

# Full publications list (1984-2024)

Last update: 2 October 2024



Time flies...

## Valentí Rull

**Senior Researcher** – Spanish National Research Council (CSIC), Botanic Institute of Barcelona, Pg. Migdia s/n, 08038 Barcelona, Spain. Email: [vrull@csic.es](mailto:vrull@csic.es)

**Associate Researcher** – Catalan Institute of Paleontology Miquel Crusafont, Autonomous University of Barcelona, C. Columnes ICTA-ICP Bld., 08193 Cerdanyola del Vallès, Barcelona, Spain. Email: [valenti.rull@icp.cat](mailto:valenti.rull@icp.cat)

**Important.** This document is the only reliable source for my publication record, I am not responsible for any other reports including the usual online databases, which I never review or update.

## Books

- Rull, V. 2024. *Origin and Evolution of Caribbean Mangroves. A Time-Continuum Approach*. Springer Nature, Cham.
- Rull, V., Vegas-Vilarrúbia, T. 2024. *Vegetation and Landscape Dynamics on the Iberian Pyrenees During the Last 3000 Years. The Montcortès Palynological Record*. Springer Nature, Cham.
- Carrión, J.S. et al. 2024. *Iberian Paleoflora and Paleovegetation. Vol. III: Holocene*. Universidad Politécnica, Cartagena.
- Rull, V., Stevenson, C.M. (eds.). 2022. *The Prehistory of Rapa Nui (Easter Island): Towards an Interdisciplinary Integrative Framework*. Springer Nature, Cham.
- Rull, V. 2020. *Paleoecological Research on Easter Island. Insights on Settlement, Climate Change, Deforestation and Cultural Shifts*. Elsevier, Amsterdam.
- Carrión, J.S. et al. 2022. *Paleoflora y Paleovegetación Ibérica. III: Holoceno*. Ministerio de Ciencia e Innovación & Fundación Séneca, Murcia.
- Rull, V. 2020. *Quaternary Ecology, Evolution and Biogeography*. Academic Press, London.
- Rull, V., Carnaval, A. (eds.). 2020. *Neotropical Diversification: Patterns and Processes*. Springer Nature, Cham.
- Rull, V., Vegas-Vilarrúbia, T., Huber, O., Señaris, C. (eds.). 2019. *Biodiversity of Pantepui, the Pristine ‘Lost World’ of the Neotropical Guiana Highlands*. Academic Press, London.
- Rull, V., Montoya, E., Giesecke, T., Morris, J. L. (eds.). 2019. *Palynology and Vegetation History* (ebook). Frontiers Media, Lausane.
- Rull, V., Giralt, S. (eds.). 2018. *Paleoecology of Easter Island: Natural and Anthropogenic Drivers of Ecological Change* (ebook). Frontiers Media, Lausane.
- Rull, V. 2018. *El Antropoceno*. Editorial CSIC-La Catarata, Madrid.
- Rull, V. 2016. *La Isla de Pascua. Una Visión Científica*. Editorial CSIC-La Catarata, Madrid.
- Carrión, J.S. et al. 2012. *Paleoflora y Paleovegetación de la Península Ibérica e Islas Baleares: Plioceno-Cuaternario*. Fundación Séneca, Murcia.
- Rull, V. 1991. *Contribución a la Paleoecología de Pantepui y la Gran Sabana: Clima, Biogeografía y Ecología*. CVG-EDELCA, Caracas.

## Articles in JCR journals

- Rull, V. 2024. The Global Humanization Event (GHE). *The Holocene*, doi 10.1177/09596836241285780.
- Rull V., Sigró, J., Vegas-Vilarrúbia, T. 2024. *Cannabis* pollen sources and dispersal in the Iberian Pyrenees during the last century: preliminary results and proposals for future studies. *Review of Palaeobotany and Palynology*, 331: 105208.
- Rull, V. 2024. The oldest Holocene Caribbean mangroves and postglacial sea level rise: biogeographical implications. *Quaternary*, 7: 38.
- Rull, V. 2024. The Rapa Nui Little Ice Age drought: evidence, potential causes and socioecological impact. *Journal of Biogeography*, 51:1014-1017.
- Rull, V., Blasco, A., Sigró, J., Vegas-Vilarrúbia, T. 2024. Last-century forest dynamics in a highland Pyrenean national park and implications for conservation and management. *Plants*, 13: 1144.
- Rull, V. 2024. The ‘Anthropocene’: *alea iacta est*. *EMBO Reports*, 25: 939-943.
- Rull, V., Alba, D., Casanovas-Vilar, I. 2024. Middle Miocene vegetation of the Vallès-Penedès Basin (NE Iberian Peninsula), as recorded by fossil pollen analysis: state of the art and future prospects. *Review of Palaeobotany and Palynology*, 321: 105042.
- Rull, V. 2023. An updated review of fossil pollen evidence for the study of the origin, evolution and diversification of Caribbean mangroves. *Plants*, 12: 3852.
- Rull, V., Blasco, A., Calero, M.A., Blaauw, M., Vegas-Vilarrúbia, T. 2023. A continuous centennial Late Glacial-Early Holocene (15-10 cal kyr BP) palynological record from the Iberian Pyrenees and regional comparisons. *Plants*, 12: 3644.
- Rull, V. 2023. Settlement and anthropization of the Azores Islands. *Journal of Biogeography*, 50: 2008-2011.
- Rull, V. 2023. Anticipation, discovery and serendipity in Quaternary paleoecology: personal insights from the Iberian Pyrenees. *Quaternary*, 6: 42.
- Rull, V., Sigró, J., Vegas-Vilarrúbia, T. 2023. Present climate of Lake Montcortès (central Pyrenees): paleoclimatic relevance and insights on future warming. *Cuadernos de Investigación Geográfica (Geographical Research Letters)*, 49: 23-38.
- Rull, V. 2023. Human settlement and landscape anthropization of remote oceanic islands: a comparison between Rapa Nui (Pacific Ocean) and the Azores (Atlantic Ocean). *Plants*, 12: 2089.
- Rull, V. & Vegas-Vilarrúbia, T. 2023. A recent *Cannabis* pollen increase on the Iberian Pyrenees. *Science of the Total Environment*, 886: 163947.
- Rull, V. 2023. Eocene/Oligocene global disruption and the revolution of Caribbean mangroves. *Perspectives in Plant Ecology, Evolution and Systematics*, 59: 125733.
- Rull, V. 2023. Rise and fall of Caribbean mangroves. *Science of the Total Environment*, 885: 163851.
- Rull, V., Vegas-Vilarrúbia, T. 2023. Resilience of Pyrenean forests after recurrent historical deforestations. *Forests*, 14: 567.
- Rull, V. 2023. Taxon cycles in Neotropical mangroves. *Plants*, 12: 244.
- Rull, V. 2023. The Neogene-Quaternary diversification trend in the shaping of modern Caribbean mangroves. *Quaternary Science Reviews*, 300: 107920.
- Rull, V., Burjachs, F., Carrión, J.S., Ejarque, A., Fernández, S., López-Sáez, J.A., Luelmo-Lautenschlaeger, R., Ochando, J., Pérez-Díaz, S., Revelles, J., Riera, S., Rodríguez, S. 2023. Historical biogeography of *Cannabis* in the Iberian Peninsula: a probabilistic approach based on palynological evidence. *Perspectives in Plant Ecology, Evolution and Systematics*, 58: 125704.
- Rull, V. 2022. Responses of Caribbean mangroves to Quaternary climatic, eustatic and anthropogenic drivers of ecological change: a review. *Plants*, 11: 3502.
- Rull, V., Sacristán-Soriano, O., Sánchez-Melsió, A., Borrego, C.M., Vegas-Vilarrúbia, T. 2022. Bacterial phylogenetic markers in lake sediments provide direct evidence for historical hemp retting. *Quaternary Science Reviews*, 295: 107803.
- Rull, V. 2022. Inductive prediction in biology. *EMBO Reports*, 23: e54846.
- Rull, V. 2022. The Caribbean mangroves: an Eocene innovation with no Cretaceous precursors. *Earth-Science Reviews*, 231: 104070.

