

CURRICULUM VITAE

Name: VILATERSANA LLUCH, ROSER

Rank or Title: "Científico Titular del CSIC"

Postal Address: Botanic Institute of Barcelona. Pg. del Migdia, s. n. 08038 Barcelona, Spain.

Phone: 34-93-2890611 Fax: 34-93-2890614 e-mail: vilatersana@ibb.csic.es

EDUCATION

- B. S., Biology, University of Barcelona, 1984.
- M. S., Botany, University of Barcelona, 1986.
- Ph. D. cum laude, Botany, University of Barcelona, 2002. Ph. D.

PROFESSIONAL EXPERIENCE

- 01/1990-12/1992: Research Collaborator, Departament de Biologia Vegetal - University of Barcelona.
- 03/2000-10/2000: Predoctoral Grant, Botanic Institute of Barcelona- United States Department of Agriculture (USDA).
- 07/2003-08/2003: Postdoctoral Grant, Istituto di Genetica Vegetale, CNR- Consiglio Nazionale Recerche.
- 09/2003-08/2004: Postdoctoral Grant, University of Oslo.
- 01/2005-02/2005: Postdoctoral Grant, University of Oslo.
- 05/2005-06/2007: Postdoctoral Investigator (JAE-Doc CSIC), Botanic Institute of Barcelona.
- 2007-present: "Científico Titular del CSIC", Botanic Institute of Barcelona.

RESEARCH INTERESTS

Biogeography, Biosystematics, Cardueae, Caryology, Centaurea, Compositae, *Carthamus*, *Carduncellus*, *Phonus*, *Femeniasia*, Evolution, Genetic Variation, Hybridization, Molecular Markers, Phylogeny, Phylogeography, Poliploidy and Systematics.

RESEARCH PROGRAMS

Title of the Project: "Estudio taxonómico y biosistemático en el género *Euphorbia* L. (*Euphorbiaceae*) en el área Mediterránea y la Región Macaronésica".

Financing Entity: DIGCyT (PB 87/1008)

From: 1988 to 1991 - Member of the project

Title of the Project: Floristic Biodiversity of Northern Morocco.

Financing Entity: UE (CI1*-CT92-0105)

From: 1993 To: 1996 - Member of the project

Title of the Project: "Estudios palinológicos, cariológicos y biológico-moleculares en los géneros de Compuestas *Artemisia* L. y *Centaurea* L."

Financing Entity: CICyT (PB 93/0032)

From: 1994 To: 1997 - Member of the project

Title of the Project: "Estudios palinológicos, cariológicos y biológico-moleculares en las Compuestas, II. Las subtribus Artemisiinae y Centaureinae".

Financing Entity: Interministerial Commission for Science and Technology, Spain (PB 97/1134)

From: 1998 To: 2001 - Member of the project

Title of the Project: " Els boscos de ribera de la conca de la riera d'Argentona: refugis de biodiversitat"

Financing Entity: CIRIT- Ajuts per al desenvolupament de projectes de recerca d'abast comarcal.

From: 1998 To: 1999 - Member of the project

Title of the Project: "Ajuts de suport als Grups de Recerca de Catalunya (SGR)."

Financing Entity: Generalitat de Catalunya (1999/SGR/00332)

From: 1999 To: 2000 - Member of the project

Title of the Project: "Estudios citogenéticos, palinológicos y biológico-moleculares en las Asteraceae III: las subtribus Artemisiinae, Carduinae y Echinopsidinae."

Financing Entity: Interministerial Commision for Science and Technology, Spain (BOS2001-3041-C02-02)

From: 2001 To: 2004 - Member of the project

Title of the Project: "Ajuts de suport als Grups de Recerca de Catalunya (SGR)."

Financing Entity: Generalitat de Catalunya (2001/SGR/00125)

From: 2001 To: 2004 - Member of the project

Title of the Project: "Estudio biogeográfico de la flora de Andalucía y sus relaciones con la del N. de Marruecos - Proyecto BIOGEO"

Financing Entity: MEC (REN 2002-04478-C03-03/GLO)

From: 2002 To: 2005 - Member of the project

Title of the Project: "Análisis citogenético clásico y molecular para el estudio de las relaciones cariologicas de los géneros *Ptilostemon* Cass. y *Cynara* L."

