

Thirty years with the Ethiopian Flora project

INGA HEDBERG

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The Flora of Ethiopia project was launched in 1980 in collaboration between the National Herbarium, Addis Ababa University and the Department of Systematic Botany, Uppsala University. Requests for collaboration had, however, been made already in 1967, when also searching for funds was started from the Swedish side. This period is reviewed and the development of the project from its start on July 1st 1980 up to now is surveyed. Apart from producing a Flora the project also has included the training of Ethiopian students to a Ph.D. in Systematic Botany and strengthening of the infrastructure at the National Herbarium. The training component has been very successful. A number of collecting expeditions organised mainly from the University of Copenhagen and the National Herbarium have brought new and interesting material from various parts of Ethiopia, and the number of specimens at the National Herbarium has grown to over 70000. Botanists from many countries have contributed to the Flora, of which 4 volumes have been published and another two are in the pipeline. The remaining volumes are planned to appear before the end of 2001.

Inga Hedberg, Uppsala University, Evolutionary Biology Centre, Department of Systematic Botany, Norbyvägen 18D, SE-752 36 Uppsala, Sweden. E-mail: inga.hedberg@ebc.uu.se

Introduction

The first Ethiopian Flora symposium was held in Uppsala in 1984, the second one in Addis Ababa two and a half year later. It is therefore very timely to arrange the third symposium – this time with a slightly wider scope and – in view of the very important contributions made by Professor Ib Friis – to hold it in Copenhagen. As now almost 20 years have passed since the start of the Ethiopian Flora Project, I find it an excellent opportunity to survey the work from the Uppsala side during these years, as well as the years before the start. It is a rather informal presentation of the project as seen from my horizon, dealing with history and experiences, not with scientific results.

1967-1980

As already mentioned it is almost 20 years since the project was launched. To those years should, however, be added another 13 years, because Ethiopian requests for assistance with fundraising and manpower were made already in 1967. I will therefore first touch upon the pioneering phase between 1968 and 1980 and then briefly review the development of the project up to the present days.

A proper setting for the project is, I think, excellently given in the AETFAT bulletin 41 by Dr. J.J.F.E. de Wilde (1993) in his review of the first Flora volume published: “Contemplating in this DNA-era the enterprise of a conventional Flora certainly needs thinking twice. To

start a Flora for a country of the size and complexity of Ethiopia certainly requires a lot of courage ...”

The need for courage was, however, nothing I anticipated when, in mid-December 1967, Olov Hedberg returned from a three and a half months stay in Ethiopia and East Africa, carrying *inter alia* a request by the Parks and Landscape Development and the Faculty of Science in Addis Ababa for assistance in finding the funds and manpower needed to produce a Flora of Ethiopia. Supported by hard arguments from various sources, *e.g.*, Brenan’s “The value of Floras to underdeveloped countries” (Brenan 1963), and knowing that SAREC (Swedish Agency for Research Co-operation with Developing Countries) had a special interest in Africa, I felt that obtaining funds for such a laudable enterprise would be a fairly easy matter. – Little did I know!

To-day any application for a project closely inter-linked with biodiversity and conservation in a developing country would stand a fair chance of being positively received and evaluated. But 30 years ago the understanding for the need of a Flora was almost completely lacking, not only in SAREC, but also in a number of other organisations approached. Even if the DNA-era had only started its triumphal advance, it was quite obvious that the kind of work needed for a Flora was considered more or less out of date. What we managed to do was to obtain a small grant from a private foundation, which, however, didn’t take us far.

At that stage the need of the fund hunters obviously became a question of optimism and tenacity rather than of courage, and in that spirit, parallel to the continuous fund hunting, more concrete planning for a Flora project was started. The most important discussions were held between Tewolde B.G. Egziabher, Professor and Dean of the Faculty of Science at Addis Ababa University, and Olov Hedberg, Associate Professor at the Botany Department, Uppsala

University. The ongoing publication of the *Adumbratio Florae Aethiopiae*, by Professor Pichi Sermolli in Florence, and the fact that Professor H.C.D. de Wit in Wageningen was contemplating a more elaborate Flora of Ethiopia, called for some kind of agreement.

Therefore, an informal meeting was arranged in Florence in April 1968 between Professor Pichi Sermolli, Professor de Wit, Olov Hedberg and myself. Because of the urgent need to produce a complete (as far as possible) Flora of Ethiopia in the shortest possible time both Professor Pichi Sermolli and Professor de Wit gave their blessing to the enterprise. The AETFAT meeting in Munich in 1970 gave its moral support to the project, and a working committee as well as an advisory committee were formed. For reasons not known to me the question of fundraising was, however, entirely left with us in Uppsala.

As a preparation for the work on the Flora, and in order to secure an up to date checklist, requests were sent to a large number of specialists, working on various families occurring in the Flora area, asking if they would be willing to contribute to an updating of Richard’s *Tentamen Florae Abyssinicae* (1847-1851). At that time, and for many years to come Roger Polhill at Kew gave us invaluable assistance – we could not have managed without him! Our request was very positively received and a number of our colleagues had already started their work when suddenly, in December 1979 Olov Hedberg was asked by SAREC to stop over in Addis Ababa to assist our Ethiopian colleagues with an application for funding of a Flora project. Such a project had been given high priority by ESTC (Ethiopian Science and Technology Commission), which obviously made SAREC reconsider the matter.