- Rull, V.**, Vegas-Vilarrúbia, T. 2022. Climatic and anthropogenic drivers of forest succession in the Iberian Pyrenees during the last 500 years: a statistical approach. *Forests*, 13: 622.
- Rull, V.** 2022. Origin, early expansion, domestication and anthropogenic diffusion of *Cannabis*, with emphasis on Europe and the Iberian Peninsula. *Perspectives in Plant Ecology, Evolution and Systematics*, 55: 125670.
- Rull, V.** 2022. On predictions and laws in biological evolution. *EMBO Reports*, 23: e54392.
- Vegas-Vilarrúbia, T., Corella, J.P., Sigró, J., **Rull, V.**, Dorado-Liñán, I., Valero-Garcés, B.L., Gutiérrez-Merino, E. 2022. Regional precipitation trends since 1500 CE reconstructed from calcite sublayers of a varved Mediterranean lake record (central Pyrenees). *Science of the Total Environment*, 826: 153773.
- Rull, V.** 2022. Biodiversity crisis or mass extinction? *EMBO Reports*, 23: e54193.
- Rull, V.**, Vegas-Vilarrúbia, T. 2021. Conifer forest dynamics in the Iberian Pyrenees during the Middle Ages. *Forests*, 12: 1685.
- Rull, V.**, Vegas-Vilarrúbia, T., Corella, J.P., Trapote, M.C., Montoya, E., Valero-Garcés, B. 2021. A unique Pyrenean varved record provides a detailed reconstruction of Mediterranean vegetation and land-use dynamics over the last three millennia. *Quaternary Science Reviews*, 268: 107128.
- Rull, V.**, Cañellas-Boltà, N., Vegas-Vilarrúbia, T. 2021. Late-Holocene forest resilience in the central Pyrenean highlands as deduced from pollen analysis of Lake Sant Maurici sediments. *The Holocene*, 31: 1797-1803.
- Rull, V.** 2021. The Anthropozoic era revisited. *Lethaia*, 54: 289-299.
- Rull, V.**, Vegas-Vilarrúbia, T., Corella, J.P., Valero-Garcés, B. 2021. Bronze Age to Medieval vegetation dynamics and landscape anthropization in the southern-central Pyrenees. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 571: 110392.
- Rull, V.**, Vegas-Vilarrúbia, T. 2021. A spatiotemporal gradient in the anthropization of Pyrenean landscapes. Preliminary report. *Quaternary Science Reviews*, 258: 106909.
- Rull, V.** 2021. Contributions of paleoecology to Easter Island's prehistory: a thorough review. *Quaternary Science Reviews*, 252: 106751.
- Rull, V.** 2021. Pristinity, degradation and replacement: the three dimensions of human impact on island vegetation. *Progress in Physical Geography*, 45; 407-426.
- Vegas-Vilarrúbia, T., **Rull, V.**, Trapote, M.C., Cao, M., Rosell-Melé, T., Buchaca, T., Gomà, J., López, P., Sigró, J., Safont, E., Cañellas, N., Garcés-Pastor, S., Giralt, S., Corella, P., Zanón, N. 2020. Modern analog approach applied to high-resolution varved sediments – a synthesis for Lake Montcortès (Central Pyrenees). *Quaternary*, 3: 1.
- Cao, M., Rivas-Ruiz, Trapote, M.C., Vegas-Vilarrúbia, T., **Rull, V.**, Rosell-Melé, A. 2020. Seasonal effects of water temperature and dissolved oxygen on isoGDGT proxy (TEX86) in a Mediterranean oligotrophic lake. *Chemical Geology*, 551: 119759.
- Rull, V.** 2020. Drought, freshwater availability and cultural resilience on Easter Island (SE Pacific) during the Little Ice Age. *The Holocene*, 30: 774-780.
- Rull, V.** 2020. The deforestation of Easter Island. *Biological Reviews*, 95: 124-141.
- Rull, V.** 2019. Human discovery and settlement of the remote Easter Island (SE Pacific). *Quaternary*, 2, 15.
- Montoya, E., Pedra- Méndez, J., García-Falcó, E., Gómez-Paccard, M., Giralt, S., Vegas-Vilarrúbia, T., Stauffer, F., **Rull, V.** 2019. Long-term vegetation dynamics of a tropical megadelta: mid-Holocene palaeoecology of the Orinoco Delta (Venezuela). *Quaternary Science Reviews*, 221: 105874.
- Vázquez-Loureiro, D., Gonçalves, V., Sáez, A., Hernández, A., Raposeiro, P., Giralt, S., Rubio-Hernández, M.J., **Rull, V.**, Bao, R. 2019. Diatom-inferred ecological responses of an oceanic lake system to volcanism and anthropogenic perturbations since 1290 CE. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 534: 109285.
- Corella, J.P. Benito, G., Wilhelm, B., Montoya, E., **Rull, V.**, Vegas-Vilarrúbia, T., Valero-Garcés, B. 2019. A millennium-long perspective of flood-related seasonal sediment yield in Mediterranean watersheds. *Global and Planetary Change*, 177: 127-140.
- Seco, I., **Rull, V.**, Montoya, E., Cañellas-Boltà, N., Giralt, S., Margalef, O., Pla-Rabes, S., D'Andrea, W., Bradley, R., Sáez, A. 2019. A continuous palynological record of forest clearing at Rano Kao (Easter Island, SE Pacific) during the last millennium: preliminary report. *Quaternary*, 2, 22.

- Rull, V.** 2019. Human discovery and settlement of the remote Easter Island (SE Pacific). *Quaternary* 2, 15.
- Rull, V.** 2018. What if the ‘Anthropocene’ is not formalized as a new geological series/epoch? *Quaternary*, 1: 24.
- Rull, V.** 2018. Strong Fuzzy EHLFS: a General Conceptual Framework to Address Past Records of Environmental, Ecological and Cultural Change. *Quaternary*, 1: 10.
- Rull, V.** 2018. Palaeoinsights – editorial tips. *Quaternary*, 1: 5.
- Rull, V.** 2018. Quaternary – a multidisciplinary integrative journal to cope with a complex world. *Quaternary*, 1: 1-7.
- Trapote, M., **Rull, V.**, Giralt, S., Montoya, E., Corella, J.P., Vegas Vilarrúbia, T. 2018. High-resolution (subdecadal) pollen analysis of varved sediments from Lake Montcortès (southern Pyrenean flank): a fine-tuned record of landscape dynamics and human impact during the last 500 years. *Review of Palaeobotany and Palynology*, 259: 207-222.
- Margalef, O., Álvarez-Gómez, J.A., Pla-Rabes, S., Cañellas-Boltà, N., **Rull, V.**, Sáez, A., Geyer, A., Peñuelas, J., Sardans, J., Giralt, S. 2018. Revisiting the role of high-energy Pacific events on the environmental history of Easter Island (Rapa Nui). *Geographical Journal*, 184: 310-322.
- Trapote, M.C., Vegas-Vilarrúbia, T., López, P., Puche, E., Gomà, J., Buchaca, T., Cañellas-Boltà, N., Safont, E., Corella, J.P., **Rull, V.** 2018. Modern sedimentary analogs and integrated monitoring to understand varve formation in the Mediterranean Lake Montcortès (Central Pyrenees, Spain). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 496: 292-304.
- Montoya, E., **Rull, V.**, Vegas-Vilarrúbia, T., Corella, J.P., Giralt, S., Valero-Garcés, B. 2018. Grazing activities in the Southern Central Pyrenees during the last millennium as deduced from the non-pollen palynomorphs (NPP) record of lake Montcortès. *Review of Palaeobotany and Palynology*, 254: 8-19.
- Rull, V.**, Montoya, E., Seco, I., Cañellas-Boltà, N., Giralt, S., Margalef, O., Pla-Rabes, S., D'Andrea, W., Bradley, R., Sáez, A. 2018. CLAFS, a holistic climatic-ecological-anthropogenic hypothesis on Easter Island’s deforestation and cultural change: proposals and testing prospects. *Frontiers in Ecology and Evolution*, 6: 32.
- Vegas-Vilarrúbia, T., Corella, J.P., Pérez-Zanón, N., Buchaca, T., Trapote, M.C., López, P., Sigró, J., **Rull, V.** 2018. Historical shifts in oxygenation regime as recorded in the laminated sediments of Lake Montcortès (Central Pyrenees) support hypoxia as a continental-scale phenomenon. *Science of the Total Environment*, 612: 1577-1592.
- Rull, V.**, Connor, S., Elias, R. 2017. Potential natural vegetation and pre-anthropic palynological records on the Azores Islands in a Macaronesian context. *Journal of Biogeography*, 44: 2437-2440.
- Rull, V.** 2017. The ‘Anthropocene’: neglects, misconceptions and possible futures. *EMBO Reports*, 18: 1056-1060.
- Hernández, A., Sáez, A., Bao, R., Raposeiro, P., Trigo, R., Doolittle, S., Masqué, P., **Rull, V.**, Gonçalves, V., Vázquez-Loureiro, D., Rubio-Inglés, M.J., Sánchez-López, G., Giralt, S. 2017. The influences of the AMO and NAO on the sedimentary infill in an Azores archipelago lake climate since ca. 1350 AD. *Global and Planetary Change*, 154: 61-74.
- Rull, V.**, Montoya, E. 2017. Holocene vegetation dynamics in the Apakará summit of the neotropical Guayana Highlands. *Review of Palaeobotany and Palynology*, 240: 22-32.
- Rull, V.**, Lara, A., Rubio-Inglés, M.J., Sáez, A., Giralt, S., Gonçalves, V., Raposeiro, P., Hernández, A., Sánchez-López, G., Vázquez-Loureiro, D., Bao, R., Masqué, P., Sáez, A. 2017. Vegetation and landscape dynamics under natural and anthropogenic forcing on the Azores Islands: a 700-year pollen record from the São Miguel Island. *Quaternary Science Reviews*, 159: 155-168.
- Rull, V.**, Vegas-Vilarrúbia, T. 2017. Potential responses of vascular plants from the pristine ‘lost world’ of the neotropical Guayana Highlands to global warming: review and new perspectives. *Frontiers in Plant Science*, 8: 81.
- Rull, V.**, Trapote, M.C., Safont, E., Cañellas-Boltà, N., Pérez-Zanón, N., Sigró, J., Vegas-Vilarrúbia, T. 2017. Seasonal patterns of pollen sedimentation in Lake Montcortès (Central Pyrenees) and potential applications to high-resolution paleoecology: a 2-year pilot study. *Journal of Paleolimnology*, 57: 95-108.

