Huitzilopochtlia

May 2009

Miscellaneous Mammillaria musings, brought to you by the left-handed postman

Thank you to everyone who responded so positively to the previous issue. Producing a booklet about the Lau mammillarias certainly looks a realistic possibility, given your help to compile as complete as possible a portfolio of photos to illustrate it. I personally have no Lau plants, as I gave my entire cactus collection to Kew back in 1983, and only a few relevant photos, sent to me in the 1970s and '80s by Lau himself. My commitments in recent weeks have left me very short of time, so this issue is only six pages, mainly a follow-up on Lau 1135 and 1096. Having sorted my correspondence with Alfred into better order, however, I'm starting with a brief account of my initial contacts with him, prior to my visit to his home with a group from Kew, in 1976 (see picture in previous issue, p. 2). As a make-weight, I'm adding a brief further instalment 'From my Mexican notebooks'. Pagination of 'Huitzilopochtlia' will be continuous, so this is page 11 – DH

Letters from Lau

I met Alfred Lau for the first time in 1973, when he attended the IOS Congress at Reading and Kew. He was well-known by then of course, having collected and distributed plants and seeds from Mexico and Bolivia for several years. At my request he agreed to collect material of the *Tradescantia* group for a project then in progress at Kew, but our correspondence did not begin until after the next IOS Congress, at Santa Barbara, California, in September the following year.

By then a storm had blown up over a very large consignment of *Lophophora* he had allegedly sent to Switzerland, apparently at the behest of Professor Werner Rauh, who needed some plants for research. Other allegations had also been made anonymously about large shipments by him of *Ariocarpus* spp. and other cacti to Germany and Japan. Rauh himself proposed Lau's expulsion from IOS, but I found myself, as Chair of the recently formed IOS Conservation Committee, defending Lau on the grounds that the evidence for Lau's supposed misdeeds was only ancedotal, and in a sense Rauh was himself partly responsible because he had not specfied the actual quantity of plants he needed. But I agreed to try to ascertain the facts, or at least Lau's side of the story, and duly wrote to Lau and to Rauh on my return to England. Then followed the first correspondence between us, and by the following March I concluded there was no case for Lau to answer.

In his first response to me (6 November 1974), having said he was 'a little perplexed' that I had not made any contact with him when I visited Mexico prior to the IOS meeting in California, Lau reported that, as agreed, he had collected material of the *Tradescantia* group, and had found one which was 'very succulent' and might be a new discovery. Sure enough, when a specimen arrived the following July (1975), it turned out to be a completely new species, demonstrating once more his remarkable knack of spotting something unusual, and here in a group of which he had no special knowledge. (I named the plant *Phyodina laui* .)

Later 1975 he sent me quite a number of plants for my opinion, mostly of ser. Supertextae, on which I commented at length and which eventually formed the basis of an article in the Cactus & Succulent Journal of Great Britain in 1979, followed by my description of the most striking of them, which I called *M. huitzilopochtli*. There is not much in our correspondence at the time to add to what was published in the article, but the following paragraph from Lau's letter to me dated 17 March 1976 is of interest:

"I send you number 761, A Mammillaria from Coalcoman which I had sent several years ago to Mr. Maddams. I never received any opinion on this plant. Coalcoman is in the State of Michoacan, far west from Apatzingan, at an elevation of 1300 metres. As Mr. Reppenhagen also found it in the same year as I, it would be fitting to name it Reppenhagenii, but first I would like to know your opinion as to the taxonomy of this Mammillaria. Then, last year, I found another small Mammillaria in Michoacan which I cannot find described anywhere. It was found near Aguililla in Mich, at an elevation of 600 metres and bears my number 1165. Finally, you are receiving a plant from the Barranca de Cobre in Chihuahua, Mammillaria number 1135. The flower is that of M. lindsayii, but it grows single and not in colonies, like lindsayii does to the East of Choix in Sinaloa and Chihuahua. There is a variety that grows on an elevation of 2000 metres which has longer and more robust spines. Number 1135 grows at 1000-1500 metres. I hope that the plants reach you. The air mail for these samples is terribly expensive."

I regret to say the plants did not arrive, which may be because I had announced my intention to visit Lau later in 1976 and he may have decided to await my visit rather than incur the cost of mailing them.

