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A re-examination of the life and work of A.F.G. Kerr and of his colleagues and friends

J.A.N. PARNELL[1], F. PILLA[2] & THE THAI BIOGEOGRAPHY GROUP (COMPRISING D.A. SIMPSON[3], P.C. VAN WELZEN[4], K. CHAYAMARIT[5], P. CHANTARANOTHAI[6], P.C. BOYCE[7], P. BYGRAVE[3], C. BYRNE[1], S. CHEN[8], C. COUCH[3], T. CURTIS[1], S. DRANSFIELD[3], B.E.E. DUYFJES[4], W. EIANTHONG[9], H.J. ESSER[10], P.J. GROTE[11], Z. HUA[8], M.H.P. JEBB[12], D.W. KIRKUP[3], P. KE LOC, S.S. LARSEN[13], J. MACKLIN[1], A. MADERN[4], C. MEADE[14], F. MERKLINGER[3], D.J. MIDDLETON[15], J. MOAT[3], A.M. MUASYA[16], P. NAKMUENWAI[17], H. PEDERSON[18], C.A. PENDRY[19], A. PRAJAKSOOD[6], R. POOMA[20], K. PREUSAPAN[21], C. PUGLISI[19], A. SATHAPATTAYANON[22], P. SUKKHARAK[23], G. STAPLES[24], J. STRIJK[25], S. SUDDEE[5], S. SUNGKAEW[9], K. TANGJITMAN[26], A. TEERWATANANON[27], J. TOVARANONTE[28], T. UNG[29], A. TRIAS BLASI[3], W.J.J.O. DE WILDE[4], P. WILKIN[3] & T. YAHARA[30]

ABSTRACT. Arthur Francis George Kerr's life is reviewed and related to a previously published account. Kerr's collecting activity is analysed using an expanded version of the Thai Biogeography Group's database of collections. 8,666 of the total 48,970 collections are Kerr's and 3,178 are those of his colleagues and friends. Therefore, the total number of collections made by Kerr and his acquaintances is likely to be larger and more diverse than previously believed. Mapping of these data using GIS show that Kerr's collecting activities focussed on particular regions of Thailand at particular times. Also large areas of the country remained unexplored by Kerr and his acquaintances: a pattern that, to some extent, persists to this day. The large, but dispersed, archive of Kerr's photographs, maps, living collections and correspondence indicate that he was a skilled photographer (taking at least 3,000 images), cartographer (producing many hand-drawn maps) and exceptionally acute, accurate and detailed observer (filling numerous notebooks and leaving other records). It is clear that digitising these collections to form an on-line dedicated website is highly desirable to further progress on the flora of Thailand and surrounding countries and would form an unique record of the social history of early 20thC Thailand.

KEY WORDS: A.F.G. Kerr, plant collecting, densities and localities, Thailand, GIS, socio-economic history, Irish Botanist, Thai Biogeography Group, Thai photographs, Thai maps, Thai plants

[1] Herbarium, Department of Botany & Trinity Centre for Biodiversity, School of Natural Sciences, Trinity College Dublin, Dublin 2, Ireland: [2] Department of Civil, Structural and Environmental Engineering, School of Engineering, Trinity College Dublin, Dublin 2, Ireland: [3]Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, UK: [4]Naturalis Biodiversity Center, P.O. Box 9517, 2300 RA Leiden, Netherlands: [5]Office of the Forest Herbarium, Department of National Parks, Wildlife and Plant Conservation, 61 Phahonyothin Road, Ladyao, Chatuchak, Bangkok 10900: [6]Department of Biology, Khon Kaen University, Khon Kaen 40002, Thailand: [7]Institute of Biodiversity and Environmental Conservation, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia: [8]Chinese Academy of Sciences, Kumming Division of Xishuangbanna Tropical Botanical Garden, Yunnan: [9]Department of Forest Biology, Faculty of Forestry, Kasetsart University, Bangkok 10900, Thailand: [10]Herbarium, Botanische Staatssammlung München, Menzinger Straße 67, D-80638 München, Germany: [11]School of Biology, Institute of Science, Suranaree University of Technology, University Avenue, Muang District, Nakhon Ratchasima 30000, Thailand: [12]National Botanic Gardens, Glasnevin, Dublin 9, Ireland: [13]Herbarium, Science and Technology Museums, Aarhus University, Ole Worms Alle 1., Build. 1137, DK-8000 Aarhus C, Denmark: [14]Institute of Bioengineering and Agroecology, National University of Ireland, Maynooth, Co. Kildare, Ireland: [15]Herbarium, Singapore Botanic Gardens, Cluny Road, Singapore 259569, Singapore: [16]Department of Biological Sciences 2014, University of Cape Town, Private Bag, Rondebosch 7701, South Africa: [17]Informatics and Space Technology Development Agency (Public Organization), 120 The Government Complex Commemorating His Majesty The King's 80th Birthday Anniversary, 5th December, B.E.2550 (2007), Ratthaprasasanabhakti Building 6th and 7th Floor, Chaeng Wattana Road, Lak Si, Bangkok 10210, Thailand: [18]Natural History Museum of Denmark, Øster Voldgade 5-7, 1350 1350 København K, Denmark: [19]Herbarium, Royal Botanic Garden, Edinburgh, Inverleith Row, Edinburgh, Scotland, UK: [20]Herbarium, National Science Museum, Royal Forest Department, Bangkok 10900, Thailand: [21]Plant Variety Protection Office, Department of Agriculture, Bangkok Herbarium, 50 Phaholyothin Road, Chatuchak, Bangkok 10900, Thailand: [22]Srinakharinwirot University, Sukhumvit 23, Bangkok 10110, Thailand: [23]Department of Biology, Faculty of Science, Burapha University, 169 Long-Hard Bangsaen Road, Saen Sook Sub- district, Mueang District, 20131 Chonburi, Thailand: [24]formerly at [15] above: [25]Plant Ecophysiology and Evolution Group, College of Forestry, Guangxi University, Nanning, China: [26]Department of Biology, Faculty of Science, Chiang Mai University, Chiang Mai, Thailand: [27]Herbarium, National Science Museum, Royal Forest Department, Bangkok 10900, Thailand: [28]School of Science, Mae Fah Luang University, 333 Moo 1, Tambon Tasud, Muang District, Chiang Rai 57100, Thailand: [29]UMR 7207 CNRS/MNHN/UPMC, MNHN Département Histoire de la Terre, CP48, 57 rue Cuvier, 75005 Paris, France: [30]Department of Biology, Faculty of Sciences, Kyushu University Hakozaki 6-10-1, Fukuoka 812-8581, Japan.

INTRODUCTION

This paper is a formal account of the plenary address the first author gave to the opening session of the 16th Flora of Thailand Conference held in the Royal Botanic Gardens Kew in September 2014. In it he dealt with the life and work of A.F.G. Kerr.

Arthur Francis George Kerr's life, both personal and scientific, has already been detailed by Jacobs (1962). As Jacobs' paper is 67 pages long and as he had access to Kerr's three daughters and his solicitor, it might be thought that there is very little novel to say in regard to Kerr. Indeed the first author feared that this was the case when he began to work on the plenary address: however, as is hopefully apparent this proved not to be the case. In fact, further study of Kerr's archives and legacy beyond that presented briefly herein would be exceptionally useful. For example, based on the information in the archives it should be possible to improve the accuracy of information on the structure, composition and location of Thailand's forest before extensive clearance occurred. Equally, Kerr's archives include much socio-economic information probably unobtainable from any other source. His diaries, for example, contain detailed accounts of trade (e.g. counts of bullock carts, their contents and their movements) as well as accounts of buildings either now vanished or much altered. His complementary photographic archive supplements these data. In the main, material already revealed by Jacobs (1962) is not repeated below: rather some corrections to Jacobs' account is presented along with novel information.

It should also be noted that at no time have I, or anyone else I have ever met in Ireland or Scotland (where the surname Kerr originated) ever heard it pronounced as is suggested in Jacobs (1962) as 'Carr': it is always pronounced as 'Kerr': though I understand that in some cases in England the name may be pronounced 'Carr'.

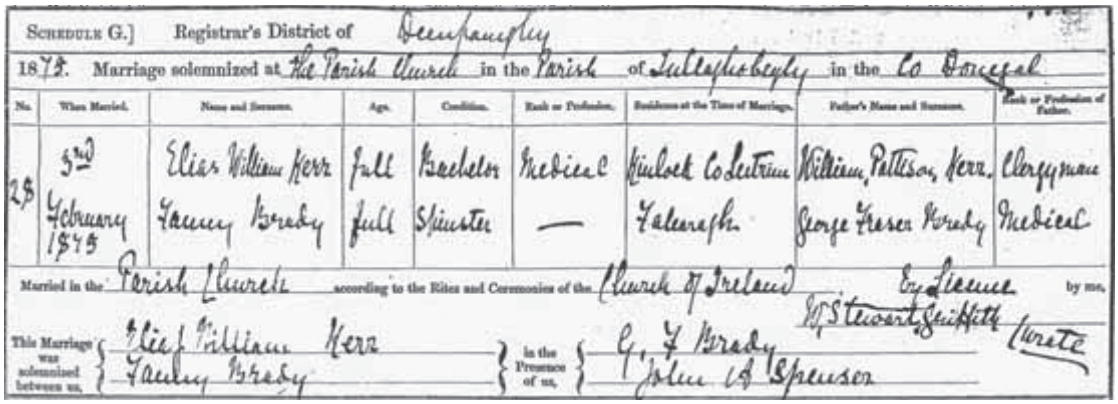
AFG Kerr's life

A.F.G. Kerr's parents, Elias William Kerr and Fanny Brady were married in the parish of Tullaghobegley in Co. Donegal, Ireland on the 3rd of February 1875. Their marriage certificate (Fig. 1) indicates that Elias was a medical practitioner, resident at that time in Kinloch, Co. Leitrim, Ireland, that Elais's father, William Patterson Kerr, was a Clergyman and that Fanny Brady hailed from Falcarragh, a small village on the north coast of Co. Donegal, Ireland probably within but certainly adjacent to Tullaghobegley parish.

