

VIII. A SHORT BIOGRAPHY OF C.A. BACKER, NESTOR OF THE FLORA OF JAVA

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A facsimile reprint of the *Verklarend woordenboek van wetenschappelijke plantennamen* (Explanatory dictionary of scientific plant names) by C.A. Backer has been published in September, 2000. I have been asked to write an introductory note on the 'author of this booklet', as Backer called himself under the lemma '*backeri*', with some of the backgrounds of the author and the origin of this monumental and unsurpassed work, of which a somewhat emended translation is given here.

The following story is based on some biographies of Backer that have appeared after his death in 1963 (see References), especially that by Reinier Cornelis Bakhuizen van den Brink f. (1911–1987) and Cornelis Gijsbert Gerrit Jan van Steenis (1901–1986), but especially on the correspondence in the archives of the National Herbarium of the Netherlands, Leiden University branch, on a number of speeches kept by Backer himself, and some contemporary papers. In the necrologies written by friends and sympathizers Backer has more or less been praised up to high heaven under the slogan: '*De mortuis nil nisi bonum*' ('Let nothing be said of the death but what is favourable'). Nevertheless, casual remarks are made about Backer's less pleasant qualities so that it must be feared that these have been somewhat higher than may appear from the following.

YOUTH AND EDUCATION

Cornelis Andries Backer was born on 18 September 1874 in Oudenbosch and died on 22 February 1963 at Heemstede, The Netherlands. From his father's side he was a scion of a family of school teachers, from his mother's of the lesser peasantry. Because of his weak constitution he spent much time at his Uncle and Aunt Pelt in Werkhoven, where he attended the school run by Master Kraai. This one had an excellent way to subdue the demoralized farmers' sons. A clear-cut method against insubordination was that he postured himself behind the querulous fellow and recited the following verse accentuating each syllable with a firm box on the ear of the youthful villain:

Het leren wordt niet opgedrongen
De lust moet zitten in de jongen.

(Teaching is not enforced / Desire must be inside the boy)

Those were the times! Actually, the teaching method employed was surprisingly modern: each student was given a reader and a book on arithmetics and perused these at his own speed. The best ones learned to trust themselves and proceeded rapidly, the others did not proceed beyond simple spelling and counting.

Although Cornelis belonged to the 'intellectuals' of his family, after school he had to fill a wheel barrow to feed the pigs. Possibly this was the foundation of his later studies in

the weed flora of Java. Certain is that within the family of Uncle Pelt the foundation was laid for Backer's proverbial knowledge of the Scripture, as the Introduction to the '*Woor-denboek*' so clearly shows. Before each meal he had to read a chapter from the Bible alternating with sermons of the Reverend Cornelis van Niel (1612–1670) from *Den donder-slag der Godloosen* (The thunderbolt of the Godless), a book that is even now still in use in some orthodox Protestant circles in the Netherlands.

Following time-honoured custom Backer, when fifteen, attended the State Teacher's Seminary at Haarlem (1889–1893). As son of poor parents he was given a grant of three hundred guilders. Three days after his finals in May 1893 at eighteen years of age he was in front of the class on an annual salary of five hundred and fifty guilders. Successively he had posts at several small villages. The advantage of this was that there was much leisure time for study, while as a schoolmaster he had credit with booksellers, something he hadn't had when still a yokel. He used this opportunity exhaustively.

His interest in botany had already expressed itself at the Seminary and by the changes in abode he became familiar with various vegetation types. This was the time that he came into contact with some famous Dutch contemporary botanists, e.g. Hendrik Heukels (1854–1936) and Eduard Heimans (1861–1914), and he sent specimens to the Dutch Botanical Society (Nederlandsche Botanische Vereeniging) which are now deposited at the National Herbarium of the Netherlands, Leiden.

Because of the National Service Backer spent five months in the Army where he obtained the rank of corporal due to the fact, he said, that with his Christian background he knew how to swear so well. In the meanwhile he obtained a number of additional certificates in mathematics, French, English, and the qualification for Headmaster. Thus, in 1900, he acquired a better position at the MULO, a kind of lower-grade secondary school, in Haarlem. But after a year he decided to go to the Dutch East Indies: if he was to be fettered by education he might as well be so in a more exotic surrounding with a higher pay.