As he said, *Lau* 761, the plant from Coalcoman, was also collected by Reppenhagen, who eventually described it himself as *Mammillaria bambusiphila* var. *parva*, with his own collection *Repp.* 663, dated 13 Sep 1972, as nomenclatural type. The second plant mentioned, found near Aguililla, Mich., was evidently *Lau* 1155, not "1165", identified in the AfM catalogue and on his own data form as *M. xaltianguensis* and later described by Reppenhagen as *M. xaltianguensis* var. *aguilensis* (*Repp*. 1046). Tthe AfM catalogue and Lau's own data form say 1165 was a *Mammillaria leucantha* form from the Sierra de San Miguel, San Luis Potosí. So far as I know, however, *M. leucantha* does not occur in the Sierra de San Miguel, where one would expect *M. bocasana.* A decade later, Alfred sent me a Kodachrome annotated by him 'L1165' and dated by Kodak 'APR85' and it is indeed, *M. bocasana*, in the form we used to think of as *M. longicoma,* later re-named by Fitz Maurice (misleadingly, I think) as ssp. *eschanzieri*.

***Lau* 1165**, catalogued by AfM as *'M. leucantha'* but identifiable as *M. bocasana* (*photo:* Lau)

It seems Alfred was in a bit of a muddle with his numbering at this point, as he had previously sent me a plant of *M. supertexta* numbered "1168" but later catalogued as *Lau* 1158, and two of *M. sphacelata* numbered "1166" and "1167", later catalogued as *Lau* 1156 and 1157. His parcel

containing these three specimens and three others (*Lau* 061a, 681 and 1116a) reached me at Kew on 3 March 1976, following a brief letter from him (dated 11 February and received nine days later) with the article (then headed “A Twenty-Year Study and Summary of Species and Varieties in the Family Cactaceae in the Tomellin Canyon of Oaxaca, Mexico”). I eventually published this in the GB journal (CSJGB 41: 61–66. 1979) along with some black and white photos, mostly reproduced there, and a few Kodachromes. By the time article was published, it seems I was aware that 1168 had become 1158 (see l.c. page 66), but not that 1166 and 1167 were also to be changed.

As for *Lau* 1135, lo and behold, when putting my Lau correspondence in order, what should I come across, to my pleasant surprise but this Kodachrome of the plant in question, and in flower. The transparency is dated (by Kodak) ‘FEB 76’.

***Lau* 1135** Lau’s own photo of this plant he suggested was a form of *M. lindsayi*

Well, clearly this one didn’t have magenta flowers, but in view of the statement by Marion and Rudi Schumacher (quoted by Bob Stanley in JMS 46(3): 62. 2006) that at El Divisadero “they found yellow-flowering plants among the plants with red flowers”, that does not make Bob’s plant,

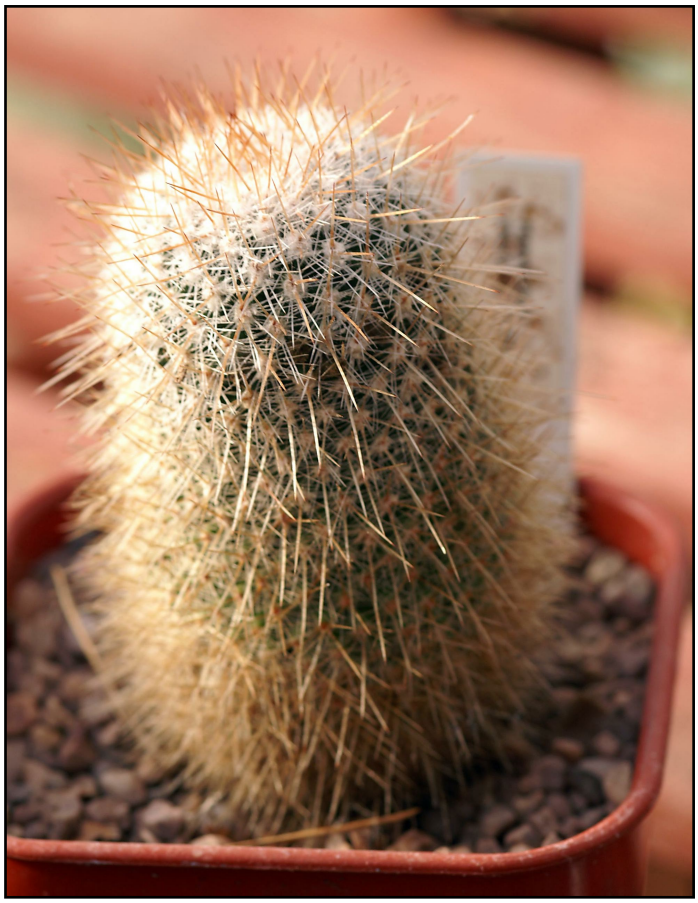
***Lau* 1135** Bob Stanley’s photo of his magenta-flowering plant, said to have been vegetatively propagated by Bill Greenaway from a collected plant of *Lau* 1135

or Mark Masterson's, which is virtually identical, an imposter, but since these were evidently not propagated from Lau's yellow-flowered plant, the clone should perhaps be given a cultivar name or else a number-suffix (e.g. *Lau* 1135b or *Lau* 1135WG, for the source, Bill Greenaway). Personally, having looked at the Schumacher pictures, I am inclined to agree with them that *M. marksiana* does not merit the status of a distinct species, but even with more data from Chihuahua I remain on the fence concerning the status of *M. lindsayi*. As for "*M. sinforosensis*", however, I cannot yet see a case for recognizing that as distinct from *M. standleyi.* The adult plants of "*M. sinforosensis*" seem to me closely to resemble those of *M. standleyi* I saw near Alamos in 1986, and plants I raised from seed from that locality (*Hunt* 9731) flowered red and resembled the young plants illustrated by the Schumachers.

