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Hans Justus Thode (1859-1932), pioneer plant collector in the Natal Drakensberg

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ABSTRACT

An account is given of the life of Hans Justus Thode (1859–1932) from the time of his arrival in Cape Town in 1885 or 1886 until his death in Durban in 1932. Thode was the pioneer plant collector of the Natal Drakensberg, but also collected wider afield in all four provinces of the Republic. His contributions to South African botany are assessed.

RESUME

HANS JUSTUS THODE (1859-1932), PREMIER BOTANISTE RECOLTEUR DANS LES DRAKENSBERG DU NATAL

La vie de Hans Justus Thode (1859-1932) est relatée, depuis le moment de son arrivée au Cap en 1885 (ou 1886) jusqu'à sa mort à Durban en 1932. Thode fut le premier à récolter des plantes dans les Drakensberg du Natal, mais ses activités se sont également exercées en d'autres endroits dans les quatre provinces de la République. Un inventaire est dressé de ses contributions à la botanique sudafricaine.

INTRODUCTION

As a student of the flora of the Natal Drakensberg, it was perhaps inevitable that the author should become interested in the life of Hans Justus Thode (Fig. 1), pioneer plant collector of the Drakensberg and the first to describe its vegetation.

The author was fortunate in obtaining a number of Thode's personal papers, some from Miss M. D. Gunn, former librarian of the Botanical Research Institute, and some from Mr R. G. Strey, Curator of the Natal Herbarium. Otherwise, research on Thode would have been extremely difficult because, from all accounts, he was a retiring and uncommunicative person, who rarely spoke of himself.

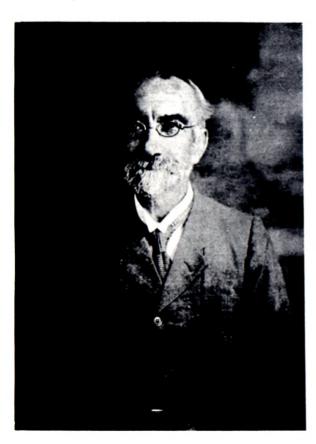


Fig. 1.—Hans Justus Thode. Portrait taken c. 1920.

BIRTHPLACE

Thode was born in 1859 probably in Germany. His death notice (Estate No. 18272, Master's Office, Pietermaritzburg), gives his nationality as Swiss, but all evidence points to a German origin. All the people contacted, who knew Thode, accepted him as German without question. Amongst his manuscripts is a poem entitled "All Red" obviously written during or about the time of World War I. The poem is strongly anti-British and would hardly have been written by a Swiss, even a German Swiss. In an article entitled "Journeys in the South African Mountains", Thode refers to the "Riesengebirge at home". The Riesengebirge or Giant Mountains lie between Dresden and Breslau (Wroclaw), in what was formerly Silesia in Germany, but is now in Poland.

According to Mr H. Struck of Draycott, Natal, during World War I Thode gave the authorities to understand that he was Swiss in order to escape possible internment. This may account for the Swiss nationality given on his death notice.

Thode had four sisters and one brother. The one sister Alwine Margarethe Sophie married Carl Alexander Hammer, a storekeeper who, according to Mr H. Zunckel of Bergville, lived at Oliviershoek. In the death notice of this sister, the birthplace is given as Germany. Another sister, Sylvia, married a Mr Mummbrauer of Noodsberg. The two remaining sisters lived in Germany, the one Mrs Käte Putz in Munich and the other Mrs Suzanna Saphir in Leipzig. The brother Felix emigrated to Australia. Mrs Käte Putz's daughter-in-law, Mrs Emmy Putz, claims that she remembers seeing a baptism certificate which indicated that Käte Putz (née Thode) was born in Manchester, England (letter from Dr A. Schreiber, Munich, to Miss M. D. Gunn, 19th August 1966).

To make tracing of Thode's birthplace even more difficult there are suggestions that Thode changed his name on arrival in South Africa. According to Mrs H. Mummbrauer of San Francisco, U.S.A., he was originally called Freylinghausen, while according to Mr Erich Mummbrauer of Bronkhorstspruit, his real name was Von Ettinghausen. Mr Mummbrauer stated that Thode came of military stock but, because of his love of botany, rejected a military carreer and emigrated to South Africa changing his name at the same time. However, no evidence to support these statements has been found.