Clearly Elais and Fanny moved the 77 km south to Co. Leitrim soon (probably immediately) after their marriage as the birth certificate of A.F.G. Kerr (Fig. 2) indicates that he was born in the district of Kinlough on the 27th of February 1877. His place of birth is given Edenvalle (AKA Edenvella) a location about 1 km north-east of Kinlough. There is therefore a discrepancy between Kerr's birth certificate and the place and the date given by Jacobs (1962) as he states that Kerr was born at Kinlough on the 7th of February 1877. A.F.G. Kerr's baptismal certificate (Fig. 3) does little to help clear up this discrepancy. It indicates that Kerr was baptized, by his grandfather W.P. Kerr, the Rector of Ballynure in Co. Antrim, on April 6th 1877 in Rossinver Parish at Muilough Church. Unfortunately, the baptismal certificate also indicates that the date of birth was February 7th. It is therefore unclear from the available records what Kerr's date or place of birth is: however, the first author believes it likely that the birth certificate was correct both in terms of the date and place of birth. It is also noticeable from the baptismal certificate that at the time of Kerr's baptism the family had moved again, being now resident in Mullinaleck about 1 km north–east of Edenvella. It is also worth noting that the delay between the dates of birth and baptism, that would seem strange by modern standards, was apparently, normal for children born in 19thC Ireland as it was only following a reasonable period of time that it was certain that the child was going to live.

The family soon moved to Dorset in the south of England and Kerr went to school in one of the oldest established school's there: Dorchester Grammar School that was first established in 1567. Kerr subsequently entered Trinity College Dublin (TCD), Ireland, an early established University (1592) and the one from which his father had graduated in 1872 as an M.B and Mast. Surg.. A.F.G. Kerr's entry in the register of students for TCD (Fig. 4 and TCD MUN V 24/6 folio 41v) shows that he matriculated (was admitted to TCD) on 18th October 1894 when he was 17. The records also show that he was recorded as a Protestant

belonging to the Church of Ireland and as a Pensioner ('Pens'). According to Jacobs (1962) Kerr, like some of his younger brothers, had a Scholarship, but the status 'Pensioner' does not indicate that he received one from TCD: the term 'Pensioner' only implies that he was a fee-paying student.



SCHEDULE G.] Registrar's District of Ballyshannon

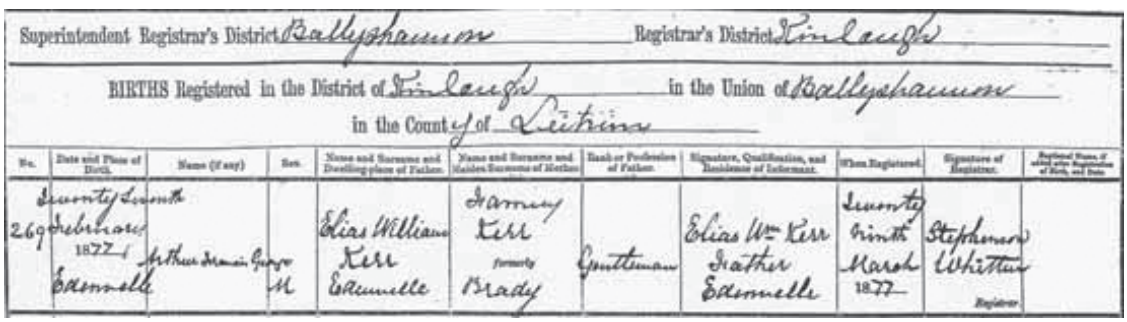
1875. Marriage solemnized at the Parish Church in the Parish of Tullyhobeyley in the Co Donegal

No.	When Married.	Name and Surname.	Age.	Condition.	Rank or Profession.	Residence at the Time of Marriage.	Father's Name and Surname.	Rank or Profession of Father.
28	5th February 1875	Elias William Kerr	full	Bachelor	Medical	Kinlock Co Leitrim	William Pattison Kerr.	Clergyman
		Fanny Brady	full	Spinster	—	Falcarragh	George Fraser Brady	Medical

Married in the Parish Church according to the Rites and Ceremonies of the Church of Ireland By License by me, W. S. Stewart Griffith Curate

This Marriage was solemnized between us, Elias William Kerr, Fanny Brady. In the Presence of us, G. F. Brady, John A. Spencer

Figure 1. Copy of the Marriage Certificate of E.W. Kerr and Fanny Brady, A.F.G. Kerr's parents.

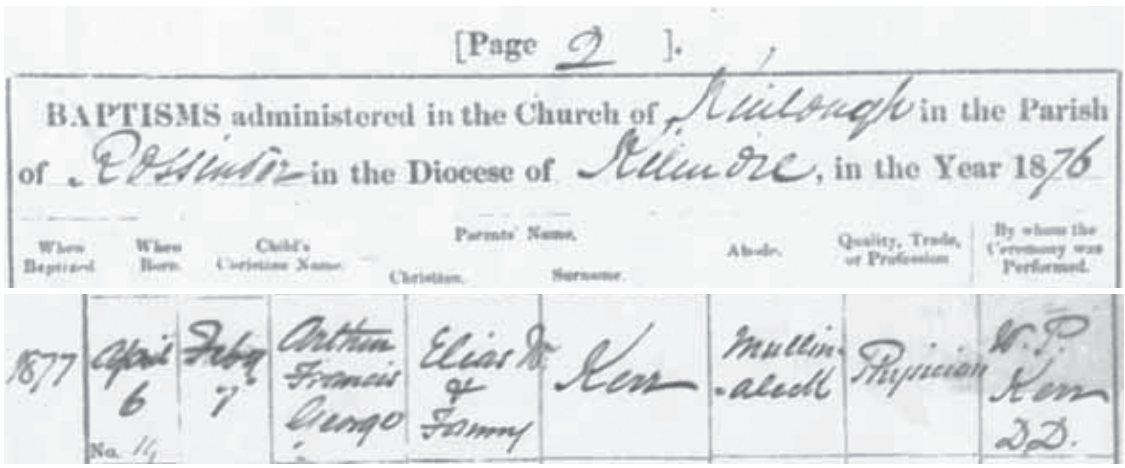


Superintendent Registrar's District Ballyshannon Registrar's District Kinlough

BIRTHS Registered in the District of Kinlough in the Union of Ballyshannon in the County of Leitrim

No.	Date and Place of Birth.	Name (if any)	Sex.	Name and Surname and Dwelling-place of Father.	Name and Surname and Maiden Surname of Mother.	Rank or Profession of Father.	Signature, Qualification, and Residence of Informant.	When Registered.	Signature of Registrar.	Baptismal Name, if added after Registration of Birth, and Date.
269	Twenty Seventh February 1877 Edenvelle	Arthur Francis Geoge	M	Elias William Kerr Edenvelle	Fanny Kerr formerly Brady	Gentleman	Elias Wm Kerr Father Edenvelle	Twenty Ninth March 1877	Stephenson Whittaker Registrar	

Figure 2. Copy of A.F.G. Kerr's birth certificate.



[Page 2].

BAPTISMS administered in the Church of Kinlough in the Parish of Drumkeerin in the Diocese of Kilmore, in the Year 1876

When Baptized	When Born	Child's Christian Name	Parents' Name, Christian	Parents' Name, Surname	Abode	Quality, Trade, or Profession	By whom the Ceremony was Performed
1877	April 6	Feby 7	Arthur Francis George	Elias W. & Fanny	Kerr	Mullinacleeth	Physician	W. P. Kerr DD.

No. 14

Figure 3. Copy of A.F.G. Kerr's baptismal certificate.

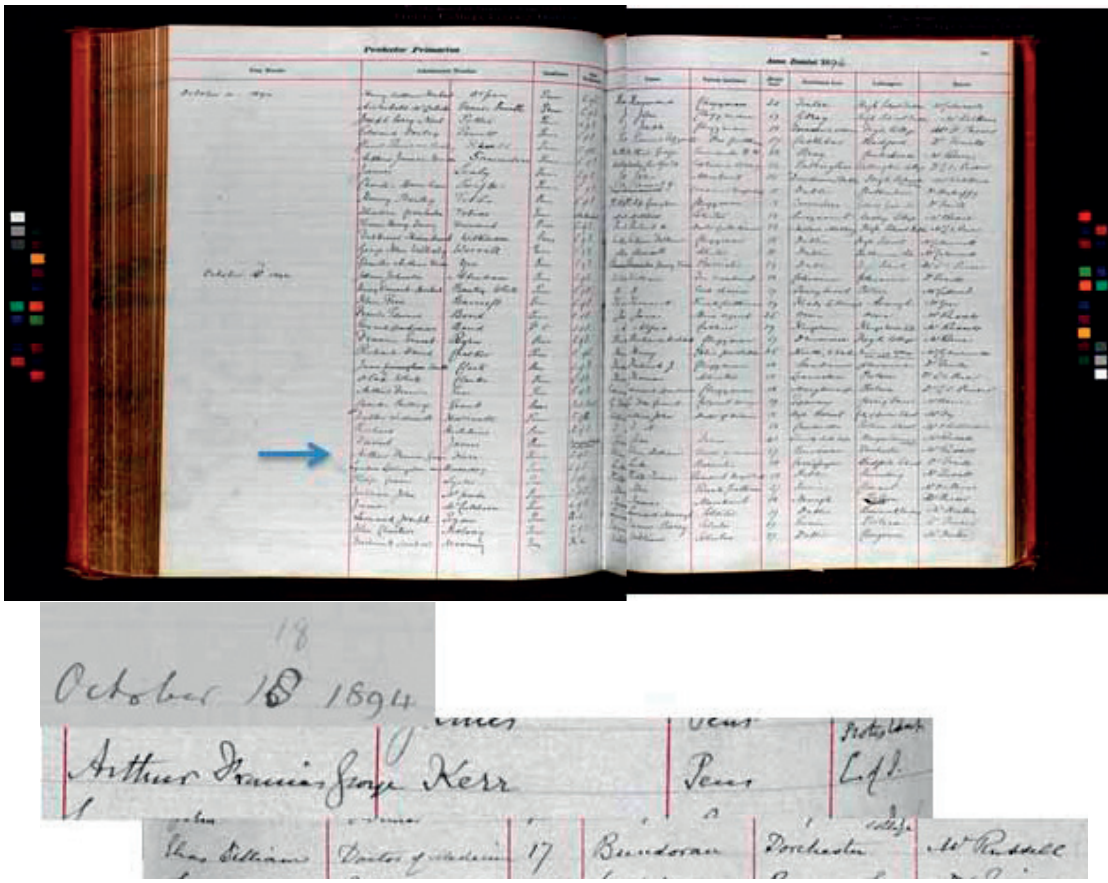
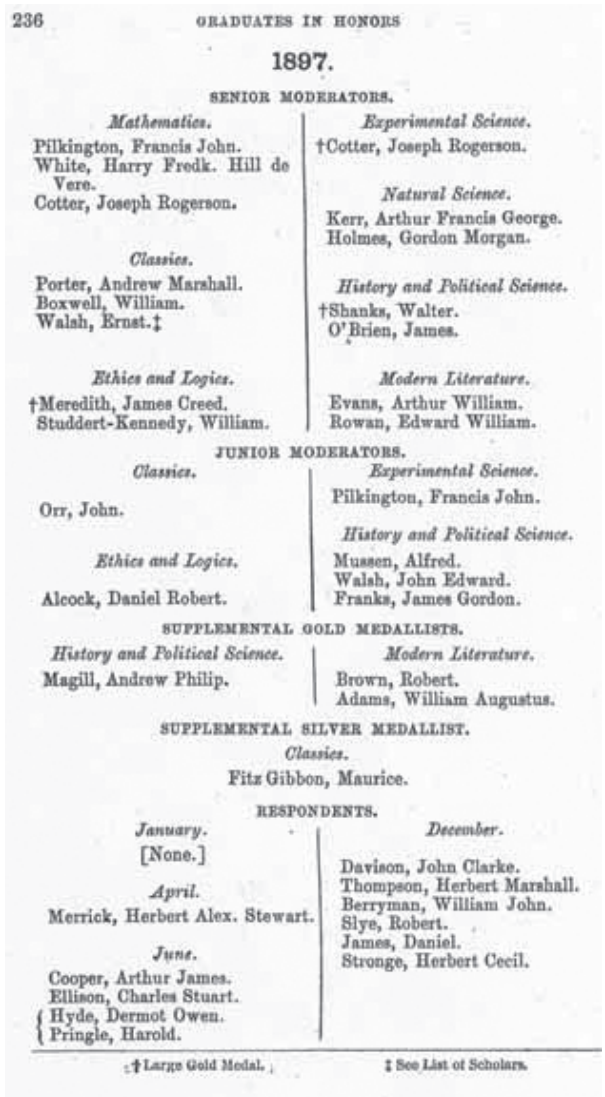