Lau 1096

My somewhat rash comments in the previous issue brought a quick response from Chris Davies and images from him of his plants of *Lau* 1096 and *M. meyranii ML* 48 which quickly persuaded me to his point of view that his *Lau* 1096 is more like *M. meyranii* than my suggestion in the previous issue (p. 5) *M. bella. ML* 48 was (I think) collected near the type locality of *M. meyranii* (Santa Barbara, close to the Río Tilóstoc, a tributary of the Río Balsas) and certainly seems to agree satisfactorily with the plants illustrated with the original description and photos by Helia Bravo in CSJGB 18: 84, 98 (1956). It is is indeed a better match than my picture of the stouter var. *michoacana* at San José Purua (NCL 431.1), which is perhaps 40 km NW of Santa Barbara and in the drainage system of the Río Tuxpan, another tributary of the Río Balsas.

Mexcala, where Lau collected his 1096, is very much closer to the type localities of *M. bella* and especially *M. guerreronis* than those of the two named *M. meyranii* forms, so (assuming *Lau* 1096 is *NOT* an imposter) it is understandable that Lau identified it as *M. guerreronis*. But are all three species mentioned really distinct? Or should *M. meyranii* and *M. bella* be reclassified as subspecies or just 'variants' of *M. guerreronis* to make their close relationship clear?



Above, Chris Davies's plant of *Lau* 1096, and *right,* his seed-raised plant of *ML* 48, originating from the type locality of *M. meyranii.*

photos: Chris Davies

From my Mexican notebooks

As I said in my introduction to this series, my first visit brief visit in 1960 doesn't really count. I saw no cacti, and my hopes of getting to the locality of Mammillaria yucatanensis were dashed.

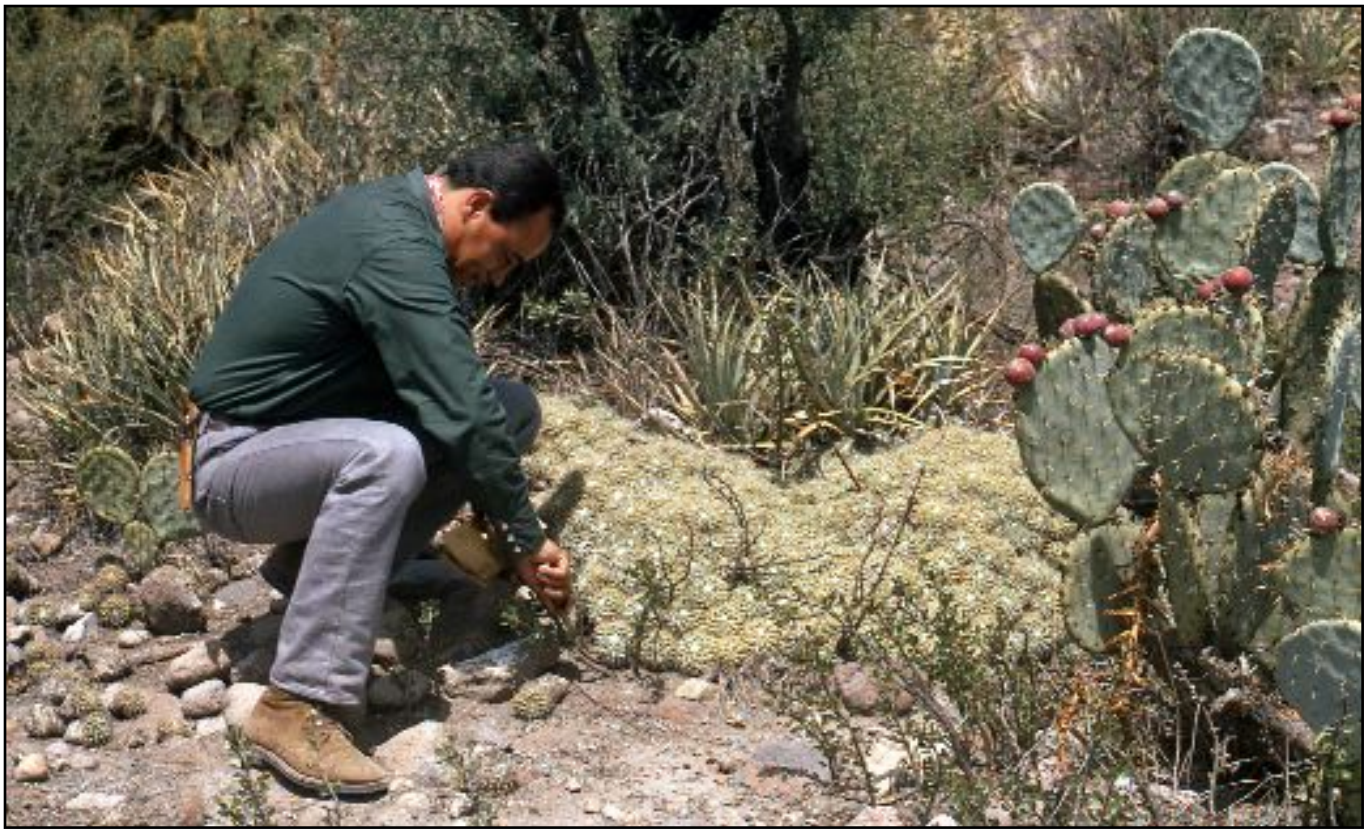
It was nine years before my next visit, again via Belize (where, as yet, no one has found a Mammillaria, though there might be one or two). I arrived in Mexico City in mid-July 1969, not ostensibly to study cacti but to collect live material of the Tradescantia family for on-going research at Kew on chromosome evolution and the taxonomy of the genus and its relatives. But urged on by Dr John Hutchinson FRS, I had already written an overview of the Cactaceae for one of his books, so my name was known to Dra Helia Bravo and Hernando Sánchez-Mejora - da, who was collaborating with her on the second edition of her book 'Las Cactáceas de Méxi - co' (it eventually included a photo of my Mammillaria collection!).