- Raposeiro, P.M., Rubio-Inglés, M.J., González, A., Hernández, A., Sánchez-López, G., Vázquez-Loureiro, D., **Rull, V.**, Bao, R., Costa, A.C., Gonçalves, V., Sáez, A., Giralt, S. 2017. Impact of the historical introduction of exotic fishes on the chironomid community of Lake Azul (Azores Islands). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 466: 77-88.
- Vegas-Vilarrúbia, T., **Rull, V.** 2016. Undervalued impacts of sea-level rise: vanishing deltas. *Frontiers in Ecology and Evolution*, 4: 77.
- Rull, V.** 2016. The EIRA database: Last Glacial and Holocene radiocarbon ages from Easter Island's sedimentary records. *Frontiers in Ecology and Evolution*, 4: 44.
- Rull, V.**, Cañellas-Boltà, N., Margalef, O., Pla-Rabes, S., Sáez, A., Giralt, S. 2016. Three millennia of climatic, ecological and cultural change on Easter Island: a synthetic overview. *Frontiers in Ecology and Evolution*, 4: 29.
- Rull, V.** 2016. Natural and anthropogenic drivers of cultural change on Easter Island: review and new insights. *Quaternary Science Reviews*, 150: 31-41.
- Rull, V.**, Vegas-Vilarrúbia, T., Safont, E. 2016. The Lost World's pristinity at risk. *Diversity and Distributions*, 22: 995-999.
- Rull, V.** 2016. The 'Anthropocene': a requiem for the Geological Time Scale? *Quaternary Geochronology*, 36: 76-77.
- Rull, V.**, Vegas-Vilarrúbia, T., Montoya, E. 2016. The neotropical Gran Sabana region: palaeoecology and conservation. *The Holocene*, 26: 1162-1167.
- Rull, V.** 2016. The Humanized Earth System (HES). *The Holocene*, 26: 1513-1515.
- Safont, E., **Rull, V.**, Vegas-Vilarrúbia, T., Montoya, E., Huber, O., Holst, B.K. 2016. Late Holocene vegetation and fire dynamics in the Guayana Highlands: the Uei-tepui palynological record. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 455: 33-43.
- Safont, E., Vegas-Vilarrúbia, T., **Rull, V.**, Holst, B.K., Huber, O., Nozawa, S., Vivas, Y., Font, X., Silva, A. 2016. Plant communities and environmental factors in the Guayana Highlands: monitoring for conservation under future climate change. *Systematics and Biodiversity*, 14: 327-344.
- Flantua, S.G.A., Hooghiemstra, H., Vuille, M., Behling, H., Carson, J., Gosling, W., Hoyos, I., Ledru, M.-P., Montoya, E., Mayle, F., Maldonado, A., **Rull, V.**, Tonello, M., Whitney, B.S., González-Arango, C. 2016. Climate change and human impact in Central and South America over the last 2000 years. *Climate of the Past*, 12: 483-523.
- Rull, V.** 2016. Free science under threat. *EMBO Reports*, 17: 131-135.
- Cañellas-Boltà, N., **Rull, V.**, Sáez, A., Margalef, O., Bao, R., Pla-Rabes, S., Valero-Garcés, B., Giralt, S. 2016. Vegetation dynamics at Lake Raraku (Easter Island) catchment during the last 34,000 years. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 446: 55-69.
- Rull, V.** 2015. Pleistocene speciation is not refuge speciation. *Journal of Biogeography*, 42: 602-604.
- Vegas-Vilarrúbia, T., Hernández, E., **Rull, V.**, Rull-Vegas, E. 2015. The Orinoco megadelta as a conservation target in the face of the ongoing and future sea level rise. *Science of the Total Environment*, 515-516: 129-142.
- Rull, V.**, Vegas-Vilarrúbia, T., Montoya, E. 2015. Neotropical vegetation responses to Younger Dryas climates as analogs for future climate change scenarios and lessons for conservation. *Quaternary Science Reviews*, 115: 28-38.
- Rull, V.** 2015. Long-term vegetation stability and the concept of potential natural vegetation in the Neotropics. *Journal of Vegetation Science*, 26: 603-607.
- Rull, V.**, Vegas-Vilarrúbia, T. 2015. Crops and weeds from the lake Montcortès region (southern Pyrenees) during the last millennium: a comparison of historical and palynological records. *Vegetation History and Archaeobotany*, 24: 699-710.
- Flantua, S.G.A., Hooghiemstra, H., Grimm, E.C., Behling, H., Bush, M.B., González-Arango, C., Gosling, W., Ledru, M.-P., Lozano-García, S., Maldonado, A., Prieto, A., **Rull, V.**, Van Boxel, J.H. 2015. Updated site compilation of the Latin American Pollen Database. *Review of Palaeobotany and Palynology*, 223: 104-115.
- Rull, V.**, Montoya, E., Vegas-Vilarrúbia, T., Ballesteros, T. 2015. New insights on paleofires and savannisation in northern South America. *Quaternary Science Reviews*, 122: 158-165.

- Rull, V.**, Cañellas-Boltà, N., Margalef, O., Sáez, A., Pla-Rabes, S., Giralt, S. 2015. Late Holocene vegetation dynamics and deforestation in Rano Aroi: implications for Easter Island's ecological and cultural history. *Quaternary Science Reviews*, 126: 219-226.
- Rull, V.** 2014. Conservation, human values and democracy. *EMBO Reports*, 15: 17-20.
- López-Vila, J., Montoya, E., Cañellas-Boltà, N., **Rull, V.** 2014. Modern non-pollen palynomorphs sedimentation along an elevational gradient in the south-central Pyrenees (southwestern Europe) as a tool for Holocene paleoecological reconstruction. *The Holocene*, 24: 372-345.
- Cañellas-Boltà, N., **Rull, V.**, Sáez, A., Prebble, M., Margalef, O. 2014. First records and potential paleoecological significance of *Dianella* (Xanthorrhoeaceae), an extinct representative of the native flora of Easter Island. *Vegetation History and Archaeobotany*, 23: 331-338.
- Rull, V.** 2014. Macrorefugia and Microrefugia. *Trends in Ecology and Evolution*, 29: 243-244.
- Rull, V.**, Montoya, E. 2014. *Mauritia flexuosa* palm swamp communities: natural or human-made? A palynological study of the Gran Sabana region (northern South America) within a neotropical context. *Quaternary Science Reviews*, 99: 13-33.
- Safont, E., **Rull, V.**, Vegas-Vilarrúbia, T., Holst, B.K., Huber, O., Nozawa, S., Vivas, Y., Silva, A. 2014. Establishing a baseline of plant diversity and endemism in a neotropical mountain summit for future comparative studies assessing upward migration: an approach from biogeography and nature conservation. *Systematics and Biodiversity*, 12: 292-314.
- Rull, V.** 2014. The most important application of science. *EMBO reports*, 15: 919-922.
- Rull, V.**, Vegas-Vilarrúbia, T. 2014. Preliminary report on a mid-19th century *Cannabis* pollen peak in NE Spain: historical context and potential chronological significance. *The Holocene*, 24: 1378-1383.
- Ballesteros, T., Vegas-Vilarrúbia, T., Montoya, E., Abbott, M.B., Giralt, S., Stansell, N., **Rull, V.** 2014. An 8700-year record of the interplay of environmental and human drivers in the development of the southern Gran Sabana landscape, SE Venezuela. *The Holocene*, 24: 1757-1770.
- Rull, V.** 2014. Time continuum and the true long-term ecology: from theory to practice. *Frontiers in Ecology and Evolution*, 2: 75.
- Rull, V.**, Cañellas-Boltà, N., Sáez, A., Margalef, O., Bao, R., Pla-Rabes, S., Valero-Garcés, B., Giralt, S. 2013. Challenging Easter Island's collapse: the need for interdisciplinary synergies. *Frontiers in Ecology and Evolution*, 1: 3.
- Cañellas-Boltà, N., **Rull, V.**, Sáez, A., Margalef, O., Bao, R., Pla-Rabes, S., Valero-Garcés, B., Blaauw, M., Giralt, S. 2013. Vegetation changes and human settlement of Easter Island during the last millennia: a multiproxy study of the Lake Raraku sediments. *Quaternary Science Reviews*, 72: 36-48.
- Nogué, S., **Rull, V.**, Vegas-Vilarrúbia, T. 2013. Elevation gradients in the neotropical table mountains: patterns of endemism and implications for conservation. *Diversity and Distributions*, 19: 676-687.
- Rull, V.** 2013. A futurist perspective on the Anthropocene. *The Holocene*, 23: 1198-1201.
- Margalef, O., Cañellas-Boltà, N., Pla-Rabes, S., Giralt, S., Pueyo, J. J., Joosten, H., **Rull, V.**, Buchaca, T., Hernández, A., Valero-Garcés, B. L., Moreno, A., Sáez, A. 2013. A 70,000 multiproxy record of climatic and environmental change from Rano Aroi peatland (Easter Island). *Global and Planetary Change*, 108: 72-84.
- Rull, V.** 2013. Paleoclimates and Amazon biodiversity. *Journal of Biogeography*, 40: 1413-1414.
- Rull, V.** 2013. Are we willing to build a better future? *Trends in Ecology and Evolution*, 28: 443-444.
- Rull, V.**, Montoya, E., Nogué, S., Vegas-Vilarrúbia, T., Safont, E. 2013. Ecological palaeoecology in the neotropical Gran Sabana region: long-term records of vegetation dynamics as a basis for ecological hypothesis testing. *Perspectives in Plant Ecology, Evolution and Systematics*, 15: 338-359.
- Rull, V.** 2013. Some problems in the study of the origin of tropical biodiversity using palaeoecological and molecular phylogenetic evidence. *Systematics and Biodiversity*, 11: 415-423.
- Rull, V.** 2012. Time, evolution and physical reductionism. *EMBO Reports*, 13: 181-185.
- Cañellas-Boltà, N., **Rull, V.**, Sáez, A., Margalef, S., Giralt, S., Pueyo, J. J., Birks, H. H., Birks, H. J. B., Pla, S. 2012. Macrofossils in Raraku Lake (Easter Island). An integration of sedimentary and