Figure 4. a (Top). Copy of the entry record for A.F.G. Kerr's into TCD (arrowed). b (Below). Enlargement of A.F.G. Kerr's into TCD. Courtesy of TCD Library (MUN V 23 7 324).

Kerr graduated from TCD on a number of occasions: firstly he achieved a BA in the Senior Moderatorship category in 1897 (note that at that time students graduating in a particular category were listed in order of merit: Kerr, therefore was placed above the only other graduate in Natural Sciences, Fig. 5). TCD's records then show that in 1901 he graduated in the Spring ('Vern') with a B.A.O, B.Ch. and M.B. (thereby graduating as a Medical Doctor) and in 1908 he obtained a M.D. in the Autumn graduations ('Aest'). At that time in TCD the study of Botany formed a substantial part of the medical curriculum and so Kerr became acquainted with H.H. Dixon, FRS, then Professor of Botany in TCD. Their acquaintance blossomed: Dixon helped Kerr to find a job in Thailand (Jacobs, 1962) and they became life-long friends. This is a quite remarkable scenario as Dixon was one of the World's best known and best respected plant scientists.

In 1902, almost immediately following his graduation as a Doctor, Kerr went to Thailand (then called Siam) (Jacobs, 1962). Jacobs deals well with Kerr's career in Thailand and it is not intended that these details be repeated here. Suffice it to say that despite the undeveloped state of the country at that time (Chiang Mai was reachable from Bangkok only by mule track or by a four week river journey), Kerr made very extensive collections, took copious field notes, drew a number of accurate maps, took lots of photographs, was an voluminous correspondent and inspired a number of other people to collect plants in Thailand: overall he must have worked exceptionally hard and really loved his time there. Eventually, Kerr ended up as Director General of Agricultural Research and was awarded The Most Exhalted Order of the White Elephant - 4th Class – an exceptional honour. His time in Thailand was not without tragedy as his wife died of Malaria whilst there, necessitating the



236 GRADUATES IN HONORS

1897.

SENIOR MODERATORS.

Mathematics.
Pilkington, Francis John.
White, Harry Fredk. Hill de Vere.
Cotter, Joseph Rogerson.

Classics.
Porter, Andrew Marshall.
Boxwell, William.
Walsh, Ernst.‡

Ethics and Logics.
†Meredith, James Creed.
Studdert-Kennedy, William.

Experimental Science.
†Cotter, Joseph Rogerson.

Natural Science.
Kerr, Arthur Francis George.
Holmes, Gordon Morgan.

History and Political Science.
†Shanks, Walter.
O'Brien, James.

Modern Literature.
Evans, Arthur William.
Rowan, Edward William.

JUNIOR MODERATORS.

Classics.
Orr, John.

Ethics and Logics.
Alcock, Daniel Robert.

Experimental Science.
Pilkington, Francis John.

History and Political Science.
Mussen, Alfred.
Walsh, John Edward.
Franks, James Gordon.

SUPPLEMENTAL GOLD MEDALLISTS.

History and Political Science.
Magill, Andrew Philip.

Modern Literature.
Brown, Robert.
Adams, William Augustus.

SUPPLEMENTAL SILVER MEDALLIST.

Classics.
Fitz Gibbon, Maurice.

RESPONDENTS.

January.
[None.]

April.
Merrick, Herbert Alex. Stewart.

June.
Cooper, Arthur James.
Ellison, Charles Stuart.
Hyde, Dermot Owen.
Pringle, Harold.

December.
Davison, John Clarke.
Thompson, Herbert Marshall.
Berryman, William John.
Slye, Robert.
James, Daniel.
Stronge, Herbert Cecil.

†Large Gold Medal. ‡ See List of Scholars.

Kenny (Robert Henry), B.A., *Vern.* 1900.
Kerr (Arthur Francis George), B.A., *Hiem.* 1897.—B.A.O., B.Ch., and M.B., *Vern.* 1901.
Kerr (George William), Sch., 1895.—B.A., *Vern.* 1896.

Kernan (John Dubourdieu), B.A., *Hiem.* 1908.—B.A.O., B.Ch., and M.B., *Æst.* 1909.
Kerr (Arthur Francis George), M.D., *Æst.* 1908.
Kerr (Frederick Hugh), B.A., *Hiem.* 1907.
Kerr (Robert Goodman), B.A., *Hiem.* 1911.

Figure 5. a (top). Copy of the graduation record for A.F.G. Kerr from TCD for his first graduation. b (middle). Copy of the graduation record for A.F.G. Kerr from TCD for his second graduation. c (bottom). Copy of the graduation record for A.F.G. Kerr from TCD for his third graduation.

removal of his children back to England who were taken care of by their Aunt in Hayes, Kent.

As Jacobs (1962) details, Kerr's time in Thailand was not continuous from his arrival in 1902 to his final departure in 1932: there were a number of breaks. These breaks enabled him to establish and maintain family and professional connections as detailed by Jacobs (1962).

Kerr lived for another 10 years following his return to England, and worked both on the plants that he had collected in Thailand, on the phenology of plants in England and briefly, just before his death, he started work on copying his maps of Thailand for the Air Ministry. He died on the 22nd of January 1942, and not on the 21st as Jacobs, 1962 states: there being 3 causes of death (Fig. 6). Kerr is buried in Cerne Abbas, Dorset, England where the family grave (Fig. 7a & b) has a particularly apposite, brief and touching epitaph to his life and work – he is described as a 'Botanist in Thailand'.

Kerr's legacy

We intend to deal with Kerr's legacy under the following headings:

1. Kerr's Herbarium specimens and those of his colleagues and friends

2. Kerr's Photographs and notebooks

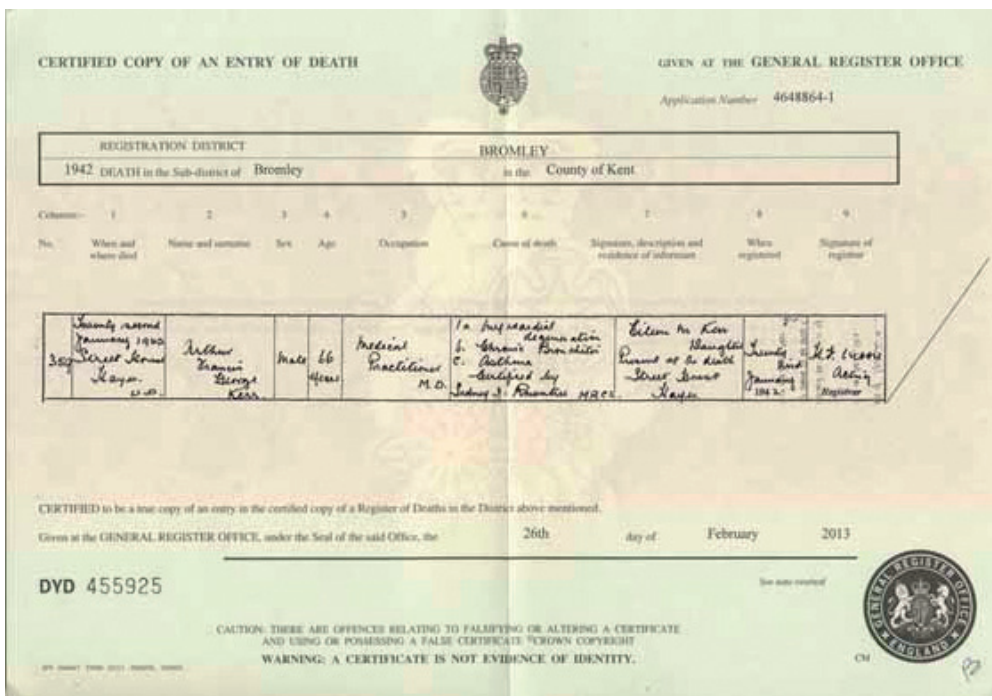
3. Kerr's Live specimens

4. Kerr's Maps, correspondence and publications

1. Kerr's herbarium specimens and those of his colleagues and friends

Jacobs (1962) indicates that Kerr collected three sets of plants (Mosses, Orchids and Vascular Plants) using different numbering systems (Table 1). The Thai Biogeography Group's (TBG) database (Parnell *et al.*, 2003; Van Welzen *et al.*, 2011) only deals with vascular plants and we have not examined Kerr's Moss and Hepatic collections, many of which are in the BM: therefore, we confine our discussion herein almost entirely to his collections of vascular plants.

