* 187:75-81.
- 2001 Braunwart, K., **D.H. Putnam**, and G. Fohner. Alternative Annual Forages—Now and in the Future. In Proceedings, 31st California Alfalfa/Forage Symposium, 12-13 December, 2001, Modesto, CA. Department of Agronomy and Range Science, UC Davis. <http://alfalfa.ucdavis.edu>.
- 2001 Orloff, S., B. Hanson, and **D.H. Putnam**, Soil Moisture Monitoring—A simple Method to Improve Alfalfa and Pasture Management.. UC Cooperative Extension, Yreka, CA.
- 2000* W. Mick Canevari, **D.H. Putnam**, W. Thomas Lanini, R.F. Long, S. B. Orloff, B.A. Reed, R.V. Vargas. Overseeding and Companion Cropping in Alfalfa. Publication 21594. University of California Agriculture and Natural Resources. 31 pages.
- 2000 **D.H. Putnam**, J. Brummer, D. Cash, A. Gray, T. Griggs, M. Ottman, I. Ray, W. Riggs, M. Smith, G. Shewaker, and R. Todd. The Importance of Western Alfalfa Production. In Proceedings, 2000 National Alfalfa Symposium, 10-12 December, 2000 Las Vegas, NV. University of California Alfalfa Workgroup, Alfalfa Council. 9 pages.
- 2000 **D.H. Putnam**, S. Orloff, and T. Ackerly. Agronomic Practices and Forage Quality. In Proceedings, 2000 National Alfalfa Symposium, 10-12 December, 2000 Las Vegas, NV. University of California Alfalfa Workgroup, Alfalfa Council. 13 pages.
- 2000 S. Orloff, **D. Putnam**, and T. Ackerly. Cutting Schedules to Maximize Profit. 10-12 December, 2000 Las Vegas, NV. University of California Alfalfa Workgroup, Alfalfa Council. 10 pages.
- 2000 **Putnam, D.H.** and J. Richardson. Alfalfa Pesticide Task Force Tackles Regulations, Scientific Issues. *California Alfalfa & Forage Review*. Univ. of California Alfalfa Workgroup. Vol. 3 No. 1. March, 2000. pp. 1-2.
- 1999 **Putnam, D.H.**, T. Ackerly, W.A. Williams, W. Graves, L. Gibbs, and G. Peterson. Environmental and cultivar effects on berseem clover yield, forage quality, and disease response. *Agronomy Abstracts*,

- Madison, WI p. 143.
- 1998 M.C. Mathews and **D.H. Putnam**. The 'California Recognized' Program and California Hay Guidelines. CA/NV Alfalfa Symposium Proceedings, 3-4 December, 1998, Reno, NV. Univ. of California Alfalfa Workgroup. pp. 140-147.
- 1998 **D.H. Putnam**. Relationships Among Testing Results of California Alfalfa Hay Samples. CA/NV Alfalfa Symposium Proceedings, 3-4 December, 1998, Reno, NV. Univ. of California Alfalfa Workgroup. pp. 148-150.
- 1998 **D.H. Putnam** and S. Orloff. How to select an Alfalfa Variety. CA/NV Alfalfa Symposium Proceedings, 3-4 December, 1998, Reno, NV. Univ. of California Alfalfa Workgroup. pp. 194-202.
- 1999 **D.H. Putnam**. Hay Industry Trends: Understanding Alfalfa & Dairy Statistics. CA Alfalfa Symposium Proceedings, 8-9 December, 1999. Univ. of California Alfalfa Workgroup. pp. 1-13.
- 1999 **Putnam, D.H.**, and E. DePeters. Finding a Reliable Hay Testing Lab. California Alfalfa & Forage Review. Univ. of California Alfalfa Workgroup. Vol. 2 No. 3. Summer, 1999. pp. 1-7.
- 1999 **Putnam, D.H.** How to Combat the Misuse of Lab Results. California Alfalfa & Forage Review. Univ. of California Alfalfa Workgroup. Vol. 2 No. 3. Summer, 1999. pp. 1-2.
- 1999 **D.H. Putnam**, Bill Williams, W. Graves, L. Gibbs, and G. Peterson. The potential of Berseem Clover Varieties for California. CA Alfalfa Symposium Proceedings, 8-9 December, 1999. Univ. of California Alfalfa Workgroup. pp. 108-119.
- 1999 S. Orloff, **D.H. Putnam**, T. Ackerly, and S. Geng. Big Bales, Small Bales and Sampling Location: Are There Differences? CA Alfalfa Symposium Proceedings, 8-9 December, 1999. Univ. of California Alfalfa Workgroup. pp. 120-130.
- 1998 **Putnam, D.H.** California Hay Testing Guidelines. Nevada Regional Alfalfa Symposium 3-4 Feb., 1998. Reno, NV.
- 1998 **Putnam, D.H.** Contributions of Alfalfa to Wildlife and the Environment. In 28th National Alfalfa Symposium, 26-27 February, Bowling Green, KY. Certified Alfalfa Seed Council, Davis, CA.
