

## OBITUARY

### **CARLYLE A. LUER (1922–2019) - IN MEMORY OF A LEGEND, A TEACHER AND A FRIEND**



Photo from Sarasota Scene Magazine

The first time I met Dr. Luer, as he was generally known in the orchid world, was on a dark and balmy night, November 6, 1981, at the Trailways bus station in Sarasota, Florida. He had invited me as a potential botanical illustrator to come by and visit the Marie Selby Botanical Gardens the next time I was heading towards South America. So here I was in a foreign country I had never visited before, dressed all wrong for the subtropical heat, dragging along too much luggage, which included a type writer, a fiddle and a black suit. I was on my way to spend a year in Ecuador after all and had no idea what to expect. When Dr. Luer saw all this he cracked up and laughed heartily. He then introduced himself as “Carl”, grasped my hand in an iron grip and welcomed me to Florida. And “Carl” it was from there on. He had invited me to stay at his place during the visit, which I gladly accepted. But I almost had second thoughts when we arrived at his home. The dark wooden building was located in a dense patch of original forest and made me think of the residence of the Addams Family (a popular horror comedy TV series). But once inside, the warm welcome by Carl’s wife and tireless travel companion Jane quickly changed my impression and I

felt at home right away. There was “something” in the house that did not welcome me as warmly as the Luers though, and that was their hair-lipped and cock-eyed pet that Carl insisted was a “dog”. This “dog” was a snarling and completely untrustworthy little creature named “Palenque”, named after a river in Ecuador. The animal had some canine-looking features for sure but I had some serious doubts about the true identification. Carl loved Palenque though and the feelings were mutual.

The following day Carl introduced me to Selby Gardens and it was love at first sight, much thanks to Carl’s efforts to introduce me to Calaway Dodson, the current Director of Research, and everybody else on the staff. Selby Gardens would not have existed as we know it today, if at all, without Carl’s influence and he was very proud of what had become of the young institution, which opened its gates in 1975. This introduction was the beginning of a 38 year long friendship and professional collaboration. Carl had already established himself as a reputed orchid taxonomist, primarily based on his superb publications about the North American orchid flora. But his reputation as a Pleurothallid taxonomist was

also growing. The reason why he was focusing on this overwhelmingly large and confusing group of orchids was pure coincidental. Carl was a member of the Board of Trustees of Selby Gardens, but also a very active volunteer and generous donor. At one point Carl wanted to entertain his never resting mind and asked Dodson what he could do. Dodson might have felt slightly uneasy by having such a formidable work force, and a member of the Board of Trustees trotting around the premises without knowing what to do. He therefore suggested that Carl should work with pleurothallids. That ought to keep him busy, Dodson thought. Working with pleurothallids was not something that Dodson himself was particularly amused by so he could solve two issues with one suggestion that way. Little did he know what would happen next, and the rest is scientific history.

Carl was not the easiest individual to work with for several reasons. I suspect that the word “workaholic” may have originated from somebody who had worked for Carl. An unrelenting stubbornness and an almost inhuman determination to finish what he set out to do made him the perfect candidate to approach the intimidating task of pleurothallid taxonomy. Carl was also incredibly picky with getting the details just right, which meant his way. I had numerous experiences with running into this wall of rigidity over the years as my illustrations improved under the ever critical eyes of Carl. Every now and then I left his house muttering under my breath, having to re-draw certain details that had ended up a couple of millimeters towards the wrong side. But this also sharpened my focus and I could not have had a better teacher. The quest to please Carl drove me forward and when he nodded his approval without saying anything, I knew I had managed to please him. The greatest challenge came when he asked me if I wanted to do the watercolor illustrations for *Thesaurus Dracularum*, a monographic treatment of the genus with all species illustrated in actual size. I accepted of course, but with some trepidation. I had never done anything like that before and knowing how picky Carl was tied a considerable knot in my stomach. Traditionally, these types of illustrations are made without much “decorations”, such as branches with moss etc. So the first volume of 16 species consisted of strictly clean illustrations, some of them rather stiff and inelegant in my retrospective opinion. But my



Carl Luer tending to orchid business at his beloved Selby Gardens in 1981. Photograph by Stig Dalström

artistic mind got bored pretty quickly so I decided to challenge Carl and added a few strains of moss on one of the roots just to see his reaction. When he spotted this “rebellious outbreak” of the traditional way of doing things he did not say a word. But after mulling things over for a while, his nose began to twitch and he eventually looked up and said that he liked it. From there on I always added something to the illustrations of both *Dracula* and later on *Masdevallia*, which made them a lot more fun to do.