The first and second author further expanded the TBG database from its already published size (Parnell *et al.*, 2003; Van Welzen *et al.*, 2011) partly by extraction of data from GBIF. All data that were tagged as Thai were extracted (approximately


CERTIFIED COPY OF AN ENTRY OF DEATH

GIVEN AT THE GENERAL REGISTER OFFICE

Application Number 4648864-1

REGISTRATION DISTRICT BROMLEY

1942 DEATH in the Sub-district of Bromley in the County of Kent

Columns: 1 2 3 4 5 6 7 8 9

No. | When and where died | Name and surname | Sex | Age | Occupation | Cause of death | Signature, description and residence of informant | When registered | Signature of registrar

Twenty second January 1942 Forest School Hayes

Arthur Francis George Kerr.

Male 66 years

Medical Practitioner M.D.

1a. Influenza Certified by

b. Chronic Bronchitis

c. Asthma

Sydney J. Rhodes M.R.C.S.

Eileen M. Kerr Daughter present at the death Forest School Hayes

Twenty third January 1942

L.T. Crooke Acting Registrar

CERTIFIED to be a true copy of an entry in the certified copy of a Register of Deaths in the District above mentioned.

Given at the GENERAL REGISTER OFFICE, under the Seal of the said Office, the 26th day of February 2013

DYD 455925

CAUTION: THERE ARE OFFENCES RELATING TO FALSIFYING OR ALTERING A CERTIFICATE AND USING OR POSSESSING A FALSE CERTIFICATE © CROWN COPYRIGHT

WARNING: A CERTIFICATE IS NOT EVIDENCE OF IDENTITY.

Figure 6. Copy of the death certificate for A.F.G. Kerr.

Figure 7. A (left). Photograph of the Kerr family grave. B (right). Close-up of the inscription for A.F.G. Kerr. It reads:

'Arthur Francis
George Kerr
Eldest son of Elais
William and Fanny Kerr
Died at Hayes Kent
January 22nd 1942 Aged 65
Botanist in Thailand'.

a million records – most of these data proved irrelevant for a variety of reasons, e.g. the data already in the TBG database, or were not Thai or were not plant data). We extracted, from the remaining pool the subset of data that referred to collections made by Kerr or his friends. This yielded a total database of plant collections from Thailand of 48,970 of which of 8,666 were made by Kerr and 3,178 were made by friends and colleagues of Kerr as defined by Jacobs (1962). The revised database allowed us to check Jacob's estimates (Table 2) for the number of plant collections made by Kerr and others.

In the case of the orchids (Table 2) we estimate that Kerr made approximately 2,273 collections rather than the 1,525 estimated by Jacobs (1962). Our higher estimate is arrived at as follows. The TGB database contains 1,594 records of herbarium sheets of orchids of which 1,081 have collection numbers in the range suggested by Jacobs. Therefore, the TGB database holds ca 67.8% of Kerr's total Orchid collection as enumerated by Jacobs (1962). In addition, we have found 6 specimens whose numbers exceed 1,525, 63 specimens numbered with an A or B extension to the number (e.g. 0409B) and 442 without any number at all (s.n.), though usually without this abbreviation being appended. Assuming that we have a non-biased sample of Kerr's Orchid collections we can calculate that if we had all of Kerr's Orchid collections in the database that there would be 6/0.678 = ca 9 specimens with numbers exceeding 1,250; 93 specimens with an A or B number and 652 without any number at all making a total of 2,348.

In the case of Kerr's vascular plant materials, Jacobs estimated that there were 21,422 collections

Table 1. Type of material, numbering system used and total number of specimens collected by Kerr according to Jacobs (1962).

Type of material	Numbering system	Total number of specimens according to Jacobs (1962)
Mosses	M1-M594	594
Orchids	0-500 & 01-01,025	1,525
Vascular plants	501 – 21,845 & 24,331 – 24,409 & s.n.	21,422 + few

Table 2.

Type of material	Total number of specimens according to Jacobs (1962)	Total number of specimens according to the TBG
Orchids	1,525	2,273 – comprising 1,525 + 10 (> 01,525) + 92 numero A,B + 646 s.n.
Vascular plants	21,422 & few s.n.	23,102 21,422 + 10 odd numbers + 46 numbered below 500 + 683 numero A,B + 983 s.n.
Fungi		16

and a few without a number (s.n.). By contrast, using the same logic as above, we know that we have 6,553 numbered specimens of higher plants in the database representing 30.6% of the total available. We have 3 specimens where the numbers (if they are numbers) simply must have been transcribed wrongly by the data suppliers into the database (e.g. 90,3618). We also have 14 specimens numbered below 500, 209 specimens with an A,B,C or D number and 301 without a number (s.n.). Therefore we estimate that there are in total 3/0.306 = 10 specimens that would appear with numbers that are in error; 46 specimens that are not Orchids numbered below 500 specimens; 683 specimens with an A, B, C or D number and 983 s.n. Together with the numbered specimens these would total 23,102 specimens. We also found that there were 5 fungal specimens recorded in the database indicating that there are likely to be 16 such specimens in total collected by Kerr. Jacobs (1962) does not record that Kerr collected any fungal material. We note that all the fungal specimens collected by Kerr were collected with the same collection number as collections of *Sauropus hirsutus* Beille: perhaps Kerr was interested in the association of these species?

If we compare the geographical distribution of Kerr's collections with those of the total TBG database it appears that his initial collecting activities undertaken until 1905 were geographically much more widespread than those he carried out later (Fig. 8). Kerr's collections do not appear to be altitude biased, in the sense that there are numerous

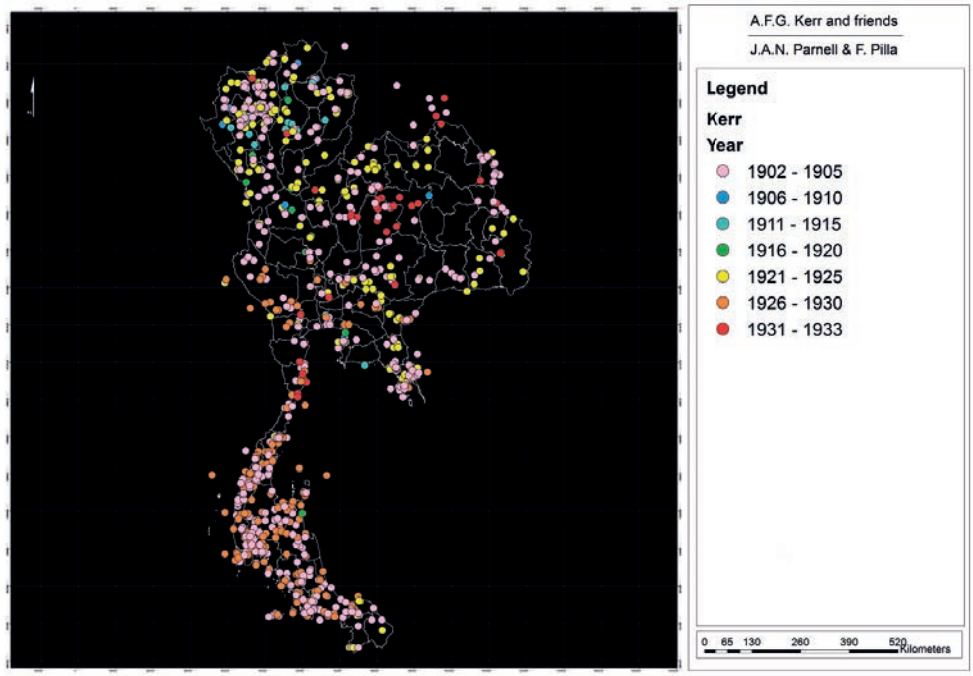


Figure 8. GIS plot of Kerr's collections in Thailand as held in the TBG database by year of collection.

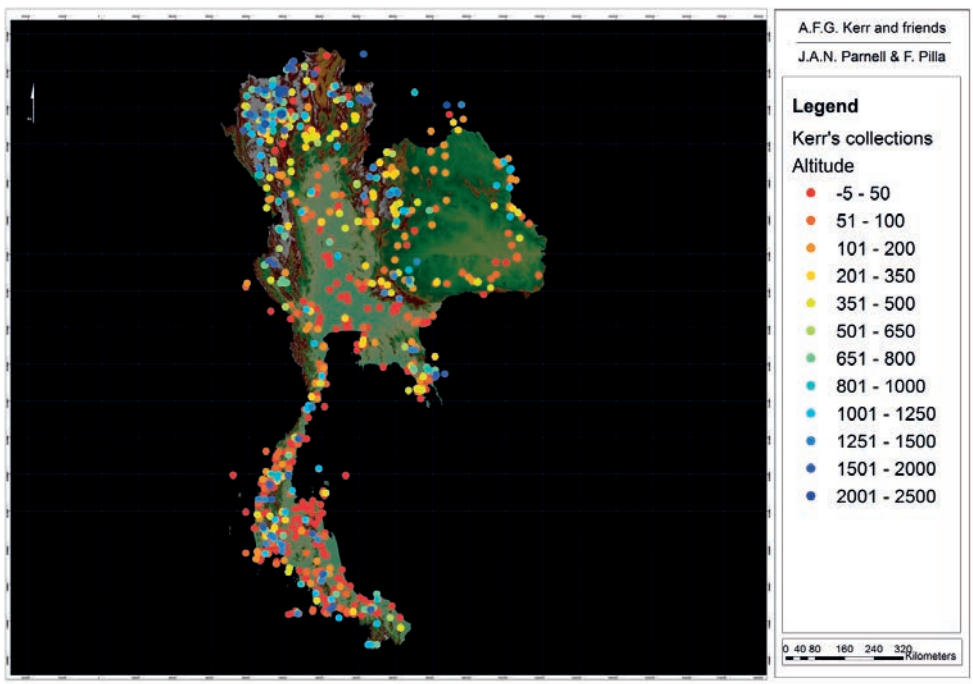


Figure 9. GIS plot of Kerr's collections in Thailand as held in the TBG database by altitude.