- geochemical records and a palaeoecological synthesis for the last 34 cal kyr. *Quaternary Science Reviews*, 34: 113-126.
- Rull, V.** 2012. Paleobiodiversity and taxonomic resolution: linking past trends with present patterns. *Journal of Biogeography*, 39: 1005-1006.
- Rull, V.** 2012. Community ecology: diversity and dynamics over time. *Community Ecology*, 13: 102-116.
- Safont, E., Vegas-Vilarrúbia, T., **Rull, V.** 2012. Use of Environmental Impact Assessment (EIA) tools to set priorities and optimize strategies in biodiversity conservation. *Biological Conservation*, 149: 113-121.
- Vegas-Vilarrúbia, T., Nogué, S., **Rull, V.** 2012. Global warming, habitat shifts and potential refugia for biodiversity conservation in the neotropical Guayana Highlands. *Biological Conservation*, 152: 159-168.
- Corella, J. P., Brauer, A., Mangili, C., **Rull, V.**, Vegas-Vilarrúbia, T., Morellón, M., Valero-Garcés, B. 2012. The 1.5 ka varved record of Lake Montcortès (southern Pyrenees, NE Spain). *Quaternary Research*, 78: 323-332.
- Rull, V.** 2012. Past natural history and ecological biodiversity modeling. *Systematics and Biodiversity*, 10: 1-5.
- Montoya, E., **Rull, V.**, Vegas-Vilarrúbia, T. 2012. Non-pollen palynomorph studies in the Neotropics: the case of Venezuela. *Review of Palaeobotany and Palynology*, 186: 102-130.
- Rull, V.** 2011. Origins of biodiversity. *Science*, 331: 398-399.
- Rull, V.**, Vegas-Vilarrúbia, T. 2011. What is long-term in ecology? *Trends in Ecology and Evolution*, 26: 3-4.
- Rull, V.** 2011. Sustainability, capitalism and evolution. *EMBO Reports*, 12: 103-106.
- Montoya, E., **Rull, V.**, Stansell, N. D., Bird, B. W., Nogué, S., Vegas-Vilarrúbia, T., Abbott, M. B., Díaz, W. A. 2011. Vegetation changes in the Neotropical Gran Sabana (Venezuela) around the Younger Dryas Chron. *Journal of Quaternary Science*, 26: 207-218.
- Vegas-Vilarrúbia, T., **Rull, V.**, Montoya, E., Safont, E. 2011. Quaternary palaeoecology and nature conservation: a general review and some examples from the Neotropics. *Quaternary Science Reviews*, 30: 2361-2388.
- Rull, V.** 2011. Neotropical biodiversity: timing and potential drivers. *Trends in Ecology and Evolution*, 26: 508-513.
- Montoya, E., **Rull, V.**, Nogué, S. 2011. Early human occupation and land use changes near the boundary of the Orinoco and the Amazon basins (SE Venezuela): palynological evidence from El Paují record. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 310: 413-426.
- Montoya, E., **Rull, V.** 2011. Gran Sabana fires (SE Venezuela): a paleoecological perspective. *Quaternary Science Reviews*, 30: 3430-3444.
- Montoya, E., **Rull, V.**, Stansell, N. D., Abbott, M. B., Nogué, S., Bird, B. W., Díaz, W. 2011. Forest-savanna-morichal dynamics in relation to fire and human occupation in the southern Gran Sabana (SE Venezuela) during the last millennia. *Quaternary Research*, 76: 335-344.
- Corella, J. P., Moreno, A., Morellón, M., **Rull, V.**, Giralt, S., Rico, M. T., Pérez-Sanz, A., Valero-Garcés, B. 2011. Climate and human impact on a meromictic lake during the last 6,000 years (Montcortès Lake, Central Pyrenees, Spain). *Journal of Paleolimnology*, 46: 351-367.
- Rull, V.**, González-Sampériz, P., Corella, J. P., Morellón, M., Giralt, S. 2011. Vegetation changes in the southern Pyrenean flank during the last millennium in relation to climate and human activities: the Montcortès lacustrine record. *Journal of Paleolimnology*, 46: 387-404.
- Scussolini, P., Vegas-Vilarrúbia, T., **Rull, V.**, Corella, P., Valero, B., Gomà, J. 2011. Mid-late Holocene climate change and human impact based on diatoms, algae and aquatic vegetation pollen from Lake Montcortès (NE Iberian Peninsula) *Journal of Paleolimnology*, 46: 369-385.
- Rull, V.** 2010. The candid approach. *EMBO Reports*, 11: 14-17.
- Rull, V.**, Cañellas-Boltà, N., Sáez, A., Giralt, S., Pla, S., Margalef, O. 2010. Paleoecology of Easter Island: evidence and uncertainties. *Earth-Science Reviews*, 99: 50-60.
- Stansell, N. D., Abbott, M. B., **Rull, V.**, Rodbell, D. T., Bezada, M., Montoya, E. 2010. Abrupt Younger Dryas cooling in the northern tropics recorded in lake sediments from the Venezuelan Andes. *Earth and Planetary Science Letters*, 293: 154-163.

- Rull, V.** 2010. Food security: green revolution drawbacks. *Science*, 328: 169.
- Cody, S., Richardson, J. E., **Rull, V.**, Ellis, Ch., Pennington, R. T. 2010. The great American biotic interchange revisited. *Ecography*, 33: 326-332.
- Rull, V.** 2010. On microrefugia and cryptic refugia. *Journal of Biogeography*, 37: 1623-1627.
- Rull, V.** 2010. Who needs a greener revolution? *EMBO Reports*, 11: 659-663.
- Montoya, E., **Rull, V.**, van Geel, B. 2010. Non-pollen palynomorphs from surface sediments along an altitudinal transect of the Venezuelan Andes. *Palaeoegography, Palaeoclimatology, Palaeoecology*, 297: 169-183.
- Rull, V.**, Stansell, N. D., Montoya, E., Bezada, M., Abbott, M. B. 2010. Palynological signal of the Younger Dryas in the tropical Venezuelan Andes. *Quaternary Science Reviews*, 29: 3045-3056.
- Rull, V.** 2009. Microrefugia. *Journal of Biogeography*, 36: 481-484.
- Rull, V.** 2009. Time's arrow: left or right? *Quaternary Geochronology*, 4: 83.
- Rull, V.** 2009. New paleoecological evidence on the role of fire in the Gran Sabana (Venezuelan Guayana), and implications for early human occupation. *Vegetation History and Archaeobotany*, 18: 219-224.
- Nogu  , S., **Rull, V.**, Vegas-Vilarr  bia, T. 2009. Modeling biodiversity loss by global warming in Pantepui, northern South America: projected upward migration and potential habitat loss. *Climatic Change*, 94: 77-85.
- Nogu  , S., **Rull, V.**, Montoya, E., Huber, O., Vegas-Vilarr  bia, T. 2009. Paleoecology of the Guayana Highlands (northern South America): Holocene pollen record from the Eruoda-tepui, in the Chimant   massif. *Palaeoegography, Palaeoclimatology, Palaeoecology*, 281: 165-173.
- Rull, V.**, Vegas-Vilarr  bia, T., Nogu  , S., Huber, O. 2009. Conservation of the neotropical vascular flora from the neotropical Guayana Highlands in the face global warming. *Conservation Biology*, 23: 1323-1327.
- Rull, V.** 2009. Beyond us. *EMBO Reports*, 10: 1191-1195.
- Ca  ellas-Bolt  , N., **Rull, V.**, Vigo, J., Mercad  , A. 2009. Modern pollen-vegetation relationships along an altitudinal transect in the Central Pyrenees (southwestern Europe). *The Holocene*, 19: 1185-1200.
- Rull, V.** 2009. On the use of paleoecological evidence to assess the role of humans in the origin of the Gran Sabana (Venezuela). *Human Ecology*, 37: 783-785.
- Rull, V.**, Vegas-Vilarr  bia. 2008. Biopiracy rules hinder conservation efforts. *Nature*, 453: 26.
- Rull, V.** 2008. Speciation timing and neotropical biodiversity: the Tertiary-Quaternary debate in the light of molecular phylogenetic evidence. *Molecular Ecology*, 17: 2722-2729.
- Rull, V.**, L  pez-S  ez, J. A., Vegas-Vilarr  bia, T. 2008. Contribution of non-pollen palynomorphs to the palaeolimnological study of a high-altitude Andean lake (Laguna Verde Alta, Venezuela). *Journal of Paleolimnology*, 40: 399-411.
- Rull, V.**, Vegas-Vilarr  bia, T., Nogu  , S., Montoya, E. 2008. Bureaucratic obstruction of conservation science in the Guayana Highlands. *Conservation Biology*, 22: 508-509.
- Rull, V.** 2007. Holocene global warming and the origin of the neotropical Gran Sabana in the Venezuelan Guayana. *Journal of Biogeography*, 34: 279-288.
- Rull, V.**, Nogu  , S. 2007. Potential migration routes and barriers for vascular plants of the Neotropical Guayana Highlands during the Quaternary. *Journal of Biogeography*, 34: 1327-1341.
- Rull, V.** 2007. The Guayana Highlands: a promised (but threatened) land for ecological and evolutionary science. *Biotropica*, 39: 31-34.
- Stansell, N. D., Abbott, M. B., Polissar, P. J., Wolfe, A. P., Bezada, M., **Rull, V.** 2007. Reply: Late Quaternary deglacial history of the M  rida Andes: response to a comment. *Journal of Quaternary Science*, 22: 823-825.
- Rull, V.**, Vegas-Vilarr  bia, T. 2006. Unexpected biodiversity loss under global warming in the neotropical Guayana Highlands: a preliminary appraisal. *Global Change Biology*, 12: 1-6.
- Rull, V.** 2006. A high mountain pollen-altitude calibration set for palaeoecological use in the tropical Andes. *The Holocene*, 16: 105-117.
- Rull, V.** 2006. Quaternary speciation in the Neotropics. *Molecular Ecology*, 15: 4257-4259.

