

## On Schmid & Endicott's *Mariposas de Venezuela*

Sobre *Mariposas de Venezuela*, de Schmid & Endicott

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We have recently learned that Dr. Michael Schmid (1948-2018) (Fig. 1), biologist and notable cytogeneticist, passed away in Würzburg, Germany (Höhn 2018). One of us (GAR) was honored and distinguished by his professional collaboration in the field of amphibian systematics and cytogenetics (see Kaiser *et al.* 2015), a scientific field to which he made great contributions. For instance, two monographs on phylogenetics, cytogenetics and natural history in terraranan and hemiphractid frogs (Schmid *et al.* 2010, 2012), and some more specific works on reptilian and amphibian taxa from northern Venezuela, especially dendrobatid and direct-developing frogs (Schmid *et al.* 1992, 2002, 2003, Manzanilla *et al.* 1996, Kaiser *et al.* 2003), and geckos or the genus *Gonatodes*, a group of lizards that he considered very promising for cytogenetic research (pers. comm. to GAR, 16 April 2015). As an example of the latter appreciation, Schmid discovered that two species of these lizards, endemic to Venezuela, present “an extraordinarily reduced diploid chromosome number  $2n=16$ , which is the lowest value found so far in reptiles” (Schmid *et al.* 1994, 2014). Schmid had a long stay in 1987 in Rancho Grande, in the Henri Pittier National Park, in Aragua, and in agreement with the Zoology Museum of the Faculty of Agronomy of the Universidad Central de Venezuela (UCV, Maracay), established a laboratory to study amphibians and small mammals (A. Fernández Badillo, pers. comm. to JMG 2019). He would return several times to Venezuela until the mid 1990s, and would teach



Figura 1. Michael Schmid takes a rest on rocks in a brook, mountains of the Cordillera de La Costa, Henri Pittier National Park, Venezuela, ca. 1987 (courtesy of K. Schmid).

short courses in cytogenetics and chromosome handling to several advanced students of UCV Maracay.

We knew from Schmid's own words that he was born in Germany (Aschaffenburg), moving to Venezuela (Caracas) with his family at the age of four. He received primary and secondary education at the bicultural/bilingual Colegio Humboldt de Caracas (Deutsche Schule Caracas, founded in 1894). He started when the school was re-opening in 1952-53, still located in the Sabana Grande area. In 1957, the entire institution had moved to the northern edge of the city, on the foothills of the Ávila, a thickly forested mountain ridge in the Cordillera de La Costa. This prominent mountain, climbed up for the first time in 1800, by his compatriot Baron Alexander von Humboldt, and several local enthusiasts (notably the young Andrés Bello, tutor of Simón Bolívar and later on, the foremost humanist of South America in the XIX Century), was for sure the place where Michael Schmid got the spell of tropical nature. It is simply not possible to ignore nature when surrounded by the evergreen vegetation of Caracas, its colorful butterflies, splendid birds, and mysterious frogs.

Schmid's parents were highly esteemed entrepreneurs who after arriving in Venezuela, were able to establish a successful bakery and *delicatessen* store at Avila Avenue, in La Florida, a middle-class neighborhood in Caracas. Being a kid, JMG met the adolescent Schmid while the latter and his brother sometimes helped their parents at their bake-shop. JMG and Schmid will be reacquainted again in 1987, while the former was doing his PhD in Maracay and the lat-

ter visited Rancho Grande, at Henri Pittier National Park, to do research. At 19, after finishing high school, Schmid decided to leave the country to pursue university studies abroad, first in the USA, and later in Europe. There, he accomplished his goal and trained as a researcher in prestigious universities, eventually obtaining a doctoral degree in Human Biology in Freiburg, and becoming a Professor of Cytogenetics in the University of Würzburg (1981). He returned to South America several times to do fieldwork, especially to collect amphibians for his investigations on chromosomes. His fellow colleague Holger Höhn has written an account of his life and works, in which he has highlighted Schmid's main interests and most relevant contributions to biological sciences (Höhn 2018). A remarkable researcher and educator, especially during his mature years, Michael Schmid was not only a prolific scientist but also the precocious main author of a popular handbook on the butterflies of Venezuela, about which we are going to comment upon in the following lines.