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ARRIVAL AND SOJOURN IN CAPE

In Table 1 Thode's collections from 1886–1906 are listed chronologically. The first collection is dated January 1886–December 1887. From this it would appear that Thode must have arrived in Cape Town in 1885 or early 1886. Why he chose to come to South Africa is not known. While in the southwestern Cape he collected intensively and made notes on the Cape flora. He published his observations under the title "Die vier Jahreszeiten am Cap" in a series of articles in Natuurwissenschaftliche Wochenschrift (1892).

TABLE 1.—Thode's collections between 1886-1906

- 1. First Cape Series (Jan. 86-Dec. 87), 11 fascicles
 - (a) First Peninsula Series (Jan. 86-Aug. 87)
 - (b) 86 Supplement (Du Toit's Kloof, Mamre, Paarlberg Caledon) Aug. 86
 - (c) 87—(Clarkson, etc.) Dec. 87
- 2. Kaffrarian Series (Dec. 87-Mar. 99)
 - (a) First East London Series (Jan. 88-Dec. 89)
 - (b) 87-88 nr. Supplement (Gamtoos R., Grahamstown, King William's Town) Dec. 87-Jan. 88
 - (c) 99-(Komga, Tembuland, Pondoland) Feb.-Mar. 99
- 3. First Natal Coastal Series (May-Oct. 90)
- First Highland Series (Weenen, Klip R. County, O.F.S.) Oct. 90-Mar. 91
- 5. Second Natal Coastal Series (Apr. 91-July 1906)
 - (a) 91 Durban Series (Apr.-Nov. 91)
 - (b) 97 Supplement (Dombeya natalensis, Avoca) June 97
 - (c) 1901-(Barringtonia, Zeuxine, etc.). June 97
 - (d) 1903-(Disa polygonoides, Pinetown) Oct. 1903
 - (e) 1904-(Habenaria, Mikania, Lower Umkomaas, etc.) July 1904
- Second Highland Series (Oliviershoek, ? etc.) Nov. 91– Dec. 92
- 7. Third Highland Series (O.F.S., Mont-aux-Sources, etc.) Jan. 93-June 94
 - (a) Emberton Supplement (Cynorchis compacta) Aug. 94
 - (b) Transvaal Supplement (Gerbera jamesonii) Dec. 1893
- 8. First Natal Midlands Series (Noodsberg) Oct. 94-Nov. 95
- 9. Fourth Highland Series (Lesotho, Witzieshoek). Dec. 1895-Jan. 97
 - (a) 97 Supplement (Brachycorythis tenuior, Emmaus) Jan. 97
- 10. Second Natal Midland Series (Umsindusi) Feb.-June 97
- 11. Second Cape Series (July 97-Jan. 99)
 - (a) Second Peninsula Series (July 97-Aug. 98)
 - (b) 98-99 Supplement (Cedarbergen, Bokkeveld) Oct. 98 Jan. 99
- 12. Fifth Highland Series (Oliviershoek Pass) Aug. 99-Dec. 1900
- 13. Sixth Highland Series (Springfontein, Empangweni) June 1902-Jan. 1904
 - (a) Springfontein Fasc. (June-Nov. 1902)
 - (b) 1904 Supplement (Empangweni, etc.) Jan. 1904
- 14. Third Cape Series (Aug. 1903)
 - (a) Stormberg (Steynsburg) Fascicle
 - (b) Karoo (Beaufort West) Fascicle
 - (c) Tulbagh Fascicle
 - (d) Third Peninsula Series
- 15. Third Natal Midland Series (Kronsberg, Howick) Jan. 1903-Nov. 1904 (June 1906, Dec.)
 - (a) 1905 Supplement (Schotia brachypetala, etc.) Aug. 1905
 - (b) 1906 Supplement (Eulophia bicolor, Aster erigeroides etc.) Jan, June 1906
- Seventh Highland Series (Bushman's Pass Reserve), Jan. 1905

From Table 1 it appears that Thode moved to British Kaffraria in about December 1887 stopping en route at the mission station at Clarkson near Humansdorp. He collected in East London, Grahamstown and King William's Town up to December 1889. It is not known where he was based

while in Kaffraria. His observations on the flora of British Kaffraria were published in Engler's Bot. Jahrb. 12: 589-607 (1890).

