





Darwin Initiative Main Project Annual Report

To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2018

Darwin Project Information

Project reference	Project 23-004 ref 3339
Project title	Ex-situ conservation of threatened plants from the Ivoloina- Ifontsy valleys, Madagascar
Host country/ies	Madagascar
Contract holder institution	Madagascar Fauna and Flora Group (MFG)
Partner institution(s)	Missouri Botanical Garden (MBG)
	Royal Botanic Gardens, Kew (RBG, Kew)
Darwin grant value	£235,894
Start/end dates of project	April 2016 to March 2019
Reporting period (e.g., Apr 2017 – Mar 2018) and number (e.g., Annual Report 1, 2, 3)	April 2017 to March 2018, Annual Report No. 2
Project Leader name	Karen Freeman
Project website/blog/Twitter	Website: http://www.madagascarfaunaflora.org/darwin-initiative.html; Twitter: @DI_gasyplants
Report author(s) and date	Karen Freeman and Chris Birkinshaw, April 2018

1. Project rationale

The Malagasy flora is both exceptionally rich (14,000 species) and highly endemic (90%)¹. However, it is also very threatened by anthropogenic activities (e.g. shifting cultivation, wild fires, charcoal production etc.). Between 1950 and 2000 40% of remaining forest was destroyed² and forest loss continues today at a similar pace. Most forest outside of protected areas will be lost in the next decade. An estimated 14% of the flora is not included in any protected area and many of these excluded species occur as tiny populations in small, degraded fragments of natural vegetation where they are exceptionally vulnerable. Ideally, these habitats should be conserved but this rarely occurs because of their small size and degraded nature. Thus, the most viable alternative to extinction for these species will be ex-situ conservation, either as growing plants in secure collections or as seeds in seed banks. Yet investment in ex-situ plant conservation in Madagascar is inadequate. This project was designed to respond to this need – albeit within a limited part of Madagascar: the Ivoloina and Ifontsy River Valleys (see map in Annex 4.1). This area was selected as the target for this project because here natural vegetation has almost all

¹ Callmander M. W. et al. 2011. Plant Ecology and Evolution, 144(2): 1

² Harper G.J. et al. (2007). Environmental Conservation 34 (4): 1-9.

been destroyed and the small remaining forest fragments are likely to be lost imminently. Thus, this project truly represents the last chance to save this botanical diversity for humanity. By demonstrating the success of this approach, we expect that this project will act as a model for similar initiatives elsewhere in Madagascar and perhaps beyond.

2. Project partnerships

The strong base partnership between Madagascar Fauna and Flora Group (MFG) and Missouri Botanical Garden (MBG) has continued to be effective through the second year of this Darwin Initiative Project. Formally MFG has been responsible for managing the budget, the ex-situ propagation, planting out and databasing of all project information on the internal database, and MBG has been responsible for field seed and herbarium specimen collections, species identifications, building community relationships and entering results into the international plant database; TROPICOS. However, MBG technical staff have been involved in all aspects of the project, lending expertise as required to ensure the smooth running and efficacy of the two Darwin Initiative plant nurseries at Parc Ivoloina. Chris Birkinshaw, Botanical Director for the project has been integral to the management of the project and is, in reality, a joint Project Leader. All major decisions as regards the direction of the project have been made jointly between MFG and MBG. These two organisations have had a long relationship of collaborative efforts on the ground in Madagascar but this project has served to further cement the relationship and exemplify the benefits of effective partnerships to achieve challenging goals.

The partnership with Royal Botanic Gardens, Kew (RBG-Kew) has continued to be fruitful and effective and although, as planned, they have had a lesser role in this year's activities (they had a major role in the training aspects of both horticulturalists and field botanists in Year 1 and in initial collection trips), they continue to provide field support as required and to carry out their ongoing role in the project to facilitate the transfer of appropriate seeds collected through the project to their Millennium Seed Bank (MSB) for long term *ex-situ* preservation.

The association with *Silo National des Graines Forestières* (SNGF, attached to the *Ministère de l'Environnement, de l'Ecologie et des Forêts*, Madagascar) has also continued to be effective despite a change in directorship. The new Director, Madame Yvannie Rabenitany, has been extremely supportive of the initiative and has committed to fulfilling all aspects of the agreed convention with MFG for the implementation of the project. The renewed agreement signed between MFG and SNGF is included in Annex 4.2 of this report and details SNGF's role in receiving a sub-set of seeds from the project for *ex-situ* conservation at their own facility (either through propagation and plantation or freezing in their own seed bank) and triage of seeds for export to the MSB. In Annex 4.3 the seeds samples given to SNGF are detailed.

As per the agreement between MBG the *Parc Botanique et Zoologique de Tsimbazaza* (PBZT, attached to the *Ministère de l'Enseignement Supérieur et de la Recherche Scientifique*), 3 young plants of each seed sample successfully propagated will be sent to PBZT for planting in their own garden, thus ensuring a further safety-net for these plants. In Year 2, 198 seedlings from 66 different species were dispatched to PBZT. These species are listed in Annex 4.4. Botanists from PBZT also sometimes joined the field work and during the reporting period contributed a total of 110 person-days to the project.

All partners in the project were represented at the official launch of the Darwin Initiative plant nursery at Parc Ivoloina in July 2017. The event, led by the British Consul for Madagascar, Michel Gonthier, was a great success despite torrential rain and ably demonstrated both the independent identity of the Darwin Initiative project and also the successful partnerships behind it.

An unexpected partnership that developed during the reporting period was with a village association called "Lovasoa". This association is dedicated to the conservation of a cluster of six forest fragments (total area = 90 hectares) known collectively as the Ampasina Forest (for further information see Section 11) and we were able to recruit some association members as community seed collectors – with benefits both to this association and to our project.

As previously, during this reporting period, the project was able to benefit from special expertise within the partner organisations. Ingrid Porton, Vice President of MFG, generously invested a significant amount of time in designing a beautiful and informative project website (http://www.madagascarfaunaflora.org/darwin-initiative.html); Brock Mashburn, Horticulture Department, MBG, continued to advised the Darwin Initiative's horticulture team on best practise for plant propagation; and Rebecca Sucher, Senior Manager, Living Collections at MBG, facilitated the archiving of the part of the accession database, for the accessions already planted out into Parc Ivoloina, in MBG's Living Collection Monitoring System.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1. Training and capacity building provided to enable four young Malagasy men/women to organise field trips, conduct botanical inventories, and collect high quality seed samples for ex-situ conservation. Entirely completed in Year 1.

Output 2. Training and capacity building provided to enable six young Malagasy men/women the skills necessary to propagate and nurture native Malagasy plants. Entirely completed in Year 1, excepting for finishing the installation of the second nursery that was completed early in Year 2.

Output 3. Vouchered and genetically diverse seed samples collected for at least 500 endemic Malagasy species from remaining native forest fragments within Ivoloina-Ifontsy River Valley. In Year 2, the field botany team completed 12 fieldtrips. As previously, the objective of this fieldwork was to collect vouchered and genetically diverse seed samples from plants growing in doomed forests within the Ivoloina and Ifonsty River Valleys. As part of their on-going coaching, the young field botanists took it in turn to plan and lead the field work. During the field-trips a total of 521 seed samples were collected. In each case the sample was vouchered with an herbarium specimen accompanied by detailed field notes and a photo. specimens were typically collected in replicates of five so that in addition to Madagascar's national herbarium at the PBZT, several other international herbaria could each receive a replicate to enrich their collections. Information (including the images) concerning the collections into the freely-available, on-line botanical database (http://www.tropicos.org/). Field work associated with this Output has now been completed, and a map of all the locations where vouchered seed samples were collected in Years 1 and 2 is provided in Annex 4.1. Identification of the vouchers associated with the seed samples will continue during Year 3 of the Project. This work will be completed by MBG botanists and also experts for the plant taxa concerned.

Since the fieldwork part of this project has now been completed, the four field botanists are now free to use their botanical skills elsewhere. We are pleased to report that all four of the botanists have obtained employment that makes full use of these skills, specifically:

- RASOANINDRIANA Mahenintsoa Harisandy will continue to work with the Darwin Initiative project as database manager.
- RALAIJAONA Benjamina will work as a botanist for MFG as part of the Global Environment Facility funded project to reinforce the population of threatened useful trees in the landscape surrounding Betampona reserve.
- SYDE Rémi Anthony will work as a Research Coordinator for MBG's community-based conservation project at the Pointe à Larrée New Protected Area.
- RAKOTONIRINA Arsène Giovanni will study for his PhD with the Institute of Science, the Environment and Sustainable Development (ISSEDD) at the University of Toamasina.

Output 4. At least 500 vouchered, genetically-diverse, endemic Malagasy flowering plant species conserved ex-situ

Seed samples collected by the field botanists together with the associated collection information were handed over to the Head of Conservation Horticulture, Mamisoa Alexandre, who directed the conservation horticulturalists in their treatment and processing. The samples were cleaned

(e.g. removed from their fruit) and sorted to remove predated or diseased seeds. If sufficiently numerous seeds in samples collected from woody plants were divided into two parts; one part for propagation at Parc Ivoloina and another to be sent to SNGF for seed banking. For reasons of capacity no more than 200 seeds from each sample were normally retained for propagation at Parc Ivoloina. All the seeds in samples collected from herbaceous plants and liana were sent to SNGF because it is difficult to maintain such species as growing plants and in this case the best option is preservation in a seed bank. In total, by the end of March 2018, seeds from 728 samples had been sown in the nursery, and 231 samples had been dispatched to SNGF for seed banking (some samples were both sown at Parc Ivoloina and dispatched for seed banking). In each case the sown seed samples, and later each seedling, was carefully labelled with the collection code of their voucher herbarium specimen. All the information relating to each of the seed samples (e.g. number of seeds sown, date of first germination, number of germinations, etc.) has been noted in nursery log books, then this information is periodically captured in an electronic spreadsheet. In Year 2 we worked with Rebecca Sucher, Senior Manager, Living Collections at MBG, to develop a format whereby our accession information could be integrated into MBG's Living Collections Monitoring System (LCMS) that will provide a secure archive for this data. The data transfer is conducted by Rebecca's team once plants leave the nursery and are planted out into Parc Ivoloina.

In Year 1, the Director of Field Botany and MFG's Forestry Station Manager, explored the 282-hectare Parc Ivoloina to identify three locations, each with contrasting conditions, where the seedlings produced by this project will be planted. Each of these sites was prepared to receive the seedlings by: thinning alien trees (e.g. *Acacia mangium* and *Eucalyptus grandis*) that had been planted when the Parc was a forestry station; removing of invasive alien shrubs, clearing the herb layer that in many places is dominated by the smothering fern *Dicranopteris linearis*, and sowing the green manure species *Flemingia macrophylla* to improve the soil and to provide some protection from wind and sun. The work to prepare the planting zones continued in Year 2, and indeed will continue in Year 3. In August 2018 the first batch of seedlings was planted-out, and since this time a total of 2656 seedlings of 72 different species have been planted out.

During Year 2, the Head of Conservation Horticulture, continued to coach the six conservation horticulturalists in best practice. New techniques practiced for the first time included vegetative propagation by means of cuttings or air-layering; preparing the ground for planting-out and then planting-out the young plants. The techniques of vegetative propagation were used in efforts to propagate two very rare and threatened species for which the botanists had been unable to collect ripe seed. The conservation horticulturalists were also guided in the preparation of the nurseries to minimise cyclone impact (see Section 9) and the subsequent treatment of seedlings damaged by the heavy rains and strong winds.

3.2 Progress towards project Outputs

Output 1. Training and capacity building provided to enable four young Malagasy men/women to organise field trips, conduct botanical inventories, and collect high quality seed samples for ex-situ conservation

This output was entirely achieved in Year 1.

Output 2. Training and capacity building provided to enable six young Malagasy men/women the skills necessary to propagate and nurture native Malagasy plants

This output was almost entirely achieved during Year 1, excepting some work to finish the second nursery, that was concluded early in Year 2.

Output 3. Vouchered and genetically diverse seed samples collected for at least 500 endemic Malagasy species from remaining native forest fragments within Ivoloina-Ifontsy River Valley During Year 2, the field botanists collected a total of 477 seed samples, thus in total, including the collections made during Year 1, 800 seed samples have been collected by this project. To date most of the vouchers associated with these samples have not been identified to the level of species thus we cannot say with absolute certainty whether the target of sampling 500 species has been achieved. The uncertainty is because sometimes a species has been sampled more

than once – from different forest fragments. This repetition is desirable because it will increase the overall genetic diversity of the species in *ex-situ* conservation. Most voucher specimens have now been identified to the level of family and genus, and we are pleased to report that our collections include at least 84 families, and 208 genera. The list of collections, downloaded from the botanical database TROPICOS, is shown in Annex 4.5. The full identification of the vouchers will be completed during Year 3, but it seems likely that the stated target has been achieved.

Although this project is not specifically targeted on any specific groups of plant, and rather considers all native plant diversity within the doomed forests as being worth conserving, it is satisfying to note several important species among our seed collections including a new species of *Vitex* (Lamiaceae). A population of the critically endangered *Dracaena umbraculifera* was also discovered. While this plant lacked ripe seeds we were able to propagate it by cuttings. A new species of *Melanophylla* was also discovered but, once again, the botanists were not able to obtain mature seeds. While we endeavoured to propagate this plant by cuttings on this occasion they did not root. Given that we have found only six individuals of this tree, and all these are located within a highly threatened forest fragment, we propose to continue our efforts to propagate this plant using institutional funds.

Output 4. At least 500 vouchered, genetically-diverse, endemic Malagasy flowering plant species conserved ex-situ

For the 800 seed samples collected to date: 728 samples were sown in the nursery at Parc Ivoloina, and 231 samples were sent to SNGF for accession into their seed bank and for dispatch to the Millennium Seed Bank (as mentioned before, some seed samples were split between Parc Ivoloina and SNGF). Among the 728 samples sown at Parc Ivoloina seeds from 578 samples have germinated to date. Among these, 2656 seedlings of 72 different species have already been planted out at Parc Ivoloina. For the 847 seedlings that have been monitored for 6 months after planting, mortality has been 8.9% (most deaths being related to the impact of Cyclone Ava – see Section 9) and the average 6-month growth in height for the living plants was 53%.

3.3 Progress towards the project Outcome

Our proposal identified two indicators of the project outcome

- 1 Number of Malagasy plant species preserved using ex-situ conservation measures increases from baseline of ca. 2100 species (the number of species conserved ex-situ in the MSB and Parc Ivoloina) to ca. 2600 species
- **2** Ten newly-trained Malagasy field botanists and nurserymen/women intervene effectively to reduce the risk of extinction of their flora through *ex-situ* conservation

With respect to the first indicator, for Year 1 and Year 2 combined, we accessioned 800 seed samples. While the vouchers for many of these samples have not yet been identified to the level of species, and while some samples are known to originate from the same species (albeit from different sub-populations) it is likely this outcome indicator will have been achieved because the number of samples largely exceeds the target number of species (i.e. 500) and because the collections include a high diversity of genera.

With respect to the second indicator, due to our training and subsequent coaching, ten young Malagasy are now contributing to reducing the risk of extinction of Malagasy plant species. This target has thus been fully attained. With respect to the field botanists, proof of this attainment is that all four of the botanists have now found post-DI employment where they can make full use of their botanical skills.

3.4 Monitoring of assumptions

Outcome Assumption 1: Most Malagasy plants can be either conserved long term in seedbanks or have seeds that can be germinated and grown thereby allowing conservation as growing plants

Among the 728 seed samples that have been sown in the nursery at Parc Ivoloina, to date, some seeds at least have germinated for 578 species (i.e. 79%). The 6-month survival rate of seedlings after planting in the park is also reasonably high at 91% Thus it would seem that the

assumption is at least partly confirmed. However, it should be noted that: 1) only seeds from woody plants are sown in this nursery (because only perennial species can be maintained easily in living ex-situ plant conservation collections), and 2) no information is available concerning the long-term viability of our seed samples in the two seed banks in which they were deposited.

Outcome Assumption 2: Young Malagasy are motivated to invest their career in the conservation of the Malagasy flora

One of the most pleasing aspects of this project is the enthusiasm and dedication of the young Malagasy who were recruited and trained as field botanists and conservation horticulturalists. All are undoubtedly dedicated to the conservation of the Malagasy flora. As partial proof of this assertion, the four field botanists, who have now completed their contracts with the Darwin Initiative Project, have each obtained employment that makes full use of the botanical knowledge and field botany skills that they obtained during the last 2 years.

Output Assumption 1: Candidates for training are available who have the physical attributes and character to cope with the sometimes-harsh conditions of fieldwork in Madagascar Certain aspects of the work of field botanists and conservation horticulturalists are physically demanding and were challenging to several of the females recruited to these posts. However, this difference in physical strength has not been an issue because, in a team, it is possible for different members to focus on what they do best. The female members of the team were just as tolerant of harsh working conditions (e.g. long treks to reach remote forest fragments or long hours working in the sun or rain) as their male colleagues. Thus, it is possible to conclude that this assumption is confirmed.

Outcome Assumption 2: Candidates for training are available who have the physical attributes and empathy for plant life required by excellent horticulturalists. See above.

Outcome Assumption 3: Specialist identification of voucher specimens can be obtained during the project's duration

As was noted above, currently we cannot provide a statement of how many plant species were sampled as part of this Project. This is because, to date, only 64% of the voucher herbarium samples accompanying the samples have been identified to the level of species. While many more samples will be fully identified during the final year of the project, it is likely that a minority will lack identification at the level of species at the project's conclusion. This is because some taxa can only be identified by specialists and their work is voluntary. In addition, a proportion of the Malagasy flora lacks a viable taxonomic framework and therefore it is currently impossible to name a specimen falling within these groups with a scientifically valid name. However, during the time remaining we will be proactive in encouraging the specialists to work on our vouchers and, by the end of the project, we anticipate that the proportion of the seed samples that cannot be identified to the level of species will be small.

Outcome Assumption 4: Nursery teams able to retain high standards at times when the field teams collect large numbers of samples (phenological periodicity of work)

In the previous report we stated that this assumption had been confirmed and that "through good communication between the field botanists and the nurserymen/women; through good organisation of the nursery team; and through a hardworking and flexible staff, all seed samples have been treated in a timely fashion and using best practise." Despite this coordination, at one time during Year 2, during the peak season for the collection of seeds, seed samples were being dispatched by the field botanists to the nursery team in quantities that they struggled to accommodate. Indeed, for a short period the nursery infrastructure had reached its capacity and some seedlings needed to be placed on the ground adjacent to the propagation benches. During this period, which lasted for no more than 4 weeks, there may have been a slight reduction in the quality of care given to the seeds and seedlings.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

Although the conception of this project was based on our knowledge of the comprehensive destruction of natural forest within the Ivoloina and Ifontsy Valleys, it has still been shocking and depressing to see, during the fieldwork, the tiny remaining forest fragments now being further diminished. It is particularly sad to witness this loss when one is aware of the extraordinary plant diversity surviving in these fragments. By collecting seed samples from the last standing native trees in this area and organising their ex-situ conservation we are making an important contribution to preventing the total loss of this genetic diversity. When we share images, for example on twitter, showing the last forest fragments, we are sometimes asked the question: "can't you conserve it?" Sadly, the answer is probably that we cannot: in most cases the fragments are too tiny to constitute viable ecosystems - being very vulnerable to invasive species, desiccation, stochastic loss of genetic diversity, wild fires and catastrophic winds (cyclones). Also, there is little motivation in the local community to conserve these areas amid their scramble to access the last fertile land (below the last trees) in the now largely barren landscape (but note the exceptional case of the Ampasina Forest described in Section 11). One day, when socio-economic conditions in Madagascar are more favourable, we hope that the plants that we have conserved ex-situ can provide the seeds from which new native forests can be restored to this sadly impoverished landscape.

This project was conceived to maximise the participation of the people of Madagascar and in Year 2 a total of 556 Malagasy received compensation for their contributions to project implementation (7 senior staff, 4 field botanists, 6 nurserymen/women, 373 porters/guides/cooks, 166 labourers). Among these people, the field botanists and horticulturalists are of particular significance because, through the training provided by the project, they now have highly marketable skills on which they can base viable careers. Among the seed samples collected and propagated by this project are several species of known economic importance such as species of ebony and rosewood. Other species included in our collections are reputed to have medicinal properties.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

- 1. No poverty: this project made a small contribution to this goal by providing salaried employment to a total of 556 Malagasy people during the reporting period. We are confident that the ten young Malagasy we trained as field botanists and conservation horticulturalists will be able to base successful careers on this training. It is notable that the 4 botanists trained through the Darwin Initiative project have already secured posts using the knowledge and skills gained through their training and work. The conservation horticulture team continue to work and gain experience and their skills have been sought after to provide training for other conservation projects entailing nursery activities. We remain confident that the 6 of them will be highly employable at the end of the DI project.
- **4.** Quality Education: during Year 2 the project continued to provide high quality coaching for ten young Malagasy horticulturalists and field botanists. In addition, the project staff hosted 4 school events aiming to promote environmental awareness for a total of 533 students (for details see Annex 4.6), and provided 3 training workshops in best practice for propagating native trees for a total of 16 nurserymen/women (for details see Annex 4.7).
- **5.** Gender Equality: the project has comprehensively demonstrated that females can be skilled and competent horticulturalists and fieldworkers two posts that in Madagascar have traditionally been regarded as male domains.
- **15.** Life on Land: to date the project has conserved 800 seed samples from a diversity of plants living in doomed forests. Without this intervention, this diversity would certainly have been lost. The young Malagasy who were developed as horticulturalists and field botanists represent an important advocate and resource for future plant conservation interventions in Madagascar.
- **17.** Partnerships for Goals: this project has established an effective and trusting partnership between diverse institutions: MFG, MBG, RBG-Kew, SNGF, and PBZT. We are already seeking opportunities to exploit this partnership to implement other similar projects (e.g. perhaps focused on Madagascar's highly threatened littoral forests). We were particularly pleased in Year 2 to

develop a new partnership with the extraordinary grass-roots association "Lovasoa" that is endeavouring to conserve the Ampasina Forest.