IN THE INDIES

Between 1901 and 1905 he was employed at a private primary boarding school, the Bosch Institute in Weltevreden (now Gambir, the centre of Jakarta) in Java. His new salary was one hundred and seventy five Dutch East Indian guilders, mind you: a month! An unimaginable luxury!

Immediately he started to collect the plants around him, but to name them unreliable or incomplete treatises had been written, now also outdated and often not readily available. Thus, he decided to write one himself, with the flora of his immediate surroundings as a start, and this marked a milestone in his life and for Malesian botany.

To have at least some basis he had to borrow books from the Herbarium Bogoriense and so, in early 1902, he came into contact with Melchior Treub (1851–1910), the Director of 's Lands Plantentuin in Buitenzorg (now the Kebun Raya, Bogor), whose international fame attracted many famous botanists for a longer or shorter visit to the renowned 'Vreemdelingenlaboratorium', Foreigner's Laboratory, now the Treub Laboratory, in Bogor.

Treub thought an interview with this Backer and a look at his collections would be opportune, to which Backer agreed under the condition that Treub would pay for the transport, by his estimate about half a lorry.

The interview apparently was satisfactory to both parties and through Treub's mediation Backer was given an appointment as Assistant at the Laboratory with as instruction to write a critical school flora for Java and to teach at the Agricultural School at Buitenzorg. In 1909 he obtained tenure. However, it then turned out that the flora of Central and East Java was so badly known that sometimes common tree species were reported as rare, while herbs and shrubs were very badly represented at all.

Backer became engaged to Martha van der Ley (1875–after 1949) on April 15, 1906, and they married in Buitenzorg on July 23 of that year. A fern was named after her, see '*marthae*'. But for very few casual remarks, the biographers are silent about the family life. Three daughters were born: Corry (C.J.E.), Ginnie, and Cobie. In a letter dated 3 March 1946, Backer mentions that he is expecting a visit from a daughter, son-in-law, and their two children, and in an act of February 6, 1962, he bestowed eighty percent of the royalties of the Flora of Java to R.C. Bakhuizen van den Brink f., while in case of his premature decease the remaining twenty had to be divided between A.C. Backer (Ginnie?), Torrance, California, and Mrs. J.J. Lagerweij-Backer (Cobie?) in Haarlem.

In 1911, together with H.A. Clerx and Zeno Kamerling (1872–?) he founded the Nederlandsch Indische Natuurhistorische Vereeniging (Dutch Indian Natural History Society) with as house organ *De Tropische Natuur* (The tropical nature), which he edited together with his fellow schoolmasters Antoon Johannes Koens (1880–before 1958) and Johannes Wilhelmus Antonius van Welsem (1866–1927). With the latter he also wrote some manuals for secondary schools (Backer & Koens, 1912; and Van Welsem & Backer, 1916, which apparently was quite a success in view of at least eight editions). *De Tropische Natuur* contains many short articles by Backer written in a very entertaining, lively, and often humorous way. They are well documented and always based on personal observations. Here a much more interesting person is revealed than can be gleaned from the bone-dry floras and dictionaries (the *Verklarend Woordenboek* has some gems, though).

A very different one, too, than found in the pamphlet against Sijfert Hendrik Koorders (1863–1919), about which later.

After a petition by Backer to charge him with the collection of Central and East Java plant species Treub's successor, Jacob Christiaan Koningsberger (1867–1951), the later Secretary of the Colonies, appointed him in 1912 as Botanist of the Java flora. From May 1912 to April 1915 he scoured the fields and forests of Java, Madura, and the adjacent Kangean Archipelago, and so collected about 30,000 specimens while making daily trips of thirty to forty kilometres on foot. There are few parts of Java where he hasn't been. Botanizing in the tropics, especially in the lowlands is not for the weak of heart: the temperature is murderous, the number of species uncountable, and specimens must be put into the press quickly otherwise the flowers have wilted. Making field notes takes much time, too.

Backer was tireless in his work: to a high age he rose at six and worked until eight in the evenings. In the field he ate nor drank during the day regardless of the tropical cli-

mate and walked on endlessly. Only in the evening he then consumed many bottles of 'liquid bread'. In the Netherlands he hated the cold and in his study it was at least 27 °C; the best climate, he said, was to sit at noon next to an oil stove in the harbour of Tanjong-priok, on the coast of Jakarta.

