
Jungle stories from ‘Dok’ Kostermans (1906–94), prisoner of war on the Burma–Thailand railway

MICHÈLE CONSTANCE HORNE

Introduction

While living in Bogor in Indonesia during the mid-1980s, I became aware of an eccentric character who everyone referred to as ‘Dok’ Kostermans. I had heard a number of stories about Kostermans’s World War II (WWII) experiences and how he was lucky to have survived. There were also stories about his more recent jungle expeditions to remote tropical areas of the Malaysian Archipelago. He was a prodigious plant collector and highly regarded in his field of botanical taxonomy. With his reputation preceding him, when I met him one night at a birthday party, I was surprised to be introduced to a tall lanky man wearing a red wig. The occasion called for dress-up and he had come as Harpo Marx. Kostermans, then in his seventy-eighth year, exuded good humour, a zest for life and physical stamina that never seemed to diminish.

André Joseph Guillaume Henri Kostermans had endured a life-changing experience as a prisoner of war (POW) on the Japanese Burma–Thailand Railway. For me, in 1984, his stories of brutal imprisonment during WWII were my first exposure to POWs taking a measure of control of their lives while under the domination of their Japanese captors. This was before Lieutenant Colonel E. E. Dunlop’s war memoir, *The War Diaries of Weary Dunlop*, was published and my historical knowledge of the POW experience was limited.¹ Kostermans was a graphic storyteller and would colourfully recount his POW experiences to anyone who would listen.

Kostermans’s stories intrigued me and I felt that there was more to uncover. Archival searches gave insights to his Bogor stories but it also uncovered secret aspects of his life. An unpublished autobiographical account from the time he lived in Java until 1978 was a treasure trove of his life’s experiences and, in particular, his POW memories of the Burma–Thailand Railway. Surprisingly, however, it was Australian

¹ E. E. Dunlop, *The War Diaries of Weary Dunlop: Java and the Burma–Thailand Railway, 1942–1945* (Melbourne: Nelson, 1986).

archival material that held the key to understanding Kostermans's scientific contributions to saving POW lives. This is the story of a controversial man who was deeply admired but also shunned for his frailties.

Kostermans's formative years

André Joseph Guillaume Henri Kostermans was born on 1 July 1906, elder of two sons, at a hospital in Purworejo (Central Java), a garrison town for the colonial state of the Dutch East Indies (Indonesia).² His Dutch father, Adriaan M. Kostermans, was a contracted public servant who taught basic education and the Dutch language to local Javanese children in the nearby town of Wonosobo on the Dieng Plateau.³ Kostermans's mother, Marie J. A. (née Beljaars), came from Maastricht (southern Netherlands) where the Catholic faith was part of the fabric of society. Even in remote Wonosobo, a priest would visit them at their home to administer the ceremonies of their faith. Kostermans's formative years were spent immersed in both the Dutch and Javanese cultures. Owing to Marie's poor health, Kostermans and his younger brother, Désiré, were mostly cared for by a Wonosobo woman. Kosterman attended Dutch administered schools for Javanese children, playing barefoot with his classmates in the rice paddies, and exploring the nearby mountainous tracks. A biology teacher encouraged Kostermans to take an interest in the natural richness of the countryside around him. He made an extensive butterfly collection that he carried with him to Maastricht when the family was repatriated to the Netherlands.

At the time when the family left Java, Kostermans was in his second year at a Dutch High School (HBS) in Bandoeng (Bandung, Central Java). He easily made the transition to life in the Netherlands because he had a talent for learning and did well academically at the Maastricht HBS. Following his high school years, he spent the obligatory two years as a conscript in the Dutch military. In 1925 he chose to study at the renowned biology department at Utrecht University. Following completion of his bachelor of science degree, he decided to specialise in taxonomic botany under the supervision of Professor A. A. Pulle. For his master of science degree he studied the botanical family Hernandiaceae of Surinam. He continued to study under Pulle

2 A. J. G. H. Kostermans, 'Levensgeschiedenis [autobiography]', transcript of interviews, Herbarium Library, Naturalis Biodiversity Centre, Leiden, Netherlands. In 1978, Kostermans was interviewed by his friend Marius Jacobs at the Leiden Herbarium. In 1981, Jacobs transcribed the five hours of interviews as background information for his 'Kostermans Seventy-Five' (see note 13). The five magnetic tapes are stored at the centre's Herbarium Library. The interviews and transcripts are in Dutch.

3 Official public notice in the local Dutch East Indies newspaper *Bataviaasch nieuwsblad*, 20 August 1904. A. M. Kostermans was appointed to teach at Wonosobo, Central Java. Delpher, accessed on 12 March 2016, www.delpher.nl.

for his PhD, researching the botanical family Lauraceae of Surinam.⁴ Included in his thesis was a chapter entitled 'Useful Plants' in which he explored well-known publications that had investigated medicinal and practical purposes of plants.⁵

Return to Java as war loomed in Europe

Kostermans had in mind that his future career was in the Dutch East Indies but he needed funds to return. He applied for and received the 1938 round of the prestigious Dutch 'Buitenzorgfonds' grant for promising botanists to undertake a six-month research project in Java.⁶ It is likely that Kostermans sought a permanent move to Java that allowed him to return to the cultural and tropical environment of his childhood and an escape from his family's strict Catholic expectations. It is not hard to imagine that the Netherlands' cold, damp winters turned Kostermans to think of living in the warmer climate of his childhood. The smells of street vendors cooking with chilli, garlic and fish paste combined with the humid warmth of the evening would have been a strong psychological force that played on his nostalgic mind. Perhaps too he believed that colonial Java offered a more tolerant attitude towards homosexual men than was the case at that time in the Netherlands.⁷ Although his memoirs did not admit to his sexual preference, later events showed this to be the case. However, this apparent tolerance in the colony did not last long as there was a concerted police operation a few months after Kostermans arrived in Batavia to purge the colonial public service of known homosexuals.⁸

Kostermans booked a return passage by boat to Java, leaving the Netherlands on 9 July 1938.⁹ The boat trip took approximately a month, which placed him in Batavia (Jakarta) by the middle of August 1938. According to the Buitenzorgfonds guidelines, Kostermans had been instructed to report to the Botanical Station at Buitenzorg (Bogor) as part of the conditions of the grant.¹⁰ Over the years when talking about this period of his life, Kostermans gave little detail about what happened once he had arrived except to highlight his collecting expeditions funded by the grant. He made a number of small collecting trips over a two-year period to

4 The Lauraceae family includes well-known plants such as cinnamon spice for cooking, bay leaves for flavouring, camphor for moth repellent and medicinal purposes, and myrtlewood and stinkwood for building furniture.