5. Project support to the Conventions, Treaties or Agreements

This proposal responds to one of the three main goals of the CBD i.e. the conservation of biological diversity. In particular, the project is directly contributing to Target 8 of the 16-point Global Plant Conservation Strategy that is linked to the Convention since it was adopted by the Conference of Parties in 2002. This target seeks to conserve at least 75 per cent of threatened plant species in *ex-situ* collections, preferably in the country of origin, and at least 20 per cent of these should be available for recovery and restoration programmes. To date our actions in this project have resulted in the accession of 800 seed sample collections into *ex-situ* collections. While we are currently unable to state reliably how many species are included among these collections, it is likely be in excess of 500.

Our work in *ex-situ* plant conservation can also be considered as a contribution to Madagascar's most recent National Biodiversity Strategy and Action Plan (to 2025) which states, as Action 12.1, that the country will implement programs for the *ex-situ* conservation of plants and the reestablishment of populations of target species. This project does not propose re-establishing plants into the wild because of its short duration and because currently conditions do not exist in the landscapes of the Ivoloina and Ifontsy valleys where such reintroduced plants would be secure, however, such work, based on the collections made during this Project, may become viable in the future. In addition, through this Project, we have identified a number of plant-diverse forest fragments, which are potentially suitable candidates for *in-situ* conservation because of their larger size and the interest of the local population in their conservation. One such forest is the Ampasina Forest that is discussed in greater detail in Section 11.

6. Project support to poverty alleviation

To date a total of 556 Malagasy have received compensation for their contributions to project implementation (7 senior staff, 4 field botanists, 6 nurserymen/women, 373 porters/guides/cooks, and 166 labourers - who worked to prepare the land at Parc Ivoloina to receive the seedlings). Clearly this contribution to poverty alleviation is of very minor importance compared to the huge needs of this impoverished country, but locally this employment provided a significant contribution to the income of a number of families. Poverty in Madagascar has multiple causes but one of these, and one that is becoming increasingly important, is the low natural capital remaining in most Malagasy landscapes. Activities to promote the successful reduction of poverty in Madagascar must certainly include restoration of these degraded landscapes. Such restoration endeavours will be facilitated by both competent nurserymen/women and by the availability of stocks of native woody plants. This project is providing both resources.

7. Project support to gender equality issues

Gender equality in Madagascar is patchy: among the higher classes the situation is like that in the West; whereas in rural communities the roles of women and men in society are defined traditionally and are very different. This project aimed to train and then provide employment for field botanists and horticulturalists. These two are posts that would traditionally be filled by men. However, we recruited 2 women and 2 men for the field botany posts and 3 women and 3 men for the posts of conservation horticulturalist. The women employed through the project (both field botanists and horticulturalists), have ably demonstrated that they are more than capable of the work undertaken and are thus breaking previous beliefs, even within our own teams, that these two are posts that are unsuitable for women. Employment of these women has also lead to more equal gender equality within MFG and MBG whose field staff were hitherto overwhelming dominated by males. As described in Section 4, during Year 2, the Darwin Initiative nurseries provided the focus for several visits by schools and scout groups, and provided three training events in best practice for the propagation of native trees. On each occasion our female conservation horticulturalists contributed to hosting the visit and thereby would have influenced perceptions about female work among the students. We plan to include presentations from the

three female horticulturalists in MFG's annual "Girl's Camp", later in 2018, to provide inspiration for young Malagasy women on potential careers.

8. Monitoring and evaluation

We are fortunate that the proposed outcomes and outputs of this Project can be described by objective, easy to measure indicators: number of people trained; evaluation reports of trainees, number of seed samples made: number of species planted at Parc Ivoloina or preserved in a seed bank, number of seedlings planted, % seedling mortality etc. The Manager of Conservation Horticulture and the Fieldwork Manager have been responsible for collecting the raw data associated with the indicators, and the Project Focal Point has been responsible for making this available to the entire Darwin Initiative Team so that the progress of the Project can be tracked objectively and, where necessary, activities modified. The Fieldwork Manager particularly appreciated the maps that were produced showing the evolving distribution of our collections over a layer showing the remaining forest fragments within the target landscape. Through these maps he was able to better orientate fieldwork so that the maximum number of fragments were visited during the fieldwork period. Nevertheless, the layer of remaining forest fragments, which was based on our interpretation of a "Google Earth" image, failed to show the smallest fragments. The indicators also provide standard measures with which we can communicate to others concerning the progress of the project, as can be seen in the project tracking table in our Darwin Initiative webpage (http://www.madagascarfaunaflora.org/darwin-initiative.html).

Among the indicators presented in our original proposal we included none measuring success in valorising the project for education nor success in sharing information about this project with others. To rectify these gaps in Year 2 we recorded both the number of educational events hosted by the project and the number of participants in these events (see Annex 4.6 and 4.7); and the occasions when information concerning the project has been presented to conservationists and scientists.

9. Lessons learnt

In Year 2, work was organised to enable one of the horticulturalists, in rotation, to join each of the fieldtrips organised by the botanists. This innovation was appreciated by both parties and was observed to have the following positive effects: 1) removing barriers between the field botany and horticulture staff and thereby creating a feeling of one team working for a shared objective; 2) providing the horticulture staff with a full understanding of the need for the project and thereby enabling them to speak, from their own experiences, to justify their work during educational events; and 3) providing the horticulture staff with an understanding of field botany that may serve them well when the seek employment, after the end of this project.

We are fortunate that our Manager of Conservation Horticulture, Mamisoa Alexandre, is one of Madagascar's most accomplished horticulturists. His work to prepare the sites destined to host the seedlings propagated by the project included an array of treatments including, for example, removal of alien trees; control of the smothering fern *Dicranopteris linearis*, use of green manures, temporary provision of shade structures for seedlings, and investment in watering seedlings should a period of drought immediately proceed plantation. Together the intelligent use of these treatments has resulted in high survival and relatively rapid growth of the planted seedlings and has overturned previously-held beliefs that the majority of native trees are best planted below established shade-giving trees. These positive results have encouraged MFG staff to consider the development of an ambitious plan to establish forest composing of native species to a major part of this site (replacing existing plantations of exotic trees planted during the French colonial period). A proposal for this work is now under development for submission to the Living Earth Collaborative (livingearth@wustl.edu).

In our original proposal we failed to recognise that cyclone impact might be among the risks faced by the project. On 5 January 2018 Cyclone Ava passed close to Parc Ivoloina and brought with it heavy rains and strong winds. Both these phenomena caused seedling injury and mortality in the nurseries and also to seedlings already planted-out in the park. In the nursery, the heavy rain caused seeds and seedlings to rot while the wind literally blew away

newly pricked-out seedlings. The winds also caused the shade netting to collapse, which then damaged seedlings by flapping around in the winds. Some seedlings that had been planted-out where literally crushed by the fall of debris. In total 23.7% of seedlings in the nursery were killed by the cyclone, while 9% of the seedlings already planted-out died. While these losses are significant they will not compromise the attainment of the project's goals because for each seed sample more seedlings were propagated than originally anticipated. Seedling death in the nursery could have been reduced if the young plants had been displaced below their propagation benches prior to the impact of the cyclone. The damage to the nursery infrastructure was quickly repaired thanks to a joint effort by the entire Darwin Initiative team; and two weeks after the event an uninformed visitor would not have known that the nursery had suffered from such a cataclysmic event.

10. Actions taken in response to previous reviews (if applicable)

The only criticism we received in our previous annual review was that the stand-alone identity of this DI project was not immediately obvious. In order to respond to this observation, we have made a large effort this year to promote the DI activities as independent of both MFG and MBG general activities. We have created a dedicated page detailing the DI project on the MFG website: http://www.madagascarfaunaflora.org/darwin-initiative.html, and a twitter page: @ DIgasyplants. In postings the team is referred to as "Parc Ivoloina's Darwin Initiative team". It was decided not to create a stand-alone website for the DI project as it would not be able to be maintained and updated beyond the project's three-year duration so instead a separate page on the MFG website was chosen. Updates on the fate of the seedlings planted by the project can thus be given beyond the project's finish date. In addition, as originally planned, we organised an official launch of the DI nursery in July 2018. The Ambassador for Great Britain was invited to oversee the ceremony but was otherwise engaged overseas at the time. Instead the British Consul for Madagascar, Michel Gonthier, led the proceedings and the stand-alone identity of the project was emphasised (a copy of the short article on the launch transmitted on local television channel "Télévision de Madagascar (TVM)" on the 11th July and repeated on the 16th July 2017 will be sent with this report). A radio interview was also aired publicising the launch of the Darwin Initiative project nursery on local radio station Agua FM on 8th July 2017 and repeated again on 9th July. The Ambassador to Great Britain later made an informal visit to see the project's activities, and shared a complimentary tweet about his visit (@PhilBoyleFCO). During Year 2 the DI project has also hosted a number of outreach activities such as visits with local school groups, scouts etc. (total 533 participants, Annex 4.6), article in MFG's quarterly local newsletter (see Annex 4.9), article in MBG's quarterly newsletter (see Annex 4.10), all of which reinforced the separate identity of the DI project. The DI logo has been used on all reports, presentations, signage and on the team T-shirt. Finally, the Darwin Initiative Project has been shared by means of oral presentations to groups of both scientists and conservationists. In May 2017 Chris Birkinshaw presented the project to 21st Association pour l'Etude Taxonomique de la Flore d'Afrique Tropicale International Congress in Nairobi; and in March 2018, Chris provided a similar presentation to a group of 14 conservation managers originating from Madagascar, Seychelles, Mauritius and the Comoros during a workshop on Conservation Management organised by the NGO Vahatra and funded by the Critical Ecosystem Partnership Fund. On both occasions the Darwin Initiative was acknowledged as the source of support for the work described.

11. Other comments on progress not covered elsewhere

On the whole the field work completed by the botanists confirmed the presupposition on which this project is founded: that the unprotected forests in the Ivoloina and Ifontsy River valleys are doomed. However, during their field work the botanists were surprised to discover a cluster of six forest fragments, that together constitute the Ampasina Forest that were being actively conserved by the local community. Apparently the leader for this action is an elderly man who left his natal village, close to the forest, as a young man to work in the city only to return decades later. On his return he was shocked by how the landscape had changed and how little forest remained and, moved by this change, dedicated himself to conserving the few remaining fragments, the Ampasina Forest, by means of a newly created association called "Lovasoa". Such stories of true grass roots conservation are very rare in Madagascar and we made a

special effort to support the association by providing their members with compensation for working as our guides and for tracking the phenology of interesting trees and collecting seed samples when ripe fruits became available.

12. Sustainability and legacy

As described in Section 10, in Year 2 of the project a diversity of approaches was used to share information about the projects: locally, regionally, nationally, and even internationally. At each level our efforts at out-reach have been well received and we are now receiving quite frequent enquires and requests to visit the nurseries.

All collection information associated with the herbarium specimens has now been uploaded to the freely available on-line botanical database TROPICOS (http://www.tropicos.org/). Hundreds of images will also be uploaded to this database in the near future.

The ideal legacy for this project would be to continue similar work with a new geographical focus. It is highly desirable that the impressive capacity for *ex-situ* plant conservation now available at Parc Ivoloina should be used to save botanical diversity from another threatened part of Madagascar. In particular, we will soon submit proposals to access support for a project similar to our work to conserve the threatened flora of the Ivoloina and Ifontsy River valleys but focused on Madagascar's highly threatened littoral forests. Even if such support cannot be accessed, MFG, the managers of Parc Ivoloina, are committed to ensuring that the seedlings planted as part of the DI project are nurtured until such a time as they are sufficiently robust to survive without further intervention. Thus the main legacy of this project will be large and genetically diverse collection of labelled plants originating from forest fragments that likely no longer exist. This collection will be a valuable resource for future generations should they wish to repair this much abused landscape. In addition to this botanical legacy, the human legacy, of ten knowledgeable and skilled field botanists and conservation horticulturalists is also highly significant because they represent a much needed resource if Madagascar is to turn the tide on the degradation of its natural environments.

13. Darwin identity

This issue is addressed in Section 10.

14. Project expenditure

Table 1: Project expenditure <u>during the reporting period</u> (1 April 2017 – 31 March 2018)

Project spend (indicative) since last annual report	2017/18 Grant (£)	2017/18 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			-3.6	
Consultancy costs			-	
Overhead Costs			-1.5	
Travel and subsistence			-22.3	Field costs for botanical collections were cheaper than originally estimated.*
Operating Costs			+7.5	
Capital items (see below)			-	
Monitoring & Evaluation (M&E)			+1.4	
Others (see below)			-5.6	

TOTAL		0	
l			

Travel and subsistence costs were significantly below the estimated budget (variance of 22.3%) mainly because it proved unnecessary to hire a dedicated project vehicle for the majority of the duration of the project to enable field collection trips and to facilitate nursery work (delivering required materials). Instead, an agreement was made with both MFG and MBG to use their existing vehicles as needed (hence a large underspend resulted). However, as the overall total funds spent remained the same and as none of the other Cost Type budget lines exceeded 10% variance from the agreed budget request, we did not submit a Budget Change Request. Apologies if this was a mistake on our part.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2017-2018

Project summary	Measurable Indicators	Progress and Achievements April 2017 - March 2018	Actions required/planned for next period
Impact Loss of Malagasy plant diversity avoide	ed through ex-situ conservation	The progress to this impact is best described by the outputs below: it is premature to claim that any of the species we are now conserving ex-situ has become extinct in the wild.	
Outcome Newly-trained Malagasy field botanists and nurserymen/women conserve the genetic diversity of threatened sub-populations of 500 endemic Malagasy flowering plant species as growing plants or in seed banks	O.1 Number of Malagasy plant species preserved using ex-situ conservation measures increases from baseline of ca. 2100 species (the number of species actually conserved ex-situ in the MSB and Parc Ivoloina) to ca. 2600 species O.2 Ten newly-trained Malagasy field botanists and nurserymen/women intervene effectively to reduce the risk of extinction of their flora through exsitu conservation	0.1. In total 800 seed samples were collected (477 in current reporting period). Of these 728 were sown at Parc Ivoloina and 231 sent to SNGF for conservation in seed banks (some samples were split between SNGF and Parc Ivoloina). Among the samples sown, to date, at least some seeds have germinated from 578 samples. The number of species included in these samples is currently not known precisely but is likely to exceed 500.	Key actions planned for next period include: identification of voucher herbarium specimens; continue propagation of seed samples; planting and caring for seedlings at Parc Ivoloina; monitoring of seedlings, valorisation of project for local environmental-awareness raising; outreach to share project approach, methods and results with others.
Output 1. Training and capacity building provided to enable four young Malagasy men/women to organise field trips, conduct botanical inventories, and collect high quality seed samples for ex-situ conservation	1.1 By end Year 1, four field botanists are able and independently capable of making vouchered, genetically diverse, and high quality seed samples of endemic Malagasy plants 1.2 The field botanists selected for training have an equitable distribution of genders	Indicators fully achieved in Year 1.	
Activity 1.1. Project Leader, Director of F select four trainees (most former graduate		Activity complete in Year 1.	
Activity 1.2. The Project Leader obtains t	he required seed collection permits	Activity complete in Year 1.	

Activity 1.3. Director of Field Botany and month training course (3-month formal transperienced field botanists)		Activity complete in Year 1.		
Output 2. Training and capacity building provided to enable six young Malagasy men/women the skills necessary to propagate and nurture native Malagasy plants	2.1 By end of 3-month formal training six nurserymen/women are independently capable of propagating seeds of most endemic Malagasy plants and then nurturing resultant seedlings with <30% mortality and by end Year 1 six nurserymen/women are independently capable of propagating seeds of all endemic Malagasy plants and then nurturing resultant seedlings with < 10% mortality 2.2 The nurserymen/women selected for training have an equitable distribution of genders	Indicators fully achieved in Year 1.		
Activity 2.1. Project Leader and Manager trainees		Activity complete in Year 1.		
Activity 2.2. Manager of Conservation Honursery at Parc Ivoloina	orticulture expands and improves the	Nursery 1 complete in Year 1, nursery 2 complete early in Year 2.		
Activity 2.3. Project Leader and Manager and implements 3-month formal training Conservation Horticulture coaches the training	course and then the Manager of	Training complete in Year 1 but coaching continued in Year 2 and will continue to end of project.		
Output 3. Vouchered and genetically diverse seed samples collected for at least 500 endemic Malagasy species from remaining native forest fragments within Ivoloina-Ifontsy River Valleys 3.1 By end Year 1 and end Year 2 genetically diverse seed samples are collected from a total of 200 and 500 vouchered, endemic plant species respectively and collection information data-based		Indicator 3.1. is defined for end of Year 2 (i.e. 500 species) is probably achieved (800 vouchered seed samples collected) but full identification of vouchers is required for confirmation. However, it is likely that many of the seed samples are not very genetically diverse because in the remaining forest fragments there are often only a few mature (sometimes only one) individuals of a given species. Evidence is provided in Section 3.2. of this report and Annex 4.5.		
		This indicator and the associated targets are well conceived although, in retrospect, we should have specified that genetically diverse samples would be collected when possible.		
Activity 3.1. Two teams of field botanists forest fragments in the Ivoloina-Ifontsy vasamples of Malagasy plants		Total of 17 field trips now completed. This activity is now finished.		

Activity 3.2. Seed samples of species co Seed Bank and the Millennium Seed Bank		231 seed samples have been sent to SNGF (72 during this reporting period) for inclusion in their seed bank and for dispatch to the MSB. This activity is now completed.		
Activity 3.3. Seed samples of species co for propagation	nsidered recalcitrant sent to Parc Ivoloina	Total (Year 1 + Year 2) of 728 seed samples have been sown at Parc Ivoloina. This activity is now completed.		
Activity 3.4. Voucher herbarium specime deposited at Madagascar's national herbaria for expert identification		Voucher herbarium specimens deposited at PBZT and shipped to international herbaria. Activity now complete.		
Activity 3.5. Data from voucher herbariur	n specimens data-based	The field data from all specimens collected to date have been databased in the on-line botanical database "TROPICOS". This activity is now complete.		
Output 4. 4. At least 500 vouchered, genetically-diverse, endemic Malagasy flowering plant species conserved exsitu	4.1. During each monitoring period seed sample germination, seedling survival, and survival of young plants at Parc Ivoloina all >80%	Indicator 4.1. Partly achieved (79% of seed samples have germinated to date but some samples may yet germinate so this estimate is premature). Evidence is provided in Section 3.3 of this report.		
	4.2. By end Year 2 and Year 3 respectively, 200 and 500 genetically	Indicator 4.2. Not achieved: 2656 seedlings of 72 different species have been planted in Parc Ivoloina, and 231 seed samples have been included in seed banks. This activity will continue in Year 3.		
	distinct sub-populations of endemic Malagasy flowering plant species growing in final planting locations at Parc Ivoloina or included in the MSB and its national partner seed bank at SNGF	The indicators provided here are reasonable except that during project conception we did not consider that on some occasions it would be necessary to collect old seeds from the ground (with consequent lower germination rates). Also, as mentioned under Indicator 3.1., many of the seed samples are not genetically diverse because of the very small populations of some tree species in the forest vestiges.		
Activity 4.1. Manager of Conservation Ho collection information for each seed acces System and then updates history of each project and beyond		Information of seedlings already planted have been entered into the LCMS. This activity will continue in Year 3.		
Activity 4.2. Head of accessions at the S Seed-bank enters collection information	NGF seed bank and the Millennium into their respective accessions systems	See above.		
Activity 4.3. Manager of Conservation Honurserymen/women propagate seeds an accessions with unique codes linked to L	d nurture seedlings, and label all	To date 728 seed samples have been sown in the nursery and, to date, at least some seedlings have germinated from 578 samples. Each sample has been labelled with a unique code. During Year 3, these seedlings will be nurtured until large enough to be planted out so this activitity will continue.		
Activity 4.4. Manager of Conservation Holocations for the seedlings within Park Ivelabelling		Activity begun in year 2 and will continue in Year 3.		

Activity 4.5. Newly planted plants weeded until fully established	Activity begun in year 2 and will continue in Year 3.
Activity 4.6. Creation of educational display (panels and labelling) at Parc Ivoloina of some of the interesting plants included in the project	No progress – this activity is planned for Year 3.
Activity 4.7. Sharing results with local stakeholders through an open day at Parc Ivoloina for representatives of the communities where we worked	No Progress – this activity is planned for Year 3.
Activity 4.8. Organising visits of all Saturday school children to visit the project, coverage on radio show, MFG newsletters, website, Twitter and Facebook accounts	Activities in Year 2: 3 educational events with 533 participants; 1 oral presentation to the scientific community; 1 oral presentation to Indian Ocean conservation community; one twitter account; one article on local television; one article on local radio; one article in MFG quarterly newsletter; one webpage activated.
Activity 4.9. Publishing results in peer-reviewed journal	No progress – this activity is planned for Year 3.

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions		
Impact: Loss of Malagasy plant diversi (Max 30 words)	ty avoided through ex-situ conservation				
Outcome: Newly-trained Malagasy field botanists and nurserymen/women conserve the genetic diversity of threatened sub-populations of 500 endemic Malagasy flowering plant species as growing plants or in seed banks (Max 30 words)	0.1 Number of Malagasy plant species preserved using ex-situ conservation measures increases from baseline of ca. 2100 species (the number of species actually conserved ex-situ in the MSB and Parc Ivoloina) to ca. 2600 species 0.2 Ten newly-trained Malagasy field botanists and nurserymen/women intervene effectively to reduce the risk of extinction of their flora through ex-situ conservation	0.1 Report (based on compilation of data from accession databases) listing species covered for the first time by exsitu conservation measures as a result of this project 0.2 End of project independent evaluation of the strengths and weaknesses of the newly trained field botanists and nurserymen/women	Most Malagasy plants can be either conserved long term in seed-banks or have seeds that can be germinated and grown thereby allowing conserved as growing plants Young Malagasy are motivated to invest their career in the conservation of the Malagasy flora		
Outputs: 1. Training and capacity building provided to enable four young Malagasy men/women to organise field trips, conduct botanical inventories, and collect high quality seed samples for exsitu conservation	1.1 By end Year 1, four field botanists are able and independently capable of making vouchered, genetically diverse, and high quality seed samples of endemic Malagasy plants 1.2 The field botanists selected for training have an equitable distribution of genders	1.1 Evaluation report elaborated by Manager of Field Botany of competence of each trainee and self-evaluation of competence by each trainee 1.2. Report on gender distribution of trainees	- Candidates for training are available who have the physical attributes and character to cope with the sometimes harsh conditions of fieldwork in Madagascar		
2. Training and capacity building provided to enable six young Malagasy men/women the skills necessary to propagate and nurture native Malagasy plants	2.1 By end of 3-month formal training six nurserymen/women are independently capable of propagating seeds of most endemic Malagasy plants and then nurturing resultant seedlings with <30% mortality and by end Year 1 six nurserymen/women are independently capable of propagating seeds of all endemic Malagasy plants and then nurturing resultant seedlings with < 10% mortality 2.2 The nurserymen/women selected for training have an equitable distribution of genders	2.1 Evaluation report elaborated by Manager of Conservation Horticulture of competence of each trainee and self-evaluation of competence by each trainee 2.2. Report on gender distribution of trainees	- Candidates for training are available who have the physical attributes and empathy for plant life required by excellent horticulturalists.		

