

## CURRICULUM VITAE FOR

*DANIEL SANCHEZ-MATA*

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**PRESENT POSITION:** Professor of Plant Biology (Botany and Plant Ecology), Department of Plant Biology, Pharmacy School, Complutense University of Madrid (thereafter UCM), Ciudad Universitaria, E-28040 Madrid. Telephone 34-91-3942087, Fax 34-913941774, Email [dsmata@farm.ucm.es](mailto:dsmata@farm.ucm.es)

**EDUCATION:** Bsc in Plant Ecology and Biochemistry, UCM, 6/81; Pharmacy D in Plant Ecology, *Magna Cum Laude*, UCM 7/86 under Prof. S. Rivas-Martinez; Ph.D. dissertation title: ‘*Estudio de la flora y vegetación del macizo oriental de la Sierra de Gredos (Ávila, España)*’. Expert in Plant and Drug Toxicology (official academic title), Spanish Ministry of Education and Science, UCM 05/03.

**AWARDS:** *Magna Cum Laude*, UCM, 1986; Spanish Ministry of Education and Science Fellow-UCM 1982-1985; B Pharmacy Award (Natural Sciences), UCM, 1984; Pharmacy D Award (Natural Sciences), UCM, 1987; UCM Sabbatical Fellow (‘Del Amo Program’), University of California at Davis, 1996; Spanish Ministry of Education and Science Fellow, University of California at Davis, Visiting Professor 1996, 1997, 2002; UCM Fellow (‘Del Amo Program’), University of California at Davis, Visiting Professor 1998, 2004, 2006 (‘Flores Vallés Program’), and 2008.

**GRANTS:** Recipient of research grants from several Institutions: Spanish Ministry of Education and Science, Spanish Ministry of Environmental Resources, Spanish Ministry of Agriculture and Natural Resources, Government of Madrid Region, UCM, ‘Gran Duque de Alba’ Institution, etc.

**EDITORIAL AND ADVISORY BOARDS:** *Opuscula Botanica Pharmaciae Complutensis*, 1986-1990; *Lazaroa*, 1986-present; *Itinera Geobotanica*, 1987-present; *Folia Botanica Matritensis*, 1989-2000; *Anales del Jardín Botánico de Madrid*, 1991-1992; *Rivasgodaya*, 1991-1993; *Studia Botanica Universidad de Salamanca*, 1992-present; *Anales de Biología de la Universidad de Murcia*, 1993-present; *Folia Geobotanica*, 1998-present; *Schironia*, 2001-present; *Boletín de la Real Sociedad Española de Historia Natural*, 2001-present; *Pytocoeonologia*, 2004-present; *Guineana*, 2007-present; *Plant Biosystems*, 2007-present; *Biological Trace Element Research*, 2007-present, etc.

**PROFESSIONAL OFFICES AND MEMBERSHIPS:** Vice-Chair, Department of Plant Biology II, Pharmacy School, Complutense University of Madrid, 1990-1996; Member of ‘*Amicale Internationale de Phytosociologie*’ (AIP), Organization for the Phytotaxonomic Investigations of the Mediterranean Area (OPTIMA), ‘*Sociedade Broteriana*’, International Association for Vegetation Science (IAVS), European Union for Dune

Conservation and Coastal Management (EUCC), California Native Plant Society (CNPS), California Botanical Society (CBS), Davis Herbaria Society (DHS), 'Gran Duque de Alba' Institution, International Biogeographical Society (IBS), Botanical Society of America (BSA), etc.

**TEACHING:** Undergraduate courses in general and applied Plant Biology, general Botany, Medical Botany, Plant Ecology, Palinology, and Iberian Peninsula vegetation (UCM). Graduate courses on Bioclimatology and Phytosociology (UCM). Co-author of some textbooks on Iberian Peninsula vegetation. Supervisor of several PhD and MSc recipients.

**RESEARCH:** Phytosociology, Plant autoecology and Synecology of vegetation at Mediterranean-climate areas (mainly throughout Southern Europe, North Africa, and Western North America) with emphasis in mediterranean chaparrals, woodlands and montane forests. Ultramafic vegetation worldwide with emphasis in Pacific Northwest areas and Mediterranean Basin. Bioclimatology and Biogeography of Mediterranean-climate areas (mainly throughout Southern Europe, North Africa and Western North America).

Author and co-author of more than one hundred contributions to national and international symposiums and meetings.

**CONSULTING:** Invited Scientific Expert to the ESA Panel on North American Vegetation annual meetings, 2003 (VA, USA), 2004 (OR, USA) - present; Scientific Advisor of Toxicology National Institute (Madrid, Spain), Spanish Drug Agency (Madrid, Spain) and Department of Justice; scientific advisor of 'Gran Duque de Alba' Institution (Avila, Spain); Scientific Advisor for the Government of Madrid Region; Member of National Scientific Committee for the '*Syntaxonomical Checklist of Vascular Plant Communities of Spain and Portugal to association level*' (Spanish Phytosociology Association-International Federation of Phytosociology); Chairman of the 'Biogeoclimatic Framework' Working Group for the 'Circumboreal Vegetation Mapping' project sponsored by the International Arctic Council.

