



Dr. Hermann Otto Sleumer, August 1965

DR. HERMANN OTTO SLEUMER RETIRED

On March 1st, 1971, Dr. Hermann Otto Sleumer, senior staff member of the Rijks-herbarium, retired on reaching the age of 65 years. I have expressly omitted to say 'from active service', because his work has gone on uninterruptedly and he even had objections against spending one afternoon, on Febr. 26th, to celebrate this occasion with speeches and a reception in his honour. Also Mrs. Sleumer found it quite unnecessary and did not anticipate it with pleasure, but afterwards both told us that they had enjoyed it immensely.

The story of the life of a scientist is to me always fascinating if it provides, apart from the plain facts of education, career, and bibliography, an insight also into the motives of his personality, the opportunities life offered to him, the challenges he had to meet, and the way he solved them or came to decisions. Too often the incentives and personal notes fail to come to the fore and consequently such so-called biographies fall short of a true life sketch.

Naturally, the biographer must in some way or other have access to sources. Fortunately, Sleumer, after having considered my plea in this aspect, provided me, though admittedly reluctantly, with vital information on the period before he joined our group in 1953. This proved to be very important indeed, because it confirmed my opinion as to how much the course of a scientist's life — even if he has firmly decided what are his ambitions and towards what end — depends on opportunities and environment, on sometimes slight occasional happenings, on personal relations, especially with his teachers, and sometimes, at least in this life, on political world affairs.

As a botanist one is also curious to know the origin of his interest in certain groups of the plant kingdom. Together it seems an erratic whole, but there is some method in it if a strong character and conviction forms the backbone.

In the following *curriculum vitae* I have tried to weave such happenings, motives, and opportunities into the ground tissue as a pattern of his life.

Hermann Otto Sleumer was born Febr. 21st, 1906, at Saarbrücken as the eldest of four sons of Bernard Sleumer and Magdalena née Messmer. His father was a pharmacist, a factor which played a distinct role in Hermann's life. After having followed primary schools at Uelzen (Hann.) and Osnabrück and the grammar schools 'Gymnasium Carolinum' at Osnabrück, the Municipal Gymnasium at Bochum, and the Friedrichs-Gymnasium at Freiburg (Br.), he attained the certificate in 1924. Financially these were bad years in Germany as an aftermath of the first World War, and entering a University for the study of geology, then his great ambition, was out of the question. So he decided on pharmacy on which he could start with three years of practical work in pharmacies in order to earn a living. After two years of pharmaceutical apprenticeship in Alfeld (Leine) he succeeded in the first pharmaceutical examinations at Hildesheim, and worked as a pharmaceutical assistant for half a year each at Wernigerode (Harz) and Trossingen (Württemberg). He was able to proceed to a University study in Pharmacy at Tübingen in 1927/28 and at Munich in 1928/29, earning his money mainly by spending most of

his free time in pharmacies, finishing this with a state examination in pharmacy at Munich, March 1929. His teachers in botany at Tübingen were Lehmann, Oehlkers, and Zimmermann, of whom he specially praises the latter; in Munich he studied under Karl von Goebel, Hirmer, and Suessenguth. During this period his ambitions had shifted from geology to botany, first under the influence of the pharmacist and allround naturalist J. Förster at Alfeld.

He wished to pursue academic study in botany and for this purpose he chose the Albert-Ludwigs-University at Freiburg (Br.), where he studied under Oltmanns and Rawitscher on a mycological thesis, viz. on the sexuality and cytology of *Ustilago zaeae*, by which he became Dr. phil. nat. in March 1932. He had to finance this study in the same way as earlier, that is, by working in pharmacies during his vacations and week-ends.