I had the great fortune to spend some time with Carl in the field as well, both locally in the Everglades and in South America looking for new *Dracula* and *Masdevallia* species. My first field adventure together with Carl took place in Ecuador in 1982. It was a great but also rather scary experience because we joined forces with Father Angel Andreetta, the Salesian Missionary Priest who later developed the world-renown orchid nursery Ecuagenera together with the Portilla family. Though the company was impressive and perhaps a bit intimidating, both Carl’s and Andreetta’s driving skills were definitely hair-raising. But at least Carl did not try to hit the stray dogs, which were in deep jeopardy when Andreetta





Inspecting some of his pleurothallid collection, cultivated at Selby Gardens, 1981–1982. Photograph by Stig Dalström.





Carl and Stig Daslström in the field in Fakahatchee Strand State Preserve, ca. 1985. Photograph by Phillip Cribb.





Left, after a hair-raising journey through Ecuador, finally a couple of days resting at Rio Palenque Science Center, hosted by Calaway and Piedad Dodson, 1982. Right, Carl happily returning to the car with some Ecuadorean discoveries, 1984. Photographs by Stig Dalström.



Left, Carl and Jane Luer risking their lives pressing orchids on a busy Colombian highway, 1989. Right, Alan Guttridge of Coastal Printing (left), Carl Luer and Phillip Cribb analyzing some discarded sheets from *Thesaurus Dracularum*, 1989. Photographs by Stig Dalström.





Carl was like a schoolboy at summer camp when searching for orchids. Here with a *Dracula chimaera* in Colombia 1989. Photo by Stig Dalström.

was at the steering wheel. We survived though and eventually managed to find a few new *Masdevallia* species so the trip was quite successful in the end. The trip to Ecuador in 1984 was tough for different reasons. Carl got up before daylight every day and insisted that we should spend as much time in the field as possible, come rain (most of the time) or sunshine. In the late afternoons his “crew”, consisting of Job Kuijt, a Canadian mistletoe expert, my Swedish travel companion Thomas Höijer and me were slumped in the car, exhausted, hungry and soaking wet. Carl on the other hand was standing outside pressing *Stelis* and other insignificant little orchids. He really enjoyed this, both because the “weaklings” were more tired than he was, but also because he usually had a number of unknown plants to work with. The rain did not bother him at all it seemed. All the collection information then went into a flimsy little notebook, which had the irreplaceable data from a number of previous field trips. One day disaster struck as he was fiddling with the ever growing herbarium press. He suddenly began looking stressed, frantically patted

his pockets and started to look around. Obviously something was wrong so we had to ask what was happening. His note book was gone! With years of unique data! We all scrambled out of the car and into the twilight of the early evening. Then followed a thorough search where we had to take everything out of the car in a desperate search for this infinitesimal little note book. The panic was not far away from Carl’s eyes when we finally located it under one of the seats. When I asked him why he brought the same little notebook to every trip instead of getting a separate one for each, he said that it would be a shame not to use every page.

Carl was an excellent illustrator himself and only reluctantly handed this task over to me. And the only reason to do so was because he could accomplish a lot more that way. But it bothered him to accept help from others and that created a conflict in him. He simply wanted to do everything himself and in his way. I believe that was one of the sources for his criticism and pickiness. But gradually he developed more confidence in my illustration skill and as long as he could cut them apart and re-arrange them anyway he wanted, he eventually (but grudgingly) accepted the situation. But I am sure he enjoyed this process as well, being a retired surgeon! I occasionally asked him how many drawings I had made over the years, but he had no idea. Thousands! The amazing thing is that I never got bored of doing them. The challenge of meeting Carl’s expectations and critical scrutiny never ceased. The last delivery of finished *Stelis* drawings to be published in Harvard Papers in Botany was made just shortly before the tragic fall in the kitchen on October 8 when he injured his spine. Carl never recovered from this and his body gave up a month later after years of heroic battle against various physical health issues.

My last image of the great orchid legend, my teacher and friend, was Carl and Jane sitting in the living room sofa together, holding hands, with Carl watching a baseball game and Jane peacefully snoozing next to him.

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Carl and Thomas Höjjer sorting the day's harvest of botanical treasures, 1984. Photo by Stig Dalström.

Some people are born to be legends, and there is no doubt that Carl Luer was one of those people. He ventured almost accidentally into the world of pleurothallids at a very late stage in his life, and, in what must be the worst case of a dare-gone-wrong in botanical history, at the time of his passing he had become the most prolific plant taxonomist of modern times.