3. Vouchered and genetically diverse seed samples collected for at least 500 endemic Malagasy species from remaining native forest fragments within Ivoloina-Ifontsy River Valleys	collected from a total of 200 and 500		-Specialist identification of voucher specimens can be obtained during the project's duration
4. At least 500 vouchered, genetically-diverse, endemic Malagasy flowering plant species conserved ex-situ	4.1. During each monitoring period seed sample germination, seedling survival, and survival of young plants at Parc Ivoloina all >80% 4.2. By end Year 2 and Year 3 respectively, 200 and 500 genetically distinct sub-populations of endemic Malagasy flowering plant species growing in final planting locations at Parc Ivoloina or included in the MSB and its national partner seed bank at SNGF	Monitoring System database from Parc Ivoloina 4.2. Download from Living Plant Monitoring System database from Parc	standards at times when the field teams collect large numbers of samples

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

- 1.1. Project Leader, Director of Field Botany and Field Botany Manager select four trainees (most former graduates of ISSEDD)
- 1.2. The Project Leader obtains the required seed collection permits
- 1.3 Director of Field Botany and Field Botany Manager organises 12-month training course (3-month formal training and 9 months coaching with experienced field botanists)
- 2.1. Project Leader and Manager of Conservation Horticulture select six trainees
- 2,2, Manager of Conservation Horticulture expands and improves the nursery at Parc Ivoloina
- 2.3. Project Leader and Manager of Conservation Horticulture conceives and implements 3-month formal training course and then the Manager of Conservation Horticulture coaches the trainees for the remainder of the project
- 3.1. Two teams of field botanists organise expeditions to unprotected forest fragments in the Ivoloina-Ifontsy valleys and there collect vouchered seed samples of Malagasy plants
- 3.2. Seed samples of species considered orthodox sent to the SNGF Seed Bank and the Millennium Seed Bank
- 3.3. Seed samples of species considered recalcitrant sent to Parc Ivoloina for propagation
- 3.4. Voucher herbarium specimens processed so that replicates are both deposited at Madagascar's national herbarium and exported to international herbaria for expert identification
- 3.5. Data from voucher herbarium specimens data-based
- 4.1. Manager of Conservation Horticulture at Parc Ivoloina enters collection information for each seed accession into Living Plant Monitoring System and then updates history of each accession within the System throughout project and beyond

- 4.2. Head of accessions at the SNGF seed bank and the Millennium Seed-bank enters collection information into their respective accessions systems
- 4.3. Manager of Conservation Horticulture at Parc Ivoloina and six nurserymen/women propagate seeds and nurture seedlings, and label all accessions with unique codes linked to LPMS
- 4.4. Manager of Conservation Horticulture identifies appropriate planting locations for the seedlings within Park Ivoloina and directs planting out and labelling
- 4.5. Newly planted plants weeded until fully established
- 4.6. Creation of educational display (panels and labelling) at Parc Ivoloina of some of the interesting plants included in the project
- 4.7. Sharing results with local stakeholders through an open day at Parc Ivoloina for representatives of the communities where we worked
- 4.8. Organising visits of all Saturday school children to visit the project, coverage on radio show, MFG newsletters, website, Twitter and Facebook accounts
- 4.9. Publishing results in peer-reviewed journal

Annex 3: Standard Measures

Code No.	Description	Gender of people (if	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the
		relevant)	Tolovality					project
Established codes								
6A	Training in field botany 4 people for 3 months; Training in conservation horticulture 6 people for 3 months; training in best nursery practise 42 people	Female (6), Male (46)	Malagasy	36	16		52	50
6B	Training in field botany 4 people x 12 weeks; Training in conservation horticulture 6 people x 12 weeks; training in best nursery practise 26 people x 0.5 weeks; 4 people for 2 weeks; 9 people for 1 week; 3 people for 3 weeks			133	26		159	250
13B	Herbarium specimens enhancing the herbarium at PBZT (includes 800 accompanying seed samples and 861 from general collection)			0	1,661		1,661	500
20	Includes camping and collecting equipment, installation of two plant nurseries, nursery			20,000	0		20,000	20,000

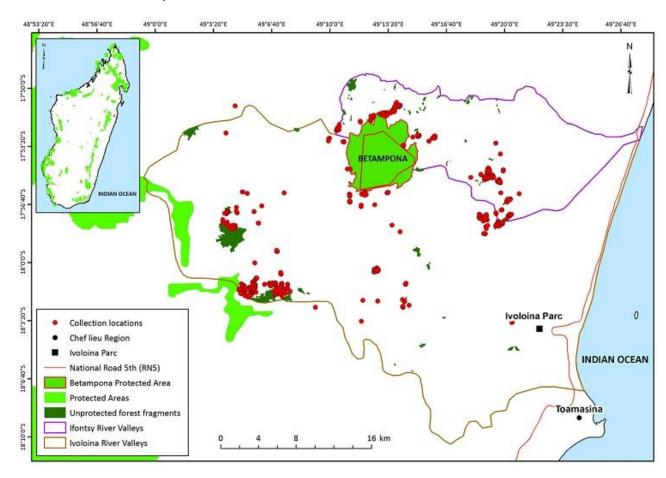
	equipment, rehabilitation of one building (using to house trainees during training)					
21	This concerns the establishment of the ex-situ plant conservation facility at Parc Ivoloina		1	0	1	1
23	From private donor to support training in best nursery practice at Parc Ivoloina for nurserymen from conservation organisations		\$2000	\$0	\$2000	\$8000

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Bitsika' Ivoloina: Edition 19*	Quarterly newsletter	Lala Randriatavy and Tsiry Harison	Male	Malagasy	MFG, Toamasina	www.madagascarfaunaflora.org
Missouri Botanical Garden Bulletin: Winter 2017/2018*	Quarterly newsletter	Chris Birkinshaw	Male	British	MBG, Saint Louis	http://www. missouribotanicalgarden.org/

Annex 4 Onwards - supplementary material

Annex 4.1. Map of Ivoloina and Infontsy River valleys showing the location of Betampona Reserve, Parc Ivoloina, unprotected forest fragments and locations where vouchered seed samples have been collected.



Annex 4.2. Renewed agreement signed between MFG and SNGF (full convention with annexes sent as separate pdf file)

PROJET CONSERVATION EX-SITU DES PLANTES MENACEES DANS LE BASSIN VERSANT D'IVOLOINA ET D'IFONTSY, REGION ATSINANANA - MADAGASCAR

Convention de collaboration entre

Madagascar Fauna and Flora Group (MFG)



Et

Le Silo National des Graines Forestières (SNGF)



CONVENTION DE COLLABORATION AU TITRE DE LA PERIODE 2017 - 2018 OBJET DE LA CONVENTION: Appui technique du SNGF dans les chaînes d'activités de la conservation ex-situ de 500 espèces endémiques de Madagascar dans les forêts non-protégées du bassin versant d'Ivoloina et Ifontsy (zone d'intervention de MFG).

<u>DUREE DE MISE EN ŒUVRE DE LA CONVENTION</u>: Avril 2017- Mars 2018 (renouvelable).

MODALITES DE COLLABORATION

Le SNGF accompagnera l'équipe locale de MFG et les intervenants des autres partenaires du Projet (Missouri Botanical Garden (MBG) et Kew Madagascar Conservation Centre (KMCC) dans l'exécution des activités visant à la conservation ex-situ des espèces du site d'intervention.

Le MFG procède à un virement trimestriel du budget requis par le SNGF pour l'exécution des activités telles qu'elles sont détaillées dans la proposition en annexe.

Le SNGF établit un rapport technique et un rapport financier à la fin de chaque trimestre pour que MFG puisse débloquer le budget suivant. Le SNGF gardera les pièces justificatives des dépenses en archive au cas où les bailleurs du projet (Darwin Initiative) ont besoin de les consulter.

Les publications, rapports ou publicité qui concernent les activités de mise en œuvre de cette convention doivent avoir l'approbation conjointe des deux parties et inclure les logos des deux organismes.

BUDGET DE LA CONVENTION POUR 2017 - 2018

Pour la période d'avril 2017 à mars 2018 de la convention, le budget est estimé à Vingt-deux millions neuf cent soixante-cinq mille Ariary (MGA 22 965 000). Les détails y afférents sont présentés en annexe dans la proposition du SNGF.

MODALITES DE PAIEMENT

Les modalités de paiement sont mentionnées en annexe dans les détails de la proposition du SNGF.

Antananarivo, 04

Pour le SNGF

n 4 MAY 2017

GARANAIVOSON Loions

Hijk en Foresterie

Pour le MFG

Dr Karen Freeman

Kennyhami

Annex 4.3. Seed samples dispatched to SNGF

CODE	FAMILY	GENUS	SPECIES
SRA_00347	*	*	*
RMS 00037	ACANTHACEAE	Mendoncia	*
RMS 00379	ACANTHACEAE	Mendoncia	*
SRA_00177	ACANTHACEAE	Mendoncia	cowanii
SRA 00325	ANACARDIACEAE	Poupartia	*
SRA_00352	ANACARDIACEAE	Poupartia	*
SRA_00385	ANACARDIACEAE	Pourpartia	*
SRA 00118	ANNONACEAE	Annona	*
RAG_00151	ANNONACEAE	Artabotrys	*
RMS_00192	ANNONACEAE	Artabotrys	mabifolius
RBM_00100	ANNONACEAE	Diospyros	*
SRA 00066	ANNONACEAE	Fenerivia	heteropetala
RAG_00108	ANNONACEAE	Monanthotaxis	valida
SRA_00120	ANNONACEAE	Monanthotaxis	*
SRA_00167	ANNONACEAE	Monanthotaxis	*
SRA 00230	ANNONACEAE	Monanthotaxis	pilosa
RBM_00268	ANNONACEAE	Pourpartia	chapelieri
SRA_00113	ANNONACEAE	Uvaria	furfuracea
RMS 00015	ANNONACEAE	Xylopia	*
RMS_00248	APIACEAE	Pseudocarium	laxiflorum
RAG_00236	APOCYNACEAE	*	*
SRA_00267	APOCYNACEAE	Gomphocarpus	fruticosus
RAG_00018	APOCYNACEAE	Plectaneia	thouarsii
RBM_00246	APOCYNACEAE	Stephanotis	grandiflora
RMS_00171	ARALIACEAE	Polyscias	*
SRA_00190	ARALIACEAE	Polyscias	*
RMS_00321	ARALIACEAE	Polyscias	*
RBM_00380	ARALIACEAE	Polyscias	*
SRA_00067	ARALIACEAE	Polyscias	amplifolia
RMS_00033	ARALIACEAE	Polyscias	fraxinifolia
SRA_00035	ARALIACEAE	Polyscias	fraxinifolia
RMS_00351	ARECACEAE	Dypsis	*
RBM_00378	ARECACEAE	Dypsis	*
RMS_00010	ARECACEAE	Dypsis	lastelliana
RMS_00263	ARECACEAE	Dypsis	lastelliana
RAG_00023	ARECACEAE	Dypsis	nodifera
SRA_00073	ARECACEAE	Dypsis	psammophila
RAG_00076	ARECACEAE	Ravenea	julietiae
RMS_00086	ARECACEAE	Ravenea	sambiranensis
RAG_00094	ARECACEAE	Ravenea	sambiranensis
RAG_00118	ARECACEAE	Ravenea	sambiranensis
SRA 00238	ARECACEAE	Ravenea	sambiranensis
SRA_00184	ASCLEPADACEAE	Secamone	*
RMS_00237	ASPARAGACEAE	Asparagus	simulans

SRA 00384	ASTERACEAE	*	*
RAG 00189	ASTERACEAE	Sonchus	oleraceus
RMS 00029	ASTERACEAE	Vernonia	*
RAG 00190	ASTERACEAE	Youngia	japonica
SRA_00228	BARBEUIACEAE	Barbeuia	· '
RBM_00155	BIGNONIACEAE	Rhodocolea	madagascariensis *
_			*
RBM_00360	BIGNONIACEAE	Rhodocolea	*
RMS_00370	BUDDLEJACEAE	Buddleja Canarium	*
SRA_00012	BURSERACEAE BURSERACEAE		
RAG_00154		Canarium	globosum
SRA_00038	BURSERACEAE	Canarium	lamianum
SRA_00018	BURSERACEAE	Canarium	pulchrebracteatum *
RAG_00246	BURSERACEAE	Protium	*
RBM_00287	COMBRETACEAE	Terminalia	
RBM_00240	CONNARACEAE	Ellipanthus	madagascariensis
RBM_00087	CONNARACEAE	Rourea	minor
RMS_00153	CONNARACEAE	Rourea	minor *
RAG_00188	DIOSCOREACEAE	Dioscorea	
SRA_00070	EBENACEAE	Diospyros	decaryana
RMS_00345	ERYTHROXYLACEAE	Erythroxylum	*
RBM_00298	EUPHORBIACEAE	Anthostema	madagascariense
SRA_00368	EUPHORBIACEAE	Anthostema	madagascariense
SRA_00092	EUPHORBIACEAE	Antidesma	madagascariense
RBM_00008	EUPHORBIACEAE	Orfilea	coriacea
RAG_00259	FABACEAE	*	*
SRA_00225	FABACEAE	Abrus	precatorius
RBM_00267	FABACEAE	Abrus	precatorius
RBM_00212	FABACEAE	Clitoria	lasciva
RMS_00305	FABACEAE	Dialium	madagascariense
RAG_00012	FABACEAE	Dialium	unifoliolatum
RBM_00328	FABACEAE	Dialium	unifoliolatum
SRA_00115	FABACEAE	Entada	rheedei
RAG_00129	FABACEAE	Entada	rheedei
RMS_00191	FABACEAE	Entada	rheedei
RMS_00262	FABACEAE	Entada	rheedei
SRA_00130	FABACEAE	Indigofera	hirsuta
RMS_00328	HAMAMELIDACEAE	Dicoryphe	*
RBM_00332	ICACINACEAE	*	*
RAG_00233	LAURACEAE	Cryptocarya	*
RBM_00313	LAURACEAE	Cryptocarya	*
SRA_00318	LAURACEAE	Cryptocarya	spathulata
SRA_00142	LEEACEAE	Leea	guineensis
RAG_00138	LEEACEAE	Leea	guineensis
RBM_00026	LILIACEAE	Dianella	ensifolia
SRA_00077	LINACEAE	Hugonia	coursiana
SRA_00106	LINACEAE	Hugonia	coursiana
RMS_00028	MALVACEAE	Byttneria	melleri
RMS 00371	MALVACEAE	Dombeya	*

RBM 00121	MALVACEAE	Grewia	*
RBM 00107	MALVACEAE	Grewia	*
RMS_00170	MALVACEAE	Grewia	*
RBM 00213	MALVACEAE	Grewia	cuneifolia
RAG 00268	MALVACEAE	Thespesia	*
RMS_00137	MARANTACEAE	Marantochloa	comorensis
RAG_00148	MELASTOMATACEAE	Dichaetanthera	articulata
RMS_00204	MELASTOMATACEAE	Gravesia	retracticauda
RMS_00227	MELASTOMATACEAE	Gravesia	venusta
SRA_00027	MELASTOMATACEAE	Medinilla	*
RBM_00280	MELIACEAE	Astrotrichilia	*
SRA_00312	MELIACEAE	Astrotrichilia	voamatata
RBM_00403	MENISPERMACEAE	*	*
RBM_00404	MENISPERMACEAE	Strychnopsis	*
RBM_00113	MENISPERMACEAE	Triclisia	*
RAG_00102	MONIMIACEAE	Tambourissa	*
RBM_00141	MONIMIACEAE	Tambourissa	*
RBM_00309	MONIMIACEAE	Tambourissa	*
RMS_00378	MONIMIACEAE	Tambourissa	*
RAG_00272	MONIMIACEAE	Tambourissa	*
RAG_00277	MONIMIACEAE	Tambourissa	*
RBM_00416	MONIMIACEAE	Tambourissa	*
RMS_00306	MONIMIACEAE	Tambourissa	uapacifolia
RBM_00227	MONIMIACEAE	Tambourissa	uapacifolia
SRA_00329	MORACEAE	Ficus	*
RMS_00269	MORACEAE	Ficus	politoria
SRA_00166	MORACEAE	Ficus	reflexa
RAG_00130	MORACEAE	Ficus	reflexa
RMS_00295	MORACEAE	Ficus	reflexa
SRA_00065	MORACEAE	Ficus	torrentium
RBM_00031	MORACEAE	Streblus	dimepate
RBM_00320	MORACEAE	Treculia	*
RBM_00082	MORACEAE	Trilepisium	madagascariense
SRA_00168	MORACEAE	Trilepisium	madagascariense
RAG_00080	MORACEAE	Trophis	montana
RMS_00132	MYRICACEAE	Morella	spathulata
RMS_00121	MYRTACEAE	Syzigium	*
RBM_00302	MYRTACEAE	Syzygium	*
RBM_00257	MYRTACEAE	Syzygium	bernieri
SRA_00008	MYRTACEAE	Syzygium	emirnense
SRA_00028	MYRTACEAE	Syzygium	emirnense
RAG_00112	MYRTACEAE	Syzygium	mortonianum
RBM_00125	MYRTACEAE	Syzygium	thouvenotii
RMS_00135	MYRTACEAE	Syzygium	thouvenotii
RMS_00083	ONAGRACEAE	Ludwigia	octovalvis
RAG_00415	ORCHIDACEAE	Vanilla	*
RAG_00163	PHYLLANTACEAE	Phyllanthus	matitanensis
RAG_00168	PHYLLANTACEAE	Suregada	laurina

RMS_00349	PHYLLANTACEAE	<i>Uapaca</i>	*
SRA 00075	PITTOSPORACEAE	Pittosporum	ochrosiifolium
RAG_00172	PITTOSPORACEAE	Pittosporum	ochrosiifolium
RBM 00158	PITTOSPORACEAE	Pittosporum	ochrosiifolium
SRA 00221	PITTOSPORACEAE	Pittosporum	ochrosiifolium
SRA 00161	PITTOSPORACEAE	Pittosporum	senacia
SRA_00181	PITTOSPORACEAE	Pittosporum	senacia
SRA 00191	PITTOSPORACEAE	Pittosporum	senacia
RAG 00294	POACEAE	*	*
RAG_00086	POACEAE	Andropogon	eucomus
RAG_00084	POACEAE	Cenchrus	polystachios
SRA 00056	POACEAE	Coix	lacryma-jobi
SRA_00063	POACEAE	Flagellaria	indica
RAG_00096	POACEAE	Hitchcockella	baronii
RBM 00080	POACEAE		
RAG_00111	POACEAE	Imperata Imperata	cylindrica cylindrica
RMS 00225	POACEAE	Isachne	mauritiana
RAG_00104	POACEAE	Megastachya	madagascariensis
SRA_00097	POACEAE	Megastachya	madagascariensis
RMS_00138	POACEAE	Megastachya	madagascariensis
RMS 00298	POACEAE	Megastachya	madagascariensis
RBM_00148	POACEAE	Olyra	latifolia
RAG_00105	POACEAE	Panicum	*
RAG_00105	POACEAE	Panicum	maximum
RBM 00078	POACEAE	Paspalum	paniculatum
RAG 00085	POACEAE	Paspalum	paniculatum
RBM 00079	POACEAE	Paspalum	scrobiculatum
RAG_00088	POACEAE	Paspalum	scrobiculatum
RAG_00089	POACEAE	Paspalum	urvillei
RBM 00091	PRIMULACEAE	Embelia	madagascariensis
SRA_00074	PRIMULACEAE	Embelia	madagascariensis
SRA_00114	PRIMULACEAE	Embelia	madagascariensis
RBM 00166	PRIMULACEAE	Embelia	madagascariensis
RAG 00026	PRIMULACEAE	Oncostemum	*
RAG 00265	PROTEACEAE	Dilobeia	thouarsii
RMS 00286	RHAMNACEAE	Gaunia	cupreifolia
RMS 00300	RUBIACEAE	Anthirea	borbonica
SRA 00041	RUBIACEAE	Bremeria	hymenopogonoides
RBM_00156	RUBIACEAE	Bremeria	hymenopogonoides
RMS_00136	RUBIACEAE	Coptosperma	*
RBM_00371	RUBIACEAE	Craterispermum	*
SRA 00069	RUBIACEAE	Gaertnera	*
RBM 00092	RUBIACEAE	Gaertnera	*
RAG_00437	RUBIACEAE	Gaertnera	*
RAG_000437	RUBIACEAE	Gaertnera	guillotii
RAG_00081	RUBIACEAE	Gaertnera	macrostipula
SRA 00046	RUBIACEAE	Gaertnera	phanerophlebia
RMS_00095	RUBIACEAE	Gaertnera	robusta
111112_00033	RODINCLAL	Guertheru	TODUSTU