*Mariposas de Venezuela* (Schmid & Endicott 1968 [1967]), is a luxurious small book, in hardback oblong octavo format (Fig. 2), printed in Copenhagen by L. Levinson Junr., a Danish publisher specialized in art and high-quality color prints. It was expensive, probably because of its small press run and the costs involved in high-quality image reproduction techniques (Wilkinson, [1970]). It was probably also published in a rush that did not allow for correcting typos and some other errors. Its printed publication date is 1968, and it appears copyrighted in

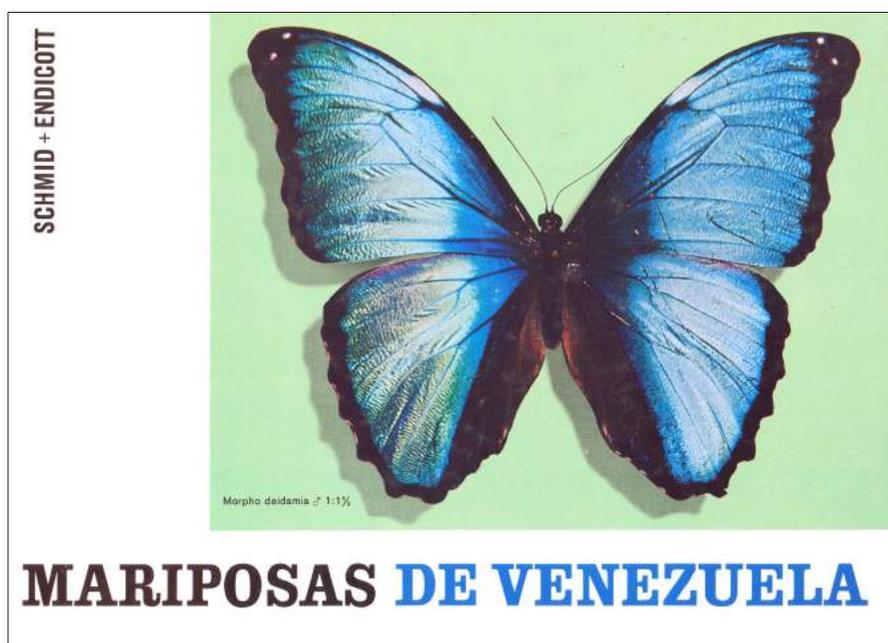
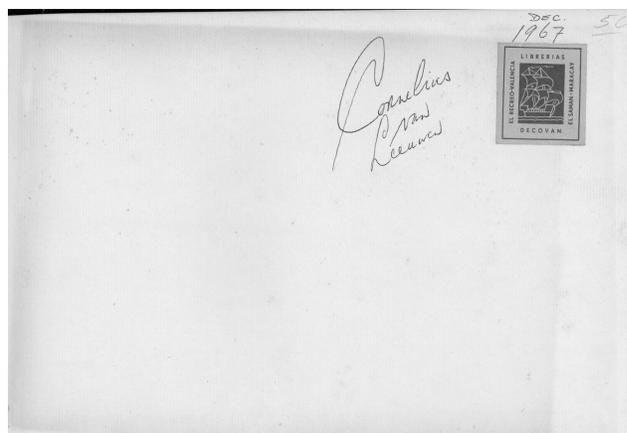


Figura 2. Front cover of the book *Mariposas de Venezuela*, published in Copenhagen, by M. Schmid & B. Endicott.

the United States of America in July-December the same year (The Library of Congress 1971). However, one copy in our possession, purchased at a North American second-hand book dealer in the early 2000s, bears a 1960s glued label of a local bookshop of Valencia and Maracay (Venezuela) and the signature of his first owner “Cornelius van Leeuwen”, together with the handwritten date “Dec. 1967” (Fig. 3). This curious detail suggests that the book may have been available for sale, at least in Venezuela, by the end of 1967, the year in which it was actually printed (its foreword was dated on September 1967). That also means that Michael Schmid should have written the text (in Spanish and English) and taken the photographs early in 1967 or even earlier. This is remarkable, as by that time Schmid was between 18 and 19 years old.