5 A. J. G. H. Kostermans, 'Studies in South American Malpighiaceae, Lauraceae and Hernandiaceae, Especially of Surinam' (PhD thesis, University of Utrecht, Netherlands, 1936).

6 Letter from A. A. Pulle to Koninklijke Akademie van Wetenschappen, 13 December 1935. Noord-hollands Archief, correspondence regarding selection of Buitenzorgfonds. Scan number 119/719, Archive No. 64, Inventory number 129.

7 Robert F. Aldrich, *Colonialism and Homosexuality* (London: Routledge, 2003), 185.

8 Aldrich, *Colonialism and Homosexuality*, 185–212.

9 Letter from A. A. Pulle to Koninklijke Akademie van Wetenschappen, 1 June 1938. Noord-hollands Archief, correspondence regarding selection of Buitenzorgfonds. Scan number 31/719, Archive No. 64, Inventory number 129.

10 Internal department letter, Koninklijke Akademie van Wetenschappen, 10 June 1938. Noord-hollands Archief, correspondence regarding selection of Buitenzorgfonds. Scan number 28/719, Archive No. 64, Inventory number 129.

islands in the Bay of Batavia and Batam, West Java and Noesa (Nusa) Kambangan¹¹ on the south coast of Central Java. In 1950, G. C. C. J. van Steenis, a highly regarded Dutch botanist, scathingly assessed Kostermans's prewar plant collection and botanical methodology, writing, 'the collector failed to make sufficient notes *in situ* and did not know himself the localities of the plants collected in the islands near W. Java, so plants of several islands are mixed up'.¹² This was not an auspicious start for a man who later became known for his extraordinary plant collecting and taxonomic identification skills.

Kostermans's war

The Netherlands was officially neutral when the British and French declared war on Germany in September 1939. However, in May 1940 Hitler bombed the Dutch seaport, Rotterdam. The city was devastated, convincing the Netherlands Government to officially surrender on 15 May. Initially, the war in Europe did not greatly affect the Dutch East Indies. The colonial government focused more on local issues, such as the nationalist Indonesian movement, than Japanese expansionist policies. When Japan bombed Pearl Harbor on 7 December 1941, the Netherlands government-in-exile declared war on Japan the following day. Now the Dutch East Indies was a direct target for Japan and the colonial government began recruiting men into their military forces. Because Kostermans was a Dutch national, he was drafted into the Royal Netherlands East Indies Army (KNIL) as a private (infantry) in early 1942.¹³ With the threat of an imminent Japanese invasion of key islands such as Java, the KNIL was incorporated into the hurriedly formed Allied Forces that brought together the American, British, Dutch and Australian commands.

Kostermans was stationed in Buitenzorg (Bogor, approximately 50 kilometres south of Jakarta) where he and his fellow soldiers had been given rudimentary instruction in warfare techniques. Following the fall of Singapore on 15 February 1942, the Japanese invasion of Java came quickly and decisively. The next few days were chaotic as he and his compatriots moved up the mountainous road from Buitenzorg to Bandoeng. On the way, they encountered a group of Japanese soldiers on bicycles.¹⁴

11 Noesa (Nusa) Kambangan has a link to modern history. It is the island that was used for the execution of Australian convicted drug traffickers in 2015. It was a prison island during the Dutch colonial period, and remains a maximum prison facility for Indonesia.

12 C. G. C. J. van Steenis, ed. *Flora Malesiana. Series 1, Spermatophyta* (Djakarta: Noordhoff-Kolff, 1950). Often referred to as the 'Green Bible' among Dutch botanists; green because of its green hardcover, and bible because it included extensive notes about the methodologies for botanical collecting and taxonomy.

13 Marius Jacobs, 'Kostermans Seventy-Five', *Reinwardtia* 10, no. 1 (1982): 9–20. Jacobs published this article (English) as a tribute to his close friend. He used the autobiographical tapes as a basis for the article. See note 2 above.

14 Dunlop, *The War Diaries of Weary Dunlop*, 45. Dunlop described the Japanese soldiers using bicycles to move around the countryside and also to escort POWs on forced marches.

The enemy was dispatched with a well-directed hand grenade: Kostermans's only act of war.¹⁵ When the group arrived in Bandoeng they discovered that the KNIL had capitulated to the Japanese on 9 March. Kostermans was interned as a POW.¹⁶

Kostermans now faced the realities of life as a captive of the Japanese. At first he was put to work 'pushing and pulling dirt carts through Bandung'.¹⁷ He was humiliated but noticed that, although the local people watched, they seldom jeered. Lieutenant Colonel E. E. 'Weary' Dunlop's memories of his first six months as a POW in Bandoeng add to Kostermans's brief descriptions of his early POW experience. Dunlop had noted that, despite the complete takeover of the colonial government and infrastructure, the Dutch POWs were 'optimistic as to the length of their troubles and pin much faith to an old Javanese legend that "Java would be conquered for 100 days"'.¹⁸ Very quickly, the violent intimidation and threats by the Japanese to execute POWs became reality. Kostermans witnessed the bayoneting of POWs who attempted to escape.¹⁹

In June, Kostermans was transferred by train to Tjilatjap (Cilacap), on the south coast of central Java.²⁰ Now the hard work, deprivations and senseless punishments began to badly affect him. For eating the left over contents of a discarded condensed milk tin, he was made to stand in the sun for six hours with the tin on his head until he collapsed. The next move was to Singapore 'packed like herrings in a tramper (goods transport ship), closed in by barbed wire everywhere'.²¹ His internment in the Changi POW camp was a precursor to the treatment that the Japanese meted out to their prisoners as the years passed. His recollections of Changi describe the increasingly difficult conditions. Food was scarce. He turned to collecting whatever remained of the plants in the compound. The POWs were fed 'stinking par-boiled rice, mostly it was vomited out again' or 'partly unhusked rice that caused intestinal bleeding'.²² One of his close friends was taken to hospital suffering from the poor diet but 'never came out alive'. In October 1942, Kostermans was among the thousands of POWs who were transported by train in 'hermetically closed metal

15 Jacobs, 'Kostermans Seventy-Five', 11.

16 Kostermans's Japanese internment card shows his rank to be Sld. Inf. (Soldaat), which is equivalent to Private Infantry in the English system of rankings. 'Japanse interneringskaarten, Surname: Kostermans', Nationaal Archief, accessed 4 September 2016, www.gahetna.nl/en/collectie/index/nt00425/e8bf00ac-148f-102f-a8e2-0050569c51dd/view/NT00425_Japanseinterneringskaarten/sort_column/prs_achternaam/sort_type/asc/q/zoekterm/kostermans/q/comments/1.