Financing Entity: CSIC/CNR (2003-IT0012)

From: 2003 To: 2004 - Member of the project

Title of the Project: "Estudios citogenéticos, palinológicos y biológico-moleculares en las Asteraceae IV: las subtribus de las Anthemideae relacionadas con las Artemisiinae y el complejo *Arctium-Cousinia*."

Financing Entity: Interministerial Commision for Science and Technology, Spain (CGL2004-04563-C02-01/BOS)

From: 2004 To: 2007 - Member of the project

Title of the Project: "Ajuts de suport als Grups de Recerca de Catalunya (SGR)."

Financing Entity: Generalitat de Catalunya (2005-SGR/00344)

From: 2005 To: 2008 - Member of the project

Title of the Project: "Estudios filogenéticos y filogeográficos en el Mediterráneo. Dos ejemplos de disjunciones Mediterráneo-Africanas: las Cardueae y el género *Euphorbia*"

Financing Entity: MEC (CGL2006-01765/BOS)

From: 2006 To: 2009 - Member of the project

Title of the Project: Endemism, evolution and phylogeography in the Mediterranean: the case of *Centaurea* sections *Acrolophus*, *Phalolepis* and *Willkommia*.

Financing Entity: MEC (CGL2007-60781/BOS)

From: 2007 To: 2010 - Member of the project

Title of the Project: "Estudios de hibridación en *Carthamus* y *Carduncellus* (Asteraceae). Dos géneros próximos con procesos de especiación muy dispares"

Financing Entity: : MEC-CSIC (200730i1035)

From: 2007 To: 2008 - Leader of the project

Title of the Project: "Diversité et structuration génétique d'*Allium roseum* L. (Alliaceae) en Tunisie: Caractérisation moléculaire par AFLP"

Financing Entity: Programa de Cooperación interuniversitaria e investigación científica entre España y Túnez (A/9937/07)

From: 2008 To: 2008 - Co-Leader of the project

Title of the Project: "Ajuts de suport als Grups de Recerca de Catalunya (SGR)."

Financing Entity: Generalitat de Catalunya (2009-SGR 439)

From: 2009 To: 2013 - Member of the project

Title of the Project: "Patrones poblacionales, evolutivos y filogeográficos en las Cardueae (Compositae) en el Mediterráneo."

Financing Entity: MCINN (CGL2010-18631/BOS)

From: 2010 To: 2013 - Leader of the project

Title of the Project: "Patrones poblacionales, evolutivos y filogeográficos en las Cardueae (Compositae) en el Mediterráneo."

Financing Entity: MCINN (CGL2010-18631/BOS)

From: 2010 To: 2013 - Leader of the project

Title of the Project: "Conservation of the critically endangered endemic flora of the Salvagens ("Savage") Island, Atlantic Ocean"

Financing Entity: The Mohamed bin Zayed Species Conservation Fund (Project 10251651)

From: 2011 To: 2012 - Member of the project

LONG STAYS IN FOREIGN RESEARCH CENTRES

Center: Istituto del Germoplasma. Consiglio Nazionale delle Ricerche (CNR)

City and Country: Bari, Italy

From September 2000 To October 2000 (2 weeks)

Project: "*In situ* hybridization technique (GISH)

Center: Istituto de Genetica Vegetale.. Consiglio Nazionale delle Ricerche (CNR)

City and Country: Bari, Italy

From July 2003 To August 2003 (4 ½ weeks)

Project: Molecular cytogenetics in *Cynara* species.

Center: NCB- National Centre for Biosystematics- Natural History Museums and Botanical Garden. University of Oslo

City and Country: Oslo, Norway

From September 2003 to August 2004 (52 weeks)

Project: *Hybridization Studies, phylogeny and genetic variability in Carthamus-Carduncellus* group.

Center: NCB- National Centre for Biosystematics- Natural History Museums and Botanical Garden. University of Oslo

City and Country: Oslo, Norway

From January 2003 to February t 2005 (4 weeks)

Project: Analysis of the sequences of low copy genes (the RNAP gene family) in the *Carthamus* genus.