As a result of his many collecting trips Backer had obtained an unbelievable knowledge of the vegetation of a vast area which has been surpassed by few and has led to an impressive series of publications. Obviously, he was a very valuable companion to have along during field trips as was repeatedly stated by those who were so lucky to attend (e.g. the sociologist Karl Gunnar Booberg, 1892–1944, and the entomologist Salomon Leefmans, 1884–1954).

In 1907 he already wrote the first part of the Flora of Batavia with exceptional extensive descriptions and notes. This was followed in 1908 by a much more concise *Voorlooper eener schoolflora voor Java (Ranunculaceae–Leguminosae)* (Precursor of a school flora for Java), which he later characterized as an obscure little school manual, and the more definitive *Schoolflora voor Java (Ranunculaceae–Myrtaceae)* of 1911, with eight to ten lines of descriptions. In his innocence Backer thought he needed only a little more time and effort to extend a schoolflora with limited content (common species only) to a complete one for the whole island. The *Handboek voor de flora van Java (1924–1928)* is proof of this error: because of its thoroughness and extensive descriptions it obviously was a too ambitious format and this approach had to be abandoned after three volumes. The extremely rich plant life of Java with about 6,100 species of flowering plants could never be described in this way within a man's life.

Van Steenis (1963 a–c) later wrote in his necrologies on Backer: "A gigantic mission for a single person who, moreover, spared himself (and others) no criticism and desired to deliver extremely conscientious work. By not copying from others, always building on his own observation he has composed a number of nearly faultless, original, and very useful works. Small treatises he only rarely wrote, except in *De Tropische Natuur*; all was compiled in books while striving for the perfect format for his goal, the Flora of Java [...] He was very rigid in his thinking and made high demands upon himself and others; he was extraordinary generous with assistance, especially to the young. Gentle was his judgment concerning good work, but inaccurate work he abhorred and such received unvarnished and sometimes unreasonable sharp criticism. On the other hand he accepted well-founded criticism without a grudge."

A further complication was that Backer wanted to include in his Flora all introduced and cultivated species as well. This is a hopeless task, as introduced species generally are regarded as 'weeds' by collectors and so hardly gathered. Moreover, the occurrence of an exotic may be a one-time event and it is very questionable whether the time-consuming task of description, identification, and key construction is worth the effort. Cultivated species are also rarely collected, partly because botanists regard garden plants with contempt, partly because few people tend to uproot the plants they have grown with so much care to kill and flatten them for herbarium specimens.

Together with Dirk Fok van Slooten (1891–1953) he prepared the *Geïllustreerd handboek der Javaansche theeonkruiden* (Illustrated manual of the Java tea weeds) (1924), still an eminent work but not easy to obtain. Backer provided the botanical know-how

for the standard work *De nuttige planten van Nederlandsch Indië* (The useful plants of Dutch East India) by Karel Heyne (1877–1947), which has appeared in three nearly identical prints (1913–1922, 1927, 1950). Several times it has been suggested to translate this into English but because of its size (ed. 3: 1691 pp.) this has remained a good intention. The series of PROSEA (Plant Resources of South-East Asia) published in Wageningen is a modern successor but sorely lacks the detailed expertise of a comparable botanist.

Backer had an unbelievable memory for languages, plants, events, and literature and was able to cite from the latter with great precision. He loved facts and was averse to speculations; his botanical work is therefore more floristic than truly taxonomic, as for the latter one has to interpret and speculate. An exception is his work with Johan Gotlieb Benjamin Beumée (1888–1966) on the correlation between the occurrence of plants and the annual drought periods of Java. Together with Van Slooten he casually described (1924: 119) a relation between the altitude of mountains and the vertical distribution of *Albizia montana* (= *A. lophantha*). For a long time this curious phenomenon could not be explained, apparently there is a critical altitude from where plants can disperse up and downward, the ‘elevation-effect’, which is not only valid for a single species in Java, but has a worldwide application (Backhuys, 1968).

Through his extensive field work (compiled by Van Steenis-Kruseman, 1950) and herbarium studies he had obtained an immense knowledge on the variation of species and because of that he had a wide species concept. Because of the relative few collections per square kilometre in Malesia it is often not clear what is infra-specific variation and what inter-specific delimitation. Then the wide species concept of the ‘lumper’ is to be preferred over the narrow one of the ‘splitter’. This notion is still to be recognized in most of the treatments of genera and families for the Flora Malesiana (1950–today).