**PUBLICATIONS:** selected publications 1998-present (last 10 years). B = book; CH: book chapter.

1. Sánchez-Mata, D. 1998. The phytosociological approach in North American studies: Some considerations on phytosociological nomenclature. **Folia Geobot. Phytotax.** 32(4): 415-418.
2. Cubas, P., C. Pardo, D. Sánchez-Mata & P. Cantó. 1998. Karyological and taxonomic notes on *Genista* L. (Papilionoideae, Leguminosae) in the Iberian Peninsula. **Bot. J. Linn. Soc.** 128 (4): 423-434. 1998.
3. Rivas-Martínez, S., P. Cantó, F. Fernández-González, J.A. Molina, J.M. Pizarro & D. Sánchez-Mata. 1999. Synopsis of the Sierra de Guadarrama Vegetation (IAVS

Geobotanical Excursion, Villalba-Benavente. July 19, 1999). **Itinera Geobot.** 13: 189-206.

4. Rivas-Martínez, S., D. Sánchez-Mata & M. Costa. 1999. *North American Boreal and Western Temperate Forest Vegetation*. 'Itinera Geobotanica' monograph (vol. 12) [this book includes a coloured biogeographical map of North and Central America]. Servicio de Publicaciones de la Universidad de León. 316 pp. + map + appendices. León. Spain. B.
5. Rivas-Martínez, S., D. Sánchez-Mata & M. Costa. 1999. North American new phytosociological classes. **Itinera Geobot.** 13: 349-352.
6. Martínez-García, J., R.G. Gavilán & D. Sánchez-Mata. Analysis of the salt marsh vegetation of the Iberian Peninsula. A numerical approach. 1999. **Fitosoc.** 36(2): 3-13.
7. Rivas-Martínez, S., D. Sánchez-Mata & M. Costa. 2000. *Gymnocarpio dryopteridis-Abietion lasiocarpae* nomen dubium et nomen ambiguum. **Stud. Bot. Univ. Salamanca** 18: 161-162.
8. Sánchez-Mata, D. 1999. *Bioclimatología: Una ciencia avanzada para la caracterización del medio natural*. In: Discursos de entrada. Asamblea Anual de la Institución 'Gran Duque de Alba, noviembre 1998: 95-112 pp. Publicaciones Institución 'Gran Duque de Alba'. Diputación provincial de Avila. 156 pp. Avila. Spain. **CH**.
9. Sánchez-Mata, D. 1999. *Biogeografía de las sierras de Gredos*. In: Corrales, L. (coord.). Recursos Naturales de las sierras de Gredos: 61-68 pp. Publicaciones Institución "Gran Duque de Alba" 62. Diputación Provincial de Avila. 375 pp. Avila. Spain. **CH**.
10. Sobrino, E., A. González, M. Sanz, E. Dana, D. Sánchez-Mata & R. G. Gavilán. 2001. *The expansion of thermophilic plants in the Iberian Peninsula as a sign of climatic change*. In: G.-R. Walthers, C. A. Burga & P. J. Edwards (ed.). 'Fingerprints' of Climate Change, Adapted Behaviour and Shifting Species Ranges: 163-184 pp. Kluwer Academic / Plenum Publishers. 338 pp. Zürich. Switzerland. **CH**.
11. Pascual, M.E., K. Slowing, D. Sánchez-Mata, M.E. Carretero, A. Villar. 2001. *Lippia*: traditional uses, chemistry and pharmacology: a review. **J. Ethnopharm.** 76: 201-214.
12. Rodríguez-Rojo, M.P., D. Sánchez-Mata, M.P., R.G. Gavilán, S. Rivas-Martínez & M.G. Barbour. 2001. Typology and ecology of the Californian serpentine annual grasslands. **J. Veg. Sci.** 12: 687-698. 2001.
13. Rodríguez-Rojo, M.P., D. Sánchez-Mata, S. Rivas-Martínez & M.G. Barbour. 2001. Syntaxonomical approach for classification of the Californian serpentine annual grasslands. **Lazaroa** 22: 83-94. 2001.