DRAKENSBERG AND SUBSEQUENT YEARS

In 1890 Thode "first set foot on the blessed soil of fair Natal." Between May and October 1890 he collected along the coast of Natal, but then set off for the "majestic range of the Kathlambe or Drakensberg, which has irresistably attracted and again and again induced me to climb its lofty heights". In the middle of October 1890 he travelled by train to Estcourt, a 10-hour journey, and saw for the first time in the distance the still partly snow-clad Drakensberg. Thode writes: "There it was lying in front of me, the goal of my long cherished dreams and expectations, the rarely visited and little known, almost mythical realm of clouds, once the retreat of robbing Bushmen, whose curious paintings can still be found in many a cave below the cliffs of the river valleys; now a sphere of solitude still unviolated by the devastating activities of man. What an inexpressible incentive to be the first explorer of this terra incognita, to open this veiled enchanted country to investigating science and to return with trophies of its interesting flora in the form of many a plant still undescribed." Medley Wood, the Curator of the Natal Herbarium, tried to dissuade Thode from exploring the Drakensberg, pointing out that the mountains were infested with hostile Basothos. This in no way deterred Thode.

He then travelled to the Empangweni Mission (maintained by the Berlin Mission Society), which he had chosen as his "fixed quarters", because of its fairly close proximity to the mountains. His first Drakensberg expedition (29th October 1890) was to Cathkin Peak and Champagne Castle. Unfortunately inclement weather and recalcitrant Bantu bearers prevented him from climbing either of these peaks. Champagne Castle had been successfully climbed two years earlier by the Stocker brothers. Thode described this trip in great detail in a published newspaper article and mentioned some of the more striking plants he encountered. Presumably, his haul of plant specimens was considerable.

A succession of expeditions followed, details of which are given in Table 2.

To enable Thode to pursue his botanical interests, he became a tutor at mission schools and on farms, some situated close to the Drakensberg. He would advertise his services in newspapers. The following is an advertisement found amongst his papers: "Teacher, elderly, ample experience and qualifications desires re-engagement as tutor on farm (Natal or Cape). All standards, Afrikaans, music, etc. Salary £5 p.m. Numerous references." Thode would spend some time in one area and having exhausted it botanically, would take up a post in another area. This was the pattern of his existence to the end.

Thode sent most of his collections to Dr Adolf Engler of the Berlin Herbarium, but apparently did not make much out of his collections financially. Prof. A. W. Bayer (letter of 3rd June 1965) writes that "Thode was convinced that science was to serve mankind and that it was quite wrong for anyone to receive payment or to make money from scientific work". H. Bolus in a letter to A. W. Hill at Kew (26th August 1908) describes Thode as "too peculiar to be hired himself". According to Prof. Bayer, Thode would bring his specimens to Illings Store at Ladysmith and this firm would pack and despatch them to Berlin.

TABLE 2.—Thode's main Drakensberg expeditions

No.	Destination	Date of departure	Place of departure	Remarks	
1	Cathkin Peak and Champagne Castle	29/10/1890	Empangweni Mission	Did not reach summit	
2	Cathedral Peak (Ibotwana)	5/1/1891	Farm 6 km from Hoffenthal Mission	Did not reach summit	
3	Langalibalele Pass (Bushman's River Pass)	27/11/1891	Empangweni Mission	Thode's first ascent of summit	
4	Mont-aux-Sources	1891	Not known	Reached summit	
5	Mont-aux-Sources	17/2/1893	Farm 32 km from Harrismith.	Reached summit, presumably via Namahi Pass	
6	Maluti Mountains	1895	Rev. Ross's Mission, Witzieshoek	An unsuccessful expedition be- cause of hostility of Chief Jonathan, son of Molappo, who suspected Thode of being a gold prospector	
7	Mont-aux-Sources	1896	Not known	Reached summit	
8	Langalibalele Pass	31/12/1904	Lorenz's farm, "Bergyliet"	Reached summit	

By 1894 he had collected to such an extent and seen so much of Natal that he was able to publish an article in Bot. Jahrb. 18, Beibl. 3, 43: 14–45 (1894) describing very accurately the botanical regions of Natal.