From 1927 onwards he had become influenced by Braun-Blanquet who, on various prolonged excursions in southern Germany and Switzerland, had introduced him into the methods of the Zürich-Montpellier school. As a result, he compiled a floristic and phytosociological survey of the famous Kaiserstuhl, a small mountain in the plain between the Black Forest and the Vosges, which was published in 1933. His herbarium had by that time reached about 14,000 numbers, including c. 4,500 collections of *Hieracium* which were named by H. Zahn. His collecting work had brought him into contact with quite a number of specialists.

His first place of employment was with the 'Badisches Weinbau-Institut' in Freiburg (Br.) from Febr. 1932 to March 1933. Here he established precise values for the incubation time-table of the *Peronospora* disease and worked on several practical, partly chemical subjects. The director of the institute was C. Müller, a famous hepaticologist, and so Sleumer became interested in this group on which later in his life he collected lavishly in the Andes. In 1932 he paid a visit to Berlin-Dahlem where he found Mattfeld very much impressed with his wide knowledge of the German flora and his interest in non-applied botany. It was soon after this that Mattfeld proposed to Diels to let Sleumer fill the vacancy at Berlin left by the death of the 'Kustos' P. Graebner, as 'Assistent', to which Diels consented just before he went to Ecuador.

Thus, on May 1st, 1933, Sleumer entered another phase in his life, occupying a post at Berlin which he held until August 1st, 1949.

As the curatorial and scientific work at Berlin was divided up by families, and Gilg retired in 1933, Gilg's lot fell to him, mostly consisting of the families of *Celastrales*, *Parietales*, and *Ericales*, 32 in all. So he started, the joke was, still unmarried, as a 32-fold 'family father'! In this great centre, then under the leadership of Ludwig Diels, he finally found the fulfilment of his first proper but also final ambition: systematic work on the world's flora. Leadership is a great word, as Diels kept himself rather remote from the staff. Though Sleumer had a room next his, Diels came to his room only twice in all the following years. Between most of the other 'Kustoden' also there was little personal contact.

In addition to the curatorial care of about one tenth of the phanerogamic herbarium Sleumer was able to produce creative work also, and among the 14 papers he published in 1934 there were several on the *Flacourtiaceae* and *Ericaceae* (the latter mostly from Andine South America), two families of which he became a devotee. He must have worked with great industry and at a tremendous pace — later to appear a life-long habit — as in the year 1935 ten papers were published, in 1936 twelve, in 1937 six including the first contribution on *Icacinaceae*, an other family to hold his lasting interest. This was the consequence of his having been entrusted earlier with the treatment of part of the *Olacales* for the 2nd edition of the 'Pflanzenfamilien' viz. the *Opiliaceae* and *Olacaceae* (1935) —

Icacinaceae etc. followed in 1942 — a token of trust in his scientific abilities by Harms, a botanist of wide learning who was a mental father to him.

In Germany, as in Switzerland and some other European countries, it is customary to write in addition to a Ph. D. a '*Habilitations-Schrift*', a scientific treatise of high standing, in order to get the title of '*Doctor habilitatus*', compulsory for university teaching. For this Sleumer chose to compose a monograph of *Hydnocarpus*. This combined botany and pharmacognosy, as the seeds of certain species of *Hydnocarpus* contain chaulmoogra oil, which was then the most promising cure for leprosy. It fitted in with another duty of Sleumer, viz. his assisting the well-known pharmacognosist Prof. N. Schürhoff, at the Berlin University, whom he assisted in lectures and courses in pharmacognostical microscopy. The '*Habilitations-Schrift*' was accepted in 1937, but the license to teach as a '*Dozent*' (lecturer) normally tied up with it, was not granted to him, because he was not a member of the 'Party' and not trusted by the Party politically.

This attitude was born much earlier. Already as a student in Munich Sleumer had witnessed the initial stages of Hitlerdom, a movement arousing feelings — and hopes for quick promotion — especially in young people. From curiosity he had attended two sessions in the famous '*Bürgerbräukeller*' but already during the second session he became so disgusted that he left it halfway hoping to escape punishment from the gang at the exit. Both his scientific mind and religious convictions urged him to reject this movement completely and though the only way to live on was to join the silent majority, his never showing any positive reaction stamped him as being untrustworthy for those who gradually grew in power. Consequently he was never granted a permanent academic position.