Naming the taxa is often a problem, too. The types (specimens that prove the application of a name) usually are kept in institutes in Europe or the USA, impossible to consult when working in Bogor, while ancient literature in which the first collections have been described also often is unavailable, even in such an eminent institute as the Herbarium Bogoriense. One has to make shift with whatever is available. Backer solved this problem by stating “I don’t give a damn what the taxon is called, as long as it is ‘good’.”

His later years in Buitenzorg were less pleasant. As it happened, Willem Marius Docters van Leeuwen (1880–1960) was appointed as Director of ‘s Lands Plantentuin in 1918. The two could not get along with each other. The one wanted to have the Flora finished as soon as possible, the other, perfectionist, refused to be hurried. The economical measures by the Government in 1923 (less money, of course, history repeats itself) provided the solution. The position of Florist for the Flora of Java was struck from the budget and Backer was allowed to remain in office until the end of 1924 so he could complete his 25 years of tenure required for obtaining a full pension. After that he had to leave without having finished his task.

Philippus van Harrevelde (1879–1957), former guest of Treub’s Laboratory, had in the meantime become Director of the Proefstation voor de Javasuikerindustrie (Experimental Station for the sugar industry of Java) in Pasuruan on East Java. He seized the opportunity and obtained an appointment for Backer as botanist with the assignment to

write a flora on the weeds of the cane fields, thus retaining him for science. The weed flora had been estimated to encompass 200–250 species, but it turned out there were 753! Ultimately the richly illustrated *Onkruidflora der Javasche suikerrietgronden* (Weed flora of the cane fields of Java) (1928–1934) appeared, the last part, an atlas, as late as 1973.

In 1929 Backer published his contentious *The problem of Krakatao, as seen by a botanist*, in which he maintained that not all plant life had been destroyed by the gigantic eruption of the volcano, but that root stocks and diaspores might have been buried to sprout again. Indeed, this possibility cannot be ruled out completely because of the failure of the Government to undertake any research immediately after the disaster in 1883. Only as late as June 1886 the first biologist, Treub, came to take stock, but grasses had already been observed on the slopes in 1884 by the geologist Rogier Diederik Marius Verbeek (1845–1926) (Thornton, 1996: 57).

BACK IN THE NETHERLANDS

In 1931 Backer and his family returned to the Netherlands.

At the departure ceremonies Leefmans delivered a farewell speech in which he called Backer ‘Opa’ (Gramps) and noted that one of his ‘ingratiating characteristics’ was that he was a stranger to all pursuit of gain and that he denounced it sharply in others. Curiously, no mention about Backer’s family is made at all.

They first lived in Haarlem and then settled in Heemstede where he worked until his last years on his ‘magnum opus’, the Flora of Java. He still harboured the stubborn illusion that this should be a ‘schoolflora’. When someone remarked that a work with 6,100 species never could be used for teaching purposes at secondary schools, he said “Sometimes it took me three days to find the identity of a plant, so why should schoolchildren not follow this example? It’s the only way to learn plants.” As a former school-teacher he ought to have known better!

Next to this he revised a few families for the Flora Malesiana. This kind of studies in depth provided him more satisfaction than all his previous floristic work, he said. “The Flora Malesiana ought to have been discovered earlier” passing over previous attempts by Friedrich Anton Wilhelm Miquel (1811–1871) and Jacob Gijsbert Boerlage (1849–1900).

In 1936, the same year in which the *Verklarend Woordenboek* appeared, the Senate of the University of Utrecht on the nomination by the Utrecht Professors Victor Jacob Koningsberger (1895–1966) and August Adriaan Pulle (1878–1955) at the event of the 300th anniversary conferred on him the honorary degree of Doctor in Science because of his achievements, his fabulous knowledge of plants, wide reading, and pre-eminent knowledge of Latin and Greek (Van Leer, 1936).

In 1939 Backer, together with Oene Posthumus (1898–1945), published the *Varenflora voor Java* (Fern flora for Java) in general still the last word on the subject, although some groups have been revised for the Flora Malesiana, Series II, dedicated to the Pteridophytes and allies.