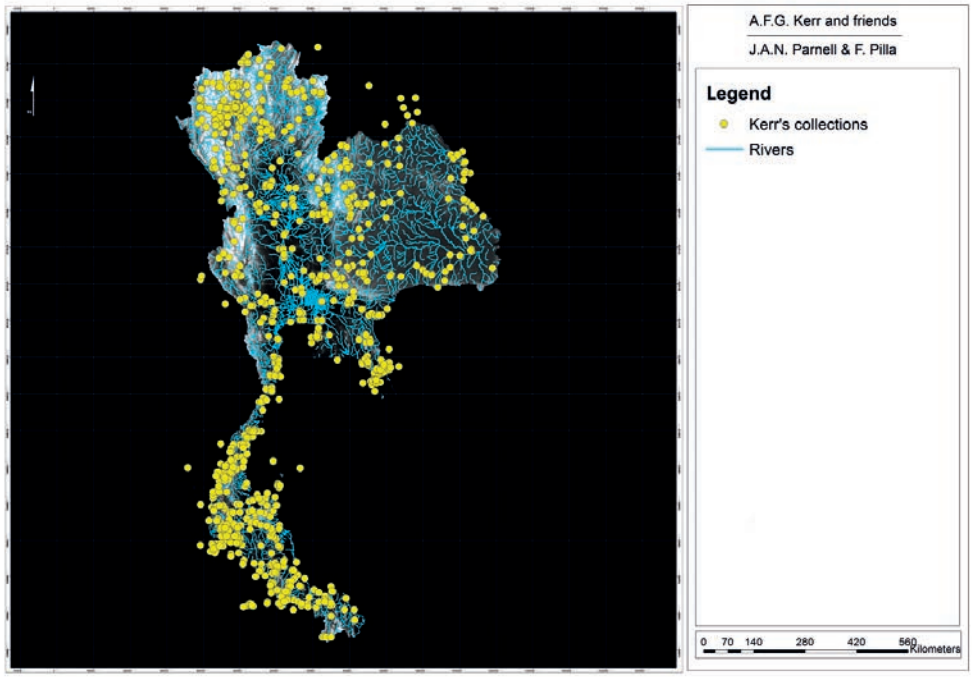


Figure 10. GIS plot of Kerr's collections in Thailand as held in the TBG database together with major rivers.

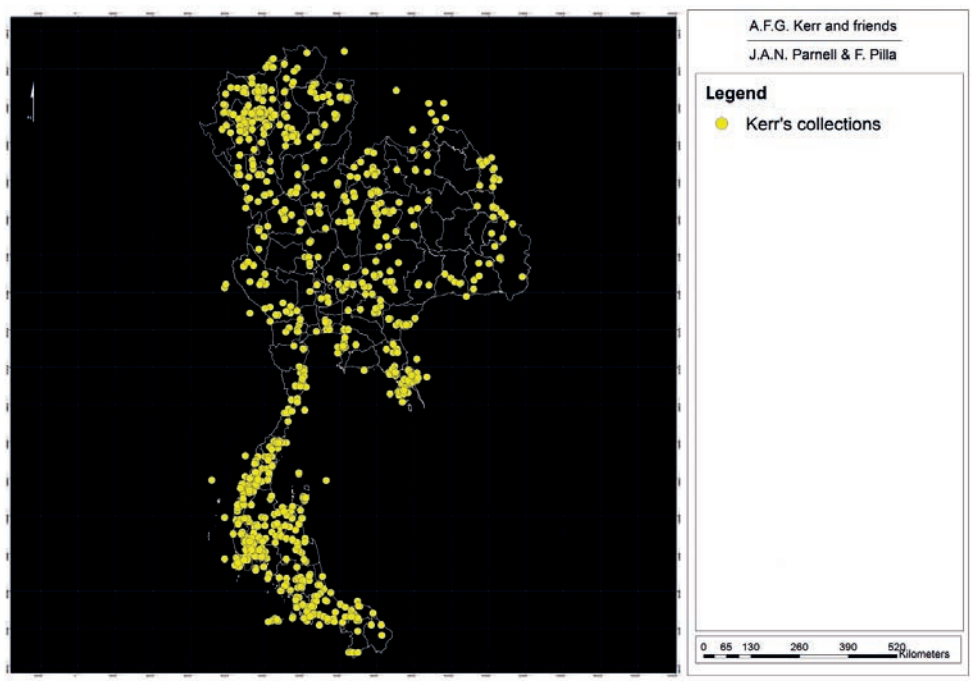


Figure 11. GIS plot of Kerr's collections in Thailand showing major gaps in his collecting activity: particularly in north-eastern Thailand.

collections from many different altitudes (Fig. 9). But his collections are strongly associated with rivers (Fig. 10) which is not surprising as Kerr most commonly travelled by river until the railways were developed and the road network become more extensive (Jacobs, 1962). Furthermore it is evident that his collecting activity, though widespread, was patchy with certain areas of Thailand being entirely uncollected (Fig. 11); for example, much of the north-east of Thailand. If the data are broken down by Changwat then it is clear that most of Kerr's collecting activity was centred on Chaing Mai with Bangkok being the next most heavily collected Changwat and then Surat Thani (Fig. 12). The patchiness of collecting becomes more evident at the finer scales of the Ampur or Tambon (Figs. 13 & 14).

Kerr had a number of colleagues and friends whose collections are also detailed in Jacobs (1962). This group of people are associated with Kerr for a variety of reasons (Jacobs op.cit.). For example his friend, Henry Burton Guest Garrett, was already resident in Siam when Kerr arrived and likely inspired Kerr to become interested in the local flora, whereas Nai Put was privately employed to collect plants by Kerr, Nai Rabil Bunnag (AKA Rabil) was Kerr's assistant and Mrs D.J. Collins was likely inspired by Kerr to take up plant collecting (the initials D.J. are, I believe, her husband's as her maiden name was Elian Emily Pemberton) (Jacobs op.cit.). The TGB database also allows their collecting activites to be reappraised and compared with the estimates of Jacobs (op.cit.) (Table 3). As can be seen from this table our estimates of the numbers of specimens collected by Kerr's colleagues and friends only differs from those of Jacobs (op.cit.) in the cases of Collins, Garrett and Rock. In total, we estimate that Kerr's colleagues and friends collected ca 16,211 specimens as opposed to the 13,875 suggested by Jacobs. Table 3 also shows that Kerr's youngest brother F.H.W. Kerr collected in Thailand. It is not likely that F.H.W. Kerr's collections can be confused with those of A.F.G. Kerr as the latter's handwriting is indescribably bad whereas his youngest brother's is quite clear and almost all the specimens so far seen clearly

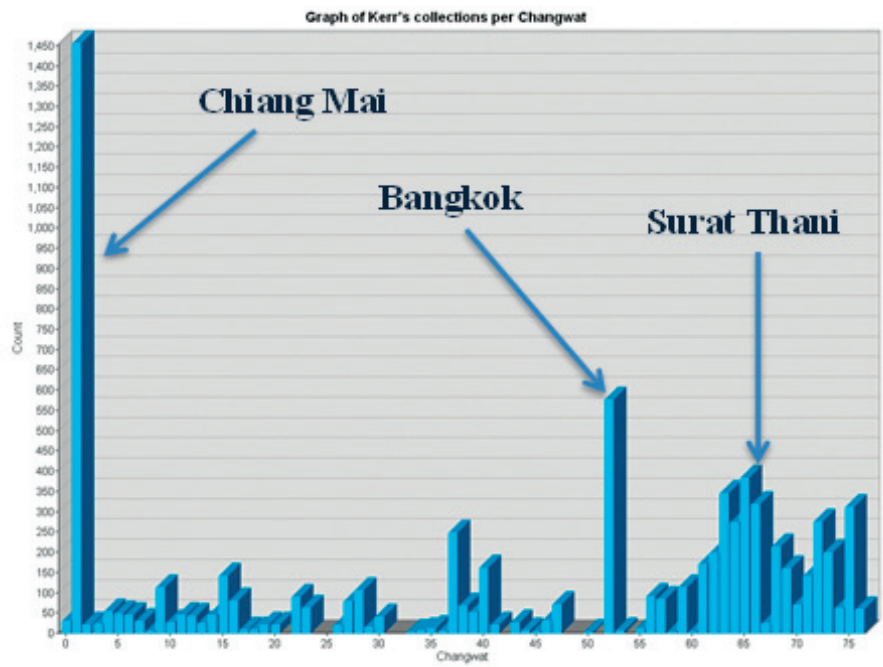


Figure 12. Histogram of all the collections of A.F.G. Kerr in Thailand in the TBG database with the most commonly collected Changwats arrowed. The numbers on the x-axis are the Changwat numbers based on the Flora of Thailand.