The political development must have clouded life for people like Sleumer and many others. Even my wife and I felt the frigid atmosphere when, travelling home on leave from Java in 1934, we had to change trains at Cologne and spent an hour on the station: everywhere gloomy, unsmiling, silent, hurrying people, and the news stands full of Hitler's '*Mein Kampf*', which I bought from curiosity. Scanning this in the train to Holland I felt the ugliness of this megalomaniac, exposing his devilish scheme so plainly that at that time few could believe it.

Under these political circumstances Hermann devoted all his energy to work, first on a monograph of *Flacourtiaceae*, and in the later thirties participating in the revisions of the '*Beiträge zur Flora Papuasiens*' commenced by Lauterbach & Diels, for which he revised the Ericaceous genera *Agapetes* and *Dimorphphanthera* and also the *Proteaceae*, the fourth large group at which he would work also later. No doubt the presence of so many '*Kustoden*', many systematists of first rank, or at least of tremendous output, such as Diels, Harms, Pilger, Mildbraed, Mattfeld, Markgraf, Mansfeld, Burret, and others, made the busy Berlin centre a scientifically stimulating environment. He never met Engler, who had died in 1932, but whose driving spirit still pervaded the institute. He also did not meet the most prolific of all former Berlin workers, Schlechter, who had died in harness in 1931. Typical for Schlechter's mentality was that he used to say '*schon zwölf Uhr und noch nichts für die Ewigkeit getan*', alluding to the fact that he had that morning not yet described a new species.

From one point of view the Berlin group failed. They were in charge of one of the richest world herbaria and the publication of the '*Pflanzenfamilien*', '*Pflanzenreich*', '*Notizblatt*', '*Fedde's Repertorium*', '*Just's Botanische Jahresberichte*', and '*Botanische Jahrbücher*' — partly private enterprises of publishers and the Academy of Sciences — indeed they were almost on top of the plant systematical world; but there was no desire to establish international contacts or to seek collaboration. I personally remember vividly

our regret, when I was working in the thirties at the Herbarium Bogoriense in Java, that the specialists of the 'Pflanzenreich' refused or did not respond to our pleas that they should borrow our material in order to make use of it in their revisions. Harms was immensely glad to receive particular information that he requested on *Balanophoraceae* and *Rafflesia*, but on my additional complaint of the lack of collaboration he answered that such collaboration with all the herbaria outside of Berlin would involve such an increase of their task and would so much slow down the output, that it was out of the question. Consequently, most family revisions in Engler's 'Pflanzenreich' were confined to the study of the Berlin material and suffered from incompleteness on that account: speed and thoroughness are antagonistic.

Sleumer has always felt this as bad for his own work and managed to go abroad and study material in other herbaria, visiting Copenhagen in 1933, Edinburgh and Montpellier in 1934, Paris in 1935, Kew in 1936, and Edinburgh again in 1939. He attended also the 6th International Botanical Congress at Amsterdam in 1935.

Towards the end of the thirties Sleumer married, July 31st 1937, Anna Agnes née Meyer, from Bremen. They had and still have two children, Angela Theodore Anna born 21st of May, 1938, and Bernhard Hans Georg, born 21st of June, 1941, both at Berlin.

With the outbreak of the war Sleumer could of course not escape being called to arms and he was assigned in 1941 to the Sanitary Corps to serve as a pharmacist, serving in Poland and Germany.