SRA 00094	RUBIACEAE	Gaertnera	robusta
SRA_00386	RUBIACEAE	Hyperacanthus	*
RMS_00087	RUBIACEAE	Hyperacanthus	talangninia
RMS 00020	RUBIACEAE	Mussaenda	arcuata
RBM_00163	RUBIACEAE	Mussaenda	arcuata
RBM_00159	RUBIACEAE	Psychotria	*
SRA_00176	RUBIACEAE	Psychotria	anjanaharibensis
RAG_00178	RUBIACEAE	Psychotria	anjanaharibensis
RMS_00148	RUBIACEAE	Psychotria	decaryi
RMS_00244	RUBIACEAE	Psychotria	manampanihensis
RAG_00174	RUBIACEAE	Psychotria	mandrarensis
RAG 00100	RUBIACEAE	Psychotria	onivensis
RBM_00134	RUBIACEAE	Psychotria	onivensis
SRA_00188	RUBIACEAE	Psychotria	pachygrammata
RAG_00133	RUBIACEAE	Psychotria	rakotoniaina
SRA 00194	RUBIACEAE	Psychotria	ratovoarisonii
RMS_00161	RUBIACEAE	Psychotria	sonocorova
SRA_00232	RUBIACEAE	Psychotria	sonocorova
RMS_00184	RUBIACEAE	Tarenna	vel sp. nov.
RMS_00384	RUTACEAE	Vepris	*
SRA_00402	SALICACEAE	Bembicia	*
SRA_00043	SALICACEAE	Casearia	nigrescens
RAG_00378	SALICACEAE	Ludia	*
SRA_00326	SALICACEAE	Scolopia	*
SRA_00371	SALICACEAE	Scolopia	*
RAG_00285	SALICACEAE	Scolopia	*
SRA_00068	SAPINDACEAE	Plagioscyphus	jumellei
RMS_00343	SAPINDACEAE	Tina	*
RMS_00388	SAPINDACEAE	Tina	*
SRA_00345	SAPINDACEAE	Tinopsis	*
RMS_00339	SAPINDACEAE	Tinopsis	*
SRA_00320	SAPOTACEAE	Chrysophyllum	perrieri
RBM_00250	SAPOTACEAE	Chrysophyllum	perrieri
RBM_00262	SAPOTACEAE	Mimusops	capuronii
RBM_00331	SARCOLAENACEAE	Sarcolaena	*
RBM_00326	SARCOLAENACEAE	Schizolaena	*
SRA_00296	SARCOLAENACEAE	Schizolaena	cauliflora
RAG_00289	SARCOLAENACEAE	Schizolaena	cauliflora
RMS_00200	SMILACCACEAE	Smilax	kraussiana
RAG_00301	SPHAEROSEPALACEAE	Rhopalocarpus	*
RAG_00075	TACCACEAE	Тасса	artocarpifolia
SRA_00095	VITACEAE	Cissus	sulfurosa
RMS_00105	XYRIDACEAE	Xyris	anceps

Annex 4.4. Young plants donated to the Parc Botanique et Zoologique de Tsimbazaza (3 seedlings of each of the species listed)

FAMILY	GENUS	SPECIES
RUBIACEAE	Danais	*
OLEACEAE	Noronhia	gracilipes
MALVACEAE	Nesogordonia	crassipes
LAURACEAE	Cryptocarya	rigidifolia
MORACEAE	Streblus	dimepate
FABACEAE	Dialium	madagascariense
SAPINDACEAE	Doratoxylon	apetalum
MYRTACEAE	Syzygium	emirnense
OLEACEAE	Noronhia	louvelii
OLEACEAE	Noronhia	boivinii
MALVACEAE	Dombeya	*
ELAEOCARPACEAE	Sloanea	rhodantha
MORACEAE	Ficus	tiliifolia
CLUSIACEAE	Garcinia	verrucosa
FABACEAE	Dialium	unifoliolatum
MALVACEAE	Dombeya	laurifolia
PRIMULACEAE	Oncostemum	reticulatum
PRIMULACEAE	Oncostemum	*
DIDYMELACEAE	Didymeles	integrifolia
EUPHORBIACEAE	Croton	mongue
PHYLLANTHACEAE	Uapaca	densifolia
ARECACEAE	Dypsis	lastelliana
PHYSENACEAE	Physena	madagascariensis
PROTEACEAE	Dilobeia	thouarsii
MENISPERMACEAE	Burasaia	madagascariensis
MALVACEAE	Hildegardia	perrieri
ANACARDIACEAE	*	*
MENISPERMACEAE	Trilepisium	madagascariensis
MONIMIACEAE	Tambourissa	*
SAPINDACEAE	Macphersonia	madagascariensis
EUPHORBIACEAE	Omphalea	oppositifolia
MORACEAE	Trilepisium	madagascariense
SARCOLAENACEAE	Eremolaena	humblotiana
MORACEAE	Ficus	politoria
EUPHORBIACEAE	Hancea	capuronii
SAPOTACEAE	Mimusops	capuronii
SAPINDACEAE	Plagioscyphus	jumellei
CALOPHYLLACEAE	Mammea	bongo
APHLOIACEAE	Aphloia	theiformis
CLUSIACEAE	Garcinia	*
RUBIACEAE	Gaertnera	*
ARECACEAE	Dypsis	fibrosa
MORACEAE	Trilepisium	*

HAMAMELIDACEAE	Dicoryphe	macrophylla
MYRTACEAE	Syzygium	mortonianum
EBENACEAE	Diospyros	haplostylis
EBENACEAE	Diospyros	vel sp. nov.
PHYLLANTHACEAE	Uapaca	littoralis
BURSERACEAE	Canarium	betamponae
BURSERACEAE	Canarium	pulchrebracteatum
ASPARAGACEAE	Dracaena	reflexa
LEEACEAE	Leea	guineensis
BURSERACEAE	Canarium	*
BURSERACEAE	Canarium	lamianum
LECYTHIDACEAE	Barringtonia	asiatica
ANNONACEAE	Annona	*
MYRTACEAE	Syzygium	parkeri
RUBIACEAE	Coffea	richardii
EUPHORBIACEAE	Anthostema	madagascariense
BURSERACEAE	Canarium	globosum
HYPERICACAE	Harungana	madagascariensis
BIGNONIACEAE	Rhodocolea	*
EUPHORBIACEAE	*	*
APOCYNACEAE	Gomphocarpus	fruticosus
MYRTACEAE	Syzygium	*
MYRTACEAE	Syzygium	parkeri

Annex 4.5. Vouchered seed samples collected for ex-situ conservation (Years 1 and 2 combined)

Voucher No.	Family	Genus	Species	Coll. date	Location	Latitude (S)	Longitude (E)	Elevation
RAG_011	BURSERACEAE	Protium	madagascariense	13/11/2016	Analambo	17° 56' 05,6"	49° 12' 04,5"	302
RAG_012	FABACEAE	Dialium	unifoliolatum	13/11/2016	Analambo	17° 56' 06,22"	49° 12' 04,1"	298
RAG_013	ARECACEAE	Dypsis	fibrosa	13/11/2016	Analambo	17° 56' 07,6"	49° 11' 59,4"	279
RAG_016	MALVACEAE	Nesogordonia	*	13/11/2016	Analambo	17° 56' 08,7"	49° 11' 59,8"	276
RAG_018	APOCYNACEAE	Plectaneia	thouarsii	07/12/2016	Ampotaka	18° 00' 37,2"	49° 07' 11,4"	369
RAG_019	ANACARDIACEAE	Abrahamia	ditimena	07/12/2016	Ampotaka	18° 00' 38,8"	49° 07' 12,3"	384
RAG_020	EBENACEAE	Diospyros	sp nov.	07/12/2016	Ampotaka	18° 00' 38,8"	49° 07' 12,5"	384
RAG_021	BURSERACEAE	Canarium	betamponae	07/12/2016	Ampotaka	18° 00' 40,2"	49° 07' 12,5"	389
RAG_022	MALVACEAE	Dombeya	laurifolia	12/12/2016	Zanaposa	18° 01' 13,0"	49° 07' 15,7"	621
RAG_023	ARECACEAE	Dypsis	nodifera	12/12/2016	Zanaposa	18° 01' 12,7"	49° 07' 15,2"	610
RAG_025	PRIMULACEAE	Oncostemum	reticulatum	12/12/2016	Zanaposa	18° 01' 12,6"	49° 07' 14,0"	612
RAG_026	PRIMULACEAE	Oncostemum	*	12/12/2016	Zanaposa	18° 01' 13,00"	49° 07' 13,9"	611
RAG_028	DIDYMELACEAE	Didymeles	integrifolia	12/12/2016	Zanaposa	18°' 01' 12,9"	49° 07' 14,5"	601
RAG_029	EUPHORBIACEAE	Croton	mongue	12/12/2016	Zanaposa	18° 01' 19,1"	49° 07' 15,5"	601
RAG_031	MYRTACEAE	Syzygium	*	12/12/2016	Zanaposa	18° 01' 24,4"	49° 07' 15,4"	655
RAG_032	OLEACEAE	Noronhia	*	13/01/2017	Antetezana	17° 48' 54,4"	49° 28' 48,1"	14
RAG_033	LAURACEAE	Ocotea	racemosa	13/01/2017	Antetezana	17° 48' 54,4"	49° 28' 47,4"	2
RAG_035	MYRTACEAE	Eugenia	pluricymosa	13/01/2017	Antetezana	17° 48' 54,3"	49° 28' 55,7"	5
RAG_036	RUBIACEAE	Saldinia	axillaris	13/01/2017	Antetezana	17° 48' 54,3"	49° 28' 55,2"	7
RAG_037	ASPARAGACEAE	Dracaena	angustifolia	02/02/2017	Andromasina	18° 01' 26,6"	49° 05' 40,7"	565
RAG_038	ANNONACEAE	Xylopia	lamii	02/02/2017	Andromasina	18° 05' 41,0"	49° 05' 41,0"	565
RAG_039	BURSERACEAE	Canarium	lamianum	02/02/2017	Andromasina	18° 01' 25,3"	49° 05' 40,7"	563
RAG_040	LAURACEAE	Ocotea	caudatifolia	02/02/2017	Andromasina	18° 01' 25,4"	49° 05' 40,4"	567
RAG_042	RUBIACEAE	Gynochthodes	umbellata	02/02/2017	Andromasina	18° 01' 24,7"	49° 05' 40,5"	560
RAG_043	RUBIACEAE	Bremeria	sp. Nov.	02/02/2017	Andromasina	18° 01' 24,7'	49° 05' 40,6"	563

RAG_045	RUBIACEAE	Danais	volubilis	02/02/2017	Andromasina	18° 01' 24,2"	49° 05′ 42,3″	562
RAG_048	PRIMULACEAE	Embelia	madagascariensis	02/02/2017	Andromasina	18° 01' 23,7"	49° 05' 41,2"	550
RAG_049	RUBIACEAE	Bremeria	hymenopogonoides	02/02/2017	Andromasina	18° 01' 23,6"	49° 05' 42,1"	552
RAG_050	MYRTACEAE	Eugenia	pluricymosa	02/02/2017	Andromasina	18° 01' 25,3"	49° 05' 41,5"	534
RAG_051	PITTOSPORACEAE	Pittosporum	ochrosiifolium	02/02/2017	Andromasina	18° 01' 37,1"	49° 05' 36,3"	592
RAG_054	SAPINDACEAE	Macphersonia	madagascariensis	02/02/2017	Ambatoharanana	18° 01' 32,5"	49° 05′ 30,3″	556
RAG_055	EBENACEAE	Diospyros	*	02/02/2017	Ambatoharanana	18° 01' 30,9"	49° 05' 31,7"	547
RAG_056	SARCOLAENACEAE	Eremolaena	humblotiana	02/02/2017	Ambatoharanana	18° 01' 31,0"	49° 05' 31,8"	549
RAG_059	EBENACEAE	Diospyros	occlusa	06/02/2017	Ambinanibikoka	18° 01' 27,8"	49° 05' 25,9"	477
RAG_060	SALICACEAE	Casearia	nigrescens	06/02/2017	Bekoka	18° 01' 28,8"	49° 05' 07,7"	572
RAG_063	SOLANACEAE	Solanum	madagascariense	06/02/2017	Bekoka	18° 01' 27,7"	49° 05' 07,6"	594
RAG_064	EUPHORBIACEAE	Hancea	capuronii	06/02/2017	Bekoka	18° 01' 27,6"	49° 05' 07,1"	590
RAG_065	APOCYNACEAE	Petchia	erythrocarpa	06/02/2017	Bekoka	18° 01' 27,7"	49° 05' 07,3"	582
RAG_066	CLUSIACEAE	Garcinia	*	06/02/2017	Bekoka	18° 01' 28,3"	49° 05' 06,5"	605
RAG_068	ARECACEAE	Dypsis	fibrosa	06/02/2017	Bekoka	18° 01' 29,4"	49° 05' 03,3"	651
RAG_069	MORACEAE	Ficus	brachyclada	06/02/2017	Bekoka	18° 01' 29,4"	49° 05' 03,9"	648
RAG_071	MORACEAE	Trilepisium	*	06/02/2017	Ampamakiandamizany	18° 00' 35,4"	49° 07' 10,8"	364
RAG_072	RUBIACEAE	Gaertnera	macrostipula	05/03/2017	Analahely	17° 53' 17,3"	49° 14' 13,6"	291
RAG_073	FABACEAE	Dialium	unifoliolatum	05/03/2017	Analahely	17° 53' 17,2"	49° 14' 13,4"	278
RAG_075	DIOSCOREACEAE	Tacca	artocarpifolia	05/03/2017	Analahely	17° 53' 17,1"	49° 14' 13,4"	280
RAG_076	ARECACEAE	Ravenea	julietiae	05/03/2017	Analahely	17° 53' 16,1"	49° 14' 12,9"	294
RAG_077	RUBIACEAE	Saldinia	oblongifolia	05/03/2017	Analahely	17° 53' 15,5"	49° 14' 12,0"	307
RAG_078	EBENACEAE	Diospyros	mangabensis	05/03/2017	Analahely	17° 53' 14,9"	49° 14' 12,9"	309
RAG_080	MORACEAE	Trophis	montana	05/03/2017	Analahely	17° 58' 14,7"	49° 14' 1,5"	311
RAG_081	RUBIACEAE	Gaertnera	guillotii	05/03/2017	Analahely	17° 53' 13,3"	49° 14' 13,6"	292
RAG_084	POACEAE	Cenchrus	polystachios	24/03/2017	Ranomadio	17° 57' 09,2"	49° 19′ 30,0″	120
RAG_085	POACEAE	Paspalum	paniculatum	24/03/2017	Ranomadio	17° 57' 09,2"	49° 19' 30,1"	120
RAG_086	POACEAE	Andropogon	eucomus	24/03/2017	Ranomadio	17° 57' 09,1"	49° 19' 30,0"	123
RAG_087	MELASTOMATACEAE	Amphorocalyx	auratifolius	24/03/2017	Ranomadio	17° 57' 12,6"	49° 19' 31,4"	119

RAG_088	POACEAE	Paspalum	scrobiculatum	24/03/2017	Ranomadio	17° 57' 37,2"	49° 19' 38,4"	144
RAG_089	POACEAE	Paspalum	urvillei	24/03/2017	Ranomadio	17° 57' 37,2"	49° 19' 38,5"	147
RAG_090	CARDIOPTERIDACEAE	Leptaulus	citrioides	24/03/2017	Vohitravao	17° 57' 43,41"	49° 19' 43,41"	183
RAG_094	ARECACEAE	Ravenea	sambiranensis	24/03/2017	Vohitravao	17° 57' 44,7"	49° 19' 45,8"	187
RAG_095	ARECACEAE	Orania	longisquama	24/03/2017	Vohitravao	17° 57' 44,3"	49° 19' 45,3"	165
RAG_097	ASPARAGACEAE	Dracaena	reflexa	24/03/2017	Vohitravao	17° 57' 45,6"	49° 19' 46,00"	193
RAG_100	RUBIACEAE	Psychotria	onivensis	24/03/2017	Vohitravao	17° 57' 47,0"	49° 19' 45,6"	178
RAG_101	ARALIACEAE	Polyscias	pentamera	24/03/2017	Vohitravao	17° 57' 48,1"	49° 19' 44,5"	176
RAG_102	MONIMIACEAE	Tambourissa	*	24/03/2017	Vohitravao	17° 57' 48,9"	49° 19' 45,2"	189
RAG_106	LAURACEAE	Ocotea	cymosa	24/03/2017	Vohitravao	17° 57' 50,2"	49° 19' 46,9"	182
RAG_107	FABACEAE	Dialium	madagascariense	24/03/2017	Vohitravao	17° 57' 50,1"	49° 19' 39,8"	197
RAG_110	RUBIACEAE	Hyperacanthus	talangninia	24/03/2017	Vohitravao	17° 57' 47,8"	49° 19' 37,8"	159
RAG_111	POACEAE	Imperata	cylindrica	24/03/2017	Vohitravao	17° 57' 09,2"	49° 19' 30,1"	123
RAG_112	MYRTACEAE	Syzygium	mortonianum	26/03/2017	Vohitravao	17° 57' 47,5"	49° 19' 34,7"	104
RAG_114	BURSERACEAE	Canarium	sp	26/03/2017	Vohitravao	17° 57' 49,9"	49° 19' 36,2	140
RAG_115	EBENACEAE	Diospyros	pervilleana	26/03/2017	Vohitravao	17° 57' 49,9"	49° 19' 36,6"	149
RAG_116	ARECACEAE	Dypsis	lucens	26/03/2017	Vohitravao	17° 57' 50,2"	49° 19' 36,7"	149
RAG_117	DIDYMELACEAE	Didymeles	integrifolia	26/03/2017	Vohitravao	17° 57' 53,5"	49° 19' 41,7"	206
RAG_118	ARECACEAE	Ravenea	sambiranensis	26/03/2017	Vohitravao	17° 57' 54,0"	49° 19' 41,9"	201
RAG_119	ASPARAGACEAE	Dracaena	reflexa	26/03/2017	Vohitravao	17° 57' 51,2"	49° 19' 41,2"	205
RAG_120	MYRTACEAE	Syzygium	parkeri	26/03/2017	Vohitravao	17° 57' 47,3"	49° 19' 40,5"	150
RAG_121	BURSERACEAE	Canarium	lamianum	28/03/2017	Andilamboalavo	17° 57' 45,6"	49° 19' 52,9"	199
RAG_123	ERYTHROXYLACEAE	Erythroxylum	*	28/03/2017	Andilamboalavo	17° 57' 45,0"	49° 19' 52,7"	206
RAG_124	DIDYMELACEAE	Didymeles	integrifolia	28/03/2017	Andilamboalavo	17° 57' 43,0"	49° 19' 51,9"	166
RAG_126	RUBIACEAE	Peponidium	pallens	28/03/2017	Andilamboalavo	17° 57' 42,3"	49° 19' 51,4"	159
RAG_127	RUBIACEAE	Gaertnera	robusta	28/03/2017	Andilamboalavo	17° 57' 42,1"	49° 19' 51,4"	150
RAG_129	FABACEAE	Entada	rheedei	28/04/2017	Ambatovilagny	17°51'24,3"	49°13'10,1"	230
RAG_130	MORACEAE	Ficus	reflexa	28/04/2017	Ambatovilagny	17°51'26,4"	49°13'06,2"	244
RAG_133	RUBIACEAE	Psychotria	rakotoniaina	28/04/2017	Ambatovilagny	17°51'28,3"	49°12'59,8"	247

RAG_135	ASPARAGACEAE	Dracaena	reflexa	28/04/2017	Ambatovilagny	17°51'30,6"	49°12'57,2"	242
RAG_136	HYPERICACAE	Psorospermum	chionanthifolium	28/04/2017	Ambatovilagny	17°51'32,7"	49°12'56,1"	232
RAG_138	LEEACEAE	Leea	guineensis	28/04/2017	Ambatovilagny	17°51'24,8"	49°13'06,1"	229
RAG_140	MELASTOMATACEAE	Memecylon	*	01/05/2017	Ambatovilantsongolovolo	17°51'07,5"	49°13'41,5"	244
RAG_145	MONIMIACEAE	Tambourissa	*	01/05/2017	Ambatovilantsongolovolo	17°51'15,8"	49°13'35,8"	277
RAG_148	MELASTOMATACEAE	Dichaetanthera	articulata	03/05/2017	Ambatovilantsongolovolo	17°51'30,3"	49°12'40,2"	312
RAG_151	ANNONACEAE	Artabotrys	*	03/05/2017	Ampasimpotsy	17°51'36,3"	49°12'35,8"	309
RAG_154	BURSERACEAE	Canarium	globosum	03/05/2017	Ampasimpotsy	17°51'36,7"	49°12'31,5"	271
RAG_155	POACEAE	Panicum	maximum	07/05/2017	Vohitralanana	17°51'03,08"	49°13'58,8"	237
RAG_156	HYPERICACAE	Harungana	madagascariensis	07/05/2017	Vohitralanana	17°51'02,5"	49°13'58,5"	260
RAG_157	RUBIACEAE	Psychotria	assimilis	07/05/2017	Vohitralanana	17°51'01,1"	49°13'59,7"	276
RAG_158	PRIMULACEAE	Oncostemum	*	07/05/2017	Vohitralanana	17°51'00,4"	49°14'01,3"	285
RAG_159	PRIMULACEAE	Oncostemum	*	07/05/2017	Vohitralanana	17°51'00,7"	49°14'01,2"	287
RAG_160	ARALIACEAE	Polyscias	chapelieri	07/05/2017	Vohitralanana	17°51'00,5"	49°14'01,3"	288
RAG_161	SALICACEAE	Casearia	nigrescens	07/05/2017	Vohitralanana	17°50'59,3"	49°14'02,8"	301
RAG_163	PHYLLANTHACEAE	Phyllanthus	matitanensis	07/05/2017	Vohitralanana	17°50'58,9"	49°14'00,4"	306
RAG_164	EUPHORBIACEAE	Macaranga	grallata	07/05/2017	Vohitralanana	17°50'58,8"	49°14'00,9"	310
RAG_166	MONIMIACEAE	Tambourissa	purpurea	07/05/2017	Vohitralanana	17°51'02,0"	49°13'52,3"	290
RAG_167	RUBIACEAE	Psychotria	onivensis	20/05/2017	Ambatoharanana	18°01'27,8"	49°05'07,4"	590
RAG_168	EUPHORBIACEAE	Suregada	laurina	20/05/2017	Ambatoharanana	18°01'28,5"	49°06'06,4"	606
RAG_169	PRIMULACEAE	Oncostemum	leprosum	20/05/2017	Ambatoharanana	18°01'28,6"	49°05'05,7"	621
RAG_170	MELIACEAE	Trichilia	mucronata	20/05/2017	Ambatoharanana	18°01'28,6"	49°05'04,1"	633
RAG_171	RUBIACEAE	Gaertnera	humblotii	20/05/2017	Ambatoharanana	18°01'28,7"	49°05'03,8"	659
RAG_172	PITTOSPORACEAE	Pittosporum	ochrosiifolium	20/05/2017	Ambatoharanana	18°01'28,2"	49°05'02,6'	678
RAG_173	MORACEAE	Ficus	politoria	20/05/2017	Ambatoharanana	18°01'28,3"	49°05'02,7'	661
RAG_174	RUBIACEAE	Psychotria	mandrarensis	20/05/2017	Ambatoharanana	18°01'28,6"	49°05'02,3'	678
RAG_175	PITTOSPORACEAE	Pittosporum	senacia	20/05/2017	Ambatoharanana	18°01'21,6"	49°05'01,8"	733
RAG_176	RUBIACEAE	Mantalania	capuronii	22/05/2017	Ambatoharanana	18°01'41,0"	49°05'08,3"	652
RAG_177	PITTOSPORACEAE	Pittosporum	senacia	22/05/2017	Ambatoharanana	18°01'42,2"	49°05'04,9"	690