In this period a collaboration with the Rijksherbarium began where under the supervision of Herman Johannes Lam (1892–1977) a greater emphasis was placed on the study of the Malesian flora. The two knew each other only vaguely. Lam made some of his staff members available, especially the eminent R.C. Bakhuizen van den Brink f. who, like Backer, had an impressive knowledge of the flora of Java. It seemed prudent to Lam to have the manuscript of the Flora mimeographed in twenty five copies to prevent loss. However, this turned out to be such an immense chore that the last, twentieth part of the *Noodflora* (Emergency flora) was published as late as 1961! Note that this was the copying of a manuscript and that no new combinations in it is to be considered as having been effectively published here!

For typing this out Backer's type machine was 'hired' for eleven years (until 1952) for NLG 7.50 a month (!) under the transparent excuse that it contained some special signs (♂ and ♀), not available on Rijksherbarium machines ... Backer so obtained a little, but essential income above his much depleted colonial pension. Lam always was very good for his collaborators, as for instance those who evaded the German occupation by going underground have testified. To Cees Mulder, one of the Herbarium's draftsmen, he even gave his golden signet ring to be used in evil times! (Mulder, pers. comm.) But when the type writer had cost the Herbarium the vast sum of NLG 990.00 Lam decided enough was enough.

In 1945 Backer became official a Guest Collaborator formalizing his status as visitor.

In the meanwhile it became obvious that in these post-colonial times there would be hardly any market and so no publishers for a flora of a now Indonesian island in the Dutch language. Backer, Bakhuizen van den Brink f., and several others therefore made an English translation, and, again, a revision of the manuscript, thereby financially assisted by ZWO (the Dutch Organization of Pure Science). Nomenclature was much outdated; it is very curious that such a meticulous worker and bibliographer as Backer had such a dislike for this subject. This chore, however, was the very thing for Bakhuizen van den Brink f. whose great contribution was rightly recognized by Backer, who made him co-author of the Flora of Java. This work in three parts (1964–1968) may be said to be unique. Not only because of its thoroughness, but especially because it was finished. However, one must realize when consulting it that many data were gathered before 1931! As an aside it may be noted that Backer's colonial pension by 1954 had devaluated so much that he very much needed the two guilders allowance for each page of translation from the ZWO kitty. This was of course not permitted, but Lam, again in his loyalty to his collaborators, somehow arranged this as a welcome suppletion to Backer's pension. Meanwhile Backer made a Dutch-English taxonomic-botanical dictionary that in 1949 was published in a stencilled form; an extended edition was produced in 1956 in Bogor.

From 1953 Backer lived in Rest-home 'Maris Stella' in Heemstede. Unfortunately by 1954 his eyesight had so deteriorated that he had to stop his revisionistic work. Undismayed he started several biographic studies, for instance a commentary on Franz Wilhelm Junghuhn's (1809–1864) famous work *Java, zijne gedaante, zijn plantentooi en inwendige bouw (1850–1854)* [Java, its shape, its botanical ornamentation, and internal structure (1850–1854)] in which he intended to give a plant geographical survey of Java. He had to abandon this project, though, as it was too vast for an old man, and instead he started an 'Adminiculum', "not to be regarded as a contribution to the botanical litera-

ture [...], a simple and convenient aid” for systematists in which he listed in great detail all existing botanical terms in Dutch and Latin together with a concise grammar of botanical Latin. But when it was finished in 1961 it unfortunately turned out that no funds could be found for its publication: 18–20 guilders for a stencilled copy was regarded as too expensive ... After his death Hendrik Cornelis Dirk de Wit (1909–1999), late Professor in Wageningen, was given the file systems. The latter also intended to prepare an extended version in English of the *Verklarend Woordenboek*, but as with so many well-meant projects nothing came of it. During a ceremony in September 2000, Backer’s interleaved copy with uncountable additions was presented to Pieter Baas (1944–*), Director of what since September 1999 is called the National Herbarium of the Netherlands. By coincidence, a few weeks earlier a facsimile reprint had seen the light.

Backer finished his ‘Adminiculum’ on September 14, 1961, just before he became completely blind and permanently bed-ridden. Until a few weeks before his death his memory and wit functioned excellently, but then his life extinguished like a candle. In various obituaries the balance of his life was made. Thus Van Steenis said about him: “No one who experienced Backer’s lively personality could remain indifferent: he was an exceptional person and the contrary of a dull fellow. He was tall and thin with slender limbs and a narrow face. One could have fun with him but his sallies were often at other people’s expense and sometimes turned into nearly sarcastic criticism. He spoke quickly with many sudden pauses during which he looked around to see the result of his words. With his rather small, clever, sprinkling and penetrating eyes, his lively face full of expression and sparkling conversation he enjoyed to be the centre of the conversation.”