In any case my visit from Kew was 'official' and I was received very hospitably by the staff of the Institute of Biology at Mexico's National Autonomous University. Arrangements were soon made for me to join any field-trips in the offing. But first (on 20 July) Hernando took me to a meeting of the Mexican Cactus Society at the Botanic Garden, where I was introduced to more of the local specialists previously only known to me through correspondence or their names in the literature, Dra Bravo, Dr Jorge Meyrán, Dudley Gold and Felipe Otero, and others like Sra Buchenau, whose husband Francisco, who had found and described several new mammillarias, and lectured in England, had died of a heart attack earlier that year.

Members of the Mexican Cactus Society at the Botanic Garden, 20 July 1969, including Dudley Gold and Felipe Otero (2nd and 3rd from left), Helia Bravo (with basket), Sra Buchenau (at back, looking to her right), Sra Gold (orange blouse, next to Sra Buchenau), Sra Meyran and Dr Meyran (next to Sra Gold) and Eulalio Hernández (friend of Felipe, right).

23–24 July 1969

On a two-day round-trip with Dr Francisco González Medraño, who was studying some shrubby members of the daisy family (Compositae), I got my first glimpse of the Valley of Mexico, and of the states of Hidalgo and Querétaro and the SW corner of San Luis Potosí. In Hidalgo I saw my first mammillarias in their natural surroundings (apart from *M. magnimamma* which I'd seen on on the pedregal (an ancient lava flow) close to the botanic Garden): *M. elongata* and *M. com - pressa.* The night was spent in Tamazunchale SLP (elevation 120 m) a one-street town on the main highway from Mexico city to the port of Tampico. Throughout the steamy night the trans- port trucks thundered past outside, their exhausts unsilenced, making sleep impossible.



Dr Francisco González Medraño with a nice clump of *M. compressa* (and *Opuntia robusta*) near Ixmiquilpan, Hidalgo, 23 July 1969. (I don't think he was trying to dig it up for me!)

26 July--6 August 1969

Next, I was invited to join a memorable ten-day trip, via Veracruz, on the Gulf of Mexico to the Institute of Biology's field-station in humid lowland rain-forest at Catemaco, an even steamier place than Tamazunchale. This trip had been organized for a visiting mycologist and his wife and we saw very few cacti, but I did find several of the *Tradescantia* group I was looking for, and even a new species. Eventually we crossed the isthmus to the drier state of Oaxaca and made a few stops on the way back to Mexico city, mostly for sight-seeing. Near the famous archaeological site of Monte Alban I spotted a clump of what I took to be *M. karwinskiana,* perhaps growing from more than one seed, but clearly demonstrating the sort of variability that can occur in a single population. Or was I mistaken? Two of the heads have shorter spines and dense axillary bristles. Were there in fact two species growing in a single clump? Answers on a postcard please!

M. Hunt 7232p (p =photo only, plant was not collected!). Oaxaca, beside the approach road below the ruins of Monte Alban, 5 Aug 1969 [DH 690622]