In 1930 Markötter published a list of plants collected by Thode at Witzieshoek, Oliviershoek Pass and Koolhoek. These collections cover the period 1891 to 1914, consequently Thode must have spent a considerable time in that area. At Oliviershoek he presumably stayed on occasions with his sister Alwine, whose husband C. A. Hammer had a store there. At Witzieshoek it is known that he often stayed with the Rev. Ross, a missionary, and at "Koolhoek" (Fig. 2) about 21 km south south-east of Memel, he was tutor to the Cronje family in 1907. According to Mr C. J. Cronje, son of Karel Pieter Cronje, Thode also tutored on the farm of Mrs Moorman at Witzieshoek for a time.

However, Thode did not spend all his time during that period in the Witzieshoek-Oliviershoek Pass-Koolhoek area. From Table 1 it will be seen that he visited the Cape Peninsula from July 1897 to August 1898 and the Cedarberg and Bokkeveld from

October 1898 to January 1899. He also passed through the eastern Cape (Komga, Tembuland and Pondoland) in February to March 1899 presumably on his way back to Natal. En route he collected on "Prospect Farm" (Komga) belonging to H. G. Flanagan. In August 1903 he visited the Karoo (Steynsburg, Beaufort West, etc.). In 1904–1906 he was tutor on the farm "Kronsberg", Noodsberg, belonging to Mr Herman Mummbrauer. On this farm he met H. Rudatis and actually commenced a combined checklist of birds with Rudatis and Mr G. Mummbrauer.

To gain some idea of Thode's movements between 1908 and 1920 the writer visited the Stellenbosch Herbarium, which contains 6309 of his specimens, and scanned as many of the specimens as possible in the time available, obtaining localities and dates from the labels. Judging from the consecutiveness of some of the dates, it would appear that Thode had several fixed bases during this period. These were apparently: "Sweet Home" (Krantzkop), Sept. 1910-Sept. 1911; "Warrock" (26 km west of Ladysmith), Oct. 1911-March 1913; "Scottspoort" (near Weenen), Oct. 1913-March 1914; Empangweni Mission (near Loskop), Nov. 1914-Jan. 1915; Shakas-



Fig. 2.—Homestead on the farm "Koolhoek" near Memel where Thode was tutor to the Cronje family in 1907.

kraal, April 1914-Sept. 1916 and finally "Yorkshire Wolds" (near Rosetta), Aug.-Nov. 1918. If more specimens had been examined, the periods might have proved to be longer.

Many other localities were noted, some being near the bases already mentioned. It is clear that Thode paid regular visits to southern Natal between 1908 and 1920: there are numerous and sometimes annual collections from "Friedenau", Kenterton, "Moyeni", St Michael's Mission, Oribi Flats, Marburg, Ivunga River, Beach Terminus and Park Rynie. It is likely that Thode visited H. Rudatis and stayed with him on his farm "Umgai". There was certainly contact between Thode and Rudatis, because some of Thode's specimens are marked "ex herb. Rudatis".

In 1911 Thode visited the Transvaal and collected in Pretoria and Heidelberg and in early 1918 he travelled to the Cape and collected at Worcester, Laingsburg, Montagu, Beaufort West and Matjiesfontein. In 1919 he crossed into Pondoland and collected in the vicinity of the Mzamba River. In 1920 he again visited the Transvaal collecting in Pretoria and Rustenburg.

In 1920 Thode was tutor on the farm "Altemooi" belonging to Mr Adrian Daneel. "Altemooi" is situated about 19 km SE of Wakkerstroom and 20 km N of Utrecht. He taught the Daneel children, as well as those of Mr H. Repsold of the farm "Tweekloof" next door. The portait of Thode (Fig. 1) was given to the author by Mrs Elizabeth Rachel Kritzinger (neé Daneel), one of Thode's pupils. Thode stayed at "Altemooi" for two years, then apparently moved to "Tweekloof" for another two years. Many of Thode's specimens (1920–1924) were collected on the farm "Kaffirdrift", another farm belonging to Mr Repsold.

Thode's movements from 1924 to 1931 have been traced by examining the accession book in the National Herbarium, Pretoria, and then getting dates from his specimens in the herbarium (there are 2859 Thode specimens in PRE). In this way Table 3 was compiled. From Table 3 it will be seen that Thode spent a considerable time in the Cape and Transvaal.