Notwithstanding all eulogies on Backer’s scientific merits he seems to have been a rather difficult person. He had some very opinionated and personal prejudices whereby he was often and unnecessarily acerbic in his criticism on others. He defended his intolerance with Leviticus 19: 17 (of course in the fundamentalist Dutch bible translation of 1637, the ‘Statenbijbel’, comparable to the English King James’ version of 1611) “Thou shalt not hate thy brother in thine heart: thou shalt in any wise rebuke thy neighbour, and not suffer sin upon him” and II Timothy 4: 2 “Preach the word; be instant in season, out of season; reprove, rebuke, exhort with all longsuffering and doctrine.” He said that he was always gentle and that he dipped his pen in honey ... An example to the contrary is his pamphlet of 1913 against Koorders’ ‘Exkursionsflora von Java’ (1911–1912) that, because of its vehemence, is unsurpassed in the usually so sedate and friendly Dutch botanical world.

THE BACKER–KOORDERS CONFLICT

When the first part of the *Exkursionsflora* appeared in 1891 Willem Gerbrand Boorsma (1867–1937), editor of the journal *Teysmannia*, asked Backer for a review. According to Backer’s own opinion he was the only one to know anything about the subject contrary to others who were “very insufficiently familiar with to totally ignorant of the flora of Java” and yet had published laudatory commentaries. With those ‘others’ he meant Diels, Merrill, and Pulle – surely not the least among contemporary botanists!

Friedrich Ludwig Emil Diels (1874–1945) was Assistant Director of the Berlin Herbarium and knew the West Australian flora well and had revised several families for the

fundamental series of Engler & Prantl, *Die Natürlichen Pflanzenfamilien* and *Das Pflanzenreich*.

Pulle was Professor of Botany in Utrecht (and, by the way, indirect successor of Miquel) and in 1906 had collected for a few months in Java, partly together (!) with Backer, and had just returned from a nearly year-long expedition to New Guinea; moreover he was an authority on the flora of Surinam and general plant geography, and founder of modern scientific plant taxonomy in the Netherlands.

Elmer Drew Merrill (1876–1956), as is well known, is the uncontested patriarch of the floristics of the Philippines.

Pulle defended his earlier positive words and those of Diels and Merrill by saying that their papers were reports and not critical reviews, indeed a small but essential difference. The first are only a compilation, the second needs more intensive scrutiny.

In 1913 Backer's *Kritiek op de Exkursionsflora von Java* (Criticism on the Excursions-flora of Java) appeared with no less than 67 pages. The result was explosive. In the *Kritiek* Backer stated that he had been 'very, very gentle' but what about remarks as "always again the fabrications of an incompetent unreliable aper", and "it is certainly much worse than the worst that has ever been written on the vegetation of Java." It appears as an extremely personal attack although Backer seems to have hardly known Koorders.

Probably various personal aspects were involved, such as a possible and understandable inferiority complex harboured by Backer. After all he was an uncouth yokel of lowly origin with 'only' a head-master's qualification in a world of Doctors and Professors of world-renown brought together by Treub in his Foreigner's Laboratory. Koorders had obtained his PhD in Bonn. Backer's curious witticisms at others' expense may have been caused by this. Surely a *jealousie de métier* is conceivable: Backer's botanical status was based on his twelve years of experience in Java, but Koorders had been there more than twenty-five. Koorders incontestably had a thorough field knowledge in view of his more than 42,000 collections (Backer finally had nearly 40,000, almost all from Java and some islands close by), still a record for Malesia. Which does not imply that Koorders could write. Backer, perhaps instinctively must have sensed the *Exkursionsflora* as a threat to his own ambitions for a Flora of Java, and he repeatedly stated that Koorders had gone beyond his brief: he had been charged with a flora for the high mountains of Java but wrote one for the entire island ... After the publication of the *Exkursionsflora* the real danger existed that from 'higher up' it might be concluded that there was now a Flora for Java, and that this slow-poke Backer, of which one could not expect too much anyway, would have become redundant. Consciously or unconsciously Backer must have felt that he had to defend himself against that. Koorders' work full of imagined and real errors was an easy prey.