- Polissar, P. J., Abbott, M. B., Wolfe, A. P., Bezada, M., **Rull, V.**, Bradley, R. S. 2006. Solar modulation of Little Ice Age in the tropical Andes. *Proceedings of the National Academy of Sciences USA*, 103: 8937-8942.
- Rull, V.** 2006. Reply to a comment by Dirsztowsky, R. W., Mahaney, W. C., Kalm, V. and Beukens, R. on 'A Middle Wisconsin interstadial in the northern Andes' (Rull, V. 2005. JSAES 19, 173-179). *Journal of South American Earth Sciences*, 21: 315-317.
- Rull, V.** 2005. Palaeovegetational and palaeoenvironmental trends in the summit of the Guaiquinima massif (Venezuelan Guayana) during the Holocene. *Journal of Quaternary Science*, 20: 135-145.
- Rull, V.** 2005. Biotic diversification in the Guayana Highlands: a proposal. *Journal of Biogeography*, 32: 921-927.
- Rull, V.** 2005. Vegetation and environmental constancy in the Neotropical Guayana Highlands during the last 6000 years? *Review of Palaeobotany and Palynology*, 135: 205-222.
- Rull, V.** 2005. A Middle Wisconsin interstadial in the northern Andes. *Journal of South American Earth Sciences*, 19: 173-179.
- Rull, V.**, Abbott, M. B., Polissar, P. P., Wolfe, A. P., Bezada, M., Bradley, R. S. 2005. 15,000-year pollen record of vegetation change in the tropical high altitude Andes at Laguna Verde Alta, Venezuela. *Quaternary Research*, 64: 308-317.
- Stansell, N. D., Abbott, M. B., Polissar, P. J., Wolfe, A., **Rull, V.** 2005. Late Quaternary deglacial history of the Mérida Andes. *Journal of Quaternary Science*, 20: 801-812.
- Rull, V.** 2004. An evaluation of the Lost World and Vertical Displacement hypotheses in the Chimanta Massif, Venezuela Guayana. *Global Ecology and Biogeography*, 13: 141-148.
- Rull, V.** 2004. Is the 'Lost World' really lost? Palaeoecological insights on the origin of the peculiar flora of the Guayana Highlands. *Naturwissenschaften*, 9: 139-142.
- Rull, V.** 2004. Biogeography of the 'Lost World': a palaeoecological perspective. *Earth-Science Reviews*, 67: 125-137.
- Rull, V.** 2003. Contribution of quantitative ecological methods to the interpretation of stratigraphically homogeneous pre-Quaternary sequences: A palynological example from the Oligocene of Venezuela. *Palynology*, 27: 75-98.
- Rull, V.** 2003. An illustrated key for the identification of pollen from Pantepui and the Gran Sabana (eastern Venezuelan Guayana). *Palynology*, 27: 99-133.
- Vegas-Vilarrúbia, T., **Rull, V.** 2002. Natural and Human disturbance history of the Playa Medina Mangrove community (eastern Venezuela). *Caribbean Journal of Science*, 38: 66-76.
- Rull, V.** 2002. High-impact palynology in petroleum geology: Applications from Venezuela (northern South America). *American Association of Petroleum Geologists Bulletin*, 86: 279-300.
- Rull, V.** 2001. A morphometric study of early Miocene Mauritiidites from northern South America. Paleoecological and evolutionary implications. *Grana*, 40: 163-167.
- Rull, V.** 2001. A quantitative palynological record from early Miocene of western Venezuela, with emphasis on mangroves. *Palynology*, 25: 109-126.
- Rull, V.** 2000. Ecostratigraphic study of Paleocene and early Eocene palynological cyclicity in northern South America. *Palaios*, 15: 14-24.
- Rull, V.**, Vegas-Vilarrúbia. 2000. Chrysophycean stomatocysts in a Caribbean mangrove. *Hydrobiologia*, 428: 145-150.
- Rull, V.** 2000. Erratum to: "Palaeofloristic and palaeovegetational changes across the Paleocene/Eocene boundary in northern South America. Review of Palaeobotany and Palynology" [Rev. Palaeobot Palynol. 107 (1999) 83-95]. *Review of Palaeobotany and Palynology*, 108: 83.
- Rull, V.** 1999. A palynological record of a secondary succession after fire in the Gran Sabana, Venezuela. *Journal of Quaternary Science*, 14: 137-152.
- Rull, V.**, Vegas- Vilarrúbia, T., Espinoza de Pernía, N. 1999. Palynological record of an Early-Mid Holocene mangrove in Eastern Venezuela. Implications for sea-level rise and disturbance history. *Journal of Coastal Research*, 15: 496-504.
- Rull, V.**, Vegas-Vilarrúbia, T. 1999. Surface palynology of a small coastal basin from Venezuela and its potential paleoecological applications. *Micropaleontology*, 45: 365-393.

- Rull, V.** 1999. Palaeofloristic and palaeovegetational changes across the Paleocene/Eocene boundary in northern South America. Review of Palaeobotany and Palynology. *Review of Palaeobotany and Palynology*, 107: 83-95.
- Rull, V.** 1999. Palaeoclimatology and sea-level history in Venezuela. New data, land-sea correlations and proposals for future studies in the frame of the IGBP-PAGES Project. *Interciencia*, 24: 92-101.
- Rull, V.** 1999. Sequence analysis of Western Venezuelan Cretaceous to Eocene sediments using palynology. Chrono-palaeoenvironmental and palaeovegetational approaches. Reply. *Palynology*, 23: 35-36.
- Rull, V.** 1998. Palaeoecology of Pleniglacial sediments from the Venezuelan Andes. 1-Palynological record of El Caballo Stadial. *Review of Palaeobotany and Palynology*, 99: 95-114.
- Rull, V.** 1998. Middle Eocene mangroves and vegetation changes in the Maracaibo basin. *Palaios*, 13: 287-296.
- Rull, V.** 1998. Biogeographical and evolutionary considerations on *Mauritia* (Arecaceae), based on palynological evidence. *Review of Palaeobotany and Palynology*, 100: 109-122.
- Rull, V.** 1998. Evolución de los manglares neotropicales: La crisis del Eoceno. *Interciencia*, 23: 355-362.
- Rull, V.** 1997. Sequence analysis of Western Venezuelan Cretaceous to Eocene sediments using palynology. Chrono-palaeoenvironmental and palaeovegetational approaches. *Palynology*, 21: 79-90.
- Rull, V.** 1997. Oligo-Miocene Palynology of the Rio Chama sequence (Western Venezuela), with comments on fossil algae as paleoenvironmental indicators. *Palynology*, 21: 213-229.
- Rull, V.** 1996. Late Pleistocene and Holocene climates of Venezuela. *Quaternary International*, 31: 85-94.
- Rull, V.** 1996. Holocene vegetational succession in the Guaiquinima and Chimantá massifs (SE Venezuela). *Interciencia*, 21: 7-20.
- Rull, V.** 1995. Organic matter assemblages from recent sediments of the Tacarigua coastal lagoon (Northern Venezuela). *Geologie en Mijnbouw*, 74: 93-104.
- Rull, V.** 1992. Successional patterns of the Gran Sabana (Southeastern Venezuela) vegetation during the last 5,000 years, and its responses to climatic fluctuations and fire. *Journal of Biogeography*, 19: 329-338.
- Rull, V.** 1991. Palaeoecological significance of Chrysophycean stomatocysts: a statistical approach. *Hydrobiologia*, 220: 161- 165.
- Perdomo-Ponce, D., Salgado Labouriau, M., Hernández, A., Alvarez, F., **Rull, V.**, Guariglia, M., Bolbochán, D., Suárez, V. 1991. Common airborne allergens and their clinical relevance in the Caracas valley. *Investigación Clínica*, 32:157-186.
- Ponce, D. P., **Rull V.**, Hernández, A., Salgado-Labouriau, M. 1989. Preselection area of a representative aerobiological sampling station of a tropical valley. *Investigación Clínica*, 30:13-20.
- Rull, V.**, Schubert, C. 1989. Evolución de las hipótesis sobre el origen del Caribe. *Interciencia*, 14: 74-85.
- Salgado-Labouriau, M.L., **Rull, V.**, Schubert, C., Valastro Jr., S. 1988. The establishment of vegetation after Late-Pleistocene deglaciation in the Páramo Miranda, Venezuelan Andes. *Review of Palaeobotany and Palynology*, 55: 5-17.
- Rull, V.** 1987. A note on pollen counting in palaeoecology. *Pollen Spores*, 29: 471-480.
- Rull, V.**, Salgado-Labouriau, M.L., Schubert, C., Valastro Jr., S. 1987. Late Holocene temperature depression in the Venezuelan Andes: Palynological evidence. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 60: 109-121.
- Salgado-Labouriau,M.L., **Rull, V.** 1986. A method of introducing exotic pollen for paleoecological analysis of sediments. *Review of Palaeobotany and Palynology*, 47: 97-103.