From then on things moved quickly. The formal proposal for a Flora of Ethiopia Project was submitted in early 1980 and SAREC decided in May that year to allocate funds from

July 1st. The application concerned an overall strengthening of taxonomic botany in Ethiopia and therefore included not only the production of a Flora but also training of Ethiopian students to a Ph.D. in Systematic Botany and the strengthening of the National Herbarium and its library. A Flora office should be created at the National Herbarium and a small “satellite” office at the Department of Systematic Botany in Uppsala. At the National Herbarium Sue Edwards, with a small staff, would handle incoming manuscripts and see to all the other new activities induced at the Herbarium by the project, whereas I, with a part-time assistant, would serve as co-editor as well as see about purchase of equipment for the National Herbarium and matters related to activities outside Ethiopia. Because of the shortage of Ethiopian expertise two European botanists with considerable experience of African botany, Mike Gilbert and Kaj Vollesen, were employed by the project as full time botanists based at Kew. The overall responsibility was given to the two initiators of the Project, Professors Tewolde and Hedberg.

It was at this stage that the need for courage became very obvious, because to “modern” scientists Flora work was considered less scientific, my own research demanded more time, and 13 years of fund hunting had taken its toll.

Furthermore Olov Hedberg had become Professor and Head of our department, which would give him much less time for the project and thus leave me with a responsibility much greater than I had anticipated. Hence my simple reaction to the message about funds was “I don’t want to commit myself to a project, which will probably put an end to my own ongoing research and leave me with problems of a dimension that I can’t foresee”. However, I almost immediately realised that having been talking for so many years about the urgency and importance of a Flora of Ethiopia, I couldn’t possibly withdraw when money at

long last became available, and the fact that so many of my colleagues round the world had shown a great interest in the project was fundamental for my decision to accept.

1980-1999

Already from the start the time schedule for the entire Flora work caused some worry, since whereas the project leaders, aware of the dimension of our task, wanted to settle the frame for the project to 20 years, ESTC, on the contrary, did not want to give it more than 10 years, which, needless to say, would be far too short. To solve the problem 15 years was agreed upon, with a possibility of extension, should need be. Of course we all knew that this possibility would become a necessity – to produce a Flora of the size envisaged within less than 20 years would be quite impossible.

The launching of the project went like a dream, at least from the Uppsala side. Since, awaiting funding of the project, so many botanists had offered to contribute, those colleagues and others were asked if they would be willing to write up their respective family. As far as I can remember, hardly any one refused, which meant that already in the autumn of 1980 we had a fairly complete list of contributors for all families, and even manuscripts for a few small ones. But naturally the building up of a Flora office at the National Herbarium, planning for, finding and buying suitable equipment for the work both for the staff in Addis and for our work in Uppsala, took its time, as did also learning enough about the computer handling of manuscripts, and creating satisfactory routines for the co-operation between the two offices, and between them and the contributors.

Since no Ethiopian taxonomists were available, a training programme leading to a Ph.D. in Systematic Botany was elaborated. In October, 1980, Mesfin Tadesse came to Uppsala,

soon followed by Sebsebe Demissew, Ensermu Kelbessa and Zemedede Asfaw. This part of the project was for us in Uppsala one of the most stimulating and uncomplicated parts of the project, but I certainly realise that living in a foreign country in an entirely different culture, spending long periods far from home, now and then must have caused our Ethiopian students considerable difficulties, though none of them complained. My own shortcomings in taking care of them in their leisure hours was a constant worry to me, but since I was working more or less round the clock I had practically no time for a social life, let alone for my own family. However, they were all very successful in their studies and it is good to know that through the project Ethiopia, as time went by, has been able to replace the two full time European botanists, employed from the start of the project, with its own taxonomists.

During the project period the number of specimens at the National Herbarium has grown considerably, from about 16000 to more than 70000. The credit for this should go to the National Herbarium and to a considerable extent to Professor Ib Friis, who, with funding from the Carlsberg Foundation and DANIDA, has organised a large number of collecting expeditions to various parts of Ethiopia.

The most time-consuming and expensive part of the project, the elaboration of a Flora, certainly would be worth a paper of its own. The choice of which volume to start on was easy: the importance of the legumes and the fact that they had already been dealt with by Mats Thulin (Thulin 1983) made Vol. 3, in which the family would appear, the most suitable to start on. Manuscripts for this and other volumes accumulated very fast. Hence the main problem was not, as a rule, late incoming manuscripts but rather the available time for checking and editing at the National Herbarium.

It would not be fair to state that the Flora

work has been without complications, and there have been moments when I have regretted my decision to leave my own research to work mainly on that of others, which has also meant that I sometimes feel more of an administrator than a scientist. Some of the more difficult problems arose in early 1984 when the project leader and my co-editor had to move to Asmara. This meant that equipment, etc., had to be bought for a second office, causing expenses which were not budgeted for.