In 1944 he had to join for half a year a botanical group within a greater organisation of biological warfare. An office was set up in Vienna, with research stations and experimental plots outside Germany. The aim was to drop inferior cereals and noxious weeds by air on enemy countries in order to deteriorate their crops — a plan emanating, it was said, from Himmler, who considered himself competent in biological matters. Several other botanists were added to this group, amongst others Hj. Eichler and O. Schwarz. The strict secrecy kept this grotesque plan concealed even from Army generals (sic); the botanists profited from it by enriching their botanical knowledge and collections in the Alps, Poland, and southern France. The plan was so silly, that they were convinced it had been invented to keep some scientists away from the fighting fronts by some high officials who already foresaw ultimate defeat.

In the autumn of 1944 Sleumer was again incorporated in the Sanitary Service as a pharmacist in the retreating fighting army. With the breakdown of the war he was in Mecklenburg and could manage to join his wife and children at Bremen.

After the formal armistice he returned to Berlin, where he found not only the ruins of a city but also an almost entirely destroyed institute where only a small part of the central wing was habitable and where the basement had saved thousands of duplicate collections of the former treasures. The Willdenow collection and some 4000 types had been evacuated to the saltmines of Bleicherode-Ost near Nordhausen in Thüringen. They were in Russian hands, but by an exchange against a physical library in West Berlin through negotiations of the Allied Forces they were saved from being removed to Moscow (see Willdenowia 1: 18, 26).

Diels had, at an earlier stage of the war, tried to get permission to evacuate the whole herbarium, but partly through the magnitude of this undertaking, but mainly through the security given by Goering that Berlin would be entirely safe from bombing, this was never realised. One was deemed a traitor to doubt his word.

Sleumer participated in the almost hopeless task of rehabilitating the Berlin centre, joining those who had survived and returned: Diels, Pilger, Melchior, Mattfeld, Reimers,

Werdermann, and Burret. This work took all his time. Besides being Assistant at Dahlem he was nominated in 1946 extra-ordinary professor at the Humboldt-University in East Berlin; he also lectured in the chair of Pharmacognosy in the Pharmaceutical Institute in West Berlin. He foresaw that these activities together would lame his scientific activity for decades to come and would frustrate his creative ambitions. All his life he shunned administrative and organisational activities and was grateful to those who carried this burden. In Germany he furthermore foresaw an extremely slow recovery of systematic botany, as Engler's policy of concentrating this branch of research in the great Berlin centre took its revenge.

And when the Foundation Instituto Miguel Lillo, affiliated with the University at Tucuman in NW. Argentina and then a very large centre of botanical activity, well aware of Sleumer's former work in the South American flora through Parodi and O'Donnell with whom he had had contacts as early as 1934, offered him a position as extra-ordinary professor to give a course in phytography and to devote himself further to taxonomic research and exploration work, he accepted.

The decision to change from Berlin to Argentina must have caused him a great mental effort. It meant a choice between the pursuit of scientific endeavour, of which he felt fully capable and which would satisfy his desire towards creative work, and a life devoted to the necessarily slow rehabilitation of Berlin which would mean some two decades of spending his energy on useful but non-creative activities, which, in addition, could never lead to the restoration of the glamour that Berlin had before. The plan was that he would work at Tucuman on contract and only temporarily for a period of 3—6 years. A vacant position was held open for him in Berlin until 1952, with the prospect of succeeding Pilger as director, who in his turn had succeeded Diels. His going to Tucuman meant really only postponing an important decision on the choice between scientist and career.

The Tucuman centre was at Sleumer's arrival still at the height of its meteoric development, because after the war it had received a big 'injection' of personnel and money towards building up a large University. But unfortunately, like too many such enterprises in South America, most laudable attempts hinge on economic ups and influential personalities, but are notoriously unstable against the later waning influence of leading persons and downs in economics.

With his departure for Argentina in September 1949 he was hardly aware of this, and if he had, he would probably still have undertaken the step. It soon proved that the Miguel Lillo Institute had passed its steep peak of growth and was on the decline. Still, Sleumer had at Tucuman a fascinating time, exploring the Andes between Patagonia and Bolivia in official time as well as during vacations. Naturally he became attracted towards the study of new groups of plants, for example *Solanaceae* which he had already scanned at Rio de Janeiro during three weeks on his way to Tucuman. He easily learned Spanish as he is well-versed in languages.