## Articles in other journals

- Rull, V.** 2024. Antropoceno y cambio climático. *Arqueología e Historia*, 57: 30-35.
- Rull, V.** & Vegas-Vilarrúbia, T. 2023. La indústria del cànem al Pirineu. La història que ens expliquen els sediments de l'estany de Montcortès. *Mètode*, 119: 31-36.
- Vegas, T., **Rull, V.**, Blasco, A., Calero, M.A., Garcés, S., Cañellas-Boltà, N. 2022. LACEN: lagos centinela de cambio global en los parques nacionales. *RED*, 10: 25.
- Rull, V.** 2022. Paleoecology helps optimize restoration efforts by identifying unrealistic preanthropic targets. *PAGES Magazine*, 30: 18-19.
- Rull, V.** 2021. Cultural development of the Pallars region (NE Iberian Peninsula) from the Bronze Age to the present. *PaleorXiv*, doi 10.31233/osf.io/kb95m
- Rull, V.** 2019. La Isla de Pascua. El colapso de una civilización. *Historia National Geographic*, 183: 94-111
- Rull, V.** 2017. The ‘Anthropocene’ uncovered. *Collectanea Botanica*, 36: e008.
- Rull, V.**, Vegas-Vilarrúbia, T., Montoya, E. 2017. Paleoecology as a guide to landscape conservation and restoration in the neotropical Gran Sabana. *PAGES Magazine*, 25: 82-83.
- Rull, V.**, Cañellas-Boltà, N., Margalef, O., Pla-Rabes, S., Sáez, A., Giralt, S. 2016. Climate changes and cultural shifts on Easter Island during the last three millennia. *PAGES Magazine*, 24: 70-71.
- Calero, M.A., Valero-Garcés, B.L., **Rull, V.**, Vegas-Vilarrúbia, T., Garcés, S., López-Vila, J., Camarero, J.J. 2016. El registro sedimentario del lago Sant Maurici (Pirineos Centrales). *Geogaceta*, 59: 11-14.
- Rull, V.** 2015. South American peopling and neotropical savannisation. *Journal of Brief Ideas*, doi 10.5281/zenodo.16589
- Rull, V.** 2014. The social utility of science. *Collectanea Botanica*, 33: 85-90.
- Rull, V.** 2014. L'estany de Montcortès: Un arxiu climàtic i ecològic excepcional. *Brolla*, 33: 10-11.
- Rull, V.** 2014. Ecological palaeoecology: a missing link between ecology and evolution. *Collectanea Botanica*, 33: 65-73.
- Rull, V.** 2014. Biodiversity, mountains and climate change. *Collectanea Botanica*, 33: 75-79.
- Mercadé, A., Vigo, J., **Rull, V.**, Vegas-Vilarrúbia, T., Garcés, S., Lara, A., Cañellas-Boltà, N. 2013. Vegetation and landscape around Lake Montcortès (Catalan pre-Pyrenees) as a tool for palaeoecological study of lake sediments. *Collectanea Botanica*, 32: 87-101.
- Rull, V.** 2013. La ciencia, esa extranjera. *Collectanea Botanica*, 32: 121-125.
- Rull, V.** 2012. Towards a scientific force: some insights and a manifesto. *Collectanea Botanica*, 31: 121-125.
- Rull, V.** 2012. Cycad diversification and tropical biodiversity. *Collectanea Botanica*, 31: 103-106.
- Rull, V.**, Montoya, E., Nogué, S., Huber, O. 2011. Preliminary palynological analysis of a Holocene peat bog from Apakará-tepui (Chimantá Massif, Venezuelan Guayana). *Collectanea Botanica*, 30: 79-88.
- Rull, V.** 2011. Research efficiency in relation to investment. *Collectanea Botanica*, 30: 107-108.
- Rull, V.** 2010. El mito del desarrollo sostenible. *Collectanea Botanica*, 29: 103-109.
- Safont, E., **Rull, V.**, Vegas-Vilarrúbia, T., Nogué, S. 2010. L'escalfament global i l'extinció de les plantes: Un exemple tropical. *L'Atzavara*, 20: 29-42.
- Rull, V.** 2010. Ecology and paleoecology: two approaches, one objective. *The Open Ecology Journal*, 3: 1-5.
- López-Martínez, C., Lara, A., **Rull, V.**, Campbell, L., Nogué, S. 2010. Additions to the Pantepui pollen flora (Venezuelan Guayana): the Maguire Collection. *Collectanea Botanica*, 29: 31-49.
- Montoya, E., **Rull, V.**, Nogué, S., Díaz, W. 2009. Paleoecología del Holoceno en la Gran Sabana, SE Venezuela: Análisis preliminar de polen y microcarbonos en la Laguna Encantada. *Collectanea Botanica*, 28: 65-79.
- Rull, V.**, Vegas-Vilarrúbia, T., Nogué, S., Montoya, E., Cañellas, N., Lara, A. 2007. Quaternary palaeoclimatology, neotropical diversity and potential effects of global warming. *Contributions to Science*, 3: 407-415.
- Rull, V.** 2007. On the origin of present neotropical biodiversity: a preliminary meta-analysis about speciation timing using molecular phylogenies. *ORSIS*, 22: 105-119.

- Rull, V.**, Vegas- Vilarrúbia, T., Nogué, S. 2005. Cambio climático y diversidad de la flora vascular en las montañas tabulares de Guayana. *ORSIS*, 20: 61-71.
- Rull, V.** 2004. A novel use for the classical Hiller borer. *PAGES Newsletter*, 13: 3.
- Rull, V.** 2004. Biogeografía histórica de las tierras altas de Guayana y origen de la biodiversidad neotropical. *ORSIS*, 19: 37-48.
- Rull, V.** 2003. Sherlock Holmes y el Mundo Perdido. Una historia sobre el origen y la evolución de la flora neotropical de Panteui. *Historia Natural*, 3: 24-33.
- Rull, V.** 2000. Holocene sea level rise in Venezuela: a preliminary curve. *Boletín de la Sociedad Venezolana de Geólogos*, 25: 32-36.
- Rull, V.**, Bezada, M., Mahaney, W. C. 1999. The middle-Wisconsin El Pedregal interstadial in the Venezuelan Andes: palynological record. *Current Research in the Pleistocene*, 16: 111-113.
- Rull, V.** 1998. Modern and Quaternary palynological studies in the Caribbean and Atlantic coasts of northern South America: a paleoecologically-oriented review. *Boletín de la Sociedad Venezolana de Geólogos*, 23(2): 5-24.
- Rull, V.**, Vegas-Vilarrúbia, T. 1998. Palynomorphs other than pollen and fern spores in glacial sediments from the Venezuelan Andes. Preliminary assessment on their potential paleoecological value. *Boletín de la Sociedad Venezolana de Geólogos*, 23: 5-27.
- Rull, V.** 1998. Contribución a la morfología polínica de las Urticales de los Andes venezolanos. *Acta Botanica Venezolica*, 21: 43-73.
- Rull, V.**, Vegas-Vilarrúbia, T. 1997. Acari remains from pleniglacial sediments of the Venezuelan Andes and their palaeolimnological significance. *Current Research in the Pleistocene*, 14: 153-155.
- Lorente, M.A., **Rull, V.**, Ruiz, M., Durán, I., Truskowski, I., Di Giacomo, E. 1997. Nuevos aportes para la datación de los principales eventos tectónicos y unidades litoestratigráficas de la Cuenca de Maracaibo, Venezuela occidental. *Boletín de Geología*, 18: 33-50.
- Rull, V.** 1997. Notas sobre Ecoestratigrafía. *Boletín de la Sociedad Venezolana de Geólogos*, 22: 34-36.
- Rull, V.**, Vegas-Vilarrúbia, T. 1996. Palynological evidence for the Last Glacial Maximum (LGM) in the Venezuelan Andes: preliminary results. *Current Research in the Pleistocene*, 13: 89-91.
- Rull, V.**, Vegas-Vilarrúbia, T. 1994. Palaeolimnological studies in Venezuela. *Verhandlungen Internationale Vereinigung Limnologie*, 25: 1122-1127.
- Hambalek, N., **Rull, V.**, Di Giacomo, E., Díaz de Gamero, M.L. 1994. Evolución paleoambiental de la secuencia del Neógeno en el Surco de Urumaco, estado Falcón. Estudio palinológico y litológico. *Boletín de la Sociedad Venezolana de Geólogos*, 19: 7-19.
- Rull, V.**, Vegas-Vilarrúbia, T. 1993. Palaeolimnological record of a macrophyte hydrosere from Lake Carinapay, Southeastern Venezuela. *Tropical Freshwater Biology*, 3: 295-307.
- Rull, V.**, Vegas-Vilarrúbia, T. 1993. Objective dimension choice and multidimensional plotting as a means to improve the PCA interpretation in the Earth Sciences: examples from palaeolimnology and river ecology. *Mitteilungen aus dem Geologische-Paläontologische Institut der Universität Hamburg*, 74: 55-64.
- Rull, V.**, Schubert, C. 1993. Evolución de las hipótesis sobre el origen del Caribe. *Boletín de Historia de las Geociencias en Venezuela*, 49: 42-53.
- Rull, V.** 1993. El Equilibrio Puntuado frente a la ortodoxia darwiniana: una revisión crítica. *Paleontología Evolución*, 26-27: 37-45.
- Rull, V.** 1992. Paleoecología y análisis secuencial de una sección deltaica terciaria de la Cuenca de Maracaibo. *Boletín de la Sociedad Venezolana de Geólogos*, 46: 16-26.
- Rull, V.**, Vegas-Vilarrúbia, T. 1991. A paleolimnological example of modulated succession from Southeast Venezuela, and its significance in Pleistocene Paleoecology. *Current Research in the Pleistocene*, 8: 81-83.
- Rinaldi, M., **Rull, V.**, Schubert, C. 1990. Análisis paleoecológico de una turbera en la Gran Sabana (Santa Cruz de Mapaurí), Venezuela: Resultados preliminares. *Acta Científica Venezolana*, 41: 66-68.
- Rull, V.** 1990. Quaternary palaeoecology and ecological theory. *ORSIS*, 5: 91-111.