CONGRESSES

International congresses: 27 (Oral presentations: 5; Posters: 22)

National congresses: 11 (Oral presentations: 4; Posters: 7)

COACHING AND TUTORING

Doctoral Dissertations: Three in course.

MsC Tutoring: 3.

Visitors Coaching: 3 (Poland and Tunisia).

PUBLISHED WORKS

Chapters in books: 3; Scientific articles in international journals: 30; in local journals: 8.

SCI PUBLICATIONS

Susanna, A. & R. Vilatersana (1996). Las afinidades de *Femeniasia* Susanna (Compositae) o rectificar es de sabios. *Anales del Jardín Botánico de Madrid* 54: 355-357.

Garcia-Jacas, N., A. Susanna, **R. Vilatersana** & M. Guara (1998). New chromosome counts in the subtribe Centaureinae (Asteraceae, Cardueae) from West Asia, II. *Botanical Journal of the Linnean Society* 128: 403-412.

Vilatersana, R., A. Susanna, N. Garcia-Jacas & T. Garnatje (2000). Generic delimitation and phylogeny of the *Carduncellus-Carthamus* complex (Asteraceae) based on ITS sequences. *Plant Systematics and Evolution* 221: 89-105.

Vilatersana, R., A. Susanna, N. Garcia-Jacas & T. Garnatje (2000). Karyology, generic delineation and dysploidy in the genera *Carduncellus*, *Carthamus* and *Phonus* (Asteraceae). *Botanical Journal of the Linnean Society* 134: 425-438.

Garnatje T., N. Garcia-Jacas & **R. Vilatersana** (2001). Natural triploidy in *Centaurea* and *Cheirolophus* (Asteraceae). *Botanica Helvetica* 111: 25-29.

Garcia-Jacas, N., A. Susanna, T. Garnatje & **R. Vilatersana** (2001). Generic delimitation and phylogeny of the subtribe Centaureinae (Asteraceae): a combined nuclear and chloroplast DNA analysis. *Annals of Botany* 87: 503-515.

Vilatersana, R., J. Martín, A. Susanna, N. Garcia-Jacas & T. Garnatje (2001). Pollen studies in subtribe Centaureinae (Asteraceae): the *Carthamus* complex and the genus *Aegialophila* analyzed with electron microscopy. *Plant Biology* 3: 607-615.

Garcia-Jacas, N., T. Garnatje, A. Susanna & **R. Vilatersana** (2002). Tribal and subtribal delimitation and phylogeny of the Cardueae (Asteraceae): a combined nuclear and chloroplast DNA analysis. *Molecular Phylogenetics and Evolution* 22: 51-64.

Garnatje, T., **R. Vilatersana**, C. T. Roché, N. Garcia-Jacas, A. Susanna & D. C. Thill (2002). Multiple introductions from the Iberian Peninsula responsible for invasion of *Crupina vulgaris* Cass. in western North America. *New Phytologist* 154: 419-428.

Susanna, A., T. Garnatje, N. Garcia-Jacas & **R. Vilatersana** (2002). On the correct subtribal placement of the genera *Syreitschikovia* and *Nikitinia* (Asteraceae, Cardueae): Carduinae or Centaureinae? *Botanical Journal of the Linnean Society* 140: 313-319.

Roché, C. T., **R. Vilatersana**, T. Garnatje, R. Gamarra, N. Garcia-Jacas, A. Susanna & D. C. Thill (2003). Tracking an invader to its origins: the invasion case history of *Crupina vulgaris*. *Weed Research* 43: 1-13.

Vallès, J., M. Torrell, T. Garnatje, N. Garcia-Jacas, **R. Vilatersana** & A. Susanna (2003). The genus *Artemisia* and its allies: phylogeny of the subtribe Artemisiinae (Asteraceae, Anthemideae) based on nucleotide sequences of nuclear ribosomal DNA internal transcribed spacers (ITS). *Plant Biology* 5: 274-284.

Susanna, A., N. Garcia-Jacas, **R. Vilatersana**, T. Garnatje, J. Vallès & S. M. Ghaffari (2003). New chromosome counts in the genus *Cousinia* and the related genus *Schmalhausenia* (Asteraceae, Cardueae). *Botanical Journal of the Linnean Society* 143: 411-418.