17 Marius Jacobs, transcript of Kostermans's 'Reminiscences of a Prisoner-of-War in Thailand', undated, possibly 1978, Kostermans biographical archives at Leiden Herbarium, Naturalis Biodiversity Centre, Netherlands, 3 pages. Language is English.

18 Dunlop, *The War Diaries of Weary Dunlop*, 11.

19 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1; Dunlop, *The War Diaries of Weary Dunlop*, 14. In Dunlop's camp, three Dutch escapees were tied to poles and bayoneted to death.

20 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1; Dunlop, *The War Diaries of Weary Dunlop*, 50–55. Dunlop recorded the movement of Dutch troops to Cilacap (Tjilatjap) in his diaries.

21 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1.

22 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1.

vans' to Bampong in Thailand.²³ Many suffocated on the four-day journey: 'corpses had to remain in the van, because of the control of numbers'.²⁴ The Japanese had no tolerance for escapes; thus the POWs had to prove that no one had absconded on the journey.

There have been numerous accounts of the appalling treatment of the POWs who laboured on the Japanese Burma–Thailand Railway project. War Crimes Tribunal records and autobiographical accounts have given graphic interpretations of the cruel punishments and abysmal camp conditions.²⁵ Kostermans's reminiscences of the railway construction were equally harrowing. Starting from Kanchanaburi, he and his fellow prisoners trekked up the Kwai (Khwaie) Noi River 'on bare feet, mostly empty stomach, working as tree cutters, moving and digging earth'.²⁶ He was in an advance party, working, and walking, all the way to the 'Three Pagodas Pass' (108 km from Bampong).²⁷ Camp accommodation along the way consisted of abysmally constructed bamboo huts, tightly packed with 200 men in each. The meagre rations provided by the Japanese were supplemented by the POWs, who captured anything that crawled, flew or swam. All prisoners used the same poor sanitation facilities. Consequently, dysentery among the POWs reached epidemic proportions. Kostermans recognised that his knowledge of tropical plants and ethnobotany had a practical use. He obtained permission from the Japanese to roam the jungle and collect edible plants and grasses. In the evenings he brewed leaves from *Psidium guajava* (Myrtaceae) to make 'tea for diarrhoea'.²⁸ Although the tea did not cure the diarrhoea, it gave some relief from the debilitating symptoms. Kostermans found edible plants and grasses to cook up a 'grass soup'. The soup provided a small amount of the vitamin riboflavin necessary for the body to convert carbohydrates into energy.²⁹ He made these concoctions in large quantities and encouraged his fellow prisoners to drink them.

When the railway was substantially completed in October 1943, thousands of men had died or were critically ill. Kostermans's own health had considerably deteriorated. He had contracted malaria and dysentery, was malnourished, and his legs were covered with large festering sores. When he was given a dire prognosis

23 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1.

24 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1.

25 Two well-known accounts are Dunlop, *The War Diaries of Weary Dunlop* and Albert Ernest Coates and Newman Hirsch Rosenthal, *The Albert Coates Story: The Will That Found the Way* (Melbourne: Hyland House Publishing, 1977). In this publication, Coates also gave an account of the War Crimes Tribunal proceedings in Japan held after the war (Appendix 1, 175–81).

26 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1.

27 Stylised map of the Burma–Thailand Railway at the Australian War Memorial site showing relative distances between camps, 'Stolen Years: Australian Prisoners of War', accessed 23 May 2018, www.awm.gov.au/visit/exhibitions/stolenyears/vw2/japan/burmatai.

28 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1.

29 Rosalind S. Hearder, 'Careers in Captivity: Australian Prisoner-of-War Medical Officers in Japanese Captivity During World War II', (PhD thesis, University of Melbourne, 2003), 96. In this study, Hearder wrote that, although the riboflavin content was small, 'grass soup' still provided the much-needed vitamin.

by a Dutch doctor, he thought he would not survive.³⁰ Useless to the Japanese in his present condition, Kostermans and other seriously ill prisoners were evacuated on a barge to a hospital camp further south along the Kwai Noi River.³¹ The move was life saving for Kostermans. He was no longer required to work on the railway, had access to better quality food and received medical care. His leg was saved from amputation by treating the ulcerated sores with a very painful remedy of Glauber's salt (sodium sulphate decahydrate) solution and placing the leg 'in the river and letting the small various fishes nibble out the pus of sores'.³²

In his last year as a POW, Kostermans was transferred to the newly built hospital camp at Nakom Paton approximately 50 kilometres from Bangkok. In late December 1943, Lieutenant Colonel A. E. Coates had been assigned by the Japanese to become its chief medical officer. Coates arrived soon after to supervise the building of the hospital's infrastructure, including an operating theatre.³³ This hospital, sited on disused rice paddies, was designed to accommodate up to 10,000 seriously ill and disabled men. Although the camp periodically flooded during tropical downpours or was without water during the dry season, the bamboo dormitory huts were well built and conditions were better than the prisoners had experienced while working on the railway. In June 1944, the hospital began receiving large groups of prisoners, and by August there were 7,353 POWs.³⁴ Dunlop and Kostermans arrived around this time in separate groups. Although this was a hospital camp, Kostermans remembered that a high earthen dyke, encircled by a deep trench filled with barbed wire, surrounded the camp. By the end of 1944, conditions declined further as the Allied forces began to make gains and the Japanese became increasingly nervous about the progress of the war.

Throughout the building of the railway, the Japanese provided grossly inadequate supplies of medicines and surgical instruments. Fortunately there were many well-educated men like Kostermans who had scientific professions before the war; the dire circumstances brought together these inventive minds to produce jungle medicines.³⁵ At the Nakom Paton Hospital camp, Kostermans, in collaboration

30 Jacobs, 'Kostermans, Levensgeschiedenis', 6.

31 It is likely Kostermans was moved to Chungkai Hospital Camp where Dunlop had been assigned as the chief officer by the Japanese. Both Dunlop (Dunlop, *The War Diaries of Weary Dunlop*, 331) and Kostermans mention the senior Dutch officer, Dr Metz (Metzer).

32 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 1–3.