Bradford M. Endicott's contribution seems to be mainly as Schmid's mentor and the patron of the edition. Endicott (1926-2018) was an outstanding and successful businessman, native to the USA. He was the grandson of multimillionaire Henry Bradford Endicott (1853-1920), and although he was 22 years older than Schmid, he died at 91, only four months earlier than the latter. According to one obituary (Anonymous 2018), the outstanding Bradford Maxwell Endicott (Fig. 4) was a “*Beloved husband, brother, father, grandfather, philanthropist, world traveler, adventurer, scientist, fish farmer, butterfly expert, author, shoemaker, hunter, art collector, diver, conservationist, trout and salmon fisherman, photographer, dancer, raconteur, trustee, lover of all things maple and sugar, and most dear friend to many. He was also a Board Member of the Handel and Haydn Society, a Patron of the New York Baroque Collegium, and Chair of the Grants Committee on the Council for the Arts at MIT (CAMIT). He was a mentor and benefactor to countless students enabling them to attend university, as well as charitable organizations focused on health and education*”. It is possible to track some of his philanthropic activities with the Massachusetts Institute of Technology (Chung 1997, Anonymous 2006). Schmid might have contacted Endicott with his idea of writing a book about Venezuelan butterflies, while meeting at Harvard University, where both became alumni (Höhn 2018, Anonymous 2018). Even though the publisher L. Levinson Junr. Ltd. had the right to distribute the book in Europe, Endicott retained the exclusivity of distribution in the USA.

The late Harold Skinner (1917-2004), a butterfly collector and painter (Duque 1993, Anonymous 1999, González 2004a), recalled Schmid as a keen butterfly collector during his youth (a fact also mentioned by Höhn 2018), who used to visit him to talk about butterflies, exchange ideas and examine his collection. Many of the butterflies pictured by Schmid & Endicott in their book, were



**Figure 3.** Front flyleaf of one copy of *Mariposas de Venezuela*, by Schmid & Endicott, with Venezuelan book seller label “Librerías DECOVAN” glued in; handwritten by previous owner, and dated “Dec. 1967” (ALV’s private library).



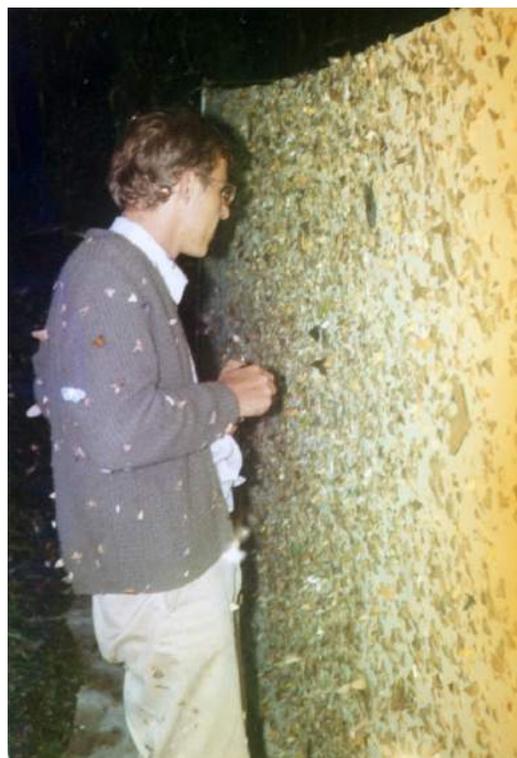
**Figure 4.** Bradford M. Endicott and wife Dorothea, in 1975 (photograph by Gabor Csanyi, from Chung 1997).

specimens from the Skinner collection, photographed at his home in Los Dos Caminos, Caracas (pers. comm. to ALV, 1985).