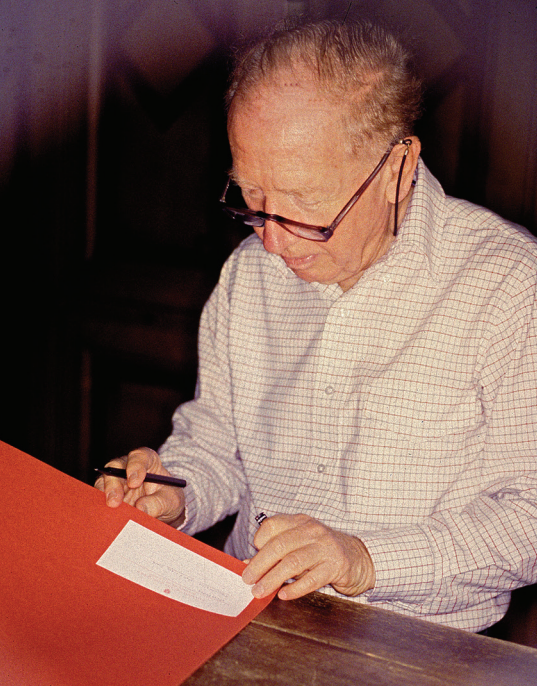
Even though mostly known for his work on Neotropical epiphytes, Carl's interest in orchids began with terrestrials in his native North America. A surgeon by profession, Luer retired in the mid nineteen-seventies, and published around that same period his first two books on orchids; *The Native Orchids of Florida* (1972) and *The Native Orchids of the United States and Canada Excluding Florida* (1975). By that time he was already an active taxonomist. The first taxa that Carl Luer described were *Triphora craigheadii* Luer and *Triphora rickettii* Luer, both in 1966. He continued working on North American orchids for several years, publishing mostly new combinations, varieties and hybrids. It is

not until 1975 that Luer publishes his first pleurothallids by the name of *Pleurothallis cyprapedioides* Luer and *Pleurothallis quadriserrata* Luer, featured in his earliest *Icones Pleurothallidarum* under the title "*Pleurothallis* of Ecuador (Orchidaceae)", in the inaugural issue of journal *Selbyana*. The rest, as they say, is history. Carl Luer's taxonomical career lasted over half a century, beginning with the publication of two *Triphora* Nutt. species in 1966, and ending with the description of *Stelis minima* Luer & Toscano on the 30th of June 2019. During those 53 years, this larger-than-life self-taught botanist published the astonishing amount of **5604 taxa** in the orchid family<sup>1</sup>.

Luer is regarded by most of us as the father of the pleurothallids, the largest and most diverse group of orchids in the world. Despite initially publishing about three dozen North American terrestrial orchids, a species of *Epidendrum* L., an *Oncidium* Sw. and a

<sup>1</sup> The complete list of taxa can be sent upon request to the author.





Carl did not quit his taxonomic work until his body finally deserted him on November 9, 2019, at age 97. Photo by Stig Dalström

variety of *Encyclia* Hook., by the end of his career more than 99% of his proposed taxa belonged to subtribe Pleurothallidinae. When Carl arrived on the scene in 1975 there were only about 1650 accepted species in the subtribe, today well above five thousand three hundred species are recognized and the vast majority of this staggering increase results from his work. During the 44 years of what we believe is most appropriately termed the Luerian Era, pleurothallid research was completely revolutionized as interest in the group grew exponentially and novelties soared. Luer published dozens of skillfully crafted monographic treatments of the diverse genera, sections and subsections of the subtribe. It was Carl's surgical precision and methodological patience that resulted so fruitful. By systematically illustrating the details of every individual, carefully inspecting the type material, critically interpreting the protologues, scrutinizing the available literature and synthesizing his ideas, he was able to almost completely resolve the taxonomy of the most challenging group of orchids there is. His opera magna, a series by the name *Icones Pleurothallidinarum*, included 10 articles and 32 monographs. The "green books", as his monographs are popularly referred to, set the basis for every single



Carl with Adam Karremans at his home in Sarasota, Florida, February 2017. Photograph by Miriam Contreras.





The Luers together with Phillip Cribb. Photographer unknown.

study in the subtribe since their publication. Only in the Pleurothallidinae, Carl published 5568 taxa. Luer's greatest contribution to orchid science has most likely been the recognition of species diversity in this mammoth group, he single-handedly proposed **3271 new pleurothallid species**. He also published many new combinations (1968), subspecies (35), hybrids (11), and a form (1). Likewise, Carl set the foundations for systematic classification in the subtribe by describing dozens of new genera (74 in total), as well as subgenera (66), sections (57), subsections (20), and series (8). The remaining (57 names) were published invalidly or illegitimately and were later republished by Luer..