33 Coates and Rosenthal, *The Albert Coates Story*, 122–23.

34 A. E. Coates: 117. Lt. Col. A. E. Coates 'Medical—Attendance of POWs', "Table A, Camp Strength", Australian War Memorial, AWM54 481/8/13, Part 4 of 6.

35 Katie Mills and Michèle Horne, 'Jungle Camp Science: Do-it-Yourself Medicines in Two POW Hospital Camps on the Japanese Burma–Thailand Railway, 1942–45', *Health and History*, Australian and New Zealand Society of the History of Medicine, 2018 in print. This article comprehensively describes the alcohol distillery process in the Nakom Paton makeshift laboratory, and includes a drawing of the laboratory by British POW, Jack Chalker.

with Private G. W. Chapman (a British POW with a PhD), produced the camp's own pharmaceuticals and the surgical alcohol required for the operating theatre.³⁶ Kostermans reported on their laboratory:

Originally the laboratorium premises consisted of a small part of one of the store huts, but later on the I.J.A. [Imperial Japanese Army] built us a separate hut for the combined alcohol and drug manufacture ... all the equipment furniture etc., had to be made by ourselves; it was not even possible to get the necessary materials from the I.J.A. and most of the equipment had to be scrounged from the POWS.³⁷

In their makeshift laboratory, Kostermans and Chapman developed an ingenious method for producing high-quality alcohol. Although the process for fermentation and alcohol extraction was well known, the challenge was to design and build a distillery that would produce large quantities of surgical-grade alcohol.³⁸ They were assisted by an Australian tinsmith, Private Norman Sachse, who soldered together discarded milk tins with stolen battery acid. When the battery acid was not available they drained dead men's stomachs for hydrochloric acid to maintain the distilling apparatus.³⁹ This became one of Kostermans's favourite stories, knowing that a listener would squirm when he recounted the gory details. They carried out many experiments under these primitive conditions with different fungi on rotting rice to make a 'starter'. Spreading new rice on bamboo matting, the 'starter' was used to inoculate rice to begin fermentation. Twenty-four hours later, the inoculated rice was added to water in earthen Thai jars for further fermentation. After three days the distillery apparatus was set up to pass steam through the fermented mixture in the jars to extract the alcohol.⁴⁰ The distillery laboratory is featured in an Australian documentary made shortly after the war and also features on the Australian War Memorial's website.⁴¹ Kostermans is seen in this film testing the quality of the alcohol.

36 A. J. Kostermans, 'Report of the Biological Department of Nakom Paton Hospital', 23 August 1945. Included in Captain G. H. Nicholson, 'Records—War Relics—Siam'. Military History Field Team, 1945, AWM, (1127/HN), Clasn. No. 492/4/2. Products included pH indicators, clove oil, ink, medicinal tobacco for asthma, saline solutions for transfusions, paper. This report was the key to understanding Kostermans's stories about his time as a POW.

37 A. J. Kostermans, 'Report of the Biological Department', 1.

38 G. W. Chapman, 'The Preparation of Surgical Alcohol', 'Medical—Attendance of POWs: Diaries kept by Lt Col A E Coates', AWM54 481/8/13, Part 2 of 6.

39 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 3.

40 Jack Bridger Chalker's drawing of the distillery apparatus in the makeshift laboratory at Nakom Paton is reproduced on the Australian War Memorial website: 'Nakhon Pathom—Alcohol Distillery and Vinegar Plant', accessed 22 May 2018, www.awm.gov.au/collection/C344500.

41 After peace was declared in the Pacific, Lady Mountbatten visited Nakom Paton. She requested that a documentary film be produced to show the various facilities of the hospital camp. The film was made and is available on the Australian War Memorial website (*POW's in Thailand*, documentary (Bangkok, Thailand, 25 August 1945), F01539, www.awm.gov.au/collection/F01539/). The hospital's alcohol distillery process is featured in the film. Kostermans is shown working in the distillery room. Photos of the distillery room and explanatory text can be found on the Australian War Memorial website, accessed 18 February 2016, www.awm.gov.au/collection/118848/.

The collaboration between Kostermans and Chapman was jungle science at its most effective. The alcohol production was such a success that:

The Japs became more friendly as they came secretly to ask for a pint of the first distillate but it ended the first Xmas as after Xmas day there was not a drop of alcohol left for the operating theatre⁴²

After the war, both Coates and Dunlop credited Kostermans and Chapman for their inventive work.⁴³ Coates wrote: 'Kostermans was to prove immensely useful to us. He experimented with many theories and ideas in an effort to find positive solutions'.⁴⁴ He had requested that Kostermans and Chapman write reports about the pharmaceuticals they had produced in the Nakom Paton makeshift laboratory.⁴⁵ Although the reports were short due to the lack of typing paper, they gave an insight into the difficulties of producing the pharmaceuticals. Fortunately, they were kept with diaries that Coates later deposited in the Australian War Memorial. In addition, the chief of staff of the Royal Dutch Army, General S. H. Spoor, sent a personal letter to Kostermans to thank him for his work in aiding sick POWs.⁴⁶

Collecting a career

Kostermans was impatient to resume his career after peace was declared. Repatriation of the POWs was a difficult logistical task for the Allied Command in the period immediately after the Japanese capitulation.⁴⁷ Rather than wait in the camp for his passage back to Indonesia, Kostermans organised a plant-collecting expedition, returning to the jungle areas of the Kwai Noi River. He had requested and received funding from the American botanist E. D. Merrill,⁴⁸ and obtained permission from Coates to take 11 Japanese, themselves now POWs, to assist him. Surprisingly, Kostermans was given permission by the British Command to use a Japanese locomotive on the disused railway up to the Three Pagodas Pass to expedite the trip.⁴⁹ This image, of Kostermans accompanied by Japanese POW assistants on a locomotive steaming its way along the railway line that had claimed so many Allied POWs, must be one of the more bizarre of the war.

42 Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 3.

43 E. E. Dunlop, 'Medical Experiences in Japanese Captivity', *British Medical Journal* 2 (1946): 486. Dunlop lists a number of life-saving initiatives, including the production of alcohol for surgical purposes.

44 Coates and Rosenthal, *The Albert Coates Story*, 125.

45 A. J. Kostermans, 'Report of the Biological Department' (also archived in AWM54 481/8/13); G. W. Chapman, 'The Preparation of Surgical Alcohol'.

46 The Dutch KNIL commander, General Spoor, escaped to Australia for the duration of the war. Kostermans gave the letter from General Spoor to van Steenis. A possible reason for him doing so may have been to show van Steenis that he (Kostermans) had made worthwhile contributions during the war while a prisoner.