As usual in writing floras Koorders based himself on existing literature (in which he cited his references more or less clearly, still something not usual). Backer, on the other hand, and actually rightly so trusted no one (not even himself) and prepared his own descriptions and keys. Unjustly Backer called Koorders' work plagiarism and of the worst kind. Surely, with such a large number of species it is nearly inhuman to start from zero. But Backer did so and expected it therefore of others, also.

The Government gave order to Koorders to write a defence and to reply to these 'coarse and libelous remarks'. He wrote an 'apology' of 201 pages. This reply made

Backer so furious that he wrote a second criticism. This was submitted to a committee of Dutch 'wise men': Jacobus Marinus Janse (1860–1938), plant physiologist and Professor-Director of the Rijksherbarium, Jan Willem Moll (1851–1933), plant anatomist and Professor in Groningen, Pulle (because of his involvement in the case not a really lucky choice, but possibly selected because he was the only plant taxonomist of standing available in the Netherlands), and Friedrich August Ferdinand Christian Went (1863–1935), Professor of plant morphology and physiology in Utrecht.

The contents of the final report are unknown, but it was leaked that the conclusions were such that the Government deferred from all measures against Backer, but prohibited the publication of this *Slotwoord* (Final word). Boorsma, the instigator of all this, wrote a review of Backer's first pamphlet (1913) and a summary of the arguments of both opponents and concluded that Backer had written "a sincere expression of indignation" about "a book that has been written with an unforgivable levity", while Koorders' "should have shown the unfounded base of this indignation: he has not done so, apparently could not do so." Pulle hoped "that now after the rebuttal the case will be closed and that the dirty laundry in the future will have its wash indoors. Then both brochures can be shelved in the archives and the botanist of the future will regard them as merely curious documents from the history on the exploration of our colonial flora."

Still, Koorders was not entirely without support: Teun Ottolander (1854–1935) (whose herbarium has been incorporated partly in that of Koorders who named 3 species after him) in 1914 wrote a defence, and Engelbert Hendrik Berend Brascamp (1876–1945) published in 1920 posthumously a long biography on Koorders, although not having known his subject well ("some few times [...] in personal contact"). Here all kinds of allegations and grievances are repeated or newly revealed against those who had hampered, sabotaged, and provoked Koorders in his work. No doubt part of this is true. The gentlemen were not so very nice to one another. In this context it may be remarked that Brascamp had assisted Anna Koorders-Schumacher (1870–1934), Koorders' wife, in the publication of Koorders' posthumous works, and certainly had obtained much biased inside information. Docters van Leeuwen (to Koorders undoubtedly part of the enemy camp, as he was Director of 's Lands Plantentuin) therefore stated in a balanced necrology of 1920 "things which he has mainly heard from one side" and regarded Brascamp's allegations as unfitting for an obituary. Moll, surely well-informed, bypassed the subject by not mentioning it at all in his 'In memoriam'.

Joannes Jacobus Smith (1867–1947) was Head of the Herbarium of Buitenzorg between 1913 and 1924. In consequence of Brascamp's paper he wrote a defence paper in which all allegations were countered and the real situation (in his opinion, of course) was outlined. This remained unpublished. About a possible departure of Koorders and the subsequent surprisingly fast cooperation from all official instances (Brascamp, 1920: 438) Smith commented (p. 10): "(from this) it shows very clearly how tired all concerned were of Dr. Koorders."

That the question remained in Backer's mind is clear. At the end of his life, March 1962, he said to Lam "and yet I have treated Koorders too friendly."

In conclusion it may be said that Backer must have been a colourful man, extremely productive, and nestor of Indonesian botany. He was of great influence on many contemporaries in Java, not in the least on Van Steenis, who was Professor-Director of the

Rijksherbarium Leiden from 1962 to 1972, and through him on his pupils, among which the undersigned, and the Flora Malesiana Project. Backer was very loyal, helpful and generous to friends and colleagues when he found them worthy. If not, then he judged their work ruthlessly. About his own work, however, he was just as critical which led to exaggerated perfectionism: "a good work is created as follows: one slaves for five years, puts aside the work, looks at it five years later and burns it immediately, and does it again for another five years, perhaps then it is more or less satisfactory enough to have it printed." It has been said that he went through seven proofs of the *Handbook of the flora of Java* ... Thus this, just like his other publications, is extremely thorough with a great degree of trustworthiness.