Immortalized in his body of work, the name of Carlyle Luer will not be soon forgotten. He stands alone

on the pinnacle of pleurothallid research, an exceptional position no one has nor will come close to in the near future. Unsurprisingly, many authors have acknowledged his impact on orchid science. Already in 1983, Dodson and Determann considered that his "contributions to the knowledge of the orchids have been outstanding", and that was before published his first monograph! To all of us fanatics of the Pleurothallidinae, his passing is a terrible and unsurmountable loss.

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TAXA HONORING CARLYLE A. LUER

*Acronia culpameae* Luer  
*Andinia lueri* S. Vieira-Uribe & Karremans  
*Brevilongium luerorum* (Dodson) Christenson  
*Caluera* Dodson & Determann  
*Caluera napoensis* Szlach., Kolan. & Mystkowska  
*Caluera surinamensis* Dodson & Determann  
*Caluera tavaresii* Campacci & J.B.F.Silva  
*Caluera vulpina* Dodson & Determann  
*Chondrorhyncha lueri* Dodson & R. Vásquez  
*Chondrorhyncha luerorum* R. Vásquez & Dodson  
*Comparettia luerae* (Dodson) M.W. Chase & N.H. Williams  
*Cyclopogon luerorum* Dodson  
*Cyrtochilum luerorum* Dalström  
*Dendrophthora lueri* Kuijt (Santalaceae)  
*Dichaea luerorum* Dodson  
*Dipterostele lueri* (Dodson & R. Vásquez) Garay & G.A. Romero  
*Dracontia lueriana* Karremans  
*Dracula carlueri* Hermans & P.J. Cribb  
*Dryadella lueriana* Carnevali & G.A. Romero  
*Epidendrum lueri* Dodson & Hágsater  
*Epidendrum luerorum* Hágsater  
*Fernandezia luerorum* Ormerod  
*Ixyophora luerorum* (R. Vásquez & Dodson) P.A. Harding  
*Lepanthes luerorum* B.T. Larsen  
*Liparis lueri* Dodson  
*Lueranthos* Szlach. & Marg.  
*Lueranthos vestigipetalus* (Luer) Szlach. & Marg.

*Luerella* Braas  
*Luerella pelecanceps* (Luer) Braas  
*Macroclinium lueri* Dodson & R. Vásquez  
*Masdevallia luerorum* Bogarín, Oses & C.M. Sm.  
*Maxillaria lueri* Dodson  
*Odontoglossum* × *luerorum* Dalström & W.E. Higgins  
*Oncidium* × *lueroroides* M.W. Chase & N.H. Williams  
*Oncidium lueri* Dodson  
*Oncidium luerorum* Dodson  
*Otoglossum luerorum* (Dodson) M.W. Chase & N.H. Williams  
*Pabstiella lueriana* Fraga & L. Kollmann  
*Platanthera* × *lueri* P.M. Br.  
*Platystele carl-lueriana* Karremans & Bogarín  
*Pleurothallis lueriana* Karremans & Rodr.-Mart.  
*Pseudocymbidium lueri* (Dodson) Szlach. & Sitko  
*Restrepiella lueri* Pupulin & Bogarín  
*Rhinorchis luerorum* Szlach. & Kolan.  
*Scelochilus luerae* Dodson  
*Sigmatostalix* × *luerorum* Nees  
*Sobralia luerorum* Dodson  
*Solenocentrum lueri* Dodson & R. Vásquez  
*Stelis dies-natalis* Karremans & M. Díaz  
*Stelis heros* Karremans  
*Stelis lueriana* (Karremans) J.M.H. Shaw  
*Stelis luerii* Karremans  
*Stellilabium lueri* Dodson & R. Vásquez  
*Stenia lueriorum* D.E. Benn. & Christenson  
*Telipogon lueri* Dodson & D.E. Benn.  
*Zygostates luerorum* Toscano & R. Vásquez





*Luerela pelecanceps*, from the Lankester Botanical Garden living collection. Photograph by Lizbeth Oses.

TAXA HONORING HIS WIFE JANE

*Comparettia janeae* (Dodson & R. Vásquez) M.W.  
Chase & N.H. Williams

*Platystele jane-lueriana* Karremans & Bogarín  
*Scelochilus janeae* Dodson & R. Vásquez

TAXA HONORING THEIR SON GEORGE

*Myoxanthus georgei* (Luer) Luer  
*Octomeria georgei* Luer

*Pleurothallis georgei* Luer

[APK]