RAG_178	RUBIACEAE	Psychotria	anjanaharibensis	22/05/2017	Ambatoharanana	18°01'42,6"	49°05'02,9"	711
RAG_180	RUBIACEAE	Psychotria	anjanaharibensis	22/05/2017	Ambatoharanana	18°01'43,7"	49°05'59,4''	742
RAG_181	RUBIACEAE	*	*	22/05/2017	Ambatoharanana	18°01'44,2"	49°04'57,3"	768
RAG_182	ELAEOCARPACEAE	Sloanea	rhodantha	22/05/2017	Ambatoharanana	18°01'46,0"	49°04'56,3'	788
RAG_183	RUBIACEAE	Ixora	*	22/05/2017	Ambatoharanana	18°01'46,4"	49°04'54,6''	790
RAG_184	OLEACEAE	Noronhia	*	22/05/2017	Ambatoharanana	18°01'44,9"	49°04'56,5''	805
RAG_185	ARALIACEAE	Polyscias	*	22/05/2017	Ambatoharanana	18°01'47,8"	49°04'56,4''	819
RAG_186	RUBIACEAE	Peponidium	sp nov.	22/05/2017	Ambatoharanana	18°01'55,6"	49°04'59,2'	816
RAG_187	ARALIACEAE	Neocussonia	*	22/05/2017	Ambatoharanana	18°01'54,0"	49°05'08,4''	723
RAG_188	DIOSCOREACEAE	Dioscorea	*	23/07/2017	Ambolofotsy	18°56,00,1"	49°07'23,9"	113
RAG_189	ASTERACEAE	Sonchus	oleraceus	24/07/2017	Tsitongambaza	17°56'45,2"	49°06'06,4"	339
RAG_190	ASTERACEAE	Youngia	japonica	24/07/2017	Tsitongambaza	17°57'04,3"	49°05'59,8"	336
RAG_193	RUBIACEAE	Chassalia	bojeri	24/07/2017	Tsitongambaza	17°57'44,1"	49°05'54,0"	613
RAG_194	ARALIACEAE	Polyscias	ariadnes	24/07/2017	Tsitongambaza	17°57'44,2"	49°05'54,5"	660
RAG_198	PHYLLANTHACEAE	Uapaca	densifolia	24/07/2017	Tsitongambaza	17°57'44,9"	49°05'55,7"	743
RAG_202	PRIMULACEAE	Oncostemum	*	28/07/2017	Sampandrano	17°57'53,2"	49°04'34,8"	816
RAG_205	ARALIACEAE	Polyscias	madagascariensis	28/07/2017	Sampandrano	17°57'55,2"	49°04'34,9"	850
RAG_208	MELASTOMATACEAE	Memecylon	*	28/07/2017	Sampandrano	17°57'58,7"	49°04'34,3"	864
RAG_210	ANNONACEAE	Fenerivia	chapelieri	28/07/2017	Sampandrano	17°58'02,7"	49°04'31,2"	895
RAG_212	MORACEAE	Ficus	politoria	28/07/2017	Sampandrano	17°58'02,3"	49°04'30,5"	888
RAG_213	MAESACEAE	Maesa	lanceolata	28/07/2017	Sampandrano	17°57'51,5"	49°04'26,2"	714
RAG_217	PRIMULACEAE	Oncostemum	*	30/07/2017	Sampandrano	17°58'00,7"	49°04'17,8"	895
RAG_218	RUBIACEAE	Ixora	emirnensis	30/07/2017	Sampandrano	17°58'02,3"	49°04'17,8"	914
RAG_230	PHYSENACEAE	Physena	madagascariensis	02/08/2017	Sampandrano	17°56'50,0"	49°04'39,1"	619
RAG_232	MELIACEAE	Astrotrichilia	*	28/10/2017	Andilamboalavo	17°57'18,3"	49°20'13,1"	164
RAG_233	LAURACEAE	Cryptocarya	*	28/10/2017	Andilamboalavo	17°57'18,6"	49°20'13,9"	162
RAG_234	LAURACEAE	Potameia	*	28/10/2017	Andilamboalavo	17°57'17,5"	49°20'14,4"	146
RAG_235	LAURACEAE	Potameia	*	28/10/2017	Andilamboalavo	17°57'17,4"	49°20'14,4"	150
RAG_236	APOCYNACEAE	*	*	28/10/2017	Andilamboalavo	17°57'16,9"	49°20'15,0"	131

RAG_239	CALOPHYLLACEAE	*	*	28/10/2017	Andilamboalavo	17°57'19,2"	49°20'15,6"	164
RAG_245	BURSERACEAE	Canarium	*	31/10/2017	Andilamboalavo	17°57'17,4"	49°20'19,8"	187
RAG_246	BURSERACEAE	Protium	*	31/10/2017	Andilamboalavo	17°57'17,2"	49°20'20,2"	178
RAG_248	CLUSIACEAE	Garcinia	*	31/10/2017	Andilamboalavo	17°57'16,8"	49°20'20,5"	171
RAG_251	HAMAMELIDACEAE	Dicoryphe	*	02/11/2017	Amparafaravahy	17°56'31,2"	49°20'09,2"	156
RAG_252	MYRTACEAE	Syzygium	*	02/11/2017	Amparafaravahy	17°56'28,3"	49°20'08,1"	190
RAG_253	PHYLLANTHACEAE	Uapaca	*	02/11/2017	Amparafaravahy	17°56'28,3"	49°20'09,1"	69
RAG_259	FABACEAE	Abrus	*	04/11/2017	Andilamboalavo	17°57'28,6"	49°20'08,00"	171
RAG_263	ERYTHROXYLACEAE	Erythroxylum	*	07/11/2017	Menagisy	17°55'21,7"	49°19',38,9"	73
RAG_264	EBENACEAE	Diospyros	*	07/11/2017	Menagisy	17°55'21,2"	49°19',40,3"	69
RAG_265	PROTEACEAE	Dilobeia	*	07/11/2017	Menagisy	17°55'16,5"	49°19',40,7"	87
RAG_267	SALICACEAE	Scolopia	*	07/11/2017	Menagisy	17°55'13,9"	49°19',40,7"	114
RAG_269	RUBIACEAE	Ixora	*	09/11/2017	Angodrogodroka	17°55'06,4"	49°19',20,1"	69
RAG_270	MYRTACEAE	Syzygium	*	09/11/2017	Angodrogodroka	17°55'05,4"	49°19',20,1"	86
RAG_272	MONIMIACEAE	Tambourissa	*	09/11/2017	Angodrogodroka	17°55'03,2"	49°19',19,4"	91
RAG_273	RUBIACEAE	Psychotria	*	09/11/2017	Angodrogodroka	17°55'03,4"	49°19',19,6"	89
RAG_277	MONIMIACEAE	Tombourissa	*	09/11/2017	Angodrogodroka	17°55'01,2"	49°19',20,0"	113
RAG_280	ERYTHROXYLACEAE	Erythroxylum	*	09/11/2017	Angodrogodroka	17°54'59,8"	49°19',18,6"	132
RAG_282	ANACARDIACEAE	Poupartia	*	09/11/2017	Angodrogodroka	17°54'59,3"	49°19',18,3"	126
RAG_283	LAMIACEAE	Vitex	*	09/11/2017	Angodrogodroka	17°55'00,4"	49°19',17,6"	127
RAG_284	PASSIFLORACEAE	Paropsia	*	09/11/2017	Angodrogodroka	17°54'58,0"	49°19',17,3"	135
RAG_285	LAURACEAE	Scolopia	*	11/11/2017	Analahambana	17°54'50,0"	49°19',03,4"	149
RAG_286	PHYLLANTHACEAE	Uapaca	*	11/11/2017	Analahambana	17°54'50,04"	49°19',04,18"	156
RAG_287	HAMAMELIDACEAE	Dicoryphe	*	11/11/2017	Analahambana	17°54'49,8"	49°19',04,6"	162
RAG_288	SALICACEAE	Scolopia	*	11/11/2017	Analahambana	17°54'49,9"	49°19',04,4"	155
RAG_289	SARCOLAENACEAE	Schizolaena	cauliflora	11/11/2017	Analahambana	17°54'46,3"	49°19',03,7"	227
RAG_292	MIRYSTICACEAE	Syzygium	*	11/11/2017	Analahambana	17°54'49,8"	49°19',04,6"	162
RAG_293	RUTACEAE	Vepris	*	11/11/2017	Analahambana	17°54'49,0"	49°19',03,8"	209
RAG_294	POACEAE	*	*	14/11/2017	Ampasimadinika	17°55'03,4"	49°18',57,9"	84

RAG_298	MORACEAE	Ficus	*	14/11/2017	Ampasimadinika	17°55'10,3"	49°18',57,7"	138
RAG_299	ARECACEAE	Dypsis	*	14/11/2017	Ampasimadinika	17°55'10,4"	49°18',56,5"	135
RAG_300	PHYLLANTHACEAE	Uapaca	*	14/11/2017	Ampasimadinika	17°55'14,0"	49°18',53,3"	114
RAG_301	SPHAEROSEPALACEAE	Rhopalocarpus	*	14/11/2017	Ampasimadinika	17°55'11,9"	49°18',59,8"	116
RAG_310	MORACEAE	Streblus	*	09/02/2018	Anjiro	18°02'10,0"	49°11'52,8"	310
RAG_326	MORACEAE	Streblus	*	11/02/2018	Marenina	18°03'21,7"	49°11'48,4"	189
RAG_346	CARDIOPTERIDACEAE	Leptaulus	*	14/02/2018	Mahatalanjona	18°00'19,9"	49°12'38,6"	235
RAG_348	FABACEAE	Cynometra	*	14/02/2018	Mahatalanjona	18°00'19,8"	49°12'38,7"	238
RAG_352	MORACEAE	Streblus	dimepate	14/02/2018	Mahatalanjona	18°00'26,8"	49°12'42,7"	203
RAG_358	CARDIOPTERIDACEAE	Leptaulus	*	16/02/2018	Mahatalanjona	18°00'26,8"	49°12'42,7"	200
RAG_359	ASPARAGACEAE	Dracaena	*	16/02/2018	Mahatalanjona	18°00'32,1"	49°12'32,9"	205
RAG_363	MONIMIACEAE	Tambourissa	*	16/02/2018	Mahatalanjona	18°00'31,8"	049°12'31,4"	212
RAG_365	ASPARAGACEAE	Dracaena	*	16/02/2018	Mahatalanjona	18°00'29,5"	049°12'32,8"	189
RAG_368	ARALIACEAE	Polyscias	*	16/02/2018	Mahatalanjona	18°00'23,8"	049°12'32,1"	150
RAG_369	ARECACEAE	Dypsis	*	16/02/2018	Mahatalanjona	18°00'25,0"	049°12'31,9"	143
RAG_378	SALICACEAE	Ludia	*	19/02/2018	Lohany_Sahamalaza	18°02'34,0"	049°14'10,5"	154
RAG_380	ARECACEAE	Dypsis	*	19/02/2018	Lohany_Sahamalaza	18°02'34,1"	049°09'09,6"	173
RAG_381	PHYLLANTHACEAE	Uapaca	*	19/02/2018	Lohany_Sahamalaza	18°02'32,0"	049°14'09,5"	168
RAG_382	BIGNONIACEAE	Rhodocolea	*	19/02/2018	Lohany_Sahamalaza	18°02'31,9"	049°14'09,5"	163
RAG_387	CARDIOPTERIDACEAE	Leptaulus	*	19/02/2018	Lohany_Sahamalaza	18°02'30,0"	049°14'11,9"	157
RAG_390	PHYLLANTHACEAE	Uapaca	*	21/02/2018	Vohitrasina	18°01'14,4"	049°14'19,1"	156
RAG_404	RUBIACEAE	Craterispermum	*	21/02/2018	Vohitrasina	18°01'11,1"	049°14'22,2"	155
RAG_414	RUBIACEAE	*	*	11/03/2018	Menagisy	17°55'22,3"	49°19'39,2"	75
RAG_415	ORCHIDACEAE	Vanilla	*	11/03/2018	Menagisy	17°55'22,5"	49°19'39,1"	78
RAG_420	*	*	*	11/03/2018	Menagisy	17°55'24,2"	49°19'40,7"	90
RAG_421	CLUSIACEAE	Mammea	*	11/03/2018	Menagisy	17°55'24,1"	49°19'40,9"	88
RAG_423	RUBIACEAE	*	*	11/03/2018	Menagisy	17°55'24,6"	49°19'44,7"	116
RAG_425	BIGNONIACEAE	Rhodocolea	*	11/03/2018	Menagisy	17°55'19,1"	49°19'44,6"	60
RAG_427	MYRTACEAE	Syzygium	*	12/03/2018	Ampasimadinika	17°55'04,8"	49°19'00,7"	78

RAG_430	BURSERACEAE	Canarium	*	12/03/2018	Ampasimadinika	17°55'07,2"	49°18'55,6"	137
RAG_439	RUBIACEAE	Gaertnera	*	12/03/2018	Amparafaravay	17°56'28,3"	49°20'08,5"	186
RAG_441	MONIMIACEAE	Tambourissa	*	12/03/2018	Amparafaravay	17°56'25,7"	49°20'09,5"	165
RAG_446	RUBIACEAE	Psychotria	*	12/03/2018	Alahambana	17°54'46,9"	49°19'04,0"	183
RAG_447	SALICACEAE	Calantica	*	12/03/2018	Alahambana	17°54'43,1"	49°19'03,9"	227
RAG_453	RUBIACEAE	Gaertnera	*	12/03/2018	Alahambana	17°54'41,1"	49°19'02,3"	212
RAG_455	ARECACEAE	Dypsis	*	12/03/2018	Alahambana	17°54'48,2"	49°19'01,7"	167
RAG_458	LOGANIACEAE	Strychnos	*	13/03/2018	Angodrogodroka	17°55'06,6"	49°19'17,4"	84
RAG_463	SALICACEAE	Ludia	*	13/03/2018	Ampasimadinika	17°55'05,4"	49°19'02,4"	71
RAG_464	SALICACEAE	Ludia	*	13/03/2018	Ampasimadinika	17°55'05,4"	49°19'02,4"	76
RAG_472	RUBIACEAE	Breonia	*	13/03/2018	Ampasimadinika	17°55'07,0"	49°18'49,8"	163
RAG_477	RUBIACEAE	Psychotria	*	13/03/2018	Alahambana	17°54'36,7"	49°19'04,5"	218
RBM_008	EUPHORBIACEAE	Orfilea	coriacea	12/11/2016	Angodro	17°56'03,3"	49°20'50,2"	278
RBM_009	HAMAMELIDACEAE	Dicoryphe	angustifolia	12/11/2016	Angodro	17°56'03,2"	49°11'50,5"	277
RBM_011	SAPOTACEAE	Mimusops	capuronii	12/11/2016	Angodro	17°56'04,0"	49°11'49,5"	276
RBM_012	MONIMIACEAE	Tambourissa	humbertii	16/11/2016	Manarivony	17°56'07,1"	49°11'08,3"	314
RBM_013	RUBIACEAE	Danais	*	16/11/2016	Manarivony	17°56'03,9"	49°11'07,3"	311
RBM_014	MALVACEAE	Dombeya	*	16/11/2016	Manarivony	17°56'08,8"	49°11'07,2"	317
RBM_015	OLEACEAE	Noronhia	gracilipes	16/11/2016	Manarivony	17°56'10,8"	49°11'08,5"	313
RBM_018	RUBIACEAE	Psychotria	bridsoniae	16/11/2016	Analavola	17°56'46,5"	49°11'47,3"	176
RBM_019	MALVACEAE	Nesogordonia	crassipes	16/11/2016	Analavola	17°56'42,0"	49°11'46,8"	178
RBM_020	DICHAPETALACEAE	Dichapetalum	madagascariense	11/12/2016	Ambotohaka	18°01'23,0"	49°06'56,1"	614
RBM_021	LAURACEAE	Cryptocarya	rigidifolia	11/12/2016	Zanaposa	18°01'19,0"	49°07'13,7"	616
RBM_022	HAMAMELIDACEAE	Dicoryphe	stipulacea	11/12/2016	Zanaposa	18°01'19,4"	49°07'13,2"	646
RBM_026	ASPHODELACEAE	Dianella	ensifolia	11/12/2016	Zanaposa	18°01'23,3"	49°07'13,6"	687
RBM_027	ANNONACEAE	Fenerivia	*	11/12/2016	Zanaposa	18°01'25,1"	49°07'12,6"	683
RBM_028	ARECACEAE	Dypsis	fibrosa	11/12/2016	Zanaposa	18°01'25,0"	49°07'12,9"	677
RBM_030	ANNONACEAE	Huberantha	*	11/12/2016	Zanaposa	18°01'26,5"	49°07'12,2"	651
RBM_031	MORACEAE	Streblus	dimepate	11/12/2016	Zanaposa	18°01'23,0"	49°06'54,4"	614

RBM_032	LOGANIACEAE	Strychnos	*	12/01/2017	Analambo	18°03'24,0"	49°20'26,1"	104
RBM_033	FABACEAE	Dialium	madagascariense	12/01/2017	Analambo	18°03'24,2"	49°20'26,0"	98
RBM_034	SAPINDACEAE	Doratoxylon	apetalum	12/01/2017	Analambo	18°03'24,2"	49°20'26,0"	98
RBM_036	SAPOTACEAE	Chrysophyllum	*	12/01/2017	Analambo	18°03'23,8"	49°20'26,0"	97
RBM_038	COMBRETACEAE	Combretum	*	12/01/2017	Analambo	18°03'25,7"	49°20'26,0"	96
RBM_039	OCHNACEAE	Campylospermum	anceps	12/01/2017	Analambo	18°03'25,6"	49°20'26,1"	96
RBM_040	OCHNACEAE	Ochna	polycarpa	12/01/2017	Analambo	18°03'26,9"	49°20'25,4"	95
RBM_043	RUBIACEAE	Coffea	richardii	12/01/2017	Analambo	18°03'26,8"	49°20'25,4"	99
RBM_044	CELASTRACEAE	Salacia	*	01/02/2017	Ambinanibikoka	18°01'28,1"	49°05'26,0"	484
RBM_045	LAURACEAE	Potameia	tomentella	01/02/2017	Ambinanibikoka	18°01'27,8"	49°05'26,1"	510
RBM_046	ANACARDIACEAE	Campnosperma	micranteia	01/02/2017	Ambinanibikoka	18°01'27,6"	49°05'25,8"	498
RBM_047	LAURACEAE	Cryptocarya	*	01/02/2017	Ambinanibikoka	18°01'28,1"	49°05'25,8"	495
RBM_048	SARCOLAENACEAE	Eremolaena	humblotiana	01/02/2017	Ambinanibikoka	18°01'27,9"	49°05'25,2"	505
RBM_049	PHYLLANTHACEAE	Uapaca	littoralis	01/02/2017	Ambinanibikoka	18°01'28,0"	49°05'25,5"	514
RBM_052	LAURACEAE	Ocotea	*	01/02/2017	Ambinanibikoka	18°01'27,7"	49°05'25,0"	511
RBM_055	APOCYNACEAE	Landolphia	*	01/02/2017	Ambinanibikoka	18°01'27,5"	49°05'25,2"	512
RBM_058	MALVACEAE	Grewia	rufostellata	01/02/2017	Ambinanibikoka	18°01'29,0"	49°05'21,8"	527
RBM_059	ANNONACEAE	*	*	01/02/2017	Ambinanibikoka	18°01'30,7"	49°05'21,5"	530
RBM_061	LAURACEAE	Ocotea	corethroides	01/02/2017	Ambinanibikoka	18°01'32,2"	49°05'21,3"	532
RBM_062	MENISPERMACEAE	Burasaia	madagascariensis	01/02/2017	Ambinanibikoka	18°01'32,2"	49°05'21,4"	533
RBM_064	RUBIACEAE	Breonia	*	01/02/2017	Ambinanibikoka	18°01'32,1"	49°05'21,8"	527
RBM_065	MONIMIACEAE	Tambourissa	*	01/02/2017	Ambinanibikoka	18°01'26,1"	49°05'26,6"	494
RBM_066	APOCYNACEAE	Landolphia	*	01/02/2017	Ambinanibikoka	18°01'25,9"	49°05'27,0"	497
RBM_068	MORACEAE	Trilepisium	madagascariense	05/02/2017	Ambavadilana	18°01'18,4"	49°05'41,6"	506
RBM_069	MORACEAE	Trilepisium	madagascariense	05/02/2017	Ambavadilana	18°01'17,8"	49°05'42,1"	500
RBM_070	ANNONACEAE	Xylopia	buxifolia	05/02/2017	Ambavadilana	18°01'17,7"	49°05'43,3"	518
RBM_072	PRIMULACEAE	Oncostemum	*	05/02/2017	Ambavadilana	18°01'17,0"	49°05'44,0"	538
RBM_073	MYRTACEAE	Syzygium	*	05/02/2017	Ambavadilana	18°01'15,8"	49°05'42,6"	533
RBM_074	ANNONACEAE	Xylopia	*	05/02/2017	Ambavadilana	18°01'15,8"	49°05'42,3"	529