- 1998 **Putnam, D.H.**, S. Mueller, and S.R. Orloff. Welcome to the California Alfalfa & Forage Review. California Alfalfa & Forage Review. Univ. of California Alfalfa Workgroup. Vol. 1 No. 1. Spring, 1998. p. 2.
- 1998 **Putnam, D.H.** California Alfalfa Acreage and Rumors of Acreage. California Alfalfa & Forage Review. Univ. of California Alfalfa Workgroup. Vol. 1 No. 1. Spring, 1998. p. 6.
- 1998 **Putnam, D.H.** Standardize that Hay Test!—Report of the California Hay Testing Consortium. California Alfalfa & Forage Review. Univ. of California Alfalfa Workgroup. Vol. 1 No. 2. Summer, 1998. p. 1.
- 1998 Robinson, P., **D.H. Putnam**, and S. Mueller. Interpreting your forage test report—a forage quality primer. California Alfalfa & Forage Review. Univ. of California Alfalfa Workgroup. Vol. 1 No. 2. Summer, 1998. pp. 2-3.
- 1997* Ressler, C., J.E. Toothache, E. Kaiser, and **D.H. Putnam**. Neurotoxins in a vetch food: Stability to cooking and removal of γ -glutamyl- β -cyanoalanine and β -cyanoalanine and acute toxicity from common vetch (*Vicia sativa* L.) Legumes. J. Agric. Food Chem. 45:189-194.
- 1997* Ayisi, K.K., **D.H. Putnam**, C.P. Vance, M.P. Russelle, and D.L. Allan. Strip intercropping and nitrogen effects on seed, oil, and protein yields of canola and soybean. Agronomy Journal 89(1):23-29.
- 1997* **Putnam, D.H.** and R. Kallenbach. Growers face critical juncture in desert forage production. California Agriculture 51(3):12-16.
- 1996* **Putnam, D.H.**, P.R. Miller, and P. Hucl. Potential for production and utilization of annual canarygrass. Cereal Foods World 41(2):75-82.
- 1996* **Putnam, D.H.**, L.R. Teuber, W.A. Williams, B. Reed, R. Long, G. Peterson, and K. Taggard. The potential of berseem clover as a nurse crop to enhance alfalfa seeding year performance. *In*: American Forage and Grasslands Council Proceedings, Vol. 5, Vancouver, B.C. Canada. June 13-16, 1996.
- 1996* Reed, B.A., R. Long, and **D. H. Putnam**. Overseeding annuals and perennials in alfalfa for reducing Egyptian alfalfa weevil and pesticide use. *In*: American Forage and Grasslands Council Proceedings, Vol. 5, Vancouver, B.C. Canada. June 13-16, 1996.
- 1995* Budin, J.T., W.M. Breene, and **D.H. Putnam**. Some compositional properties of camelina (*Camelina sativa* L. crutz) seeds and oils. J. of American Oil Chemists Society. 72(3):309-315.
- 1994* Lehmann, J.W., A.A. Qureshi, and **D.H. Putnam**. Vitamin E isomers in grain amaranth (*Amaranthus* spp.) Lipids. 29(3):177-181.
- 1994* DeHaan, R.L., D.L. Wyse, N.J. Ehlke, B.D. Maxwell, and **D.H. Putnam**. Simulation of spring-seeded smother plants for weed control in corn (*Zea mays*). Weed Science 42:35-43.
- 1992* **Putnam, D.H.**, J. Wright, and L.A. Field. Seed yield and water-use efficiency of white lupin as influenced by irrigation, row spacing and weeds. Agron. J. 84:557-563.
- 1992* Ayisi, K.K., **D.H. Putnam**, C.P. Vance, and P.H. Graham. Bradyrhizobium inoculation and nitrogen fertilizer effects on seed yield and protein of white lupin. Agron. J. 84:857-861.
- 1991* **Putnam, D.H.**, W.E. Lueschen, B.K. Kanne, and T.R. Hoverstad. A comparison of sweet sorghum cultivars with maize for ethanol production. J. Prod. Agric. 4:377-381.
- 1993 **Putnam, D.H.** The power of diversity—The potential of alternative field crops. *In*: American Small Farm (Jan./Feb., 1993). pp. 43-46.
- 1992* **Putnam, D.H.** and D.L. Allan. Mechanisms of overyielding in a sunflower/mustard intercrop. Agron. J. 84:188-195.
- 1992 **Putnam, D.H.**, E.A. Oelke, and L. McCann. The Center for Alternative Plant and Animal Products - Programs in information exchange and research. Second National New Crops Symposium. 6-9 Oct.,

1985* 1991, Indianapolis, IN.
Putnam, D.H., S.J. Herbert, and A. Vargas. Corn-soybean intercrop density studies. I: Yield complementarity. *Experimental Agriculture* 21:45-52.