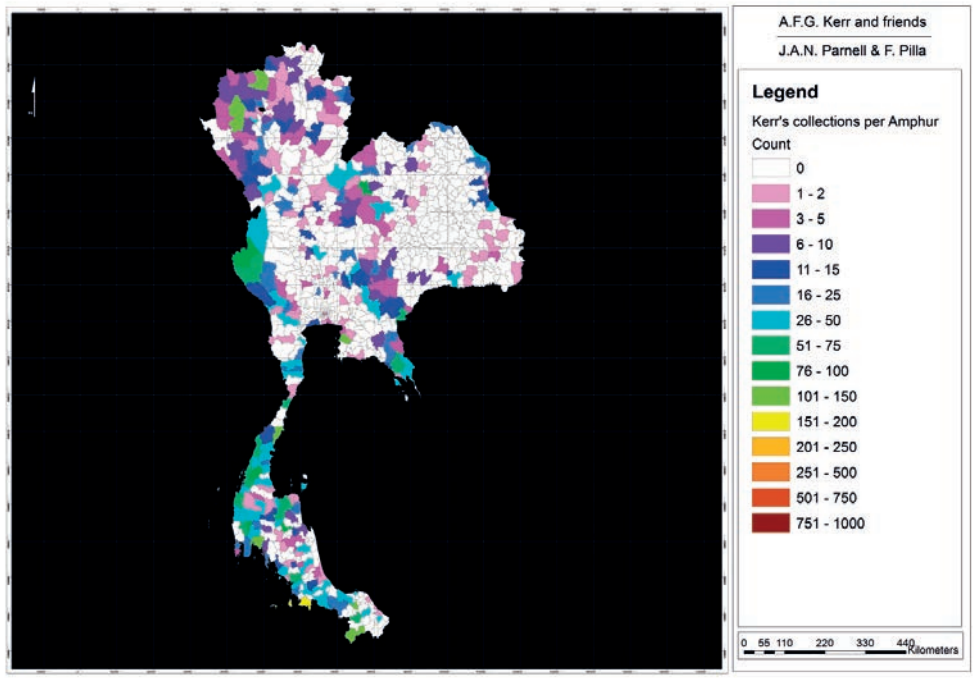


Figure 13. GIS plot of Kerr's collections in Thailand by Amphur.

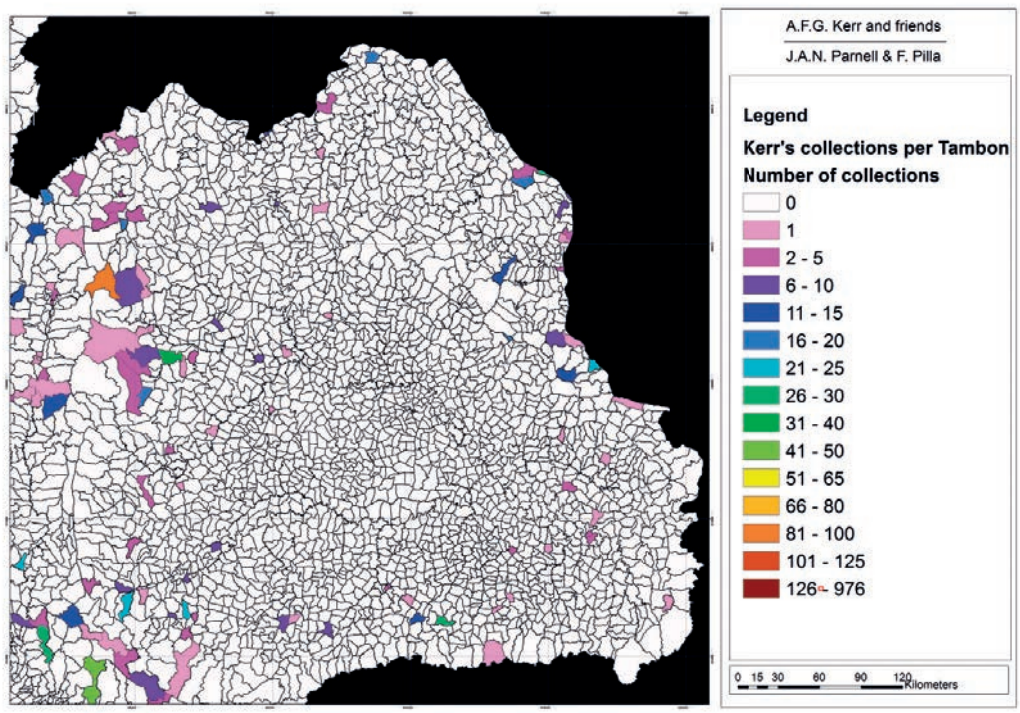


Figure 14. GIS plot of Kerr's collections in Thailand by Tambon.

Table 3. Numbers of specimens collected by Kerr's colleagues and friends as estimated using the TBG database and by Jacobs (1962).

Collector	TBG estimate of the numbers of specimens collected with Jacobs estimate where it differs in italics
ANUWAT, P.	87
BOURKE-BORROWES, D.R.S.	???
COLLINS, D.J.	2,778 (2,501)
GARRETT, H.B.G.	2,664 (1,495)
HOSSEUS, C.C.	≥850
KERR, F.H.W.	455
LAKSHNAKARA, M.C.	1,526
MARCAN, A.	2,758
NOE, N,I.	292
PUT, N	4,548
RABIL, N.B.	393
ROCK, J.F.C.	2,810 (1,920)
SMITH, E.	1,948
SMITH, H.M.	686
VANPRUK, P.	1,200
WINIT, P.W.	1,976
YUANG, N.	57
TOTAL	**16,211 (*13,875*)**

bear his initials (Fig. 15). Jacobs (1962) notes, however, that F.H.W. Kerr's labels were sometimes misprinted as M.F.G. Kerr and that A.F.G. Kerr used at least one of these misprinted labels for a collection he made in Saraburi in 1923.

Kerr's colleagues and friends did not expand much, geographically, on Kerr's collections (Fig. 16) with many of the gaps in Kerr's collecting activity being maintained (compare Figs. 9 & 16). In fact a comparison of the geographical spread of the total TBG database (43,441 of the 48,970 were usable by GIS) (Fig. 17) with those of Kerr show that though most of the gaps in collecting activity no longer exist that the original gaps and areas of low density of collecting by Kerr (compare Figs. 10 & 17) remain even now as areas of low collecting density. Using all the data in the TBG database shows that the order of importance of Changwat by number of collections (Fig. 18) is still headed by Chiangmai but now Lampang and Kanchanaburi are the second and third most collected Changwats (compare Figs. 12 & 18).

2. Kerr's photographs and notebooks

Kerr was an avid and exceptionally able photographer. There are probably at least 3,000 photographs and negatives and ca 4,200 black and white prints of his scattered through various collections, with the vast majority being in K. TCD contains a number of 2' square glass lantern slides: examples are shown in Figs. 19 & 20. The slide of *Eichornia crassipes* (Mart.) Solms (Fig. 19) is typical of many of Kerr's photographs and slides. It combines historical, sociological and biological interest showing the early spread of this highly invasive weed in Thailand at the start of last century as well as some of the standard boats of that time period. Fig. 20 is of similar interest and is labelled as a 'Scare Tiger'.

It is difficult to see how this apparatus functioned from the photograph, but nevertheless it is of historic and social interest. By chance, whilst the first Author was browsing through Kerr's written archives in K he came across one of Kerr's diaries with the following entry (Fig. 21) that explains exactly how the 'Scare Tiger' was intended to work. As can be seen from this extract Kerr's writing was often almost illegible. The entry, though, is typical of much of the information contained in Kerr's diaries spanning both Botany and sociology. Elsewhere, for example, Kerr's diaries contain plan drawings of various temple complexes and commentary on the frequency of road traffic (bullock carts) and their loads. Therefore, his notebooks provide a rich source of information for anyone intersted in the history and development of Thailand as well, of course, in its botany.

Most of the slides and photographs have not been digitised and many are deteriorating with their images fading. Also a number of negatives have had to be destroyed because they are composed of cellulose acetate, and pose a fire risk due to their potential for self ignition.

3. Kerr's live specimens

One aspect of Kerr's botanical activity that I have never seen detailed concerns the living plant material that he collected. Some, at least of these, were sent to the TCD Botanic Gardens (Fig. 22). It is unlikely, however, that this was the only destination for this material. Details of the material sent, the destinations it went to and whether or not any of it is still extant are entirely lacking. This is unfortunate as some of the material may be of taxonomic and nomenclatural importance. There may be information on these specimens lying unrecognised in the archives at K, or TCD.

4. Kerr's maps, correspondence and publications

Kerr was obviously a very active, indeed almost unbelievably active, field botanist. For not only did he collect, as we have shown, many thousands of herbarium specimens, record them and their immediate surroundings both in notebooks and also through photography, but he also pioneered the mapping of some areas of Thailand. For example, as Fig. 23 shows, one of his notebooks is concerned with a trip he made to Kao Tao and his diary contains

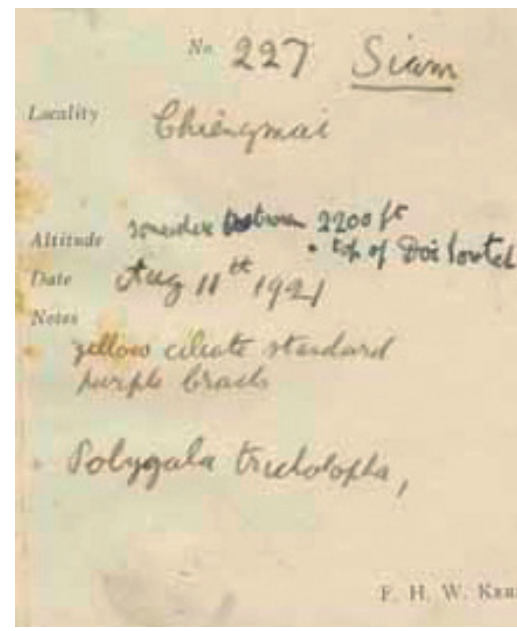


Figure 15. a (above). Specimen of F.H.W. Kerr from TCD. B (below). Close up of label.