- Rull, V.**, Schubert, C. 1989. The Little Ice Age in the tropical Venezuelan Andes. *Acta Cientifica Venezolana*, 40: 71-73.
- Rull, V.**, Rinaldi, M. 1989. Size variations of the *Kochia scoparia* pollen under different treatments, mounting, and storing media. *Acta Cientifica Venezolana*, 40: 470-472.
- Schubert, C., **Rull, V.** 1988. Alluvial and palynological studies in the Venezuelan Guayana Shield. *Tropical Geomorphology Newsletter*, 5: 10-13.
- Rull, V.**, Schubert, C., Huber, O., Aravena, R. 1988. Estudios paleoecológicos sobre aluviones y turberas de sabana y tepuyes de la Gran Sabana (Estado Bolívar): Resultados preliminares. *Pantepui*, 4: 25-29.
- Rull, V.**, Schubert, C., Aravena, R. 1988. Palynological studies in the Venezuelan Guayana Shield: preliminary results. *Current Research in the Pleistocene*, 5: 54-56.
- Vegas-Vilarrúbia, T., **Rull, V.** 1988. A multivariate statistical classification of Venezuelan blackwater rivers. *Mitteilungen aus dem Geologische-Paläontologische Institut der Universität Hamburg*, 66: 51-61.
- Rull, V.** 1987. Evidencia de una oscilación climática fría, contemporánea con la Pequeña Edad de Hielo, en los Andes venezolanos. *Boletín de la Asociación Venezolana de Arqueología*, 4: 13-27.
- Conde, J.E., **Rull, V.**, Vegas, T. 1986. Análisis exploratorio de datos ecológicos y biométricos: Gráficos stem-and-leaf (tallo-y-hoja) y boxplots (cajas gráficas). *Enseñanza de las Ciencias*, 4: 153-162.
- Rull, V.** 1986. Diatomeas y crisofíceas en los sedimentos acuáticos de una depresión cárstica del Pirineo catalán. *Oecologia aquatica*, 8: 11-24.
- Rull, V.**, Vegas,T., Navarro, J. 1984. Extinción de la luz en los embalses españoles. Relaciones con la concentración de clorofila y las partículas en suspensión. *Oecologia aquatica*, 7: 25-36.

## Book chapters

- Rull, V.**, Blasco, A., Calero, M.A., Vegas-Vilarrúbia, T. 2023. Bassa Nera (Pletiu dera Muntanheta). In: Carrión, J.S. (ed.), *Paleoflora and Paleovegetation of the Iberian Peninsula*. Fundación Séneca, Murcia.
- Rull, V.**, Cañellas-Boltà, N., Vegas-Vilarrúbia, T. 2022. Lake sant Maurici. In: Carrión, J.S. (ed.), *Paleoflora and Paleovegetation of the Iberian Peninsula*. Fundación Séneca, Murcia.
- Montoya, E., **Rull, V.**, Trapote, M.C., Vegas-Vilarrúbia, T. 2022. Montcortès. In: Carrión, J.S. (ed.), *Paleoflora y Paleovegetación Ibérica, Volumen III: Holoceno*. Fundació Séneca, Murcia, pp. 744-751.
- Rull, V.**, Stevenson, C.M. 2022. Introduction. In: Rull, V., Stevenson, C.M. (eds.), *The prehistory of Rapa Nui (Easter Island): Towards an Interdisciplinary Integrative Framework*. Springer Nature, Cham, pp. 1-16.
- Rull, V.** 2022. Prehistoric paleoecology of Easter Island. In: Rull, V., Stevenson, C.M. (eds.), *The prehistory of Rapa Nui (Easter Island): Towards an Interdisciplinary Integrative Framework*. Springer Nature, Cham, pp. 275-309.
- Rull, V.**, Stevenson, C.M. 2022. Towards a holistic approach to Easter island prehistory. In: Rull, V., Stevenson, C.M. (eds.), *The prehistory of Rapa Nui (Easter Island): Towards an Interdisciplinary Integrative Framework*. Springer Nature, Cham, pp. 609-626.
- Rull, V.**, Carnaval, A. 2020. Introduction. In: Rull, V., Carnaval, A. (eds.), *Neotropical Diversification: Patterns and Processes*. Springer, Berlin, pp 1-10.
- Rull, V.** 2020. Neotropical diversification: historical overview and conceptual insights. In: Rull, V., Carnaval, A. (eds.), *Neotropical Diversification: Patterns and Processes*. Springer, Berlin, pp. 13-49.
- Rull, V.**, Vegas-Vilarrúbia, T. 2020. The Pantepui “lost world”: towards a biogeographical, ecological and evolutionary synthesis of a pristine Neotropical sky-island archipelago. In: Rull, V., Carnaval, A. (eds.), *Neotropical Diversification: Patterns and Processes*. Springer, Berlin, pp. 369-413.
- Rull, V.**, Vegas-Vilarrúbia, T., Huber, O., Señaris, C. Introduction. In: Rull, V., Vegas-Vilarrúbia, T., Huber, O., Señaris, C. (eds.), *Biodiversity of Pantepui: the pristine ‘Lost World’ of the Neotropical Guiana Highlands*. Academic Press, London, pp. xv-xviii.

- Rull, V.**, Huber, O., Vegas-Vilarrúbia, T., Señaris, C. 2019. Definition and characterization of the Pantepui biogeographical province. In: Rull, V., Vegas-Vilarrúbia, T., Huber, O., Señaris, C. (eds.), *Biodiversity of Pantepui: the pristine 'Lost World' of the Neotropical Guiana Highlands*. Academic Press, London, pp. 3-32.
- Rull, V.**, Montoya, E., Nogué, S., Safont, E., Vegas-Vilarrúbia, T. 2019. Climatic and ecological history of Pantepui and surrounding areas. In: Rull, V., Vegas-Vilarrúbia, T. Huber, O., Señaris, C. (eds.), *Biodiversity of Pantepui: the pristine 'Lost World' of the Neotropical Guiana Highlands*. Academic Press, London, pp. 33-54.
- Rull, V.**, Vegas-Vilarrúbia, T. 2019. Pantepui as a dynamic biogeographical concept. In: Rull, V., Vegas-Vilarrúbia, T., Huber, O., Señaris, C. (eds.), *Biodiversity of Pantepui: the pristine 'Lost World' of the Neotropical Guiana Highlands*. Academic Press, London, pp. 55-67.
- Rull, V.** 2019. Origin and evolution of the Pantepui biota. In: Rull, V., Vegas-Vilarrúbia, T., Huber, O., Señaris, C. (eds.), *Biodiversity of Pantepui: the pristine 'Lost World' of the Neotropical Guiana Highlands*. Academic Press, London, pp. 69-91.
- Huber, O., **Rull, V.** 2019. Plant communities. In: Rull, V., Vegas-Vilarrúbia, T., Huber, O., Señaris, C. (eds.), *Biodiversity of Pantepui: the pristine 'Lost World' of the Neotropical Guiana Highlands*. Academic Press, London, pp. 149-164.
- Rull, V.**, Nogué, S., Safont, E., Vegas-Vilarrúbia, T. 2019. Pantepui and Global Warming. In: Rull, V., Vegas-Vilarrúbia, T., Huber, O., Señaris, C. (eds.), *Biodiversity of Pantepui: the pristine 'Lost World' of the Neotropical Guiana Highlands*. Academic Press, London, pp. 403-417.
- Antczak, A.T., Lemoine Buffet, L.A., Antczak, M.M., **Rull, V.** 2019. Early Indigenous Occupations of Margarita Island and the Venezuelan Caribbean. In: Hofman, C.L. Antczak, .T. (eds.), *Early Settlers of the Insular Caribbean: Dearchaizing the Archaic*. Sidestone Press, Leiden, PP. 129-144.
- Rull, V.**, Montoya, E., Giesecke, T., Morris, J.L. 2018. Editorial: Paleoecology and Vegetation History. *Frontiers in Earth Science*, 6: 105.
- Rull, V.**, Giralt, S. 2018. Editorial: Palaeoecology of Easter Island: Natural and Anthropogenic Drivers of Ecological Change. *Frontiers in Ecology and Evolution*, 6: 105.
- Camarero, J.J., Garcés-Pastor, S., Gutiérrez, E., **Rull, V.**, Vegas-Vilarrúbia, T., Cañellas-Boltà, N., Sangüesa, G., Trapote, M.C., Clavaguera, A., Calero, M.A., Galván, J.D., Sánchez, R., Giralt, S., Valero-Garcés, B. 2016. Reconstruyendo la historia de los bosques pirenaicos. *Proyectos de investigación en parques nacionales: convocatoria 2011-2014*, pp. 141-156.
- Rull, V.**, Rull, E. 2015. Green revolution, future prospects. In: Albala, K. (ed.), *The Encyclopedia of Food Issues*. SAGE Publ., London, pp. 735-738.
- Rull, V.**, Omedes, A. 2014. Presentation. In: Pardo-Tomàs, J. (ed), *Salvadoriana: the cabinet of curiosities of Barcelona*. Museum of Natural Sciences of Barcelona-Botanic Institute of Barcelona, Barcelona, pp. 13-14.
- Rull, V.** 2013. Prefácio. In: Bauermann, S. et al. (eds), *Pólen nas Angiospermas: Diversidade e evolução*. Universidade Luterana do Brasil, Canoas, pp. 11-12.
- Rull, V.**, Montoya, E. 2012. El origen de la Gran Sabana: Pistas del pasado. In: Sánchez-Villagra, M. (ed.), *Venezuela Paleontológica*. Universität Zurich, Zurich, pp. 335-345.
- Rull, V.**, Vegas-Vilarrúbia, T. 2012. Montcortès. In: Carrión, J. S. (ed.), *Paleoflora y paleovegetación de la Península Ibérica e islas Baleares: Plioceno-Cuaternario*. Ministerio de Economía y Competitividad, Madrid, pp. 333-336.
- Rull, V.** 2011. Paleoecología de las Tierras Altas de Guayana: Implicaciones ecológicas y evolutivas. In: Caballero, M., Ortega, B. (eds.), *Escenarios de cambio ambiental: Registros del Cuaternario en América Latina*. Universidad Nacional Autónoma de México, México, pp. 139-156.
- Rull, V.** 2010. The Guayana Highlands: a natural laboratory for the biogeographical and evolutionary study of the neotropical flora. In: Sánchez-Villagra, M., Aguilera, O., Carlini, A. (eds.), *Urumaco and Venezuelan palaeontology-The fossil record of the Northern Neotropics*. Indiana University Press, Indiana, pp. 84-102.
- Rull, V.**, Abbott, M. B., Vegas-Vilarrúbia, T., Bezada, M., Montoya, E., Nogué, S., González, C. 2010. Paleoenvironmental trends in Venezuela during the last glacial cycle. In: Sánchez-Villagra, M., Aguilera, O., Carlini, A. (eds.), *Urumaco and Venezuelan palaeontology-The fossil record of the Northern Neotropics*. Indiana University Press, Indiana, pp. 55-83.