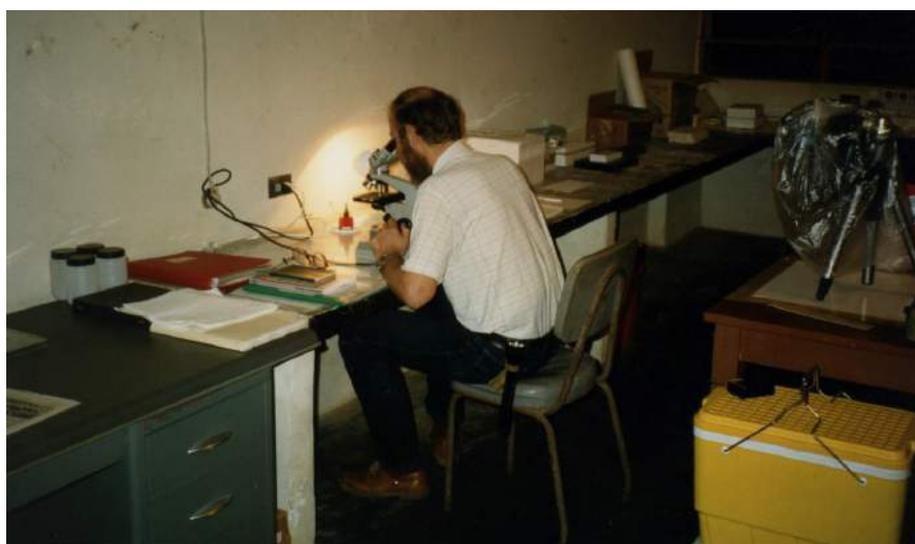
It is worth mentioning that during the mid-1960s, when Michael Schmid was a young collector of lepidopterans and in the course of preparing his book, there

were several other amateur, private butterfly collectors living in Caracas, like Harold Skinner (Los Dos Caminos, Los Palos Grandes), Rudolph Feige (Los Rosales), Pedro J. Bermúdez, Jr., Roberto de la Fuente, Sr. (Prados del Este) and Albert “Alberto” Gadou and Marie Louise “Mari Lou” Gatier de Gadou, who had a specialties and souvenir store in Sabana Grande, frequently visited by amateur and professional entomologists always curious to see which insects they had collected in their frequent expeditions throughout Venezuela, mainly south of the Orinoco. René Lichy (1896-1981), who had eventually become the first professional lepidopterist of Venezuela and one of the co-founders of the Sociedad Venezolana de Entomología in 1964 (González 2018), had moved from Caracas (La Pastora) to Maracay, and his contact with private collectors of Caracas may have become infrequent. Francisco Romero (1920-2002), Otello Mattei (1914-1981) and Edwin Saino (1918-2002), together with their respective families (all from Maracay) were highly motivated in collecting Lepidoptera and were frequent visitors of several spots along the Henri Pittier National Park, including Rancho Grande, Portachuelo pass, and the forested areas around Choroni (González 2004b, 2005). Schmid was certainly in contact with Francisco Fernández Yépez (1923-1986), who introduced him to several collectors from the Caracas-Maracay axis, more notably Lichy, Romero, Skinner and Gadou. Contact with friends and colleagues in those cities was quite possibly periodically renewed, as he later came back to the country several times to do fieldwork at Rancho Grande Biological Station, in the Henri Pittier National Park, a few kilometers north of Maracay (Figs. 5, 6).

Besides photographs taken from Skinner’s collection, Schmid also photographed specimens for his book from his own collection (which he started as a tweenager), and from the insect collection (now Museo del Instituto de Zoología Agrícola Francisco Fernández Yépez, MIZA-



**Figure 5.** Young Michael Schmid collecting moths with a light-trap at Rancho Grande Biological Station, Venezuela (courtesy of K. Schmid).