RBM_076	CELASTRACEAE	Salacia	madagascariensis	05/02/2017	Ambavadilana	18°00'35,4"	49°07'10,8"	364
RBM_077	SAPOTACEAE	Sideroxylon	capuronii	10/03/2017	Lohanisahananto	17° 52' 52,6"	49° 13' 46"	390
RBM_078	POACEAE	Paspalum	paniculatum	10/03/2017	Lohanisahananto	17° 52' 50,2"	49° 13' 46"	429
RBM_079	POACEAE	Paspalum	scrobiculatum	10/03/2017	Lohanisahananto	17° 52' 48,7"	49° 13' 46"	433
RBM_080	POACEAE	Imperata	cylindrica	10/03/2017	Lohanisahananto	17° 52' 48,7"	49° 13' 46"	432
RBM_081	RUBIACEAE	Saldinia	*	10/03/2017	Anteviala	17° 52' 46,3"	49° 13' 46"	439
RBM_082	MORACEAE	Trilepisium	madagascariense	10/03/2017	Anteviala	17° 52' 47,7"	49° 13' 46"	430
RBM_083	SAPINDACEAE	Plagioscyphus	jumellei	10/03/2017	Anteviala	17° 52' 47,6"	49° 13′ 46″	445
RBM_087	CONNARACEAE	Rourea	minor	13/03/2017	Analavola	17° 52' 46,6"	49° 13' 46"	255
RBM_089	EBENACEAE	Diospyros	haplostylis	13/03/2017	Analavola	17° 52' 44,6"	49° 13' 46"	279
RBM_091	PRIMULACEAE	Embelia	madagascariensis	13/03/2017	Analavola	17° 52' 44,5"	49° 13' 46"	291
RBM_092	RUBIACEAE	Gaertnera	*	13/03/2017	Analavola	17° 52' 44,2"	49° 13' 46"	293
RBM_094	EBENACEAE	Diospyros	sp. Nov.	13/03/2017	Analavola	17° 52' 42,6"	49° 13' 46"	295
RBM_095	ERYTHROXYLACEAE	Erythroxylum	corymbosum	13/03/2017	Analavola	17° 52' 42,2"	49° 13' 46"	199
RBM_096	FABACEAE	Dialium	madagascariense	13/03/2017	Analavola	17° 52' 44,4"	49° 13' 46"	312
RBM_099	ARALIACEAE	Polyscias	chapelieri	13/03/2017	Analavola	17° 52' 42,1"	49° 13' 46"	328
RBM_100	EBENACEAE	Diospyros	*	13/03/2017	Analavola	17° 52' 42,3"	49° 13' 46"	317
RBM_101	CELASTRACEAE	Polycardia	phyllanthoides	13/03/2017	Analavola	17° 52' 41"	49° 13' 46"	340
RBM_103	ELAEOCARPACEAE	Elaeocarpus	subserratus	13/03/2017	Analavola	17° 52' 40,8"	49° 13' 46"	346
RBM_104	EBENACEAE	Diospyros	*	26/03/2017	Vohitrakoholahy	17° 57' 15,5"	49° 13' 46"	69
RBM_107	MALVACEAE	Grewia	*	26/03/2017	Vohitrakoholahy	17° 57' 19,7"	49° 13' 46"	105
RBM_108	ANNONACEAE	Fenerivia	*	26/03/2017	Analabe	17° 57' 18,8"	49° 13' 46"	102
RBM_110	RUBIACEAE	Coffea	richardii	26/03/2017	Analabe	17° 57' 24"	49° 13' 46"	121
RBM_111	CLUSIACEAE	Eliea	articulata	26/03/2017	Analabe	17° 57' 26,6"	49° 13' 46"	97
RBM_112	MALVACEAE	Nesogordonia	crassipes	26/03/2017	Analabe	17° 57' 28,4"	49° 13' 46"	73
RBM_113	Menispermaceae	Triclisia	*	28/03/2017	Analabe	17° 57' 37,4"	49° 13' 46"	117
RBM_114	ASPARAGACEAE	Dracaena	reflexa	28/03/2017	Analabe	17° 57' 22,8"	49° 13' 46"	103
RBM_119	RUBIACEAE	Psychotria	cephaloides	28/03/2017	Analabe	17° 57' 22,4"	49° 13' 46"	97
RBM_121	MALVACEAE	Grewia	*	28/03/2017	Analabe	17° 57' 22,4"	49° 13' 46"	93

RBM_122	ERYTHROXYLACEAE	Erythroxylum	*	27/04/2017	Ambinanivatovilany	17° 51' 24,3"	49° 13' 46"	227
RBM_123	BURSERACEAE	Canarium	betamponae	27/04/2017	Ambinanivatovilany	17° 51' 28,1"	49° 13' 46"	232
RBM_124	MORACEAE	Streblus	dimepate	27/04/2017	Ambinanivatovilany	17° 51' 27,1"	49° 13' 46"	236
RBM_125	MYRTACEAE	Syzygium	thouvenotii	27/04/2017	Ambinanivatovilany	17° 51' 26,3"	49° 13' 46"	245
RBM_126	PRIMULACEAE	Oncostemum	*	27/04/2017	Ambinanivatovilany	17° 51' 25,4"	49° 13' 46"	266
RBM_127	PRIMULACEAE	Oncostemum	*	27/04/2017	Ambinanivatovilany	17° 51' 25,8"	49° 13' 46"	269
RBM_128	MORACEAE	Trilepisium	madagascariense	27/04/2017	Ambinanivatovilany	17° 51' 26,9"	49° 13' 46"	241
RBM_133	ARALIACEAE	Polyscias	pentamera	29/04/2017	Ankorakely	17° 51' 16,2"	49° 13' 46"	273
RBM_134	RUBIACEAE	Psychotria	onivensis	29/04/2017	Ankorakely	17° 51' 17,0"	49° 13' 46"	271
RBM_135	ARALIACEAE	Polyscias	chapelieri	29/04/2017	Ankorakely	17° 51' 16,9"	49° 13' 46"	273
RBM_136	ERYTHROXYLACEAE	Erythroxylum	*	29/04/2017	Ankorakely	17° 51' 17,3"	49° 13' 46"	294
RBM_137	ANACARDIACEAE	Abrahamia	ditimena	29/04/2017	Ankorakely	17° 51' 16,9"	49° 13' 46"	307
RBM_139	RUBIACEAE	Tarenna	thouarsiana	02/05/2017	Vohitralanana	17° 51' 58,8"	49° 13' 46"	241
RBM_140	ERYTHROXYLACEAE	Erythroxylum	*	02/05/2017	Vohitralanana	17° 51' 57,8"	49° 13' 46"	258
RBM_141	MONIMIACEAE	Tambourissa	*	02/05/2017	Vohitralanana	17° 51' 57,9"	49° 13' 46"	252
RBM_142	ARALIACEAE	Polyscias	pentamera	02/05/2017	Vohitralanana	17° 51' 58,7"	49° 13' 46"	266
RBM_143	PRIMULACEAE	Oncostemum	*	02/05/2017	Vohitralanana	17° 51' 57,7"	49° 13' 46"	295
RBM_144	EUPHORBIACEAE	Thecacoris	*	02/05/2017	Vohitralanana	17° 51' 58,4"	49° 13' 46"	296
RBM_146	ERYTHROXYLACEAE	Erythroxylum	*	06/05/2017	Andilamena	17° 51' 27,3"	49° 13' 46"	238
RBM_147	RUBIACEAE	Tricalysia	orientalis	06/05/2017	Andilamena	17° 51' 26,5"	49° 13' 46"	245
RBM_148	POACEAE	Olyra	latifolia	06/05/2017	Andilamena	17° 51' 25,6"	49° 13' 46"	242
RBM_153	Connaraceae	Ellipanthus	madagascariensis	06/05/2017	Sahabefody	17° 51' 24,7"	49° 13' 46"	262
RBM_155	BIGNONIACEAE	Rhodocolea	*	06/05/2017	Sahabefody	17° 51' 25,3"	49° 13' 46"	257
RBM_156	RUBIACEAE	Bremeria	hymenopogonoides	20/05/2017	Ambodivoromboronana	18°01'32,7"	49°05'36,8"	586
RBM_157	RUBIACEAE	Psychotria	*	20/05/2017	Ambodivoromboronana	18°01'35,5"	49°05'35,4"	593
RBM_158	PITTOSPORACEAE	Pittosporum	ochrosiifolium	20/05/2017	Ambodivoromboronana	18°01'35,7"	49°05'35,3"	591
RBM_159	RUBIACEAE	Psychotria	*	20/05/2017	Ambodivoromboronana	18°01'40,9"	49°05'35,6"	608
RBM_160	ARECACEAE	Dypsis	*	20/05/2017	Ambodivoromboronana	18°01'42,8"	49°05'35"	582
RBM_161	RUBIACEAE	Bertiera	crinita	20/05/2017	Ambodivoromboronana	18°01'42,9"	49°05'36,7"	592

RBM_163	RUBIACEAE	Mussaenda	arcuata	20/05/2017	Ambodivoromboronana	18°01'40,2"	49°05'42,8"	520
RBM_164	MYRTACEAE	Syzygium	*	20/05/2017	Ambodivoromboronana	18°01'40,6"	49°05'43,5"	516
RBM_165	SALICACEAE	*	*	20/05/2017	Ambodivoromboronana	18°01'41,9"	49°05'46,4"	523
RBM_166	PRIMULACEAE	Embelia	madagascariensis	22/05/2017	Antanetinambatoharanana	18°01'52,9"	49°05'18,4"	691
RBM_167	MELIACEAE	Trichilia	*	22/05/2017	Antanetinambatoharanana	18°01'58,9"	49°05'19,4"	754
RBM_168	MELIACEAE	Astrotrichilia	parvifolia	22/05/2017	Antanetinambatoharanana	18°01'58,8"	49°05'19,6"	755
RBM_169	ARECACEAE	Dypsis	fibrosa	22/05/2017	Antanetinambatoharanana	18°01'59"	49°05'21,2"	739
RBM_170	ARECACEAE	Dypsis	*	22/05/2017	Antanetinambatoharanana	18°01'59"	49°05'21,2"	739
RBM_171	CLUSIACEAE	Garcinia	*	22/05/2017	Antanetinambatoharanana	18°01'44,1"	49°05'28,3"	641
RBM_174	EUPHORBIACEAE	*	*	26/05/2017	Anjinjavola	17°56'08,9"	49°11'08,2"	302
RBM_175	SAPINDACEAE	Plagioscyphus	jumellei	26/05/2017	Anjinjavola	17°56'08,8"	49°11'08,4"	299
RBM_176	RUBIACEAE	*	*	26/05/2017	Anjinjavola	17°56'08,8"	49°11'08,4"	299
RBM_180	RUBIACEAE	Gallienia	sclerophylla	26/07/2017	Vohitsitondroina	17°57'12,0"	49°04'04,3"	757
RBM_181	ARECACEAE	Dypsis	angustifolia	26/07/2017	Vohitsitondroina	17°57'12,0"	49°04'04,4"	756
RBM_186	MELIACEAE	Astrotrichilia	voamatata	26/07/2017	Vohitsitondroina	17°57'10,6"	49°04'02,8"	789
RBM_187	RUBIACEAE	Psychotria	pachygrammata	26/07/2017	Vohitsitondroina	17°57'10,1"	49°04'02,6"	787
RBM_192	ARALIACEAE	Polyscias	*	26/07/2017	Vohitsitondroina	17°57'08,1"	49°04'03,8"	804
RBM_198	RUBIACEAE	Tarenna	uniflora	29/07/2017	Vohitsitondroina	17°57'02,3"	49°04'10,1"	826
RBM_207	MAESACEAE	Maesa	lanceolata	31/07/2017	Itaolana	17°57'31,7"	49°03'52,3"	713
RBM_211	MORACEAE	Ficus	tiliifolia	31/07/2017	Itaolana	17°57'43,0"	49°03'51,6"	752
RBM_212	FABACEAE	Clitoria	lasciva	04/08/2017	Vohitrambo	17°56'02,4"	49°05'15,9"	328
RBM_213	MALVACEAE	Grewia	cuneifolia	04/08/2017	Vohitrambo	17°55'57,3"	49°05'00,8"	628
RBM_214	RUBIACEAE	Psychotria	pachygrammata	04/08/2017	Vohitrambo	17°55'57,0"	49°04'59,4"	646
RBM_215	EBENACEAE	Diospyros	lokohensis	04/08/2017	Vohitrambo	17°55'56,8"	49°04'59,3"	647
RBM_223	FABACEAE	Dalbergia	bathiei	23/09/2017	Angodrogodroka	17°55'07,4"	49°19'11,4"	79
RBM_227	MONIMIACEAE	Tambourissa	uapacifolia	23/09/2017	Angodrogodroka	17°55'01,8"	49°19'15,2"	106
RBM_229	ARECACEAE	Dypsis	angustifolia	23/09/2017	Angodrogodroka	17°55'07,0"	49°19'20,8"	67
RBM_231	ERYTHROXYLACEAE	Erythroxylum	nitidulum	23/09/2017	Angodrogodroka	17°55'06,6"	49°19'20,1"	73
RBM_234	MELASTOMATACEAE	Memecylon	perangustum	23/09/2017	Angodrogodroka	17°55'05,9"	49°19'19,1"	79

RBM_235	MORACEAE	Ficus	tiliifolia	23/09/2017	Angodrogodroka	17°55'06,5"	49°19'20,3"	75
RBM_236	ARALIACEAE	Polyscias	chapelieri	23/09/2017	Angodrogodroka	17°55'06,6"	49°19'20,3"	75
RBM_239	LOGANIACEAE	Strychnos	trichoneura	23/09/2017	Angodrogodroka	17°55'02,7"	49°19'14,5"	97
RBM_240	CONNARACEAE	Ellipanthus	madagascariensis	23/09/2017	Angodrogodroka	17°55'01,2"	49°19'17,3"	122
RBM_243	RUBIACEAE	Psychotria	pachygrammata	23/09/2017	Angodrogodroka	17°55'04,3"	49°19'15,3"	94
RBM_246	APOCYNACEAE	Stephanotis	grandiflora	23/09/2017	Angodrogodroka	17°55'04,0"	49°19'15,3"	117
RBM_247	ASPARAGACEAE	Dracaena	reflexa	27/09/2017	Ampasimadinika	17°55'05,4"	49°18'59,2"	132
RBM_248	RUBIACEAE	Saldinia	axillaris	27/09/2017	Ampasimadinika	17°55'05,8"	49°18'59,1"	110
RBM_249	FABACEAE	Dialium	unifoliolatum	27/09/2017	Ampasimadinika	17°55'04,7"	49°18'56,4"	113
RBM_250	SAPOTACEAE	Chrysophyllum	perrieri	27/09/2017	Ampasimadinika	17°55'04,9"	49°18'54,5"	114
RBM_251	MELASTOMATACEAE	Memecylon	clavistaminum	27/09/2017	Ampasimadinika	17°55'04,8"	49°18'54,5"	122
RBM_255	PHYSENACEAE	Physena	madagascariensis	27/09/2017	Ampasimadinika	17°55'06,7"	49°18'49,9"	158
RBM_257	MYRTACEAE	Syzygium	bernieri	27/09/2017	Ampasimadinika	17°55'12,5"	49°18'46,5"	152
RBM_258	MONIMIACEAE	Tambourissa	purpurea	27/09/2017	Ampasimadinika	17°55'14,5"	49°18'50,8"	98
RBM_259	SARCOLAENACEAE	Schizolaena	*	29/09/2017	Alahambana	17°54'49,4'	49°19'03,5"	169
RBM_261	MORACEAE	Ficus	politoria	29/09/2017	Alahambana	17°54'49,2"	49°19'03,2"	168
RBM_263	SALICACEAE	Scolopia	scolopioides	29/09/2017	Alahambana	17°54'47,1"	49°19'04,4"	187
RBM_264	ANACARDIACEAE	Poupartia	orientalis	29/09/2017	Alahambana	17°54'46,5"	49°19'05,4"	176
RBM_266	ARECACEAE	Dypsis	hildebrandtii	29/09/2017	Alahambana	17°54'41,4"	49°19'07,1"	167
RBM_267	FABACEAE	Abrus	precatorius	29/09/2017	Alahambana	17°54'37,3"	49°19'02,3"	185
RBM_268	ANACARDIACEAE	Poupartia	chapelieri	29/09/2017	Alahambana	17°54'45,3"	49°19'08,8"	204
RBM_271	SAPINDACEAE	Beguea	*	30/10/2017	Andilamboalavo	17°57'17,8"	49°20'15,9"	142
RBM_274	EBENACEAE	Diospyros	*	30/10/2017	Andilamboalavo	17°57'16,7"	49°20'15,7"	132
RBM_276	PROTEACEAE	Dilobeia	*	30/10/2017	Andilamboalavo	17°57'17,9"	49°20'17,3"	138
RBM_277	CALOPHYLLACEAE	Calophyllum	*	30/10/2017	Andilamboalavo	17°57'17,4"	49°20'19,0"	152
RBM_278	MYRISTICACEAE	Brochoneura	*	01/11/2017	Andilamboalavo	17°57'13,2"	49°20'17,5"	115
RBM_280	MELIACEAE	Astrotrichilia	*	01/11/2017	Andilamboalavo	17°57'13,9"	49°20'24,2"	143
RBM_282	SAPOTACEAE	Mimusops	*	03/11/2017	Amparafaravahy	17°56'21,1"	49°20'20,3"	136
RBM_285	SALICACEAE	Scolopia	*	03/11/2017	Amparafaravahy	17°56'20,8"	49°20'19,1"	148

RBM_286	CALOPHYLLACEAE	Calophyllum	*	03/11/2017	Amparafaravahy	17°56'23,4"	49°20'18,6"	131
RBM_287	COMBRETACEAE	Terminalia	*	03/11/2017	Amparafaravahy	17°56'23,7"	49°20'17,3"	126
RBM_291	OLEACEAE	Noronhia	*	06/11/2017	Alaratsy	17°54'43,5"	49°19'54,7"	97
RBM_292	PHYLLANTHACEAE	Uapaca	*	06/11/2017	Alaratsy	17°54'43,2"	49°19'55,1"	92
RBM_293	MORACEAE	Trilepisium	*	06/11/2017	Alaratsy	17°54'43,2"	49°19'55,1"	91
RBM_294	RUBIACEAE	Ixora	*	06/11/2017	Alaratsy	17°54'43,3"	49°19'55,0"	91
RBM_295	RUBIACEAE	Pyrostria	*	06/11/2017	Alaratsy	17°54'42,3"	49°19'55,6"	92
RBM_296	EBENACEAE	Diospyros	*	06/11/2017	Alaratsy	17°54'41,4"	49°19'56,1"	94
RBM_297	EBENACEAE	Diospyros	*	06/11/2017	Alaratsy	17°54'41,5"	49°19'55,2"	91
RBM_298	EUPHORBIACEAE	Anthostema	*	06/11/2017	Alaratsy	17°54'41,5"	49°19'56,1"	90
RBM_299	SAPOTACEAE	Mimusops	*	06/11/2017	Menagisa	17°55'19,3"	49°19'43,3"	43
RBM_301	HAMAMELIDACEAE	Dicoryphe	*	06/11/2017	Menagisa	17°55'19,2"	49°19'43,2"	47
RBM_302	MYRTACEAE	Syzygium	*	08/11/2017	Angodrogodroka	17°55'07,3"	49°19'19,7"	65
RBM_304	APOCYNACEAE	*	*	08/11/2017	Angodrogodroka	17°55'07,0"	49°19'20,6"	67
RBM_309	MONIMIACEAE	Tambourissa	*	08/11/2017	Angodrogodroka	17°55'05,8"	49°19'21,7"	91
RBM_313	LAURACEAE	Cryptocarya	*	08/11/2017	Angodrogodroka	17°55'02,5"	49°19'21,4"	109
RBM_315	RUBIACEAE	Coffea	*	10/11/2017	Alahambana	17°54'46,4"	49°18'59,9"	185
RBM_316	HAMAMELIDACEAE	Dicoryphe	*	10/11/2017	Alahambana	17°54'48,9"	49°18'59,9"	175
RBM_318	ANNONACEAE	Annona	*	13/11/2017	Ambinanimenavato	17°54'56,6"	49°18'38,9"	145
RBM_320	MORACEAE	Treculia	*	13/11/2017	Ambinanimenavato	17°54'56,8"	49°18'39,0"	144
RBM_325	ANACARDIACEAE	Poupartia	*	13/11/2017	Ambinanimenavato	17°54'55,9"	49°18'38,5"	148
RBM_332	ICACINACEAE	*	*	10/02/2018	Vohitrandiana	18°02'12,1"	49°12'43,6"	299
RBM_342	SAPOTACEAE	Mimusops	*	13/02/2018	Mahatalanjona	18°00'25,9"	49°12'35,4"	161
RBM_345	PHYLLANTHACEAE	Uapaca	*	13/02/2018	Mahatalanjona	18°00'25,1"	49°12'36,3"	171
RBM_347	MORACEAE	Streblus	*	13/02/2018	Mahatalanjona	18°00'25,8"	49°12'35,4"	170
RBM_349	MONIMIACEAE	Tambourissa	*	13/02/2018	Mahatalanjona	18°00'25,2"	49°12'35,4"	167
RBM_359	DILLENIACEAE	Dillenia	triquetra	13/02/2018	Mahatalanjona	18°00'27,8"	49°12'37,1"	171
RBM_360	BIGNONIACEAE	Rhodocolea	*	13/02/2018	Mahatalanjona	18°00'27,5"	49°12'38,3"	169
RBM_367	ARECACEAE	Dypsis	*	13/02/2018	Mahatalanjona	18°00'29,5"	49°12'37,2"	163

