

## *In memoriam*

### Santiago Castroviejo Bolibar (1946-2009)



M. Jerez. Real Jardín Botánico, CSIC. 1991

The early death of Professor Santiago Castroviejo Bolibar, following shortly after the decease of Professor César Gómez Campo, is a further tragedy for Spanish botany. Santiago Castroviejo was Profesor de Investigación of the Consejo Superior de Investigaciones Científicas and Academician of the Real Academia de Ciencias Exactas, Físicas y Naturales, and Director of the Real Jardín Botánico de Madrid from 1984 to 1994, having been its Secretary from 1979 to 1980. Professor Castroviejo was born in Tirán, Moaña (Pontevedra). He studied botany and zoology at the Universidad Complutense, Madrid, in the

1960s. Originally intending to become a zoologist, he explained that he had to study plants to understand the habitat of the animals he was interested in. He then opted for botany and obtained his doctorate under Professor Francisco Bellot Rodríguez in 1972 for a thesis on 'Flora y Cartografía de la vegetación de la Península del Morrazo en Pontevedra' for which he obtained the Premio Extraordinario del Doctorado.

The 1960s was a period when Spanish biology was still coming out of the post-war doldrums: botanical studies were largely dominated by phytosociology, a

subject that depended on a sound taxonomic basis but one which was unfortunately lacking in Spain. As Castroviejo himself noted in his obituary of Bellot Rodríguez<sup>1</sup>, his former professor's work had to be judged by the standards of the time – ‘...en plena posguerra, sin maestros y prácticamente aislado del extranjero, en ambiente de tal penuria económica y cultural, que incluso las inquietudes se veían acalladas’ (‘...in the midst of the post-war period, without teachers and practically isolated from other countries, in an such an impoverished economic and cultural environment that even worries and concerns were silenced’). Even by the 1960s, although the situation had improved, the state of plant taxonomy in Spain was still fairly basic and little training was given in the essential procedures such as writing descriptions, preparing keys, typification and application of the International Code of Nomenclature, while areas such as biosys-

tematics, experimental taxonomy and genecology, not to mention numerical and chemical systematics, had largely bypassed Spanish botanists. There was no modern Flora of Spain and the long-outdated *Prodomus florum hispanicae* of Willkomm & Lange (1862-1880) was the main floristic resource and despite various projects to prepare a new Flora, this situation persisted until the initiation of *Flora iberica* which was to be Castroviejo's magnum opus. The publication of *Flora Europaea* between 1964 and 1980 must have served as a stimulus although it was a continental synthesis and in no way a substitute for a national Flora.

This then was the context in which the young Castroviejo started his professional career. For someone of his intelligence, it was obvious that if he was to follow a career in plant taxonomy, he would have to teach himself and travel abroad to familiarize himself with current ideas, techniques and concepts and the burgeoning literature on the subject. And this is precisely what he did. He visited the United Kingdom several times, working mainly at the Royal Botanic Gardens Kew, the Natural History Museum and the Linnean Society of London; he made several visits to major botanical centres in Italy, Switzerland and Germany as well as to several South American countries. By the time he decided to launch the *Flora iberica* project, he has gained extensive international experience which helped him plan this major undertaking and made a major contribution to bringing Spanish plant taxonomy into line with world standards.

Santiago Castroviejo was deeply interested in and knowledgeable in many aspects of biology and published a series of books and papers on floristics, taxonomy, cytotaxonomy, phytosociology, ecology and conservation. He was instrumental in furthering the development of conservation in Spain: a vocal critic of the Spanish forestry and later conservation agency ICONA's track record he was later involved in the dispute between the authorities and the Palancares Land Owners Committee (Comunidad de Propietarios de Palancares – CPP)



A. Prunell. Ladysmith, Sudáfrica. 1999

<sup>1</sup> Castroviejo, S. 1983. In Memoriam. Francisco Bellot Rodríguez (1911-1983). *Anales Jard. Bot. Madrid* 40(1): 3-4.



over the policy of reafforestation that involved the felling of native trees to replace them with conifers and removal of the matorral which he, along with other Spanish ecologists such as González Bernáldez, recognized as a seral stage of recovery of the natural vegetation and whose removal would reduce the chances of recovery. In 1978 he co-authored a book on ecology and politics in Spain (*Ecología y política en España*<sup>2</sup>).