**Figure 6.** Schmid at laboratory work in Rancho Grande, 1980s (courtesy of K. Schmid).

FFY) at the Faculty of Agronomy of the Universidad Central de Venezuela in Maracay, as well as Ms. Gadou's collection in Caracas. Even though he is not mentioned in the acknowledgments of the book, there appears that photographs of some specimens from Lichy's collection were also used. The latter had the young Michael in high esteem and was very excited and happy for him after the book was published (A. Lichy, pers. comm. to JMG, 2019).

The foundation of the national entomological society came together with the increasing efforts of the renown Venezuelan entomologist Fernández Yépez to promote more and better relationships of cooperation between professional entomologists and collectors (many of them amateur). The affable character of Fernández Yépez was that of a natural leader of his generation. He had also achieved much academic prestige, accepting the appointment to Dean of the Faculty of Agronomy of the Universidad Central de Venezuela, between 1962 and 1965. From this position, he supported educational improvements throughout his institution, building museum and library facilities, and making possible favorable conditions to the exchange of knowledge with foreign experts in entomology, especially lepidopterology. There was much enthusiasm for butterfly collecting in the country in the 1960s and 1970s. This is especially true for a small community in Maracay, where a number of amateur lepidopterists have settled and established a circle around the figure of Fernández Yépez, namely, Marie Louise Gadou (El Limón), Francisco Romero R. and his family (Las Delicias), Otello Mattei and sons (Las Delicias); not to mention some outstanding specialists in Coleoptera. The unprecedented appearance of a number of popular and scientific articles on butterflies during the nineteen sixties and later could be at least partly, attributed to the expedited operation of this network of specialists (Bermúdez 1966, Skinner 1966, 1969, Masters 1967a, 1967b, 1968a, 1968b, 1969a, 1969b, 1969c, 1969d, 1970, 1971a, 1971c, 1973a, 1973b, 1973c, 1973d, 1973e, Negishi 1971a, 1971b, 1972, Holzinger & Holzinger 1972, 1974, Brown, Jr. & Holzinger 1973, Baumann 1974, Brown, Jr. & Fernández Yépez 1985). Interestingly, despite the fact that Venezuela is widely recognized as one of the megadiverse countries of the world, very few works on Lepidoptera have been published to reach amateurs and the general public (González 2009). However, we think and defend the idea that the publication of Schmid & Endicott's *Mariposas de Venezuela* triggered a novel interest in publishing, among Venezuelan collectors and their peers from elsewhere.

All members of the Venezuelan entomologists circle received Schmid's book with great expectation. It was the first book on Lepidoptera acquired by many amateur en-

tomologists (J. M. Ayala & R. de la Fuente, pers. comm. to JMG; M. Costa, pers. comm. to ALV, 2019). The book was not intended as an illustrated taxonomic catalogue, but as a popular, basic handbook for collecting, addressed to young readers, with a colorful illustrated account of a minimal representation (only 132 species) of the extraordinary diversity of butterflies and moths that can be found in the Venezuelan territory. According to Endicott's own words "[t]his book was really designed for the younger generation..." hoping it would "...bring pleasure ..." to the young minds and their families. This work was more an aesthetically beautiful "coffee-table book" than a scientific treatise. Nevertheless, in its time, it was a necessary contribution to popular knowledge that definitely drew significant attention from the broad public and marked a milestone in the history of the study of the butterflies of Venezuela.

The pedagogical concept of *Mariposas de Venezuela* is similar to that of *Mariposas diurnas de Venezuela*, by Álvarez Sierra & Álvarez Corral (1984), but the amount and quality of taxonomic information it contains, even if rather sufficient, cannot be collated with more recent systematic work, like the exhaustive volumes of *The Butterflies of Venezuela*, by Andrew Neild (1996, 2008). It is not comparable either, with earlier species lists and the highly impressive collection of watercolors of butterflies and moths from the vicinity of Caracas, by Théophile Raymond (1982).

