



## *In Memoriam* Salvador Rivas-Martínez

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It is difficult to talk about Salvador Rivas, especially when, despite his departure, his memory is still so present in me. A relationship of more than sixty years based on friendship makes it difficult for me to remember things objectively. Our relationship was based on loyalty and respect and our different personalities, sometimes difficult, and our disagreements, as it happens in every long-term relationship, never broke our friendship, precisely because it was based on respect and loyalty.

I do not favor nostalgia, which is why Salvador's memory brings to light all the positive experiences I shared with him. I remember the beginning of our friendship, sixty years ago I do not know if it was the result of *Primula* preparation or during that unforgettable trip to the Port of Manzanal to collect *Genista hyxtrix*, which interested some Swiss pharmacologists. It was an incredible trip, especially when Salvador made me realize how Mediterranean vegetation gave way to entirely different Atlantic vegetation. And after picking up the *Genista* and freed ourselves from the Swiss, we traveled to Galician territory and interpreted the vegetation. During that trip, I was able to get a full understanding of vegetation dynamics and its zoning related to altitude; both subjects would amaze me throughout my professional life. That trip through Andalusia back in 1963 when Matías Mayor, Jesús Izco and I participated jointly with Salvador

Rivas and Professor José Borja, was unforgettable. It was a highly scientific trip, as we were lucky enough to share some wonderful days in the fields with a flora expert like Borja and a vegetation expert like Salvador. The trip was memorable despite the Land Rover discomfort, which was part of the American Seed Plan.

Botany and the love of sports, especially mountain climbing, would strengthen our friendship over the years. My departure to Barcelona in 1967 was significant, where Salvador was already a University professor and where I got a position as Assistant Professor. We remained there until 1969 when we went back to Madrid. Those years in Barcelona were very intense, both scientifically and in outdoor sports. That was the beginning of our trips to the Pyrenees, that magnificent mountain we fell in love with and which we would continue to visit year after year with great devotion, until 2019 when we made our last botanical-sports outings to the Aran Valley. We also made terrific journeys through the valleys of Benasque, Gistaín, Bielsa, Pineta, Vallibierna, Lliterola, etc. We climbed Perdiguero, Aneto, Pico del l'Alba, Coronas, Taillon, Vignemale, etc. I will never forget that climbing route we opened in Pa de Sucre wall in Sierra Tumeneia, nor our trips to Salenques crest, to Tempestades and Margalida peaks, and Cregüeña crest. From the Pyrenees, we would then go to the Alps, also experiencing memorable climbs like the one in Chermoz Grepon. I remember those climbs with some longing; we would take inventories of vegetation in the cracks while hanging from the walls, like the one in Néouvielle-Pic Long. We described and published the communities of *Woodsia pulchella*.

Regarding our botanical-climbing activity, I must not forget our expeditions to the American mountains, such as the Rockies and the Cascades, the Andes in Peru and Venezuela, the volcanoes in Mexico (Nevado de Toluca, Pico de Orizaba, and Iztaccíhuatl). In Australia, we climbed Mount Kosciuszko, the highest peak in continental Australia's Great Divide, located in the national park bearing the same name. Those trips and other to South Africa, China, and

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Tasmania were an opportunity for Salvador to study the world's vegetation and describe important bioclimatic and biogeographic features. In every mountain we climbed, he established different bioclimatic levels. It allowed us to have an altitudinal view of the Venezuelan and Peruvian Andes, the Rockies, Olympia Mountains, Rainier Peak, and Mount Robson. As a result of those trips, Europe and America's biogeographical maps, both North and South, would see the light.

I was lucky to be Salvador's friend and that our friendship lasted a lifetime. Both of us had different and strong personalities, yet we would complement each other. Each of us contributed our part in those adventures, not without arguments that were hard sometimes. Still, we redirected them immediately because of our affection

and friendship, which grew more robust instead of becoming weaker, and became more reliable. He was generous enough to share all of his science with me, and he shared it in abundance, without keeping anything from me. He taught me everything I know, and through him, I got everything I am. I contributed my ability to organize things because that was not one of his strengths, and I also taught him a little about how to enjoy the ludic part of life, which made our hard-working days feel lighter. We created a tandem, a unique symbiotic relationship, which gave us much happiness in our multiple days of nature and work. His loss has left a great emptiness in me. I feel vast loneliness and sadness. I miss his calls. I miss our long conversations. I lost my friend, my brother, my teacher and I feel devastated.