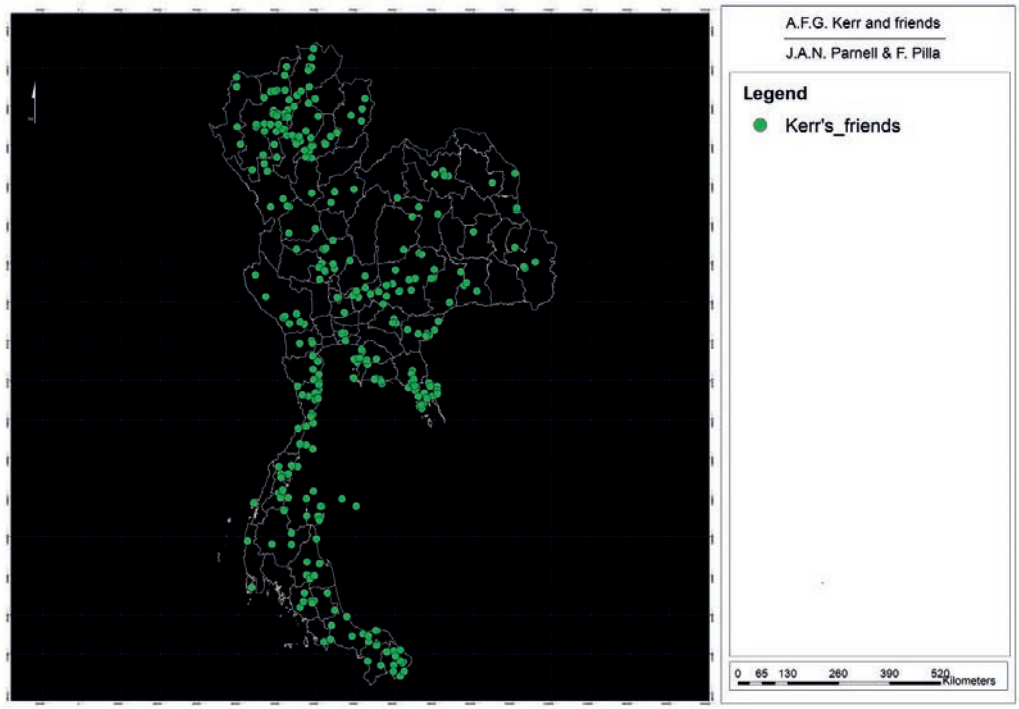


Figure 16. GIS plot of Kerr's collections in Thailand by Amphur.

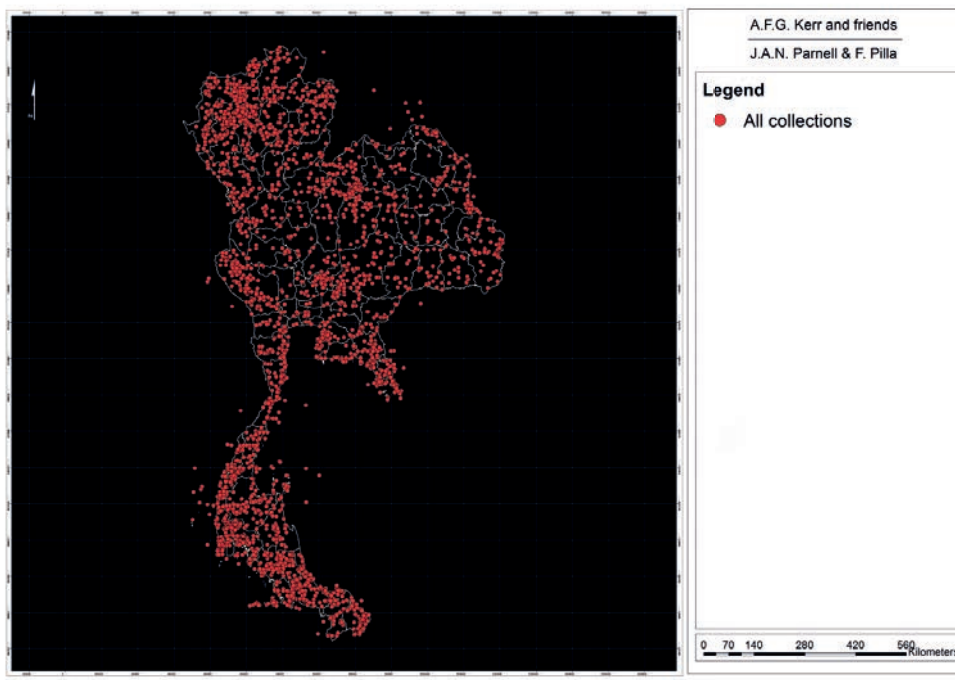


Figure 17. GIS plot of all collections in Thailand held in the TBG database.

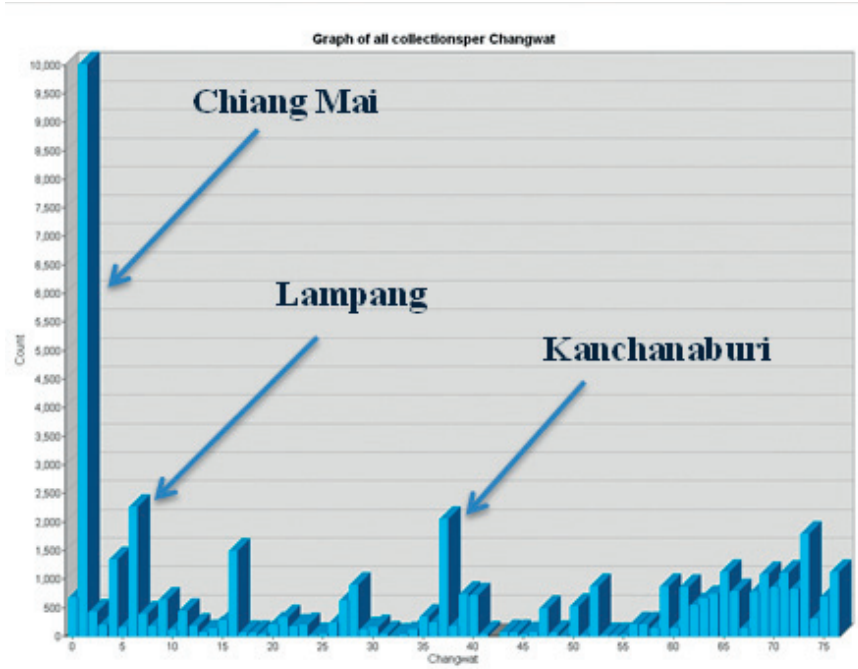


Figure 18. Histogram of all of the collections in Thailand in the TBG database with the most commonly collected Changwats arrowed. The numbers on the x-axis are the Changwat numbers based on the Flora of Thailand.

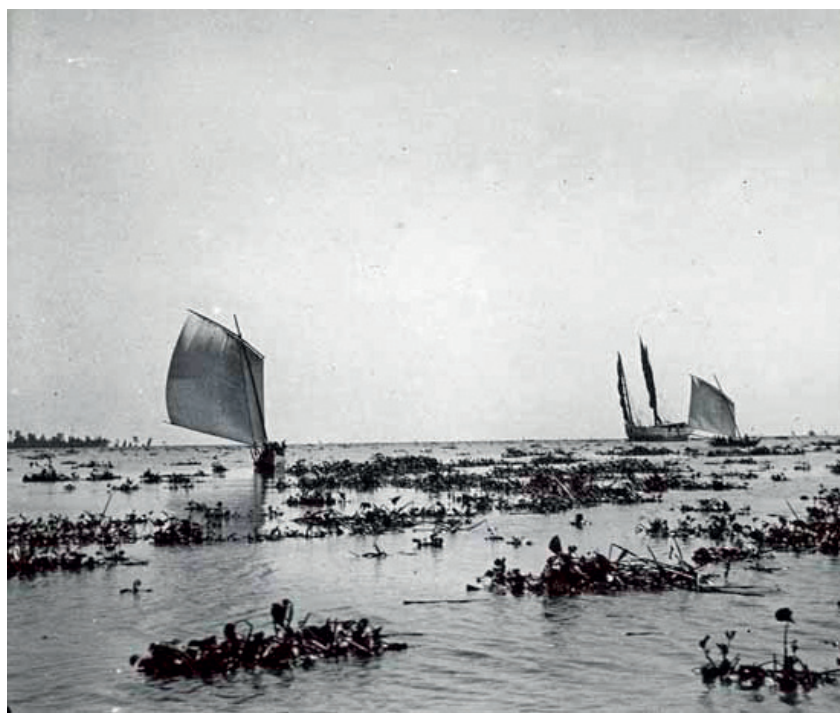


Figure 19. Photograph by A.F.G. Kerr of a *Eichornia crassipes* (Mart.)Solms. Courtesy of the TCD herbarium.

Figure 20. Photograph by A.F.G. Kerr of a 'Scare Tiger'. Courtesy of the TCD herbarium.

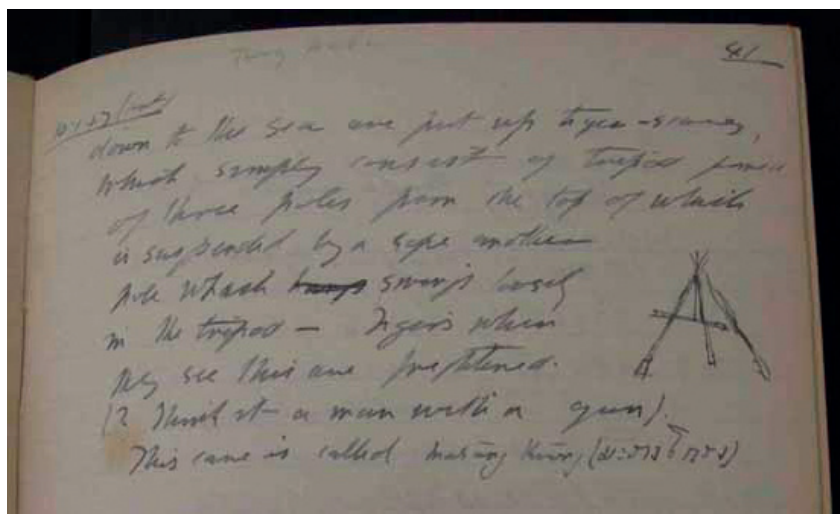


Figure 21. Photograph of an entry by A.F.G. Kerr relating to a Scare Tiger' in one of his diary's for 1927of a 'Scare Tiger'. Courtesy of the K herbarium (KER/1/24). The entry reads: ' down to the sea we put up tiger-scare which simply consist of tripod formed of three poles from the top of which is suspended by a rope another pole which ~~hangs~~ swings loosely in the tripod – tigers when they see this are frightened. (? think it a man with a gun). This scare is called Marang Krong (มะรางโกรง)

Figure 22. Photograph two plants *Coelogyne siamensis* Rolfe and *Coelogyne lentiginosa* Lindl. sent by Kerr to the TCD Botanic Gardens and recorded in the gardens archives.