When the decline of Tucuman set in, money became short and the MSS he compiled for the pompous but magnificent 'Flora Argentina' were left unpublished. The seven working foreign botanists, among them Singer and Hueck, Fiebrig and Sparre, left one by one, Sleumer remaining as the last of the Mohicans, leaving his 4300 selected and well annotated herbarium numbers at Tucuman; duplicates had been sent to Stockholm, Vienna, and Washington.

With the gradual worsening of the political and economic situation under Perón Sleumer was again faced with the dilemma: would he remain or return to Berlin?

On this cross-roads he decided definitely for serving science in his own way regardless of position. This decision was still more important for him to make, as its implication

was the abandonment of all rights for a pension from Germany, as he had never been appointed in a permanent position from 1933 onwards, for reasons which have become clear earlier in this life sketch.

At that time (1953) the Foundation Flora Malesiana, centered at Leiden as a guest working group, had a vacancy for its build-up, and the prospect of pure research work without administrative duties induced him to accept my request that he should join the work for Flora Malesiana, in May 1953, a step which neither he nor we have ever regretted. I had had no earlier correspondence with him, but knew his work in *Flacourtiaceae* and his contributions to the *Proteaceae*, *Ericaceae*, and *Icacinaceae* of the Papuanian flora. It was naturally these groups which he undertook to revise for Flora Malesiana, now in the customary thorough way and style of our design.

On this final phase of his life I can be short as it has been so much less eventful as compared with the earlier periods.

On July 1st, 1956, Sleumer accepted a permanent post in the Rijksherbarium under the condition that he would continue his work for Flora Malesiana as usual. He also solicited Dutch citizenship which was granted to him in 1962.

During his tenure at the Rijksherbarium he went on with the Malesian *Ericaceae*, started in 1955. The preliminary MS was finished in 1961, but he felt the lack of personal field knowledge a great shortcoming. Through a joint grant from the Netherlands Foundation for Pure Scientific Research (Z.W.O.) and the "Treub Maatschappij" he made an expedition to Malesia in 1961/62 together with Dr. P. van Royen. They spent first several weeks in Luzon, then from May 1961—Febr. 1962 they were in western New Guinea, where they explored the Cycloop Mts., Mt. Arfak, and the Vogelkop Peninsula, where he was joined by Mr. W. Vink; in Sept. '61 he explored in East New Guinea in the Morobe District and Eastern Highlands, with Mr. J. Womersley, hunting *Rhododendrons* and other *Ericaceae* and *Epacridaceae*. He returned via Brisbane, Sydney, and Honolulu, staying as guest of the Degeners, exploring for *Epacridaceae* in Oahu, Kauai, Maui, and Hawaii, returning via San Francisco, Cambridge, and New York. In 1963 he was for the same purpose about two months in West Malesia, exploring in Sarawak and North Borneo, attending the Unesco Humid Tropics Symposium at Kuching, making the ascent of Kinabalu, and subsequently spent two months in Thailand leading (together with Dr. Tem Smitinand) the 4th Unesco Botanical Training Expedition in which twenty participated.