47 Sue Ebury, *Weary King of the River* (Carlton, Vic.: Miegunyah Press, 2009), 308–9.

48 Dr E. D. Merrill (1876–1956) was a significant figure in the field of botanical taxonomy in the United States of America. At the time Kostermans applied for expedition funds, Merrill was administrator of Botanical Collections at Harvard University, a role that included managing a number of botanical institutions including director of the Arnold Arboretum.

49 Jacobs, 'Kostermans, Levensgeschiedenis', 7–8; Jacobs, 'Reminiscences of a Prisoner-of-War in Thailand', 12.

This eight-month expedition was not without its dangers and presented Kostermans with many challenges along the way. Green timber had been used to construct sections of the railway and, by late 1945, some of the sleepers had buckled. Similarly, some of the bridges had shoots sprouting on the superstructure. Kostermans had recounted the story to Jacobs: ‘When passages looked risky—some of the beams of the bridges began to sprout already—the engine was sent across first’.⁵⁰ Kostermans and the crew would run behind, reboarding the locomotive when they felt the dangerous section had been passed. There were also risks to their personal safety from armed gangs roaming the countryside in the power vacuum created by the Japanese capitulation.⁵¹ Despite these challenges, Kostermans had a successful expedition. He sent 2,000 dried herbarium specimens to Merrill at Harvard. Disappointingly, van Steenis, the editor of the prestigious ‘Cyclopaedia of Collectors’, barely recognised the significance of Kostermans’s Thailand expedition.⁵²

Following the Kwai Noi River trip, Kostermans returned by boat to Java in a period of heightened Indonesian nationalism.⁵³ The nationalist leaders Sukarno and Mohammad Hatta had proclaimed Indonesian independence on 17 August 1945 after the Japanese capitulation two days earlier. However, the Dutch returned as colonialists to regain control with the assistance of British troops. The various political interests, the British included, made this a chaotic time in the political centres of Batavia (Jakarta) and Buitenzorg (Bogor). Some of the Dutch residents wanted to turn back the clock to 1941 while others were aware that they needed to negotiate a power-sharing arrangement with the Indonesian leaders. International pressure on the Netherlands resulted in the government formally transferring its sovereignty to the Republic of the United States of Indonesia on 27 December 1949.⁵⁴

During this period of political instability, Kostermans began to consolidate his collecting career based at Buitenzorg. F. A. Endert, secretary of the colonial Committee of Economic Plants, appointed Kostermans to assist with updating the renowned ‘Useful Plants of Dutch East Indies’ publication, *Nuttige Planten van Nederlandsch-Indië*.⁵⁵ The remuneration was small but it signified recognition

50 Jacobs, ‘Reminiscences of a Prisoner-of-War in Thailand’, 12.

51 Chalong Soontravanich, ‘Small Arms, Romance, and Crime and Violence in Post WW II Thai Society’, *Southeast Asian Studies* 43, no. 1 (2005): 30; Ebury, *Weary King of the River*, 309; Coates and Rosenthal, *The Albert Coates Story*, 149.

52 Van Steenis, *Flora Malesiana*, 299. Van Steenis wrote: ‘Early in 1946 he made an expedition in Siam with Bloembergen and den Hoed, proceeding on his own’.

53 Van Steenis, *Flora Malesiana*, 299. Van Steenis wrote: ‘Returned to Java September 1946’.

54 A. Goss, *The Floracrats: State-Sponsored Science and the Failure of the Enlightenment in Indonesia* (Madison, USA: University of Wisconsin Press, 2011), 136.

55 Karel Heyne’s Dutch language book *De nuttige planten van Nederlandsch-Indië* (*The Useful Plants in the Dutch East Indies*), published in three volumes from 1913 to 1917, were iconic books among Dutch botanists. There were several attempts to update the manuscripts and publish them in English. Kostermans was involved in this project over a number of years. The updated version was never published.

of Kostermans's taxonomic skills among the Dutch botanists. For this assignment he travelled throughout Indo-China to search for new cropping plants that had potential to be introduced into Indonesia.

In 1947 he gained a permanent appointment as forest botanist with the Forestry Service in Buitenzorg.⁵⁶ His first assignment was to accompany a group of foresters on a six-month survey expedition of a remote region in the Momi-Ransiki area on the Birds Head Peninsula (Dobetai Peninsula), western Nieuw Guinea (Province of West Papua, Indonesia).⁵⁷ With his POW experience still fresh in his mind, Kostermans had the skills to deal with the challenges this remote area would present. The Nieuw Guinean boatmen dropped the forestry group on a deserted beach in the Ransiki area with their food supplies and equipment.⁵⁸ The group had an agreement with the boatman to pick them up in six months. They completed the survey one month early, allowing Kostermans an opportunity to undertake an arduous side-trip to Mt Arfak (highest point in the province at 2,940 m elevation). He was keen to search for a rare medicinal plant, the Massoia tree, that other plant collectors had failed to find. Kostermans took with him two local men because the foresters would not go with him on this difficult mountain climb. Food supplies were low but his ingenuity for using available resources was as strong as ever. They ate local plants or caught live food such as small birds that they half-cooked on a fire. When retelling this story, Kostermans would mention an alleged cannibalism attack on a missionary that was meant to be a warning for him not to go. He found the Massoia tree and the find was all the more sweet for its rareness. Back on the beach waiting for the boatman to return he used discarded oil drums for drying the collected plant material. His botanical colleagues considered his preservation methods crude but it allowed him to collect and process many more specimens than he otherwise could. He estimated that 3,000 plant specimens were collected on this trip.⁵⁹

Kostermans was happiest when he was on a plant-collecting expedition to a remote locality. He was keen to search unmapped forests because he was concerned that species would disappear without them being found and classified. On his seventh expedition to Borneo (Kalimantan) he had prearranged a meeting with Sven Gillsäter, a Swedish photographer. By then, Kostermans's reputation as a plant collector 'extraordinaire' had preceded him. Gillsäter describes their first meeting: 'A fair-skinned man, a head taller than the paddling Dayaks, rose easily in the slender canoe and stepped ashore'. Kostermans was 'bare-foot and wearing nothing but a pair of shorts, he is as much at home in canoes and in the virgin forest as the

56 'Personal News', *Flora Malesiana Bulletin* 2, no. 1 (1947), accessed 15 March 2016, www.repository.naturalis.nl/record/533215.