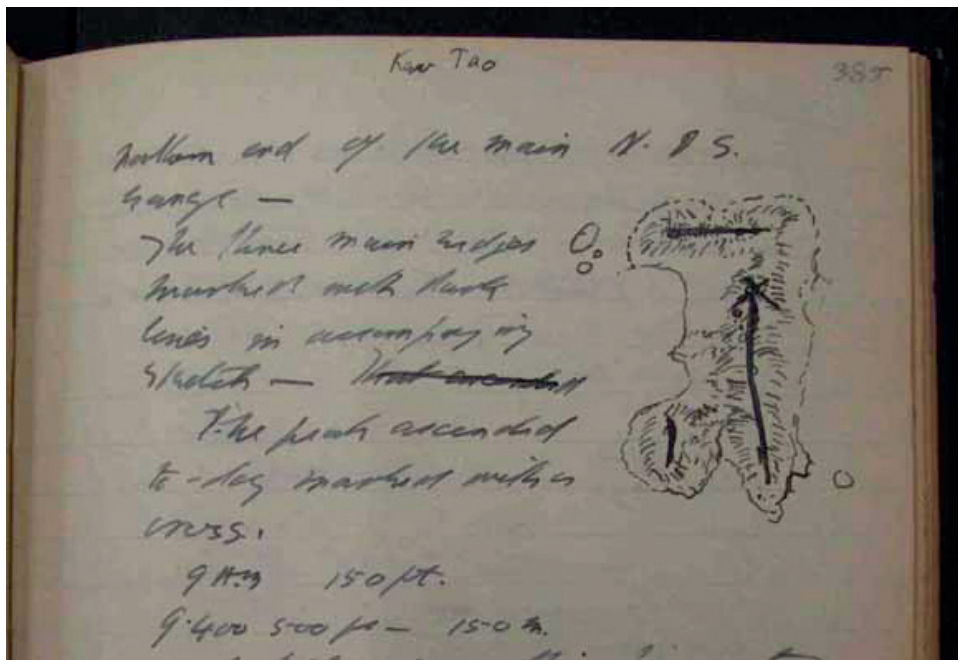


Figure 23. Photograph of an entry by A.F.G. Kerr relating to his trip to Kaw Tao. Courtesy of the K herbarium (KER/1/28).

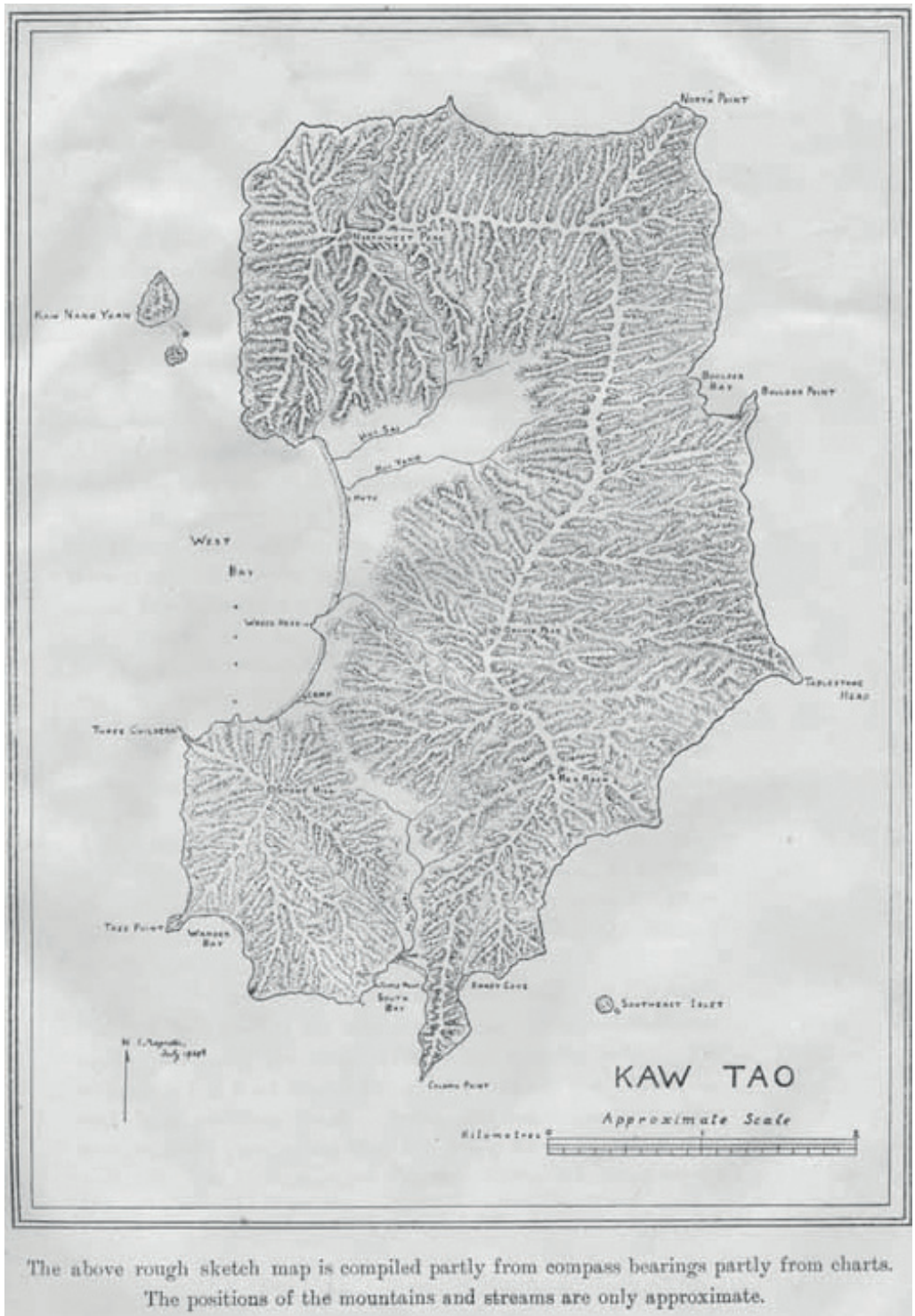


Figure 24. Photograph of the map published by Kerr based on his sketch above of Kaw Tao (Kerr, 1928).

a drawing both of the island and the route he took on it. Later, Kerr (1928) published an account of the island in which he included a more elegant map, obviously based on that in his field notebook (Fig. 24).

Though Kerr published relatively few scientific papers, some of those he did publish included more detailed maps of the area of study along, sometimes, with details entered onto a hand-drawn map of his itinerary (Fig. 25). We have managed to superimpose collecting localities from the TBG database onto this map and believe that this process should be expanded and could also be used in reverse: that is it should be possible to take some of Kerr's maps that have information on Kerr's locations at a particular date to more acccurately georeference his specimens.

Recently, BK has republished most of Kerr's Botanical reports (Jirasutas, 2014) making them more easily available. It is, however, clear that Kerr's archives are diverse in type and are held in a large number of institutes that are often geographically well-separated (e.g. in ABD, K, BK, BM and TCD). Most of this material is, effectively, relatively inaccessible requiring visits to be made to the holding institute by any interested party. It would therefore, be appropriate, and useful, for Kerr's archives (including his specimens) to be made available on-line. Clearly, such a project would be costly and large in scope. Funding would, therefore, have to be sourced for any such project as the institutions holding the archival material cannot, themselves, fund such a project. Such funding might be more easily obtained for a cross disciplinary project that encompassed both the botanical and socio-economic aspects of Kerr's archives.

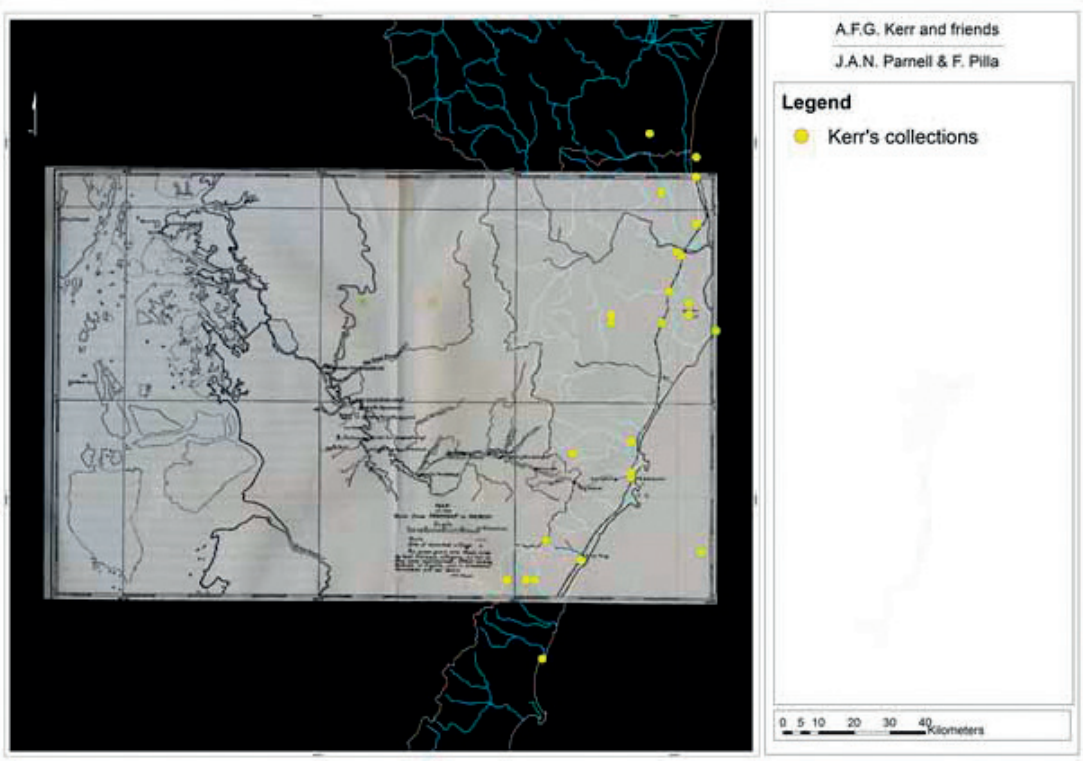


Figure 25. Photograph of the map published by Kerr of his trip from Prachuap to Mergui (Kerr, 1933) with the enlargement showing locations of collections in the TGB database.

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