In 1925–1926 he was tutor on Mr James Trollip's farm "Glen Makopo", Hobhouse, in the district of Thaba Nchu, Orange Free State.

FINAL DAYS

According to Table 3 Thode must have made his last collections at Witbank in the Transvaal from December 1930 to March 1931. No records can be traced of specimens collected later than this.

It is likely that he spent his last days in Durban living at 170 Mansfield Road (the address given on his death notice). It is also possible that he spent some of his time in the Natal Herbarium naming his collections. The late Miss Helena M. L. Forbes, former curator of the Natal Herbarium, wrote to Miss Gunn (30th October 1953): "Thode had been in the habit of spending a month or more at the Herbarium naming his specimens every few years. I think he came three times after I came here, once to name up a collection, which he sold to Stellenbosch University".

On 30th May 1932 Dr A. P. D. McLean, who was then stationed at Natal Herbarium, wrote to Dr I. B. Pole Evans, Chief of the Division of Botany, stating that Thode was in Addington Hospital in a critical condition and had been visited by Miss Forbes. According to Miss Forbes, Thode's impecunious state weighed heavily on his mind even when delirious and he was anxious that his collections be sold.

TABLE 3.—Collecting localities from 1924 to 1931

Year Month/s		Localities	
1924	FebJune Dec.	Pongola Mountains to Kaffirdrift Heidelberg-Pretoria-Wonderboom- Warmbaths	
1925	Jan. Feb. Mar. Aug. SeptOct. NovDec.	Burghersdorp, Joubert (Wittebergen) Joubert (Wittebergen)—probably Joubert's Pass just E. of Lady Grey "Glen Makopa", Hobhouse Bloemfontein Graaff-Reinet Uitenhage and Kareedouw	
1926	Jan. Aug. Dec.	Eerste River, Wynberg Clarkson Tweekloof, Utrecht	
1927	Jan. Sept. NovDec.	Tweekloof, Utrecht Eshowe Heidelberg	
1928	Jan. Sept. Oct. Nov. Dec.	Zeerust Mtunzini Barberton, Duiwelskantoor Lydenburg Potgietersrust	
1929	Jan. FebApr. Oct. Nov. Dec.	Pretoria Aliwal North Van Rhynsdorp, Wupperthal, Calvinia and Cedarberg Pakhuis Pass, Piketberg, Franschoek Ceres	
1930	Mar. AprAug. SeptOct. Dec.	Swellendam, George Assegaaibosch, Witte Elsbosch, Klip- drift, Humansdorp Enon Witbank	
1931	JanMar.	Witbank	

On 1st June 1932 Thode died and was buried in a communal grave with no gravestone at Stella Wood Cemetery, Block N, 1374. Later the grave site was sold and to-day several gravestones occupy the site.

David Strachan & Taylor, accountants of Durban, were asked by the Master of the Supreme Court to handle Thode's estate. Thode died insolvent owing £52. 6s. 6d. It was hoped that the sale of his collection of 2859 numbers would defray this debt. To this end negotiations between Strachan & Taylor and the Division of Botany proceeded protractedly with Dr McLean pressing for the purchase and the Division of Botany expressing little interest because, as Dr E. P. Phillips put it, "The cream of Thode's collections i.e. his high mountain gatherings, had earlier been sold to the University of Stellenbosch".

Eventually, on 3rd May 1934, the Division of Botany offered £36 and this was accepted by the Administrators. There were three or four duplicates of each specimen, so the collection was made up into three sets, one for the Natal Herbarium, one for the National Herbarium, Pretoria, and one for Kew. The specimens were numbered A1, A2, etc. to avoid confusion with his other collections. Unfortunately Thode did not adopt a system of continuous consecutive numbering. This collection was mainly of Transvaal and Cape plants (see Table 3, which was based on this collection). The large wooden trunk in which Thode stored his specimens and other effects, is still in the Natal Herbarium, Durban. Thode's personal effects, beds and odds and ends, were left to his sister Mrs Alwine Hammer of 340 Vause Road, Durban. Some of his books were sold by M. Thompson & Co., auctioneers, for 4/6d.