These expeditions had amongst others also the purpose of introducing Malesian *Rhododendrons* into cultivation, especially those of the highlands of Malaya, Kinabalu, Luzon, and New Guinea. Malesian species, notably *R. jasminiflorum* and *R. javanicum*, had been introduced by Thomas Lobb in the last century, but now that the unimaginable wealth of beautiful species had been exposed it became clear that here was a rich untapped source for horticulture. We had already started an attempt to introduce large-flowered species from the Wissel Lakes in West New Guinea in 1955 through a forest official, Mr. M. Rosendahl. Sleumer found that seeds were best viable if the pods were collected just before bursting. Seed was distributed freely to botanical gardens, Leiden, Groningen, Kew, Edinburgh, etc. It appeared that upgrowth was very slow. Then Sleumer devised the method of cuttings which improved the pace of getting flowering plants. The large Boskoop centre of arboriculture in the Netherlands was initially not very interested, as in fact were many other *Rhododendron* societies and *Rhodo*-adepts, because of the general lack of hardiness of tropical-montane and even alpine plants, necessitating greenhouse conditions for their maintenance. But at present there is an abundant demand, in England, Australia, and the United States. It is with great satisfaction that I draw attention to

Sleumer's vital role in the introduction of tropical Malesian *Rhododendron*, which culminated in the discovery and introduction of *R. leucogigas*, the 'white giant', which species has presumably the largest flowers in the genus.

When he had finished the revision of *Icacinaeae* and was approaching retirement he told me that he had still some large provisional old MSS on various groups and instead of starting on a new smallish family for Flora Malesiana, to which he had already made such large contributions, I granted him to work on these MSS from which evolved the revisions of *Escallonia* and some *Flacourtiaceae* genera. After his retirement we were able to induce the Netherlands Foundation for Pure Scientific Research (Z. W. O.) to make him a three years' grant to enable him to pursue his monographic work on his beloved *Flacourtiaceae*, which he once wanted to revise for the 'Pflanzenreich', but which he is now tackling genus by genus, starting with the African genera.

I have said above that his life has not been eventful since 1953, but this is only valid for his 'official' life. Because I am sure that the finishing of each MS is for him an important event; the worry he has sometimes, with the finishing touches, with decisions about generic and specific delimitation, can always be well observed by his colleagues; it is probably the same feeling a hen must have in laying an egg, restlessness and nervousness in order to make a performance to perfection.

Sleumer has of course described a good many new species and even genera and in this respect he comes up to the rather remarkable standard for good creative systematical work set by our colleague Stafleu, who recently suggested (in *Taxon* 19: 425) measuring this by the number of entries of new species in *Index Kewensis*. Fortunately, there are exceptions, as in Sleumer's certainly thorough monograph of *Escallonia* only a single new species is described. The large number of novelties in *Ericaceae* can easily be explained by the fact that, except for some odd, occasional new species descriptions, nobody had ever revised this family which is extremely rich in the mountains of Malesia, New Guinea in particular. This also happens in some other neglected families as *Euphorbiaceae*, *Lauraceae* etc. and is expected for others, such as *Gesneriaceae*, *Meliaceae*, etc. In many other families revisions are equally badly needed but will entail few novelties, rather a mass of synonyms, as shown again in Sleumer's recent revision of the Asiatic-Malesian *Icacinaeae*: reductions and critical synthesis rather than new species to be recorded in *Index Kewensis*.

His species concept tends to be towards the narrow side, especially if material is scant or inadequate, a consequence of his cautious approach and sticking to facts. Indeed, it is often extremely difficult to fathom conspecificity on the basis of scant material of random specimens found widely apart which are not more or less homogeneous. Caution induces him then to keep them apart provisionally as taxa of either specific or infraspecific rank. In such cases indeed our work must have unfortunately a provisional character, although admittedly others with more daring views tend to accept even then a wider species concept. But Sleumer hates the confusion sometimes caused by too early reduction; in absence of intermediary links he wants to postpone a final decision until he has sufficient factual material, at which stage he alternatively does not hesitate to recognize wide and variable species. Through this cautious approach to taxonomy he has never felt induced to indulge in considerations of synthesis or theory, which requires speculation and means a trust in imagination.

We wish doctor Sleumer and his family a most pleasant future time at Leiden and hope that science and our institute will profit from his devoted work. As an honorary staff member he remains attached to the Rijksherbarium as from March 1, 1971.

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