57 The survey's findings were documented in a report. D. A. Boon, A. J. G. H. Kostermans and P. Tideman, *Bosonderzoek Kolonisatie Object Momi-Ransiki New Guinea* / Rapport Samengesteld Onder Leiding Van D. A. Boon Door A. Kostermans En P. Tideman: Dienst van het boswezen in Indonesië, AFD Bosplanologie, 1948.

58 Jacobs, 'Kostermans, Levensgeschiedenis', 11.

59 Jacobs, 'Kostermans, Levensgeschiedenis', 10.

Dayaks, whose language he speaks fluently'.⁶⁰ Gillsäter's account demonstrates how comfortable Kostermans was with local people. Travelling together for two weeks, Gillsäter wrote:

As the days passed I was more and more impressed, not by his botanical knowledge—of which I am not qualified to judge—but by his unsurpassed ability to get on with the Dayaks and with nature. A man like André Kostermans makes up for the errors of many white men in these parts.⁶¹

Gillsäter wrote graphically about the jungles of Borneo, describing them as fascinating, cruel and alien: the leeches that tumbled from the trees when they smelt a perspiring body, sticking fast on a victim's neck, legs, anything exposed; the filming of a crocodile and the disaster that struck when one of the canoes capsized into the swirling river, the reels of film lost; the portage of the equipment when the river became unnavigable, scrambling along an almost invisible track, up slippery hills, down into deep ravines and over slimy rotten tree trunks; the gloomy denseness of the jungle cutting out the light; and the rain that came down in buckets.⁶² Gillsäter found this environment hard going but Kostermans relished the challenges of these expeditions.

While Kostermans was establishing his botanical career, the political situation for Dutch scientists working in Bogor was changing. After the formation of the Indonesian Republic, the scientists were encouraged to remain working in the new political environment.⁶³ As the 1950s proceeded, the emerging Indonesian elites increasingly controlled the political and economic appointments in scientific institutions. Indonesian science graduates now were leading many of the nation's institutes.⁶⁴ As part of the decolonisation process, the Indonesians made it clear to the Dutch scientists that they were no longer welcome and should leave.

In 1958, Kostermans was given a choice by the head of the Forestry Service (his employer) to either leave or become an Indonesian citizen.⁶⁵ Before the Dutch Government recognised Indonesia's independence in 1949, he had predicted this situation, saying to his Dutch colleagues that it 'was evident to him that the Dutch would never be able to hold the country, he could as well make friends with the people'.⁶⁶ Many of his colleagues, including van Steenis, Donk, Endert and Bloembergen, returned to the Netherlands to establish their careers in universities

60 Sven Gillsäter, *We Ended in Bali*, trans. F. H. Lyon (London: Allen and Unwin, 1961), 79–90. In this segment, Gillsäter recounts his meeting with Kostermans on a riverbank in Borneo and their travels together. This trip was either in 1956 or 1957.

61 Gillsäter, *We Ended in Bali*, 79–80.

62 Gillsäter, *We Ended in Bali*, 81–83.

63 Goss, *The Floracrats*, 146.

64 Goss, *The Floracrats*, 146–47.

65 Jacobs, 'Kostermans, Levensgeschiedenis', 21–22. Dual citizenship was not a choice as neither the Netherlands nor Indonesia allowed dual citizenship status.

66 Jacobs, 'Kostermans, Levensgeschiedenis', 10.

and national institutions.⁶⁷ Unlike his peers, Kostermans created ties with Indonesia. He purchased a house with a glorious view of the Kebun Raya Bogor (Bogor Botanical Gardens). He also set himself the task of building a world-class herbarium in Bogor, persistently lobbying Indonesian officials for funds.⁶⁸ However, relinquishing his Dutch citizenship and becoming an Indonesian citizen had economic ramifications for him. As an Indonesian Public Servant, his salary was extremely low and he was compelled to seek overseas funded contracts to supplement his income. He also lost his life's savings in the Netherlands by becoming an Indonesian citizen.⁶⁹ From an economic perspective alone, it is understandable that none of his Dutch colleagues, many with families, would make the same decision.

Kostermans sought help from an Indonesian professor, his close friend, Eddy Noerhadi, who had a teaching position at the Bandung Institute of Technology. Noerhadi facilitated the paperwork and untangled the complicated process that dragged on for some time. In 1961, Kostermans left Bogor to embark on a collecting expedition in Sumbawa still not knowing the outcome of his application for citizenship. While there he received a telegram to say that all was in order but he was required to return to Jakarta immediately. This was not an easy return trip. Sumbawa is a remote island in the east of the Indonesia archipelago: travel was by boat to Lombok; overland by bus to the capital of Lombok, Mataram; plane to Denpasar, Bali; and, finally, another plane to Jakarta. When he arrived in Jakarta he was told that he was not required in person. He was given the certificate of citizenship personally signed by President Sukarno. Not to miss the importance of his change of citizenship, Kostermans held a huge party inviting friends and acquaintances. To reflect his Indonesian citizenship he took the name Achmad Jahja Goh Hartono Kostermans, using the initials of his Dutch name.⁷⁰ Many of his monographs are published under his Indonesian name.⁷¹

67 After the war, van Steenis returned to the Netherlands; he went back to Indonesia in 1949 and returned to Leiden in 1950. Bloembergen spent time in the Netherlands and Indonesia and returned to the Netherlands in 1955. Kostermans's friend from his university days, M. A. Donk, head of the Herbarium Bogoriense, returned to the Netherlands after being fired by his Indonesian employers in early 1955. F. A. Endert retired in 1952 and returned to the Netherlands.

68 Jacobs, 'Kostermans, Levensgeschiedenis', 15, 17–21. President Sukarno was instrumental in granting funds for the herbarium project. The Bogor Herbarium was completed and officially opened in April 1970.

69 Jacobs, 'Kostermans, Levensgeschiedenis', 22. Kostermans claimed he lost 20,000 guilders (approximately 60,000 euros in 2018 currency value). His comment was that it was a pity but he had never regretted it.

70 Jacobs, 'Kostermans, Levensgeschiedenis', 21–22.

71 W. J. J. O. de Wilde and P. Baas, 'In Memoriam Professor A. J. G. H. Kostermans (1906–1994)', *Blumea—Biodiversity, Evolution and Biogeography of Plants* 40, no. 1 (1995): 1–13. A Bibliography of Kostermans's publications is listed in this publication. An in-depth listing for his numerous collecting expeditions, 1939–66, is recorded in the *Flora Malesiana*. M. J. van Steenis Kruseman, 'Kostermans, Prof.dr. André Joseph Guillaume Henri ('doc')', Cyclopaedia of Malesian Collectors, accessed 19 September 2016, www.nationaalherbarium.nl/FMCollectors/K/KostermansAJGH.htm.