THODE, THE MAN

Fortunately the author was able to contact four of Thode's past pupils, namely Mr Erich Mumm-brauer formerly of the farm "Kronsberg", Noods-berg, in Natal, Mr C. J. Cronje formerly of the farm "Koolhoek" near Memel in the Orange Free State, Mrs E. R. Kritzinger (neé Daneel) formerly of the farm "Altemooi" near Utrecht in Natal and Mrs Lorna Grové (neé Trollip) formerly of the farm "Glen Makopa", Hobhouse, in the Orange Free State.

Discussions with these people revealed a remarkably similar memory of the man. Thode clearly left a lasting impression on them. He was slightly built with a moustache and small beard. He always wore a brown suit buttoned to the top with a widebrimmed hat or helmet on his head. His plant press was slung high up on his shoulders. He was short-sighted and wore thick spectacles. Thode was an excellent pianist, being passionately fond of Beethoven. He showed little patience with his pupils if they played incorrect notes. Mr Cronje relates how when the family received visitors the children would be asked to play the piano. When a mistake was made, Thode would storm over to the piano and correct the young pianist. The Cronjes asked him to desist from this practice, so on similar occasions when mistakes were made, Thode would walk agitatedly around the room pretending to put all the pictures straight.

He seems to have been an accomplished poet (there are several unpublished poems amongst his papers) and was very fond of the works of Goethe.

He had a good knowledge of the classics as the following incident will show. Mr Heinz Lorenz a former pupil of Thode's at Empangweni Mission School told Mr R. G. Strey of the Natal Herbarium that Thode once taught chemistry and physics at a school in Pietermaritzburg. In the neighbouring classroom the headmaster was giving a lesson in Latin. Thode overhead him incorrectly quoting some Latin verse or prose. When the headmaster a few minutes later left the classroom for some reason or other, Thode quickly nipped into the classroom and corrected the offending quotation on the blackboard. On his return, the headmaster was furious that the quotation had been corrected and promptly sacked Thode.

Mr E. Mummbrauer recalls that after dinner Thode would retire to his room and could be heard walking aroung the room conducting an imaginary orchestra.

Apparently he never rode on horseback, but used horses for carrying his equipment.

Thode was fond of good food, but disliked Mrs Lorenz's "Mehlklôsse". According to Mr H. Struck of Draycott, Thode would sometimes outstay his welcome on the farm and stay for weeks and weeks. The only way to get rid of him was to put sago pudding regularly on the table.

Mr Struck tells of an incident when Thode went visiting the Zunckels in the Bergville area. To get to the Zunckels, Thode had to cross a river in full spate. He took off his clothes, tied them into a bundle and started to ford the river. Unfortunately the current was strong and he slipped, losing his clothes in the process. Mr Struck describes the amusing sight of Thode running from tree to tree to hide his nakedness and when near the Zunckel homestead being spotted by the children, who ran i doors shouting "There is a naked man outside".

Thode was no respecter of authority. This is amply shown in a letter he wrote to the permit secretary in Durban. He castigated him for his lack of knowledge of geography and ended off with some incredibly rude remarks. He was most indignant when learning from Mr Sydney Barnes, the first conservator of the Drakensberg Game Reserve that he would have to pay 6d per day for each of his party i.e. for himself, Bantu and horse. He wrote: "The Government, or rather the Forestry Department, under whose supervision the Game Reserve is kept, should know best why and for what purpose such an absurd system of (taxation) pillaging travellers has been introduced . . . for our legislators seem too fond of indulging in measures, the wisdom of which is shrouded in mystery quite impenetrable to ordinary common sense".

He was obviously a man with a short temper. Prof. A. W. Bayer (letter to author, 3rd June 1965) tells the story of a collecting trip by ox-wagon made by Thode with Rudolf Schlechter (probably between June and October 1893). Schlechter was apparently rather strict with his Bantu servants and one morning they found that the servants had deserted. After

 $N_0 = 33/0$

HERBARIUM, UNIVERSITY STELLENBOSCH.

HERBARIUM: Ex Justus Thode.

Name Kniphofia sp.