Garnatje, T., J. Vallès, **R. Vilatersana**, N. Garcia-Jacas, A. Susanna & S. Siljak-Yakovlev (2004). Molecular cytogenetics of *Xeranthemum* L. and related genera (Asteraceae, Cardueae). *Plant Biology* 6: 140-146.

Vilatersana, R., T. Garnatje, A. Susanna & N. Garcia-Jacas (2005). Taxonomic problems in *Carthamus* L. (Asteraceae): RAPD markers and sectional classification. *Botanical Journal of the Linnean Society* 147: 375-383.

Garnatje, T., **R. Vilatersana**, A. Susanna, J. Vallès & S. Siljak-Yakovlev (2004). Contribution to the karyological knowledge of *Echinops* L. (Asteraceae, Cardueae) and related genera. *Botanical Journal of the Linnean Society* 145: 337-344.

Garnatje, T., A. Susanna, N. Garcia-Jacas, **R. Vilatersana** & J. Vallès (2005). A first approach to the molecular phylogeny of the genus *Echinops* L. (Asteraceae): sectional

delimitation and relationships with the genus *Acantholepis* Less. *Folia Geobotanica* 40: 407-419.

Susanna, A., N. Garcia-Jacas, O. Hidalgo, **R. Vilatersana** & T. Garnatje (2006). The Cardueae (Compositae) revisited: insights from a ITS, trnL-trnF and matK nuclear and chloroplast DNA analysis. *Annals of the Missouri Botanical Garden* 93: 153-174.

Garnatje, T., S. Garcia, **R. Vilatersana** & J. Vallès (2006). Genome size variation in the genus *Carthamus* (Asteraceae, Cardueae): Systematic implications and additive changes during allopolyploidization. *Annals of Botany* 97:461-467.

Vilatersana, R., A. Susanna & C. Brochmann (2007). Genetic variation in *Femeniasia* (Compositae, Cardueae) an endemic and endangered monotypic genus from the Balearic Island (Spain). *Botanical Journal of Linnean Society* 153: 97-107.

Sonnante, G., A. V. Carluccio, **R. Vilatersana** & D. Pignone (2007). Evolutionary patterns in *Cynara* and the origin of artichoke and cardoon. *Genetic Resources and Crop Evolution* 54: 483-495.

Vilatersana, R., A. K. Brysting & C. Brochmann (2007). Molecular evidence for hybrid origins of the invasive polyploids *Carthamus creticus* and *C. turkestanicus* (Cardueae, Asteraceae). *Molecular Phylogenetics and Evolution* 44: 610-621.

Sanz, M., **R. Vilatersana**, O. Hidalgo, N. Garcia-Jacas, A. Susanna, G. M. Schneeweiss & J. Vallès (2008). Molecular phylogeny and evolution of floral characters of *Artemisia* and allies (Anthemideae, Asteraceae): evidence from nrDNA ETS and ITS sequences. *Taxon* 57: 1-13.

Font M., N. Garcia-Jacas, **R. Vilatersana**, C. Roquet & A. Susanna (2009). Biogeography and introgression in *Centaurea* section *Acrocentron* inferred from nuclear and plastid DNA sequence analyses. *Annals of Botany* 103: 985-997.

Garcia-Jacas N., P. Soltis, M. Font, D. Soltis, **R. Vilatersana** & A. Susanna (2009). The polyploid series of *Centaurea toletana*: glacial migrations and introgression revealed by nrDNA and cpDNA sequence analyses. *Molecular Phylogenetics and Evolution* 52: 377-394.

Vilatersana, R. (2010). Comments on the paper by Sehgal et al. (2009). *Molecular Phylogenetics and Evolution* 57: 477-478

Guetet, A., **Vilatersana, R.**, Neffati, M. & Boussaid, M. (2010). Genetic diversity in Tunisian rosy garlic populations (*Allium roseum* L.) as evidenced by chloroplastic DNA analysis: Sequence variation of non-coding region and intergenic spacers. *Biochemical Systematics and Ecology* 38: 502-509