Figure 1: Herbarium, Naturalis Biodiversity Centre, Leiden, Netherlands, 2016. Plant material attached to herbarium sheets are stored in boxes.

Source: Photograph by M. Horne.

In the late 1960s, Kostermans was at the peak of his collecting career, specialising in tropical forest trees. His taxonomic skills and photographic memory allowed him to collect prodigiously. In 1981 Jacobs attributed 25,000 specimen types to Kostermans. Mounted onto herbarium sheets, these specimens were deposited around the world including the Herbarium Bogoriense, Rijksherbarium Leiden (now Naturalis Biodiversity Centre), Kew Royal Botanical Gardens and Harvard University Herbaria.⁷² His prolific collections are now considered invaluable because of the diversity of plant specimens, some of which have become extremely rare. They are all the more precious, as many of the specimens originated from areas that have been destroyed by urbanisation and plantation development.

Kostermans's taxonomic skills for documenting plants collected from remote jungle areas qualify him as a collector of the highest order in the twentieth century. In a quantitative study, Bebber and others (2012) investigated the traits of prodigious plant collectors to identify those who had made extraordinary contributions to the discovery of plant species.⁷³ From their study they observed that 'plant collecting is a specific skill that seems to be developed by certain individuals over a considerable length of time'. They suggest that 'relatively few people develop the key skills and interests for really productive plant collecting'. Kostermans was passionate about finding as many species as possible before they were irretrievably lost to science. In today's assessment of a legacy, Kostermans's 'big hitting' collecting career continues to contribute to the knowledge base for future scientific endeavours in the field of plant diversity.

Educating the family

Kostermans never married, nor did he have a lifelong partner. He created his own family by 'fostering' Indonesian children, giving them opportunities they would not have had otherwise.⁷⁴ How many children he fostered is unknown, although he would often say that the number was the same as his age.⁷⁵ Some of his fostered

72 Two examples of Kostermans's plant specimens mounted on herbarium sheets: (1) Herbarium, Kew Royal Botanical Gardens, apps.kew.org/herbcat/getImage.do?imageBarcode=K000695164; (2) Harvard University Herbaria, accessed 19 September 2016, kiki.huh.harvard.edu/databases/specimen_search.php?mode=details&tid=84571.

73 D. P. Bebber, M. A. Carine, G. Davidse, D. J. Harris, E. M. Haston, M. G. Penn, S. Cafferty, J. R. Wood and R. W. Scotland, 'Big Hitting Collectors Make Massive and Disproportionate Contribution to the Discovery of Plant Species', *Proceedings of the Royal Botanical Society* 279 (2012): 2269–274, 2272.

74 Kostermans's 'fostering' of children is a broad term based on the Indonesian *anak angkat*, which is translated as 'adopted child'. Culturally it is not unusual for children to live with adults who are not their biological parents but are part of the extended family. It is unusual for an adult outside the extended family to 'foster' children. Fostering is not based within a legal procedure.

75 A letter, dated 19 July 1970, from E. H. Walker to K. F. Dumont (see page 33) together with Kostermans's five page CV/autobiography, dated 1962, are archived at the LuEsther T. Mertz Library, the New York Botanical Garden, under the Kent Parsons Dumont collection of documents. There is a specific entry for these documents under Dumont's correspondence section. Some of the 'fostered' children did not live with Kostermans but were under his guidance for education and mentoring. He often sought overseas scholarships for them.

children made good lives for themselves and followed diverse occupations. If one of the children showed an aptitude for higher learning, Kostermans encouraged the child to study at university level.

While away on a collecting trip in July 1969, one of the foster children was shot and died. On his return to Bogor, Kostermans was drawn into the investigations by the police and was charged on suspicion of inciting the murder and possessing an illegal firearm. The news of his arrest and detainment in a Jakarta jail rippled through the Bogor and international scientific communities. Articles in the Indonesian and Dutch newspapers began to appear, including the Dutch daily morning newspaper *De Telegraaf* with a headline, 'Ex-Dutchman Prof. Kostermans in Indonesia sick in jail'.⁷⁶ While the state prosecutor built the case against him, he remained in jail for three months in appalling conditions, his health deteriorating. He was released to a friend's care and placed under house arrest in Bogor. Over the following year, the case was brought before the Bogor court a number of times with various charges including one of 'homosexual sex with minors under the age of 21 years'. Finally, on 8 September 1970, Kostermans was given the verdict that the 'illegal firearm' charge and the 'homosexual sex with minors under the age of 21 years' charge stood. He was given 10 months jail, with previous jail time and house arrest to be taken in consideration. In the head judge's summing up of the case, the judges acknowledged that it should not be forgotten that Kostermans had supported 38 children over the years and several of them had already graduated. The head judge concluded: 'but the law was the law and the defendant, Kostermans, had been proven guilty' ('Tetapi, hukum adalah hukum, terdakwa A.J. Kostermans terbukti bersalah').⁷⁷

Over the years, the facts of this pivotal event for Kostermans had been lost through innuendo and rumour among his friends and colleagues. The Dutch newspaper *Het Vrije Volk* had labelled the case as bizarre, and the paper's reporting was convoluted, making it difficult to understand the proceedings.⁷⁸ Kostermans's own memory of the period between his foster child's death and his quick departure from Indonesia for a number of years after his release had glaring omissions. When he related the story to Jacobs in 1978, he spoke at length about the case, in particular how the gun had come to be at his home, but nothing about the 'homosexual sex' charge. However, Mien Rifai, a close friend, wrote in a 1995 obituary that Kostermans 'was silently discharged from his post in the Forestry Service without

76 'Ex-Nederlander Prof. Kostermans in Indonesie Ziek in Cel' ['Ex-Dutchman Prof. Kostermans Sick in Jail'], *De Telegraaf*, 14 August 1969.

77 'Kostermans Divonnis 10 Bulan Penjara' ['Kostermans Sentenced to 10 Months Prison'], *Sinar Harapan*, 9 September 1970, 3.