RBM_368	MONIMIACEAE	Tambourissa	*	13/02/2018	Mahatalanjona	18°00'29,6"	49°12'37,5"	157
RBM_371	RUBIACEAE	Craterispermum	*	15/02/2018	Mahatalanjona	18°00'30,2"	49°12'43,3"	178
RBM_372	ANNONACEAE	Xylopia	*	15/02/2018	Mahatalanjona	18°00'28,8"	49°12'43,5"	182
RBM_376	OCHNACEAE	Ouratea	*	15/02/2018	Mahatalanjona	18°00'27,1"	49°12'46,0"	191
RBM_377	MORACEAE	Trilepisium	*	15/02/2018	Mahatalanjona	18°00'23,8"	49°12'46,4"	202
RBM_378	ARECACEAE	Dypsis	*	15/02/2018	Mahatalanjona	18°00'23,4"	49°12'45,6"	215
RBM_380	ARALIACEAE	Polyscias	*	15/02/2018	Mahatalanjona	18°00'25,2"	49°12'43,2"	221
RBM_386	SALICACEAE	Ludia	*	18/02/2018	Analabe	18°02'14,1"	49°14'15,7"	169
RBM_403	MENISPERMACEAE	*	*	18/02/2018	Analabe	18°02'13,3"	49°14'15,1"	175
RBM_404	MENISPERMACEAE	Strychnopsis	*	18/02/2018	Analabe	18°02'12,9"	49°14'17,2"	158
RBM_407	RUTACEAE	Zanthoxylum	*	18/02/2018	Analabe	18°02'05,8"	49°14'20,2"	163
RBM_416	MONIMIACEAE	Tambourissa	*	20/02/2018	Alaratsy	18°02'26,9"	49°14'32,4"	196
RMS_ 040	ANACARDIACEAE	*	*	13/12/2016	Lohaniambotoaka	18°01'20,4"	049°06'33,7"	598
RMS_ 041	VITACEAE	Cissus	floribunda	29/01/2017	Analamasina	17° 59' 22,1"	49° 06' 58,8"	287
RMS_ 042	EBENACEAE	Diospyros	sp nov.	29/01/2017	Analamasina	17° 59' 21,9	49° 06' 58,7"	293
RMS_ 043	MORACEAE	Trilepisium	madagascariense	29/01/2017	Analamasina	17° 59' 21,9"	49° 06' 58,6"	300
RMS_ 044	CALOPHYLLACEAE	Mammea	bongo	29/01/2017	Analamasina	17° 59' 21,4"	49° 06' 58,5"	305
RMS_ 049	CONNARACEAE	Agelaea	thouarsiana	29/01/2017	Analamasina	17° 59' 20,6"	49° 06' 59,7"	323
RMS_ 052	MORACEAE	Trophis	montana	29/01/2017	Analamasina	17° 59' 20,7"	49° 06' 57,3"	300
RMS_ 053	BURSERACEAE	Canarium	betamponae	29/01/2017	Analamasina	17° 59' 17,8"	49° 06' 57,0"	285
RMS_ 054	MORACEAE	Trilepisium	madagascariense	29/01/2017	Analamasina	17° 59' 17,9"	49° 06' 57,1"	285
RMS_ 055	APHLOIACEAE	Aphloia	theiformis	03/02/2017	Ambavadilana	18° 01' 18,2"	49° 05' 40,3"	503
RMS_ 056	CYPERACEAE	Mapania	mauritiana	03/02/2017	Ambavadilana	18° 01' 17,8"	49° 05' 39,9"	498
RMS_ 058	ARECACEAE	Dypsis	schatzii	03/02/2017	Ambavadilana	18° 01' 16,9"	49° 05' 42,2"	517
RMS_ 060	RUTACEAE	Vepris	fitoravina	03/02/2017	Ambavadilana	18° 01' 15,6"	49° 05' 40,6"	510
RMS_ 061	RUBIACEAE	Saldinia	axillaris	03/02/2017	Ambavadilana	18° 01' 16,1"	49° 05' 40,5"	497
RMS_ 062	LAURACEAE	Cryptocarya	polyneura	03/02/2017	Ambavadilana	18° 01' 16,7"	49° 05' 41,2"	514
RMS_ 063	MALVACEAE	Grewia	thouvenotii	03/02/2017	Ambavadilana	18° 01' 16,5"	49° 05′ 41,3″	511
RMS_ 064	ERYTHROXYLACEAE	Erythroxylum	*	03/02/2017	Ambavadilana	18° 01' 15,9"	49° 05' 41,9"	548

RMS_ 067	MORACEAE	Ficus	politoria	03/02/2017	Ambavadilana	18° 01' 14,9"	49° 05′ 42,3″	534
RMS_ 068	DICHAPETALACEAE	Dichapetalum	pachypus	03/02/2017	Ambavadilana	18° 01' 14,7"	49° 05' 42,3"	536
RMS_ 070	CLUSIACEAE	Garcinia	chapelieri	03/02/2017	Ambavadilana	18° 01' 14,9"	49° 05' 41,5"	508
RMS_ 072	MORACEAE	Ficus	tiliifolia	03/02/2017	Ambavadilana	18° 01' 13,8"	49° 05' 37,8"	496
RMS_ 073	LAURACEAE	Cryptocarya	*	03/02/2017	Ambavadilana	18° 01' 14,0"	49° 05' 37,7"	488
RMS_ 074	HAMAMELIDACEAE	Dicoryphe	macrophylla	03/02/2017	Ambavadilana	18° 01' 14,4"	49° 05' 37,8"	491
RMS_ 075	CELASTRACEAE	Elaeodendron	*	03/02/2017	Ambavadilana	18° 01' 14,5"	49° 05' 38,0"	492
RMS_ 076	MORACEAE	Ficus	politoria	07/02/2017	Bisifika	18° 01' 29,6"	49° 05' 15,5"	542
RMS_ 077	HAMAMELIDACEAE	Dicoryphe	macrophylla	07/02/2017	Bisifika	18° 01' 29,8"	49° 05' 15,5"	549
RMS_ 078	MELASTOMATACEAE	Dichaetanthera	oblongifolia	07/02/2017	Bisifika	18° 01' 29,7"	49° 05' 15,5"	543
RMS_ 079	PHYLLANTHACEAE	Uapaca	littoralis	07/02/2017	Bisifika	18° 01' 30,7"	49° 05' 15,2"	548
RMS_ 080	POACEAE	Paspalum	paniculatum	07/02/2017	Bisifika	18° 01' 30,7"	49° 05' 15,1"	552
RMS_ 083	ONAGRACEAE	Ludwigia	octovalvis	07/02/2017	Bisifika	18° 01' 35,7"	49° 05' 20,6"	550
RMS_ 085	BURSERACEAE	Canarium	betamponae	06/03/2017	Marovato	17° 53' 13,6"	49° 13' 58,4"	220
RMS_ 086	ARECACEAE	Ravenea	sambiranensis	06/03/2017	Andriambôla	17° 53′ 5,1″	49° 13' 53,4"	270
RMS_ 087	RUBIACEAE	Hyperacanthus	talangninia	06/03/2017	Andriambôla	17° 53' 4,5"	49° 13' 54,4"	275
RMS_ 088	RUBIACEAE	Peponidium	pallens	06/03/2017	Andriambôla	17° 53' 3,2"	49° 13' 54,5"	303
RMS_ 091	EBENACEAE	Diospyros	*	11/03/2017	Ambinanisahavatana	17° 53' 30,7"	49° 14' 26"	196
RMS_ 093	OCHNACEAE	Campylospermum	anceps	12/03/2017	Analaratsy	17° 53′ 1,8″	49° 15' 40"	174
RMS_ 094	ERYTHROXYLACEAE	Erythroxylum	pruinosum	12/03/2017	Analaratsy	17° 53' 1,6"	49° 15' 40"	174
RMS_ 095	RUBIACEAE	Gaertnera	robusta	12/03/2017	Analaratsy	17° 53' 1,8"	49° 15' 40,3"	*
RMS_ 096	MYRTACEAE	Syzygium	mortonianum	12/03/2017	Analaratsy	17° 53′ 1,6″	49° 15' 40,3"	*
RMS_ 098	RUBIACEAE	Chassalia	*	12/03/2017	Vohidrofito	17° 52' 52,2"	49° 15' 59,7"	385
RMS_ 100	LEEACEAE	Leea	guineensis	12/03/2017	Vohidrofito	17° 52' 49,3"	49° 16' 1,2"	407
RMS_ 101	BURSERACEAE	Canarium	lamianum	12/03/2017	Vohidrofito	17° 52' 44,8"	49° 16' 2,4"	391
RMS_ 102	LOGANIACEAE	Strychnos	trichoneura	12/03/2017	Vohidrofito	17° 52' 44"	49° 15′ 59,2″	372
RMS_ 104	RUBIACEAE	Gaertnera	guillotii	12/03/2017	Vohidrofito	17° 52' 52,2"	49° 15′ 59,7″	385
RMS_ 105	XYRIDACEAE	Xyris	anceps	25/03/2017	Ambodihasina	17° 57' 52,7"	49° 19' 2"	46
RMS_ 106	EUPHORBIACEAE	Tannodia	obovata	25/03/2017	Vohitravao	17° 57' 50,1"	49° 19' 32,5"	117

RMS_ 107	OCHNACEAE	Campylospermum	anceps	25/03/2017	Vohitravao	17° 57' 50,2"	49° 19' 33,5"	112
RMS_ 109	ARECACEAE	Dypsis	schatzii	25/03/2017	Vohitravao	17° 57' 51,1"	49° 19' 33,3"	134
RMS_ 112	RUBIACEAE	Peponidium	orientale	25/03/2017	Vohitravao	17° 57' 52,6"	49° 19' 34,6"	131
RMS_ 113	ERYTHROXYLACEAE	Erythroxylum	*	25/03/2017	Vohitravao	17° 57' 54,5"	49° 19' 36,4"	157
RMS_ 114	MYRISTICACEAE	Mauloutchia	chapelieri	25/03/2017	Vohitravao	17° 57' 55,5"	49° 19' 38,8"	190
RMS_ 115	RUBIACEAE	Coffea	richardii	25/03/2017	Vohitravao	17° 57' 55,5"	49° 19' 38,8"	190
RMS_ 116	EUPHORBIACEAE	Anthostema	madagascariense	25/03/2017	Vohitravao	17° 57' 55,4"	49° 19' 39"	190
RMS_ 118	RUBIACEAE	Psychotria	*	27/03/2017	Ambodivoahangy	17° 56' 58,7"	49° 19' 51,4"	152
RMS_ 119	ERYTHROXYLACEAE	Erythroxylum	*	27/03/2017	Ambodivoahangy	17° 56' 58,7"	49° 19' 51,3"	153
RMS_ 120	MALVACEAE	Grewia	cuneifolia	27/03/2017	Ambodivoahangy	17° 56' 58,7"	49° 19' 51,4"	152
RMS_ 121	MYRTACEAE	Syzygium	*	27/03/2017	Ambodivoahangy	17° 56' 58,8"	49° 19' 50,5"	152
RMS_ 122	ARALIACEAE	Polyscias	*	27/03/2017	Ambodivoahangy	17° 56' 58,7"	49° 19' 50,5"	157
RMS_ 125	BURSERACEAE	Canarium	scholasticum	27/03/2017	Ambodivoahangy	17° 56' 59"	49° 19' 48,7"	156
RMS_ 126	ARECACEAE	Ravenea	julietiae	27/03/2017	Ambodivoahangy	17° 57' 0,1"	49° 19' 47"	128
RMS_ 127	EBENACEAE	Diospyros	haplostylis	29/03/2017	Vohitravao	17° 57' 54,1"	49° 19' 29,5"	114
RMS_ 128	MYRTACEAE	Syzygium	parkeri	29/03/2017	Vohitravao	17° 57' 54,3"	49° 19' 30,6"	113
RMS_007	PHYLLANTHACEAE	Uapaca	densifolia	09/11/2016	Analamaimbo	17°55'00.0"	049°13'17,3"	84
RMS_008	BURSERACEAE	Canarium	betamponae	09/11/2016	Analamaimbo	17°55'59.5"	049°13'17,5"	100
RMS_009	MELIACEAE	Malleastrum	gracile	09/11/2016	Analamaimbo	17°55'59.3"	049°13'17,1"	88
RMS_010	ARECACEAE	Dypsis	lastelliana	09/11/2016	Analamaimbo	17°55'59.3"	049°13'10,0"	88
RMS_013	PHYSENACEAE	Physena	madagascariensis	09/11/2016	Analamaimbo	17°55'58.8"	049°13'20,3"	81
RMS_014	CLUSIACEAE	Garcinia	commersonii	09/11/2016	Analamaimbo	17°55'58.3"	049°13'20,5"	80
RMS_015	ANNONACEAE	Xylopia	*	14/11/2016	Vohidakatra	17°56'45.1"	049°12'34,0"	294
RMS_017	CLUSIACEAE	Garcinia	orthoclada	09/12/2016	lambotoaka	18°01'16.5"	049°06'51,1"	548
RMS_018	PROTEACEAE	Dilobeia	thouarsii	09/12/2016	lambotoaka	18°01'14.5"	049°06'51,9"	558
RMS_020	RUBIACEAE	Mussaenda	arcuata	09/12/2016	lambotoaka	18°01'13.7"	049°06'53,4"	572
RMS_023	ARECACEAE	Orania	*	09/12/2016	lambotoaka	18°01'10.5"	049°06'53,0"	535
RMS_026	MELASTOMATACEAE	Gravesia	*	09/12/2016	lambotoaka	18°01'11,9"	049°06'52,4"	560
RMS_027	MORACEAE	Treculia	madagascarica	09/12/2016	lambotoaka	18°01'12,8"	049°06'52,1"	559

RMS_028	MALVACEAE	Byttneria	melleri	13/12/2016	Lohaniambotoaka	18°01'15,3"	049°06'46,0"	548
RMS_029	ASTERACEAE	Vernonia	*	13/12/2016	Lohaniambotoaka	18°01'13,2"	049°06'42,2"	592
RMS_033	ARALIACEAE	Polyscias	fraxinifolia	13/12/2016	Lohaniambotoaka	18°01'11,2"	049°06'42,0"	573
RMS_034	MALVACEAE	Hildegardia	perrieri	13/12/2016	Lohaniambotoaka	18°01'10,5"	049°06'43,0"	579
RMS_035	MALVACEAE	Dombeya	*	13/12/2016	Lohaniambotoaka	18°01'18,8"	049°06'38,7"	630
RMS_037	ACANTHACEAE	Mendoncia	*	13/12/2016	Lohaniambotoaka	18°01'19,9"	049°06'37,0"	623
RMS_038	PRIMULACEAE	Oncostemum	*	13/12/2016	Lohaniambotoaka	18°01'19,6"	049°06'35,5"	630
RMS_132	MYRICACEAE	Morella	spathulata	27/04/2017	Ampasimpotsy	17°51'37.6"	049°13'06.5"	273
RMS_134	MORACEAE	Streblus	dimepate	27/04/2017	Ampasimpotsy	17°51'34.4"	049°12'50.3"	280
RMS_135	MYRTACEAE	Syzygium	thouvenotii	27/04/2017	Ampasimpotsy	17°51'33.4"	049°12'50.2"	283
RMS_136	RUBIACEAE	Coptosperma	*	27/04/2017	Ampasimpotsy	17°51'30.6"	049°12'46.3"	286
RMS_137	MARANTACEAE	Marantochloa	comorensis	27/04/2017	Ampasimpotsy	17°51'34.9"	049°12'38.3"	304
RMS_138	POACEAE	Megastachya	madagascariensis	27/04/2017	Ampasimpotsy	17°51'37.7"	049°12'40.3"	340
RMS_139	ARECACEAE	Dypsis	turkii	27/04/2017	Ampasimpotsy	17°51'36.9"	049°12'41.1"	358
RMS_140	RUBIACEAE	Tricalysia	orientalis	27/04/2017	Ampasimpotsy	17°51'33.9"	049°12'41.1"	339
RMS_142	MONIMIACEAE	Tambourissa	purpurea	29/04/2017	Antaranarina	17°51'30.4"	049°13'41.2"	223
RMS_143	PRIMULACEAE	Oncostemum	*	29/04/2017	Antaranarina	17°51'18.2"	049°13'42.1"	211
RMS_144	RUBIACEAE	Psychotria	cephaloides	29/04/2017	Antaranarina	17°51'17.9"	049°13'41.8"	214
RMS_146	BURSERACEAE	Canarium	lamianum	29/04/2017	Vohitralanana	17°51'04.4"	049°13'47.1"	282
RMS_147	FABACEAE	Dialium	madagascariense	29/04/2017	Vohitralanana	17°51'04.3"	049°13'47.8"	304
RMS_148	RUBIACEAE	Psychotria	decaryi	29/04/2017	Vohitralanana	17°51'01.5"	049°13'52.6"	298
RMS_150	MYRTACEAE	Syzygium	*	29/04/2017	Vohitralanana	17°51'06.0"	049°13'43.1"	248
RMS_151	EBENACEAE	Diospyros	pervilleana	29/04/2017	Vohitralanana	17°51'06.3"	049°13'43.1"	226
RMS_153	CONNARACEAE	Rourea	minor	25/02/2017	Vohitralanana	17°50'52.3"	049°13'48.7"	218
RMS_156	ERYTHROXYLACEAE	Erythroxylum	*	25/02/2017	Vohitralanana	17°50'48.8"	049°13'49.9"	231
RMS_161	RUBIACEAE	Psychotria	sonocorova	06/05/2017	Ambohikarabo	17°51'40.2"	049°12'23.0"	255
RMS_164	RUBIACEAE	Psychotria	rakotoniaina	06/05/2017	Ambohikarabo	17°51'36.5"	049°12'21.3"	312
RMS_168	CARDIOPTERIDACEAE	Leptaulus	citrioides	06/05/2017	Ambohikarabo	17°51'33.3"	049°12'30.1"	244
RMS_169	RUBIACEAE	Psychotria	manampanihensis	21/05/2017	Ambatoharanana	18°01'31.4"	049°04'59.4"	675

RMS_170	MALVACEAE	Grewia	*	21/05/2017	Ambatoharanana	18°01'30.3"	049°04'58.4"	692
RMS_171	ARALIACEAE	Polyscias	*	21/05/2017	Ambatoharanana	18°01'30.5"	049°04'48.6"	796
RMS_172	ARECACEAE	Dypsis	procera	21/05/2017	Ambatoharanana	18°01'31.7"	049°04'48.8"	805
RMS_173	RUBIACEAE	Psychotria	integristipulata	23/05/2017	Ambatoharanana	18°01'21.5"	049°05'05.4"	663
RMS_174	RUBIACEAE	Flagenium	*	23/05/2017	Ambatoharanana	18°01'19.9"	049°05'05.4"	705
RMS_175	RUBIACEAE	Psychotria	pachygrammata	23/05/2017	Ambatoharanana	18°01'19.0"	049°05'01.8"	754
RMS_176	ELAEOCARPACEAE	Sloanea	rhodantha	23/05/2017	Ambatoharanana	18°01'19.0"	049°05'01.8"	754
RMS_177	CLUSIACEAE	Psorospermum	chionanthifolium	23/05/2017	Ambatoharanana	18°01'14.3"	049°04'57.8"	816
RMS_178	EBENACEAE	Diospyros	*	23/05/2017	Ambatoharanana	18°01'13.3"	049°04'56.2"	847
RMS_179	CHRYSOBALANACEAE	Magnistipula	cerebriformis	23/05/2017	Ambatoharanana	18°01'13.4"	049°04'55.9"	854
RMS_184	RUBIACEAE	Tarenna	vel sp nov	18/06/2017	Ambakaka	17°52'25.5"	049°10'22.7"	317
RMS_185	ARECACEAE	Dypsis	angustifolia	18/06/2017	Ambakaka	17°52'24.8"	049°10'25.7"	315
RMS_188	ARALIACEAE	Polyscias	chapelieri	18/06/2017	Ambakaka	17°52'22.5"	049°10'26.7"	333
RMS_190	RUBIACEAE	Peponidium	sp nov.	18/06/2017	Ambakaka	17°52'22.5"	049°10'29.2"	333
RMS_191	FABACEAE	Entada	rheedei	18/06/2017	Ambakaka	17°52'22.6"	049°10'29.2"	324
RMS_192	ANNONACEAE	Artabotrys	mabifolius	18/06/2017	Ambakaka	17°52'22.9"	049°10'31.6"	321
RMS_193	PRIMULACEAE	Oncostemum	buxifolium	18/06/2017	Ambakaka	17°52'22.9"	049°10'31.8"	321
RMS_195	ERYTHROXYLACEAE	Erythroxylum	nitidulum	18/06/2017	Ambakaka	17°52'18.7"	049°10'30.0"	318
RMS_199	RUBIACEAE	Psychotria	anjanaharibensis	20/06/2017	Sondrimaro	17°52'52.2"	049°09'59.2"	424
RMS_200	SMILACACEAE	Smilax	kraussiana	20/06/2017	Sondrimaro	17°52'53.4"	049°09'56.8"	447
RMS_201	RUBIACEAE	Psychotria	manampanihensis	20/06/2017	Sondrimaro	17°52'53.8"	049°09'56.1"	452
RMS_204	MELASTOMATACEAE	Gravesia	retracticauda	20/06/2017	Sondrimaro	17°53'01.5"	049°09'55.5"	455
RMS_208	RUBIACEAE	Psychotria	pachygrammata	22/06/2017	Vatoakanga	17°53'04.0"	049°10'48.7"	493
RMS_209	ARECACEAE	Dypsis	catatiana	22/06/2017	Vatoakanga	17°53'05.1"	049°10'48.1"	492
RMS_212	RUBIACEAE	Psychotria	imerinensis	22/06/2017	Vatoakanga	17°53'04.0"	049°10'45.7"	521
RMS_216	RUBIACEAE	Psychotria	pachygrammata	26/07/2017	Lohanisahafantsina	17°57'39.6"	049°04'06.9"	763
RMS_225	POACEAE	Isachne	mauritiana	26/07/2017	Ahintaolana	17°57'46.6"	049°04'03.8"	830
RMS_227	MELASTOMATACEAE	Gravesia	venusta	26/07/2017	Ahintaolana	17°57'47.8"	049°04'04.1"	843
RMS_233	MELASTOMATACEAE	Memecylon	*	26/07/2017	Ahintaolana	17°57'53.4"	049°04'13.9"	792