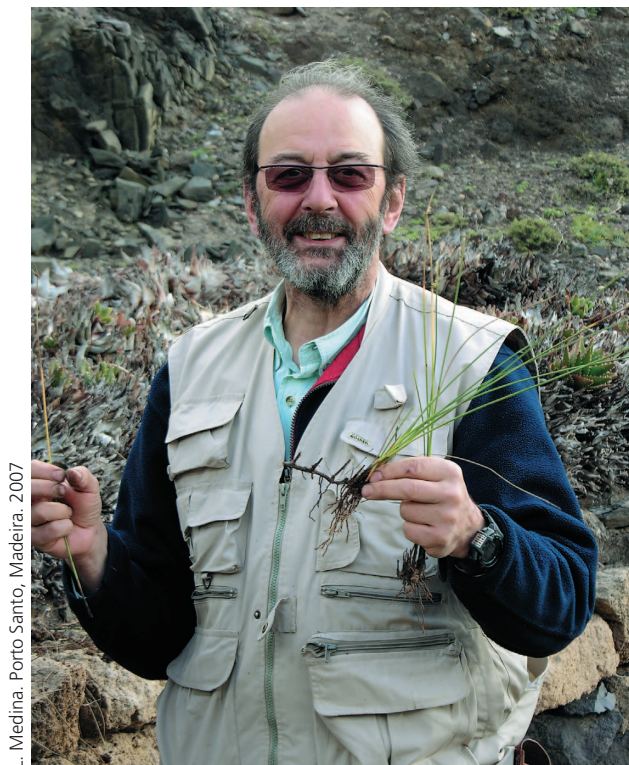
It is quite evident, however, that his heart was in taxonomy and floristics. Indeed, his major achievement was without doubt, the organization and editing of *Flora iberica*, one of the greatest floristic achievements of recent times. His decision to devote himself to this project, which occupied most of his professional career, was a brave one but one for which we should all be grateful. For nearly thirty years he coordinated the *Flora iberica* project and was still working on it shortly before the final stages of the illness that had plagued him for several years forced him to abandon work.

Castroviejo did not confine his botanical studies to the Iberian peninsula but also worked extensively in Latin America. For example, he studied the flora and vegetation of the sabanas and tepuis in Venezuela and he was frequently invited to Colombia, Argentina and other centres to study and identify material. One of his recent publications (2006) was a co-edited book on the biodiversity of the Bahía Honda region of Veraguas (Panama)<sup>3</sup> which followed on from an earlier volume, also co-authored by him, on the flora and fauna of the Parque Nacional de Coiba, Panama. One can only regret that as well as his own personal achievements he was unable to develop a major programme of research into South American botany at the Real Jardín Botánico to take advantage of the rich enormously valuable collections and archive material that the institution houses.

The basis of Castroviejo's understanding of and attitudes to taxonomy and classification are clearly expounded in his address to the Real Academia at his inception as an Academician<sup>4</sup>. In this he reveals himself as one who while fully aware of the recent dramatic developments in plant systematics, believes that one should not abandon the primary function of taxonomy to describe and name species – while accepting that today there are also other objectives such as un-

derstanding the evolutionary history and phylogeny of groups and providing the underpinning for biodiversity research. He was very much a pragmatist and insisted that species had to be recognizable by their morphology, whatever other evidence might be used in their definition. He became interested in the application of information technology to systematics and was responsible for developing the Anthos database and search system for quality-controlled chorological and taxonomic information on the vascular plants of Spain.

As Director of the Real Jardín Botánico de Madrid during a critical period in its history, he was largely responsible for developing it as a world class institution. He had remarkable organizational skills and was widely respected and admired, both in Spain and abroad. He was a member of a number of international projects or boards such as Species Plantarum, Flora Neotropica, GBIF and Euro+Med Plant Base and his loss will be felt across the international community of botany.



L. Medina. Porto Santo, Madeira. 2007

<sup>2</sup> Castroviejo, S., M.A. Murado, R. Silva & Roy Xordo. 1978. *Ecología y política en España*. H. Blume Edic., Madrid.

<sup>3</sup> Castroviejo, S. & A. Ibáñez 2006 [2005]. *Estudios sobre la biodiversidad de la región de Bahía Honda (Veraguas, Panamá) / Studies on the Biodiversity of the Bahía Honda Region (Veraguas, Panamá)*. CSIC, IdE & Real Academia de Ciencias EFyN, Madrid.

<sup>4</sup> Castroviejo, S. & Sánchez-Monge, E. 2004. *De familias géneros y especies. La eterna búsqueda de la estabilidad en la clasificación biológica*. Discurso de ingreso en la Real Academia de Ciencias Exactas, Físicas y Naturales. Madrid, 79 pp.

Santiago Castroviejo was a modest man. In his inaugural address to the Real Academia, he observed that he had never sought such an honour and indeed had never considered that becoming a member of the Academy was something that he would never aspire to, nor did he do anything to achieve it ('Pertener a la Academia no fue nunca una meta para mí, ni nada hice por conseguirlo; de hecho, vi siempre a esta prestigiosa institución muy alejada de mi esfera personal'). He was a man of few words what he did say was remarkably shrewd and perceptive and his advice on projects such as Euro+Med PlantBase in which he played an important role was always valuable and to the point. He would have been an outstanding University Professor: he was an excellent teacher and

instilled great enthusiasm in his students and those who worked with him. I remember on more than one occasion that when having dinner with him he would invite junior colleagues to join us so they could have the opportunity of meeting me and hearing my perspective on taxonomy, systematics, conservation and so on. He was remarkably erudite and it was always a pleasure to spend time with him discussing not only issues of a professional nature but all manner of topics ranging from political history to gastronomy.

I join with my Spanish friends and colleagues in regretting the premature decease of such an outstanding botanist and share their grievous sense of loss.

Vernon H. Heywood