78 'Botanicus Staat Terecht in Bizarre Moordzaak' ['Botanist Is on Trial for Bizarre Murder Case'], *Het Vrije Volk: Democratisch-Socialistisch Dagblad*, 13 August 1970, accessed in Delpher, 12 March 2016, www.delpher.nl.

a pension because of his conviction for sexual perversion'. Rifai further added: 'but homosexuality was not the motive of his adopting so many children because I knew very well that he did not take advantage of all those boys'.⁷⁹

The later years

Before the tragedy of the foster child's murder, Kostermans's scientific reputation had earned him a number of prestigious international positions. In 1967 he held a guest professorship at Kentucky, Lexington, United States of America. In 1969 he was in Ceylon for the 'Smithsonian Flora of Ceylon' project. Following his release from jail in late 1970, he went to Aarhus, Denmark, and also visited the Leiden Rijksherbarium and the Kew Gardens while in Europe. In 1973 he held a guest professorship at Zurich, Switzerland. From 1975 to 1978 he held the position of B. A. Krukoff botanist at the Leiden Rijksherbarium.⁸⁰ Throughout his later years he remained a forceful figure in taxonomic botany internationally and in Indonesia. He continued to publish prodigiously, mostly taxonomic articles on the family Lauraceae but also on other plant families.⁸¹ By the mid-1970s Kostermans had re-established himself in Indonesia by becoming involved in research that promoted and documented plant resources of South-East Asia; he was working with the Southeast Asian Regional Centre for Tropical Biology (BIOTROP), an Indonesian centre for tropical biology that was set up in 1970 to train junior scientists and provide senior scientists with opportunities to conduct research.⁸² One of the founding members of the international cooperation program PROSEA (Plant Resources of South-East Asia), he was also the scientific advisor for the Indonesian PROSEA project.⁸³ In 1990 he was awarded the prestigious Dutch Commander's Cross of the Order of Oranje-Nassau in recognition of his life's work in botany, promotion of good relations between the Netherlands and Indonesia, and commitment to the education of Indonesian botanists.⁸⁴

At the end of his life Kostermans became a strong advocate for conserving Indonesia's forest, having become troubled by extensive logging of native forests and the resulting loss of biodiversity. He expressed his frustration with the Indonesian Government for allowing the rapid extinction of Indonesia's forests that had made

79 A. Rifai Mien, 'Kostermans: The Man, His Work, His Legacy', *Plant Diversity in Malesia III*, Proceedings of Symposium 1995, ed. J. Dransfield, M. J. E. Coode and D. A. Simpson, Royal Botanical Gardens, Kew, 1997, 229.

80 These appointments are listed in W. J. J. O. de Wilde and P. Baas, 'In Memoriam Professor A. J. G. H. Kostermans (1906–1994)', *Blumea—Biodiversity, Evolution and Biogeography of Plants* 40, no. 1 (1995): 3.

81 His scientific publications are listed in de Wilde and Baas, 'In Memoriam Professor A. J. G. H. Kostermans', 6–13.

82 Goss, *The Floracrats*, 166.

83 P. C. M. Jansen, 'The Prosea Programme (Plant Resources of South-East Asia)', *Flora Malesiana Bulletin* 12, no. 7/8 (2001): 359–63, accessed 29 September 2016, repository.naturalis.nl/record/532837.

84 De Wilde and Baas, 'In Memoriam Professor A. J. G. H. Kostermans', 1–13.

them famous within scientific circles.⁸⁵ His adopted country, he believed, had not sufficiently recognised him for the contributions he had made to botany.⁸⁶ In modern Indonesia, however, Kostermans is remembered with respect. After the funeral ceremonies on 11 July 1994, he was buried in the Dutch cemetery of the Kebun Raya Bogor. The Indonesian Government had given special permission to allow the burial in a cemetery that had been closed for 100 years. In recent times, an information board has been placed at the entrance of the cemetery. On the board is written:

The most recent grave is that of Prof. A.J.G.H. Kostermans who died in 1994—a renowned botanist from the Netherlands who became a citizen of Indonesia in 1958. Kostermans is buried near the plant environment he loved, in accordance with his wishes. The Indonesian government awarded him for his services to science.⁸⁷

His grave was initially marked with a wooden cross that Kostermans had requested to signify his life-time's taxonomical work with lowland forest trees. When the cross rotted in the tropical environment, his grave was substantially upgraded with a large headstone and horizontal red, white and blue grave markers. The headstone includes the inscription 'born Dutch in Purworejo on 1 July 1906 André Joseph Guillaume Henri, died Indonesian in Jakarta on 10 July 1994 Achmad Jahja Goh Hartono KOSTERMANS'.

In their 1995 memorial, de Wilde and Baas named Kosterman as one of the most important post-WWII South-East Asian botanists and a leading expert on the family Lauraceae.⁸⁸ His prolific collections of botanical specimens deposited in world-renowned herbariums continue to inform botanists of the plant diversity that existed in areas now lost to deforestation. To the end of his life, Kostermans continued to be academically active, completing his final major scholarly work in 1993, a work still considered the seminal taxonomy of mangoes.⁸⁹ His scientific work is highly regarded by botanists but his work as a Japanese POW in the makeshift laboratory at the Nakom Paton hospital camp is less well known. Kostermans's and Chapman's inventive pharmaceutical work saved the lives of many fellow POWs, including Australian servicemen with whom they had laboured on the Burma–Thailand Railway. This forgotten contribution is an aspect of his life about which he was rightly proud.

85 Melody Kemp, 'Doc Kostermans: Botanist Extraordinaire', *Inside Indonesia*, no. 40, September 1994, 24.

86 Kemp, 'Doc Kostermans: Botanist Extraordinaire', 22.

87 Text on the information board at the Dutch cemetery, Kebun Raya Bogor, about Kostermans' gravesite. Kostermans became an Indonesian in 1961, not 1958 when he began the process of naturalisation.

88 De Wilde and Baas, 'In Memoriam Professor A. J. G. H. Kostermans', 1.

89 A. J. G. H. Kostermans and J. M. Bompert, *The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization* (Cornwall, UK: TJ Press, 2012). Personal communication with P. Horne. Originally published in 1993.



Figure 2: Kostermans's grave, Dutch cemetery, Kebun Raya Bogor, 2016.

Source: Photograph by P. M. Horne.

Acknowledgements

A number of people assisted me with this Kostermans project: Karien Lahaise, Naturalis Biodiversity Centre, Netherlands; Mechteld Gravendeel, University of Amsterdam; Melanie Nolan, National Centre of Biography, ANU; Barbara Palmer, New York, United States; Taco Bottema, Bogor, Indonesia; Sean Foley, Vientiane, Lao PDR; Jon Lewis, Canberra; and Peter Horne, Canberra.

This text is taken from *Australian Journal of Biography and History*:
No. 1, 2018, published 2018 by ANU Press, The Australian National
University, Canberra, Australia.

doi.org/10.22459/AJBH.2018.08