THE 'VERKLAREND WOORDENBOEK VAN WETENSCHAPPELIJKE
PLANTENNAMEN', ALSO KNOWN AS THE 'LINTWURM' (TAPEWORM)

During the preparations for the *Onkruidflora der Javasche suikerrietgronden*, which appeared in parts between 1928 and 1934, Backer had started to make a file on the meanings of scientific (more or less Latin) names of plants. Over the years this card system became larger and larger as yet more cards ('joints') were added to it. Around 1931 there were a good 9,000. Mockingly he called it the 'Lintwurm' (note: with a 'u', standard Dutch has it as 'lintworm').

After his repatriation he extended the 'Lintwurm' continually and added the names of Dutch and European species, also: having started small it gradually became a monumental file of about 22,500 items. As he wasn't as young as he used to be his colleagues exhorted him to publish them as a book, and so in 1936 the *Verklarend woordenboek van wetenschappelijke plantennamen* was published.

The *Woordenboek* is a goldmine of often very original information, biographical data, and here and there one catches a glimpse of the wry and somewhat acerbic wit often aimed at others for which he was known. Thus he notes under the entry 'Andromeda': "This comparison reminds one of a centipede limping at all legs", and under 'Baltimora': "Baltimore's poems in bad Latin were called '*divina carmina*', divine songs, by Linné. People in the 18th century were more courteous than today." See also the characterizations, ebullitions, and anecdotes under 'armandii, Cliffortia, colocynthis, Commelina, condamineus, etc.'

Not satisfied with the result he continued to add to the file in observance of James 3: 2 "For in many things we offend all. If any man offend not in word, the same is a perfect man, and able also to bridle the whole body." In a postcard of November 5, 1938, addressed to Willem Hendrik Wachter (1882–1946) he thought things would be correct in the supplemented print of 2036 ...

Notwithstanding laudatory reviews, for instance by Jacobus Pieter Thijssse [1865–1945, famous botanist in the Netherlands and conservationist of the first hour, "a beautiful, entertaining, and amusing book" of (1937)] this very valuable manual remained rather unknown for various reasons. First, because it was written in Dutch and not in English which narrowed the target group considerably. Secondly, it appeared in the middle of the economic crisis of the 1930s and many could not afford such an expensive work (it cost 19.50 guilders; my father, as a chartered mechanical engineer around that time started at NLG 37.50 a week!). Finally, the publisher remained stuck with his stock

and legend has it that during WW II or just after because of the scarcity of paper it was pulped (personal communication by Van Steenis who was able to save a dozen leftover copies). For nearly twenty years I myself searched for a copy before I managed to lay my hands on one.

There is no comparable work in its kind. There are several German or English handbooks (cited under the References below) which however cannot touch Backer's in size and depth. That the dictionary still has been unsurpassed is shown by the words of William Thomas Stearn (1911-*), well-known in botanical circles: "Dutch work of unrivaled scholarship on plant names, both generic and specific" and even in 1992 mentions his indebtedness to it. More recently a CD-ROM on grass names appeared (Clifford, 1996) for which the 'Woordenboek' served as an example.

For a full bibliography see Bakhuizen van den Brink f. & Vogelenzang (1963).

Eponymy

Fifteen taxa have been named after Backer:

- *Backeria* Bakh. f.
- *Ceratostylis backeri* J.J. Sm.
- *Dryopteris backeri* Alderw.
- *Elatostema backeri* H. Schröter
- *Euphorbia backeri* Pax & K. Hoffm.
- *Fagara backeri* Bakh. f., now *Zanthoxylum backeri* (Bakh. f.) T.G. Hartley
- *Freycinetia backeri* B.C. Stone
- *Habenaria backeri* J.J. Sm.
- *Ixora backeri* Bremek.
- *Lepidagathis backeri* Bremek.
- *Nasturtium backeri* O.E. Schulz, now *Rorippa backeri* (O.E. Schulz) B. Jonsell
- *Parastrobilanthes backeri* Bremek.
- *Pavetta backeri* Bremek.
- *Rostellularia backeri* Bremek.
- *Sterculia backeri* I G.M. Tantra

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