It has not always been possible to use Schmid & Endicott's book as a guide for taxonomic identification, because it was not conceived for that purpose. For a period of time, collectors and cultivated lepidopterists in Venezuela would only have the means to reliably identify their butterflies by comparing at least part of the more common Venezuelan butterfly fauna with that of the neighboring islands of Trinidad & Tobago, territories for which another book more focused on faunistic and taxonomy was soon to be published (Barcant, 1970). Otherwise, they had to find their way consulting other books such as H. L. Lewis' *Butterflies of the World* or Paul Smart's *The Illustrated Encyclopedia of the Butterfly World*, or the more expensive, and often inaccessible, treatises like Seitz's series *The macrolepidoptera of the world*, or in later years, d'Abrebra's *Butterflies of the world*.

To our knowledge *Mariposas de Venezuela* by Schmid and Endicott, was the subject of only three short reviews (Takahashi & Sugimoto 1970, Wilkinson [1970], Masters 1971; the last one missing in Lamas 2019). Although courteous, none of them was very appreciative. There were no reviews either written by Venezuelan authors or published in Venezuela. This was not good for the national records, as time and events would show how reputable this short monograph has been in our country.

The same year of 1967 there appeared a work entitled *Mariposas y "Taras" de Santiago de León de Caracas* by Ignacio Ortiz. It was a mimeographed, paperback, "official" publication, with a species list, and some black and white illustrations, probably produced in a run of very few copies, that did not circulate appropriately within the community of Venezuelan entomologists. Therefore, it has unfortunately passed overlooked over the years, if not totally unknown (Ortiz 1967). Consequently, it would seem correct to consider *Mariposas de Venezuela* (Schmid & Endicott 1968 [1967]) the first handbook on Venezuelan butterflies. A fact already acknowledged by its early reviewers (Wilkinson [1970], Masters 1971).

Schmid & Endicott's was going to be for several years, though elemental as it remains, the **only book** available as a basic reference for anyone interested in Venezuelan butterflies. That is why it had been so influential up to the first half of the 1980s (M. Costa, pers. comm. to ALV, 2019). Being then, almost out-of-print, it became inadvertently displaced by the publication of an archival hoard of old manuscripts and illustrations by Théophile Raymond (1982), a very successful editorial venture, that was due to go to a massive second edition and two translations (Raymond, 1994a, 1994, 2001, Orellana *et al.* 2019, this issue).

Despite the fact that *Mariposas de Venezuela* was Michael's only work in Entomology (see Höhn, 2018), he maintained his interest in the group. "I just remember Michael showing me his collection of locally trapped butterflies which he called 'Mariposas de Franconia' [Franconian Butterflies; Würzburg, the city where the late Schmid lived and worked, is located in the region of Franconia, northern Bavaria, Germany]. His continued enthusiasm for the diversity and beauty of these precious (and highly threatened) species was very obvious" (H. Höhn, pers. comm. to JMG, 2019). During his research visit to Venezuela in 1987, Michael and his brother Thomas (who was still living in Caracas and managing the family's bakery) decided to donate part of the former's collection gathered during his tween and teen years and still in his family's house in Caracas. Many specimens, well mounted and in perfect condition, but lacking collecting information were given to the Zoology Museum (Faculty of Agronomy, Maracay), through Alberto Fernández Badillo (with whom Michael had started a cytogenetics project in 1987) to be used as didactic material (A. Fernández Badillo, pers. comm. to JMG, 2019). Some specimens were kept in Schmid's own collection in Germany, some were brought to the insect collection of the University of Würzburg and the remainder of Schmid's collection was advertised by Michael's brother in a specialties magazine and apparently sold to a foreign collector (so far, we have not been able to locate the buyer).

Nowadays, *Mariposas de Venezuela* by Michael Schmid and Bradford M. Endicott is a hard-to-find little treasure and almost a bibliographical object of cult.

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