It was about the same time that SAREC for the first time hoisted a flag of warning. The Director General of SAREC paid a visit to us in Uppsala because he was worried about the future of the project. It had been going on for *more than three and a half years and nothing had yet been published!* He asked if he at least could have some proofs, since it was quite clear that not all SAREC Board members were convinced that an Ethiopian Flora project was a good project, on which SAREC should spend a considerable amount of money. However, we had at that stage not enough formatted material. Another six years were to pass before we saw the first volume published, but a very interesting fact is that, as far as I can remember, we had no serious trouble during that period in getting the funds required. However, in the early 1990's, when only one volume had been published, SAREC complained again. But then we had received an impressive amount of manuscripts, vols. 6 and 2(2) were well under way and a grass specialist, Sylvia Phillips, had been contracted to write Vol. 7, which would cover the grasses. By assigning the editing of that volume to us in Uppsala, the project was able to show satisfactory results in the form of three more volumes from 1995 to 1997. From the first of those volumes published, vol. 7, the title of the Flora, because of the independence of Eritrea in 1993, was altered to *Flora of Ethiopia and Eritrea*.

The need to finish the project within a time

span of fairly close to 20 years has made it desirable to assign the editing of another volume, vol. 4, to Uppsala, while Addis finishes the work on vol. 2(1). More detailed information on the project has been given in symposium proceedings and a number of reports from 1983 and onwards (e.g. I. Hedberg 1986, 1990, 1996; O. Hedberg 1983; Mesfin Tadesse 1988; Tewolde B.G. Egziabher 1991). In those papers accounts of the progress of the project are given, but most of them are far too optimistic about the time needed to complete each volume.

June 30th, the year 2000, marks the end of the period for the project as outlined by the project leaders in December 1979. With only one year to go we have four volumes published, two volumes more or less in the pipeline (vols. 2(1) and 4) and only two "real" Flora volumes left (vols. 5 and 1). It is quite clear that we will not see the complete Flora within the period envisaged at the start of the project. Being optimistic, I would say that an additional two years will be needed, and if we are able to present a complete Flora before the end of 2001 I think SAREC ought to be satisfied. After all, 22 years is not a long time for producing a Flora of a tropical area of the size of Ethiopia and Eritrea.

Looking back at the 19 years I have been working with the Ethiopian Flora Project I find that the only real problem, as we see it from the Swedish side, has been the time schedule. The co-operation between the National Herbarium and us in Uppsala, and between Uppsala and the large number of contributors, has been remarkably free from serious conflicts.

I would like to end this presentation by expressing my deep-felt thanks to Olov Hedberg for his everlasting support, and to all those colleagues, who not only have contributed to the Flora, but also demonstrated a considerable understanding and patience, and in difficult situations shown me a kindness far greater than I ever expected.

References

- Brenan, J.P.M. 1963. The value of Floras to underdeveloped countries. *Impact* **XIII**(2): 121-146.
- Hedberg, I. 1986. The Flora of Ethiopia: a progress report. In: Hedberg, I. (ed.), *Research on the Ethiopian Flora. Symb. Bot. Ups.* **26**(2): 17-18.
- Hedberg, I. 1990. The Ethiopian Flora project. In: Ihlenfeldt, H-D., Baijnath, H., Cheek, M., Hepper, F.N., Lejoly, J., Lucas, G.L., Malaisse, F.P., Peters, C.R. & Wessels, D.C.J. (eds.), *Proceedings of the twelfth plenary meeting of AETFAT. Mitt. Inst. Allg. Bot. Hamburg* **236**: 745-746.
- Hedberg, I. 1996. Flora of Ethiopia and Eritrea. In: van der Maesen, L.J.G., van der Burgt, X.M., & Medenbach de Rooy, J.M. (eds.), *The Biodiversity of African Plants. Proceedings XIVth AETFAT Congress 22-27 August 1994, Wageningen, The Netherlands*. Kluwer, Dordrecht. Pp. 802-804.
- Hedberg, O. 1983. Ethiopian Flora Project. *Bothalia* **14**(3 & 4): 571-574.
- Mesfin Tadesse 1988. The Ethiopian Flora Project and its contribution to the Development of the Science of Botany in Ethiopia. In: Gizachew Woldeyes (ed.), *Proceedings of the SAREC-ESTC Conference on Research Development and Current Research Activities in Ethiopia*. Pp. 156-170.
- Richard, A. 1847-1851. *Tentamen Florae Abyssinicae. Vol. 1-2*. Arthus Bertrand, Paris (Facsimile 1982, Uppsala).
- Thulin, M. 1983. Leguminosae of Ethiopia. *Opera Bot.* **68**:14-223.
- Tewolde Berhan Gebre Egziabher 1991. The Ethiopian Flora Project. In: *SAREC Documentation. Project Report 1991.1*. Pp. 1-18.
- Wilde, J.J.F.E. de 1993. Flora of Ethiopia. Vol. 3. Pittosporaceae to Araliaceae. Review/ Compte rendu. *AETFAT Bulletin* **41**:40-41.