Vilatersana, R., N. Garcia-Jacas, T. Garnatje, J. Molero, G. Sonnante & A. Susanna (2010). Molecular phylogeny of the genus *Ptilostemon* (Compositae: Cardueae) and its relationships with *Cynara* and *Lamyropsis*. *Systematic Botany* 35: 907-917

Hilpold, A., P. Schönswetter, A. Susanna, N. Garcia-Jacas & **R. Vilatersana** (2011). Evolution of the central Mediterranean *Centaurea cineraria* group (Asteraceae): evidence for relatively recent, allopatric diversification following trans-oceanic seed dispersal. *Taxon* 60: 528-538

Barres, L., **R. Vilatersana**, J. Molero, A. Susanna & M. Galbany-Casals (2011). Molecular phylogeny of *Euphorbia* sect. *Aphyllis* (Euphorbiaceae) inferred from combined nrDNA and cpDNA markers with biogeographic insights. *Taxon* 60:705-720.

OTHER PUBLICATIONS

Vilatersana, R. & M. Bernal (1992). Mediterranean chromosome Number reports-2. Reports (83-91). *Flora Mediterranea* 2: 249-255.

Vallès, J., M. Torrell, J. Martín, M. Sanz, S. Garcia, T. Garnatje, N. Garcia-Jacas, **R. Vilatersana** & A. Susanna (2003). Phylogeny of subtribe Artemisiinae (Asteraceae),

Anthemideae) based on the sequences of nuclear ribosomal spacers (ITS); relationships with cytogenetic and palynological data. *Compositae Newsletter* 40: 37-38.

Susanna, A., N. Garcia-Jacas, **R. Vilatersana** & T. Garnatje (2003). Generic boundaries and evolution of characters in the *Arctium* group: a nuclear and chloroplast DNA analysis. *Collectanea Botanica (Barcelona)* 26: 101-118.

Sonnante, G., A. V. Carluccio, D. Pignone & **R. Vilatersana** (2007). Variable rDNA regions provide suggestion on artichoke domestication and evolutionary history. *Acta Horticulturae* 630: 123-125.

Vilatersana, R. (2008). Estudios morfoanatómicos de los aquenios en el complejo *Carduncellus-Carthusus* (*Asteraceae: Cardueae*): su utilidad para la clasificación filogenética. *Collectanea Botanica (Barcelona)* 27: 37-64.

Martín, J., S. Garcia, N. Garcia-Jacas, T. Garnatje, O. Hidalgo, J. Pellicer, A. Susanna, J. Vallès & **R. Vilatersana** (2009). Études palynologiques sur des plantes méditerranéennes: vision d'ensemble et études concrètes sur les Astéracées. *Bocconeia* 23: 79-83.

Hilpold A., N. Garcia-Jacas, **R. Vilatersana** & A. Susanna (2009). Two additions to the *Jacea-Lepteranthus* complex: Parallel adaptation in the enigmatic species *Centaurea subtilis* and *C. exarata*. *Collectanea Botanica (Barcelona)* 28: 47-58.

Sanz, M., Schneeweiss, G. M., **Vilatersana, R.** & Vallès, J. (2011). Temporal origins and diversification of *Artemisia* and allies (Anthemideae, Compositae) . *Collectanea Botanica (Barcelona)* 30: 1-9.

BOOK CHAPTERS

Vilatersana, R., A., Susanna & N. Garcia-Jacas (2002). *Carduncellus* Adanson. In: Valdés B., M. Rejdali, A. Achhal, S. L. Jury & J. M. Montserrat (eds.), Checklist of vascular plants of northern Morocco with identification keys II: 719-720. Consejo Superior de Investigaciones Científicas.

Vilatersana, R., A., Susanna & N. Garcia-Jacas (2002). *Carthamus* L. In: Valdés B., M. Rejdali, A. Achhal, S. L. Jury & J. M. Montserrat (eds.), Checklist of vascular plants of northern Morocco with identification keys II: 718. Consejo Superior de Investigaciones Científicas.

Vilatersana, R., A., Susanna & N. Garcia-Jacas (2002). *Phonus* Hill. In: Valdés B., M. Rejdali, A. Achhal, S. L. Jury & J. M. Montserrat (eds.), Checklist of vascular plants of northern Morocco with identification keys II: 718-719. Consejo Superior de Investigaciones Científicas.