14. Gavilán, R.G., D. Sánchez-Mata, A. Escudero, A. Rubio. 2002. Spatial structure and interspecific interactions in Mediterranean high mountain vegetation (Sistema Central, Spain). **Israel J. Plant Sci.** 50: 217-228.
15. S. Rivas-Martínez & D. Sánchez-Mata. 2004. Phytosociological precisions on some vegetation types of the Pacific Northwest territories. **Stud. Bot. Univ. Salamanca** 22: 43-47
16. Rodríguez-Rojo, M.P. & D. Sánchez-Mata. 2004. Campanulo herminii-Nardion strictae (Nardetea) in the Central Range of the Iberian Peninsula. **Quercetea** 4: 79-92.
17. Rodríguez-Rojo, M.P. & D. Sánchez-Mata. 2004. Mediterranean hay meadow communities: diversity and dynamics in mountain areas throughout the Iberian Central Range (Spain). En coautoría **Biodiv. and Conserv.** 13: 2361-2380.
18. D. Sánchez-Mata, D., Rodríguez-Rojo, M.P. & M.G. Barbour. 2004. *California ultramafic vegetation: diversity and phytosociological survey (Vegetación ultramáfica de California: diversidad y síntesis fitosociológica)*. In: R.S. Boyd, A.J.M. Baker & J. Proctor (ed.). Ultramafic rocks: their soils, vegetation and fauna (Rocas ultramáficas: sus suelos, vegetación y fauna): 177-181. Science Reviews. 347 pp. St. Albans. United Kingdom. **CH**.
19. D. Sánchez-Mata, D., Rodríguez-González, N., Rodríguez-Rojo, M.P., Amils Pibernat, R. & Fuente García, V. de la. 2004. *Studies on California's ultramafic flora: a selected microanalytical screening (Estudios sobre la flora ultramáfica de California: un examen microanalítico selectivo)*. In: R.S. Boyd, A.J.M. Baker & J. Proctor (ed.). Ultramafic rocks: their soils, vegetation and fauna (Rocas ultramáficas: sus suelos, vegetación y fauna): 259-265. Science Reviews. 347 pp. St. Albans. United Kingdom. **CH**.
20. Entrocassi, G.S., Gavilán, R.G. & D. Sánchez-Mata. 2004. Aplicación de análisis multivariabls a los bosques ibéricos de Quercus pyrenaica. **Fitosociologia** 41(1) suppl. 1: 143-154.
21. Rufo Nieto, L., Fuente, V. de la, Sánchez-Mata, D. & M.P. Rodríguez-Rojo. 2004. Studies on Iberian Peninsula ultramafic flora: a selected nickel accumulation screening. **Lazaroa** 25: 161-167. 2004.
22. Rodríguez-Rojo, M.P. & D. Sánchez Mata. 2004. Mediterranean hay meadow communities: diversity and dynamics in mountain areas throughout the Iberian Central Range (Spain). **Biodiv. Conserv.** 13 (12): 2361-2380.
23. Entrocassi, G.S., R.G. Gavilán & D. Sánchez-Mata. 2004. Aplicación de análisis multivariabls a los bosques ibéricos de Quercus pyrenaica. **Fitosociologia** 41(1) suppl. 1: 143-154.

24. Rufo Nieto, L., V. de la Fuente & M.P. Rodríguez-Rojo 2004. Studies on Iberian Peninsula ultramafic flora: a selected nickel accumulation screening. **Lazaroa** 25: 161-167.
25. Rodríguez-Rojo, M.P. & D. Sánchez-Mata. 2006. Análisis biogeográfico y del valor pastoral de los cervunales en el Sistema Central. **Pastos** 33(2): 233-251.
26. Rodríguez-Rojo, M.P. & D. Sánchez-Mata. 2006. Hay meadow communities (Arrhenatherion Koch 1926) throughout the Iberian Central Range (Spain). **Phytocoenologia** 36(2): 231-246.
27. De la Fuente, V., R. Berazaín, L. Rufo, N. Rodríguez, D. Sánchez-Mata & R. Amils. 2007. Nickel localization on tissues of hyperaccumulator species of *Phyllanthus* L. (*Euphorbiaceae*) from ultramafic areas of Cuba. **Biological Trace Element Research** 115 (1): 67-86.
28. Berazaín, R., V. de la Fuente, L. Rufo, N. Rodríguez, R. Amils, D. Sánchez-Mata, B. Díez-Garretas y A. Asensi. 2007. Nickel localization in tissues of different hyperaccumulator species of Euphorbiaceae from ultramafic areas of Cuba. **Plant Soil** 293: 99-106.
29. Gavilán, R., B. Vilches, G.S. Entrocassi & D. Sánchez-Mata. 2007. Modeling current distribution of Spanish *Quercus pyrenaica* forests using climatic parameters. **Phytocoenologia** 37 (3-4): 561-581.
30. Barbour, M.G., D. Sánchez-Mata, M.P. Rodríguez-Rojo, S. Barnhart, F. Llamas & J. Loidi. 007. Age structure of young- and old-growth *Quercus pyrenaica* stands in Spain. **Phytocoenologia** 37 (3-4): 583-598.
31. *Ultramafic Vegetation* (D. Sánchez-Mata). Chapter 3: *California Soils and Examples of Ultramafic Vegetation* (A.T. O'Geen, R. A. Dahlgren, & D. Sánchez-Mata). In: M. G. Barbour, T. Keeler-Wolf & A.A. Schoenherr (ed.). *Terrestrial Vegetation of California* (3<sup>a</sup> edición): 93-(71)-106. University of California Press. 712 p. 2007. Berkeley, CA, USA. **CH.**
32. Díez-Garretas, B., A. Asensi, L. Rufo, N. Rodríguez, R. Amils, D. Sánchez-Mata & V. de la Fuente. 2009. *Saxifraga gemmulosa* Boiss. (Saxifragaceae), a nickel bioindicator species endemic to ultramafic areas of the southern Iberian Peninsula. **Northeastern Naturalist** (special issue) (accepted, in press).