Ramily Ciliaceae

Locality Prottsproort N.S. Date F. 1914

Habitat Banks of streams in Thorns Ultica, 4000

Remarks 2-3ft. high. Flowers yellow and red

Fig. 3.—Example of the special label used for Thode's col-lection in Stellenbosch Herbarium. The handwriting is Thode's.

breakfast, they proceeded to break up camp and to round up and inspan the oxen. Schlechter then picked up the driver's whip and announced to Thode "I will drive; you can voorloop". Thode was so annoyed at this brusque instruction that he went up to the wagon, took his rucksack, turned his back on Schlechter and disappeared into the bush.

CONTRIBUTIONS TO SOUTH AFRICAN BOTANY

Thode's contributions to South African botany lie in the many plant specimens he collected during his 46 years in the country and in his seven publications. As already indicated, he was the first to collect in the Natal Drakensberg, being several years earlier than H. G. Flanagan and H. Bolus (summer 1893-94) and Maurice Evans (1894). Thode was much chagrined when plants like Erica frigida, E. algida and Gladiolus flanaganii were described from material collected by Flanagan instead of from his material collected three years earlier (letter from Thode to H. Bolus, 5th February 1896).

It is not known how many specimens Thode collected, because he did not consecutively number his specimens. He must have sent thousands of specimens to the Berlin Herbarium; there are 6309 of his specimens in the Stellenbosch Herbarium (Fig. 3), collected between 1886 and 1920, and there are 2859 specimens in the National Herbarium, Pretoria, collected between 1924 and 1931, with duplicate sets in the Natal Herbarium and at Kew. The specimens he collected were of good quality, but often lacked adequate field notes. Oddly enough, Thode did not collect grasses.

Thode is commemorated in the following species: Alepidea thodei Dümmer, Athanasia thodei H. Bol., Disa thodei Schltr., Erica thodei Guth. & H. Bol.,

Geranium thodei Schltr., Holothrix thodei Rolfe, Kniphofia thodei Bak., Lessertia thodei L. Bol., Manulea thodeana Diels, Osteospermum thodei Märk., Rhodohypoxis thodiana (Nel) Hilliard & Burtt, Romulea thodei Schltr. and Sebaea thodeana Gilg.

Thode's papers though few were of a high standard. The following is a list of his publications:

THODE, J.,* 1890. Die Küstenvegetation von Britisch-Kaffrarien und ihr Verhältnis zu den Nachbarfloren. Bot. Jahrb. 12: 589-607.
THODE, J., 1892. Die vier Jahreszeiten am Cap. Naturwissen-

schaftliche Wochenschrift. 7,14: 131-133. 15: 144-147. 21: 206-207. 23: 226-228.

THODE, J., 1892. Die botanische Hohenregionen Natals. Bot. Jahrb. 18. III Beibl. 43: 14-45.
THODE, J. 1901. The botanical regions of Natal determined by altitude. 16 pp. Durban: Durban Field Naturalists'

Society.
THODE, J., 1913. Leucadendron natalense Thode & Gilg.
Notizbl. Bot. Gart. Berl. 5: 290. Thode, J., 1922. Bowkeria citrina Thode. Kew Bull. 1922: 31 (1922).

Thode, J., 1924. A new *Pyrenacantha* from Natal. J. Bot. 42: 115-116 (1924).

In his first paper, "Die Küstenvegetation von Britisch-Kaffrarien und ihr Verhältnis zu den Nachbarfloren" (1890), Thode compared the coast vegetation of British Kaffraria with that of the south-west Cape and Natal. He showed that although Compositae and Leguminosae were the two dominant families in all three regions, the remaining families differed significantly in their order of importance. Illustrating his broad knowledge and interest in floristics and plant geography, Thode compared the flora of East London with the floras of Ethiopia and