- Rull, V.** 2009. Pantepui. In: Gillespie, R., Clague, D. (eds.), *Encyclopedia of Islands*. University of California Press, Berkeley, pp. 717-720.
- Rull, V.** 2006. Paleoecología, biogeografía y evolución en el Mundo Perdido. In: Carrión, J. S., Fernández, S., Fuentes, N. (eds.), *Paleoambientes y cambio climático*. Fundación Séneca, Murcia. pp. 203-212.
- Vegas-Vilarrúbia, T., Maass, M., **Rull, V.**, Elias, V., Ovalle, A.R.C., López, D., Schneider, G., Depetris, P., Douglas, I. 1994. Small catchment studies in the Tropical Zone. In: Moldan, B., Cerny, J. (eds.), *Biogeochemistry of small catchments: A tool for environmental research*. SCOPE Report 51, J. Wiley & Sons, Chichester. pp. 343-360.

## Articles in Proceedings

- Blasco, A., **Rull, V.**, Calero, M.A., Cañellas-Boltà, N., Garcés, S., Vegas-Vilarrúbia, T. 2022. LACEN – llacs sentinella de canvi global en els parcs nacionals: anàlisis multidisciplinari dels últims 6000 anys. *XII Jornades sobre Recerca al Parc Nacional d'Aigüestortes i Estany de Sant Maurici*, Espot, pp. 47-52.
- Calero, M.A., Schulte, L., **Rull, V.**, Vegas-Vilarrúbia, T. 2022. Profunditat de l'Estany de Sant Maurici abans de 1953. *XII Jornades sobre Recerca al Parc Nacional d'Aigüestortes i Estany de Sant Maurici*, Espot, pp. 53-56.
- Rull, V.**, Cañellas-Boltà, N., Sáez, A., Giralt, S., Pla-Rabes, S., Margalef, O. 2016. Palaeoecology and human history of Easter Island (Southern Pacific Ocean): some problems and potential solutions. In: Reindel, M., Bartl, K., Lüth, F., Benecke, N. (eds.), *Palaeoenvironment and the Development of Early Settlements*. Verlag Marie Leidorf, Rahden, pp. 91-98.
- Garcés-Pastor, S., Vegas-Vilarrúbia, T., Cañellas-Boltà, N., **Rull, V.**, Calero, M.A., Giralt, S., Valero-Garcés, B., Gutiérrez, E., Camarero, J.J. 2016. Canvis limnològics i paisatgístics durant el darrer mil·leni a l'Estany de Sant Maurici: Estudi multiproxy. *X Jornades sobre Recerca al Parc Nacional d'Aigüestortes i Estany de Sant Maurici*, Espot, Oct 2015 (ISBN 9788439394518), pp. 33-42.
- Calero, M.A., Valero-Garcés, B., **Rull, V.**, Vegas-Vilarrúbia, T., Garcés, S. 2016. Paleoclimatologia de l'Holocè tardà a l'Estany de Sant Maurici. *X Jornades sobre Recerca al Parc Nacional d'Aigüestortes i Estany de Sant Maurici*, Espot, Oct 2015 (ISBN 9788439394518), pp. 55-59.
- Cañellas-Boltà, N., **Rull, V.**, Vigo, J., Mercadé, A. 2010. Sedimentació actual de pol·len a la Vall d'Aiguamòg i el Circ de Colomès, i la seva relació amb la flora i la vegetació. *Actes VIII Jornades sobre Recerca al Parc Nacional d'Aigüestortes i Estany de Sant Maurici*, Espot, 2009, pp. 101-112.
- Rull, V.**, Vegas-Vilarrúbia, T. 2001. Paleoecology and paleolimnology of the last Pleniglacial in the Venezuelan Andes. In Goodman, D. K., Clarke, R. T. (eds.), *Proceedings of the IX International Palynological Congress, Houston, Texas, 1996*. American Association of Stratigraphic Palynologists Foundation. p. 385-401.
- González, E., Lorente, M. A., Acosta, J., **Rull, V.** 2001. Aplicación de análisis de series de tiempo para la determinación de la ciclicidad en el límite Cretácico-Terciario (oeste de Venezuela). *Memorias XI Congreso Latinoamericano de Geología, Montevideo, 2001*, 1: 1-13 (CD-ROM).
- Rull, V.** 2001. Origen y evolución de los manglares del Caribe: Evidencias palinológicas. *Actas del XIII Simposio de la Asociación de Palinólogos de Lengua Española (APLE) 2000, Cartagena*: 333-349.
- Rull, V.** 2001. Palynological record of a >60-58 ka B. P. (middle Würm/Wisconsin) warming in the northern Andes. *Actas del XIII Simposio de la Asociación de Palinólogos de Lengua Española (APLE) 2000, Cartagena*: 351-364.
- Gamero, H., Herrera, S., González, G., **Rull, V.**, Galarraga, M., Pestman, P., Arminio, J.F., Taha, M. 1997. Marco estratigráfico del Eoceno B inferior, Formación Misoa, Bloque III, Cuenca de Maracaibo: Implicaciones en la caracterización del yacimiento VLC100/949. *Proceedings I Latin American Congress Sedimentology*, I: 275-281.
- Rull, V.**, Poumot, C. 1997. Eocene to Miocene palynocycles from Western Venezuela, and correlations with global eustatic cycles. *Memorias VIII Congreso Geológico Venezolano*, 2: 343-349.

- Rull, V.**, Lorente, MA 1997. Area central del Lago de Maracaibo: la bioestratigrafía como herramienta para la interpretación paleoestructural del Eoceno. *Memorias VIII Congreso Geológico Venezolano*, 2: 351-353.
- Durán, I., Ruiz, M., **Rull, V.**, Lorente, M.A. 1997. Rangos de extensión de especies-índice marinas y terrestres en el margen suroccidental del Tethys: La transición Cretácico/Paleoceno, C/P. *Memorias VIII Congreso Geológico Venezolano*, 2: 339-342.
- Mompart, L., **Rull, V.** 1991. Comparación de métodos geoquímicos y análisis digital de imágenes para la evaluación del potencial de roca madre en la Cuenca de Maracaibo. *Memorias IV Simposio Bolivariano sobre Exploración Petrolera en las Cuencas Subandinas*, 2: 314-329.
- Rull, V.**, Bolbochán, D., Hernández, A., Guariglia, M., Suárez, V., Salgado-Labouriau, M.L., Ponce, D.P. 1989. Primer calendario polínico de la ciudad de Caracas. Avance de resultados. In: Bianco, N., Machado, I. (eds.), *Inmunología Clínica*. Fondo Editorial CONICIT, Caracas, pp. 217-225.