Farm name and number	Locality	Location	Grid reference
Altemooi 99	_	10 km SNE of Groenvlei	2730 AD
Beach Farm	Marburg Beach Terminus	6 km W of Port Shepstone. 6 km SW of Port Shepstone	3030 CB 3030 CD
Bergveld 5595	Beach Terminus	11 km W of Winterton	2829 CD
_	Bethesda	1,6 km SE of Darnall	2931 AD
De Rust (probably Rust) 1112	Bingham's Berg	8 km NE of top of Oliviershoek Pass, O.F.S. 8 km NNE of Greytown	2829 CA 2930 BA
De Rust (probably Rust) 1112	Empangweni Mission	14 km SE of Loskop	2829 DC
_	Emmaus Mission	18 km NSW of Winterton	2829 CD
	Empangweni Mission Emyati Mtn. (Mnyati Mtn.)	At Draycott	2829 DC 2730 DD
Friedenau 8635	(Minyati Miti.)	18 km W of Sezela	3030 AD
Georgina 1354	_	16 km SNE of Ladysmith	2829 DB 2930 BD
Glenside 2035	Ivunga R. (Vunga R.)	16 km SNE of Wartburg	3030 CD
Kafferdrift (Kaffersdrift)	_	26 km E of Groenvlei	2730 AD
-	Kenterton	5 km NW of Dumisa	3030 AD 2729 DB
Koolhoek 653	Koenigsberg	21 km SSE of Memel, O.F.S	2729 DC
Leeuwnek 51	_	23 km SE of Vryheid	2731 CC
Little Noodsberg 3167 Moyeni 9004/9006	_	24 km E of Wartburg	2930 BD 3030 AD
<i>√</i>	New Germany	3 km NE of Pinetown	2930 DD
Paulina 1516	_	5 km NW of Van Reenen's Pass, O.F.S	2829 AD 2729 DD
Reserve 199 Scottspoort 2025		5 km SE of Volksrust	2830 CC
—	Smiths' Crossing	10 km NW of Ladysmith	2829 BC
-	Stendal Mission	10 km NNE of Weenen	2830 CC 3030 AB
Sweet Home 2175	St. Michael's Mission	10 km NW of Dumisa 8 km SE of Krantzkop	2930 BB
Tweekloof 100		10 km E of Groenvlei	2730 AD
Uitzicht 1926	Limdadalala (Cathlein)	8 km SE of Winterton	2829 DC 2929 AB
Umgai (Umgaye) 8511	Umdedelele (Cathkin)	16 km W of Sezela	3030 BC
Warrock 2159	_	26 km W of Ladysmith	2829 DA
Yorkshire Wolds 8043Zaaihoek 188	_	18 km due E of Rosetta	2929 BD 2828 BD
Zaamock 100		Harrismith, O.F.S.	2020 00

^{*} Thode always omitted the initial of his christian name, Hans.

D. J. B. KILLICK

His second paper, "Die vier Jahreszeiten am Cap" (1892) showed a surprising knowledge of the south-west Cape flora after only a short period of residence there. Thode described the four seasons of the Cape and related them to the flora; he commented on the effect of fire on fynbos; he mentioned the exploitation of the flora and urged that conservation measures be adopted.

In 1894 he published "Die botanische Hohenregionen Natals", an accurate picture of altitudinal zonation of vegetation in Natal. This paper stamps Thode as a competent plant geographer. His description of the vegetation of the Natal Drakensberg is the first on record and is extremely accurate as to detail.

In 1901 he published "The botanical regions of Natal determined by altitude". This represents a condensed version of his 1894 paper, translated into English and read before the Durban Field Naturalists' Society on 16th May 1901.

The remaining papers were descriptions of new species.

In conclusion, it may be said that Thode's contributions to South African botany were considerable, especially if it is realized that he was an amateur botanist, attached to no institution, with no library facilities and collecting in remote areas often never collected before. Bolus in writing to A. W. Hill at Kew (26th August 1905) described Thode as "wanting in systematic effort and regularity, and so has not done all he might have done". This

is a somewhat harsh judgement, but Bolus does concede that "he has written some valuable papers on the flora of that region".

LOCATION OF CERTAIN THODE COLLECTING LOCALITIES

Taxonomists have frequently found difficulty in locating some of Thode's localities. This is partly due to Thode's frequent use of farm names. To assist taxonomists, the exact location of some of the "problem" localities is given in Table 4.

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UITTREKSEL

'n Verslag word gegee van die lewe van Hans Justus Thode (1859–1932), vanaf se aankoms in Kaapstad in 1885 of 1886 tot sy dood in Durban in 1932. Thode was die baanbreker-plantversamelaar van die Natalse Drakensberge, maar hy het ook verder weg in al vier provinsies van die Republiek plante versamel. 'n Waardasie van sy bydraes tot Suid-Afrikaanse plantkunde word gemaak.

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