RMS_234	RUBIACEAE	Psychotria	betamponensis	29/07/2017	Vohitsitondroina	17°57'07.5"	049°04'08.2"	752
RMS_235	ARECACEAE	Dypsis	corniculata	29/07/2017	Vohitsitondroina	17°57'07.4"	049°04'07.9"	792
RMS_236	PRIMULACEAE	Oncostemum	palmiforme	29/07/2017	Vohitsitondroina	17°57'07.1"	049°04'06.1"	801
RMS_237	ASPARAGACEAE	Asparagus	simulans	29/07/2017	Vohitsitondroina	17°57'07.1"	049°04'06.1"	801
RMS_238	EBENACEAE	Diospyros	lokohensis	29/07/2017	Vohitsitondroina	17°57'06.0"	049°04'06.0"	811
RMS_239	MALVACEAE	Grewia	brideliifolia	29/07/2017	Vohitsitondroina	17°57'05.7"	049°04'05.5"	823
RMS_240	RUBIACEAE	Tricalysia	orientalis	29/07/2017	Vohitsitondroina	17°57'05.6"	049°04'05.4"	824
RMS_241	RUBIACEAE	Tarenna	vel sp nov	29/07/2017	Vohitsitondroina	17°57'05.6"	049°04'04.5"	826
RMS_244	RUBIACEAE	Psychotria	manampanihensis	29/07/2017	Vohitsitondroina	17°57'09.8"	049°03'57.6"	789
RMS_246	RUBIACEAE	Psychotria	rufovilosa	31/07/2017	Lohanisahafantsina	17°58'00.7"	049°04'20.8"	857
RMS_248	APIACEAE	Pseudocarium	laxiflorum	31/07/2017	Lohanisahafantsina	17°58'01.4"	049°04'21.0"	873
RMS_251	MELASTOMATACEAE	Memecylon	*	31/07/2017	Lohanisahafantsina	17°58'05.1"	049°04'25.1"	889
RMS_253	ARALIACEAE	Polyscias	chapelieri	21/09/2017	Ampasimadinika	17°55'03.8"	049°18'59,6"	84
RMS_255	CARDIOPTERIDACEAE	Leptaulus	citrioides	21/09/2017	Ampasimadinika	17°55'04.0"	049°18'59,1"	86
RMS_258	RUBIACEAE	Tricalysia	orientalis	21/09/2017	Ampasimadinika	17°55'03.5"	049°18'57,9"	79
RMS_260	RUBIACEAE	Tarenna	vel sp nov.	21/09/2017	Ampasimadinika	17°55'03.6"	049°18'57,9"	80
RMS_262	FABACEAE	Entada	rheedei	21/09/2017	Ampasimadinika	17°55'02.0"	049°18'57,0"	78
RMS_263	ARECACEAE	Dypsis	lastelliana	21/09/2017	Ampasimadinika	17°55'02.0"	049°18'56,2"	74
RMS_265	RUBIACEAE	Saldinia	axillaris	21/09/2017	Ampasimadinika	17°55'03.3"	049°18'55,2"	114
RMS_268	FABACEAE	Dialium	madagascariense	21/09/2017	Ampasimadinika	17°55'04.0"	049°18'55,2"	124
RMS_269	MORACEAE	Ficus	politoria	21/09/2017	Ampasimadinika	17°55'04.0"	049°18'55,2"	124
RMS_276	RUBIACEAE	Psychotria	sonocorova	25/09/2017	Angodrogodroka	17°55'02.0"	049°19'20,0"	121
RMS_283	PASSIFLORACEAE	Paropsia	madagascariensis	25/09/2017	Angodrogodroka	17°54'58.0"	049°19'17,4"	129
RMS_284	MELIACEAE	Trichilia	mucronata	25/09/2017	Angodrogodroka	17°54'58.6"	049°19'17,6"	137
RMS_286	RHAMNACEAE	Gouania	cupreifolia	25/09/2017	Angodrogodroka	17°55'07.6"	049°19'10,1"	74
RMS_287	ERYTHROXYLACEAE	Erythroxylum	corymbosum	28/09/2017	Angodrogodroka	17°55'07.5"	049°19'19,9"	78
RMS_289	RUBIACEAE	Peponidium	pallens	28/09/2017	Angodrogodroka	17°55'06.8"	049°19'20,6"	71
RMS_292	COMBRETACEAE	Terminalia	ombrophila	28/09/2017	Menagisa	17°55'07.1"	049°19'22,7"	76
RMS_295	MORACEAE	Ficus	reflexa	28/09/2017	Menagisa	17°55'19.0"	049°19'35,0"	56

RMS_296	FABACEAE	Dalbergia	bathiei	28/09/2017	Menagisa	17°55'21.8"	049°19'37,4"	53
RMS_297	PHYLLANTHACEAE	Uapaca	thouarsii	28/09/2017	Menagisa	17°55'21.3"	049°19'37,6"	66
RMS_298	POACEAE	Megastachya	madagascariensis	28/09/2017	Menagisa	17°55'21.3"	049°19'37,6"	66
RMS_300	RUBIACEAE	Antirhea	borbonica	28/09/2017	Menagisa	17°55'21.1"	049°19'38,7"	72
RMS_305	FABACEAE	Dialium	madagascariense	28/09/2017	Menagisa	17°55'22.6"	049°19'45,3"	111
RMS_306	MONIMIACEAE	Tambourissa	uapacifolia	28/09/2017	Menagisa	17°55'22.4"	049°19'45,6"	111
RMS_310	PRIMULACEAE	Oncostemum	*	11/11/2017	Lohanisahavongo	18°01'43,3"	049°06'56,6"	663
RMS_311	MELIACEAE	Astrotrichilia	*	11/11/2017	Lohanisahavongo	18°01'43,1"	049°06'56,5"	663
RMS_316	PHYLLANTHACEAE	Uapaca	*	11/11/2017	Lohanisahavongo	18°01'47,0"	049°06'54,1"	655
RMS_321	ARALIACEAE	Polyscias	*	11/11/2017	Lohanisahavongo	18°01'47,1"	049°06'52,4"	658
RMS_326	RUBIACEAE	Schismatoclada	*	13/11/2017	Lohanisahavongo	18°01'39,1"	049°07'03,0"	627
RMS_333	MYRISTICACEAE	Mauloutchia	*	13/11/2017	Lohanisahavongo	18°01'41,2"	049°07'01,1"	659
RMS_339	SAPINDACEAE	Tinopsis	*	15/11/2017	Andasibe	18°01'39,5"	049°07'13,2"	624
RMS_343	SAPINDACEAE	Tina	*	15/11/2017	Andasibe	18°01'37,8"	049°07'14,8"	649
RMS_345	ERYTHROXYLACEAE	Erythroxylum	*	15/11/2017	Andasibe	18°01'37,6"	049°07'14,8"	656
RMS_349	PHYLLANTHACEAE	Uapaca	*	15/11/2017	Andasibe	18°01'36,8"	049°07'15,3"	660
RMS_355	MORACEAE	Ficus	*	15/11/2017	Andasibe	18°01'35,4"	049°07'16,5"	669
RMS_359	SAPINDACEAE	Beguea	*	17/11/2017	Zanaposa	18°01'27,2"	049°07'08,4"	595
RMS_364	RUTACEAE	Vepris	*	17/11/2017	Zanaposa	18°01'26,5"	049°07'09,2"	617
RMS_370	BUDDLEJACEAE	Buddleja	*	20/11/2017	Lohanisahavongo	18°01'37,3"	049°07'03,5"	601
RMS_371	MALVACEAE	Dombeya	*	20/11/2017	Lohanisahavongo	18°01'38,3"	049°07'02,6"	612
RMS_374	SALICACEAE	Homalium	*	20/11/2017	Lohanisahavongo	18°01'35,6"	049°06'59,9"	685
RMS_378	MONIMIACEAE	Tambourissa	*	24/11/2017	Andasibe	18°01'40,8"	049°07'12,7"	595
RMS_379	ACANTHACEAE	Mendoncia	*	24/11/2017	Andasibe	18°01'40,8"	049°07'12,7"	595
RMS_384	RUTACEAE	Vepris	*	24/11/2017	Andasibe	18°01'38,9"	049°07'16,3"	638
RMS_388	SAPINDACEAE	Tina	*	25/11/2017	Vavahadivato	18°01'46,0"	049°07'27,8"	653
SRA _130	FABACEAE	Indigofera	hirsuta	28/05/2017	Ampasimpotsy	17°51'32,9"	49°13'16,0"	242
SRA _131	ERYTHROXYLACEAE	Erythroxylum	*	28/05/2017	Ampasimpotsy	17°51'35,8"	49°12'45,1"	355
SRA _133	ASPARAGACEAE	Dracaena	reflexa	28/05/2017	Ampasimpotsy	17°51'39,0"	49°12'43,6"	365

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SRA _135	LAURACEAE	Potameia	*	28/05/2017	Ampasimpotsy	17°51'36,1"	49°12'42,5"	361
SRA _139	EBENACEAE	Diospyros	haplostylis	01/05/17	Tsingolovolo	17°51'08,7"	49°13'42,8"	214
SRA _140	ERYTHROXYLACEAE	Erythroxylum	corymbosum	01/05/17	Tsingolovolo	17°51'05,6"	49°13'43,3"	221
SRA _142	LEEACEAE	Leea	guineensis	01/05/17	Tsingolovolo	17°51'02,1"	49°13'43,5"	221
SRA _145	BURSERACEAE	Canarium	*	01/05/17	Vohitralanana	17°51'00,7"	49°13'49,3"	253
SRA _147	ARALIACEAE	Polyscias	*	01/05/17	Tsingolovolo	17°51'00,3"	49°13'49,7"	261
SRA _148	RUBIACEAE	Tricalysia	orientalis	01/05/17	Tsingolovolo	17°51'03,6"	49°13'52,0"	282
SRA _150	FABACEAE	Dialium	unifoliolatum	28/05/2017	Ampasimpotsy	17°51'41,0"	49°12'29,3"	272
SRA _160	RUBIACEAE	Tarenna	vel sp. nov.	05/05/17	Ambokarabo	17°51'36,3"	49°12'25,0"	281
SRA _161	PITTOSPORACEAE	Pittosporum	senacia	05/05/17	Ambokarabo	17°51'36,0"	49°12'24,5"	281
SRA _165	RUBIACEAE	Tarenna	spiranthera	05/05/17	Ambokarabo	17°51'36,7"	49°12'29,2"	226
SRA _166	MORACEAE	Ficus	reflexa	08/05/17	Ambokarabo	17°51'52,2"	49°12'19,9"	284
SRA _167	ANNONACEAE	Monanthotaxis	*	08/05/17	Ambokarabo	17°51'50,6"	49°12'18,7"	282
SRA _168	MORACEAE	Trilepisium	madagascariense	08/05/17	Amparafara	17°51'06,2"	49°12'03,7"	325
SRA _170	ARECACEAE	Dypsis	bernieriana	08/05/17	Amparafara	17°51'07,3"	49°12'04,5"	326
SRA _171	RUBIACEAE	Psychotria	integristipulata	08/05/17	Amparafara	17°51'56,6"	49°11'44,5"	303
SRA _173	RUBIACEAE	Peponidium	vel sp nov.	08/05/17	Tsiamaniana	17°51'56,1"	49°11'44,4"	305
SRA _174	ASPARAGACEAE	Dracaena	fontanesiana	21/05/2017	Ambodivolomborona	18°01'46,3"	49°05'30,0"	667
SRA _175	RUBIACEAE	Gallienia	sclerophylla	21/05/2017	Ambodivolomborona	18°01'46,3"	49°05'30,0"	667
SRA _176	RUBIACEAE	Psychotria	anjanaharibensis	21/05/2017	Ambodivolomborona	18°01'46,7"	49°05'30,1"	670
SRA _177	ACANTHACEAE	Mendoncia	cowanii	21/05/2017	Ambodivolomborona	18°01'47,8"	49°05'29,5"	673
SRA _178	RUTACEAE	Melicope	*	21/05/2017	Ambodivolomborona	18°01'50,6"	49°05'28,3"	676
SRA _179	PHYSENACEAE	Physena	madagascariensis	21/05/2017	Ambodivolomborona	18°01'51,8"	49°05'28,3"	685
SRA _180	RUBIACEAE	Psychotria	anjanaharibensis	21/05/2017	Ambodivolomborona	18°01'51,8"	49°05'28,3"	685
SRA _181	PITTOSPORACEAE	Pittosporum	senacia	21/05/2017	Ambodivolomborona	18°01'52,1"	49°05'28,1"	687
SRA _182	SAPOTACEAE	Sideroxylon	betsimisarakum	21/05/2017	Ambodivolomborona	18°01'53,6"	49°05'25,6"	690
SRA _183	SAPINDACEAE	Allophylus	trichodesmus	23/05/17	Ambatoharanana	18°01'46,3"	49°05'55,02"	793
SRA _184	APOCYNACEAE	Secamon	*	23/05/17	Ambatoharanana	18°01'47,7"	49°05'52,6"	781
SRA _185	ASTERACEAE	Apodocephala	pauciflora	23/05/17	Ambatoharanana	18°01'45,9"	49°05'52,5"	779

SRA _186	ELAEOCARPACEAE	Sloanea	rhodantha	23/05/17	Ambatoharanana	18°01'35,1"	49°05'48,3"	818
SRA _188	RUBIACEAE	Psychotria	pachygrammata	15/06/17	Ambakaka	17°52'24,1"	49°10'24,3"	328
SRA _189	ARALIACEAE	Polyscias	*	15/06/17	Ambakaka	17°52'24,1"	49°10'24,3"	328
SRA _190	ARALIACEAE	Polyscias	*	15/06/17	Ambakaka	17°52'24,7"	49°10'23,7"	326
SRA _191	PITTOSPORACEAE	Pittosporum	senacia	15/06/17	Ambakaka	17°52'24,6"	49°10'23,3"	333
SRA _193	RUBIACEAE	Tricalysia	orientalis	15/06/17	Ambakaka	17°52'24,6"	49°10'23,3"	333
SRA _194	RUBIACEAE	Psychotria	ratovoarisonii	15/06/17	Ambakaka	17°52'23,9"	49°10'24,1"	332
SRA _195	RUBIACEAE	Gaertnera	guillotii	15/06/17	Ambakaka	17°52'23,5"	49°10'23,3"	333
SRA _196	RUBIACEAE	Bertiera	crinita	15/06/17	Ambakaka	17°52'23,5"	49°10'23,0"	333
SRA _197	RUBIACEAE	Psychotria	*	15/06/17	Ambakaka	17°52'24,7"	49°10'23,7"	326
SRA _198	FABACEAE	Dialium	unifoliolatum	15/06/17	Ambakaka	17°52'22,3"	49°10'24,7"	336
SRA _199	RUBIACEAE	Psychotria	sonocorova	15/06/17	Ambakaka	17°52'22,3"	49°10'24,7"	336
SRA _200	ARALIACEAE	Polyscias	pentamera	15/06/17	Ambakaka	17°52'21,1"	49°10'23,5"	326
SRA _201	ARALIACEAE	Polyscias	chapelieri	15/06/17	Ambakaka	17°52'21,4"	49°10'23,5"	329
SRA _203	CARDIOPTERIDACEAE	Leptaulus	citrioides	15/06/17	Ambakaka	17°52'22,6"	49°10'25,7"	334
SRA _204	LAURACEAE	Cryptocarya	rigidifolia	15/06/17	Ambakaka	17°52'22,3"	49°10'26,3"	324
SRA _205	LOGANIACEAE	Strychnos	spinosa	15/06/17	Ambakaka	17°52'22,3"	49°10'26,3"	324
SRA _206	SAPINDACEAE	Macphersonia	madagascariensis	15/06/17	Ambakaka	17°52'22,5"	49°10'27,2"	325
SRA _207	ARALIACEAE	Polyscias	lantzii	15/06/17	Ambakaka	17°52'23,9"	49°10'24,1"	332
SRA _209	ANACARDIACEAE	Abrahamia	ditimena	19/06/17	Ambakaka	17°52'18,9"	49°10'25,1"	346
SRA _210	RUBIACEAE	Saldinia	axillaris	19/06/17	Ambakaka	17°52'18,8"	49°10'25,1"	344
SRA _211	RUBIACEAE	Psychotria	mandrarensis	19/06/17	Ambakaka	17°52'18,5"	49°10'25,0"	341
SRA _212	RUBIACEAE	Coptosperma	sp	19/06/17	Ambakaka	17°52'17,3"	49°10'24,9"	349
SRA _213	ASPARAGACEAE	Dracaena	fontanesiana	19/06/17	Ambakaka	17°52'18,3"	49°10'25,1"	346
SRA _215	ARECACEAE	Dypsis	delicatula	19/06/17	Ambakaka	17°52'12,8"	49°10'30,6"	333
SRA _216	RUBIACEAE	Psychotria	integristipulata	19/06/17	Ambakaka	17°52'11,4"	49°10'30,8"	333
SRA _217	ARALIACEAE	Polyscias	pentamera	19/06/17	Ambakaka	17°52'10,0"	49°10'30,8"	342
SRA _221	PITTOSPORACEAE	Pittosporum	ochrosiifolium	19/06/17	Ambakaka	17°52'04,6"	49°10'31,8"	392
SRA _222	MYRTACEAE	Syzygium	mortonianum	19/06/17	Antarambontsira	17°54'37,6"	49°11'09,8"	174

SRA _225	FABACEAE	Abrus	precatorius	19/06/17	Marofatana	17°54'37,7"	49°11'00,1"	229
SRA _228	BARBEUIACEAE	Barbeuia	madagascariensis	21/06/17	Sahamanasina	17°53'00,9"	49°11'33,8"	404
SRA _229	MELASTOMATACEAE	Memecylon	*	21/06/17	Sahamanasina	17°53'00,9"	49°11'33,8"	404
SRA _230	ANNONACEAE	Monanthotaxis	pilosa	21/06/17	Sahamanasina	17°53'00,9"	49°11'35,5"	443
SRA _231	RUBIACEAE	Gaertnera	guillotii	21/06/17	Sahamanasina	17°53'00,9"	49°11'35,5"	443
SRA _232	RUBIACEAE	Psychotria	sonocorova	21/06/17	Sahamanasina	17°53'04,7"	49°11'36,5"	466
SRA _233	RUBIACEAE	Psychotria	atsinanana	21/06/17	Sahamanasina	17°53'04,7"	49°11'36,5"	466
SRA _237	RUBIACEAE	Tricalysia	orientalis	22/06/17	Sahamanasina	17°57'46,3"	49°19'46,2"	200
SRA _238	ARECACEAE	Ravenea	sambiranensis	22/06/17	Vohitravao	17°57'14,7"	49°18'33,4"	95
SRA _239	SAPOTACEAE	Sideroxylon	betsimisarakum	28/07/17	Votsitondrona	17°57'06,7"	49°04'08,8"	762
SRA _241	RHAMNACEAE	Bathiorhamnus	macrocarpus	28/07/17	Votsitondrona	17°57'06,4"	49°04'08,5"	792
SRA _261	ARALIACEAE	Polyscias	madagascariensis	30/07/17	Itaolana	17°57'39,5"	49°04'02,9"	829
SRA _262	PRIMULACEAE	Oncostemum	palmiforme	30/07/17	Itaolana	17°57'40,1"	49°04'02,1"	824
SRA _267	APOCYNACEAE	Gomphocarpus	fruticosus	30/07/17	Sahafantsina	17°57'09,4"	49°04'41,0"	583
SRA _270	ELAEOCARPACEAE	Sloanea	rhodantha	02/07/17	Sahafantsina	17°57'03,2"	49°04'37,6"	494
SRA _274	ERYTHROXYLACEAE	Erythroxylum	*	02/07/17	Sahafantsina	17°57'01,1"	49°04'33,8"	557
SRA_008	MYRTACEAE	Syzygium	emirnense	10/11/16	Rendrirendry	17°55'59,3"	49°11′57,7"	261
SRA_009	CLUSIACEAE	Garcinia	pauciflora	25/03/17	Rendrirendry	17°55'59,3"	49°11'57,7"	261
SRA_010	OLEACEAE	Noronhia	louvelii	10/11/16	Rendrirendry	17°56'04,2''	49°11′59,2"	267
SRA_012	BURSERACEAE	Canarium	*	10/11/16	Rendrirendry	17°56'29,2''	49°11′09,5''	292
SRA_013	MORACEAE	Ficus	lutea	15/11/16	Antanetilava	17°56'28,9''	49°11'09,2''	292
SRA_014	PHYLLANTHACEAE	Uapaca	littoralis	15/11/16	Antanetilava	17°56'32,3"	49°11'08,5"	301
SRA_015	HAMAMELIDACEAE	Dicoryphe	stipulacea	15/11/16	Antanetilava	17°56'28,3"	49°11'07,7"	306
SRA_016	OLEACEAE	Noronhia	boivinii	15/11/16	Antanetilava	17°56'28,4"	49°11'07,4"	303
SRA_019	MALVACEAE	Dombeya	*	10/12/16	Vohimihambagna	18°01'32,2"	49°06'48,3"	303
SRA_020	ELAEOCARPACEAE	Sloanea	<u>rhodantha</u>	10/12/16	Vohimihambagna	18°01'36,8"	49°06'48,1"	755
SRA_022	BORAGINACEAE	Tournefortia	puberula	10/12/16	Vohimihambagna	18°01'37,0"	49°06'48,2"	753
SRA_027	MELASTOMATACEAE	Medinilla	*	10/12/16	Vohimihambagna	18°01'42,2"	49°06'53,3"	691
SRA_028	MYRTACEAE	Syzygium	emirnense	10/12/16	Vohimihambagna	18°01'27,1"	49°07'08,9"	559

SRA_029	MORACEAE	Ficus	tiliifolia	10/12/16	Vohimihambagna	18°01'27,1"	49°07'08,9"	559
SRA_030	CLUSIACEAE	Garcinia	verrucosa	14/12/16	Lohanitranomaro	18°01'14,8"	49°07'34,6''	594
SRA_031	DIDYMELACEAE	Didymeles	integrifolia	14/12/16	Lohanitranomaro	18°01'14,3"	49°07'34,1''	596
SRA_033	EUPHORBIACEAE	Macaranga	oblongifolia	14/12/16	Andalangy	18°01'11,4"	49°06'32,4''	598
SRA_035	ARALIACEAE	Polyscias	fraxinifolia	14/12/16	Andalangy	18°01'11,9"	49°06'30,7''	590
SRA_036	ARALIACEAE	Polyscias	fraxinifolia	14/12/16	Andalangy	18°01'11,7"	49°06'31,2''	601
SRA_038	BURSERACEAE	Canarium	lamianum	10/12/16	Lohanambatoaranana	18°01'31,8"	49°05'37,2"	585
SRA_040	EUPHORBIACEAE	Omphalea	oppositifolia	31/01/17	Lohanambatoaranana	18°01'31,8"	49°05'37,9''	599
SRA_041	RUBIACEAE	Bremeria	hymenopogonoides	31/01/17	Lohanambatoaranana	18°01'31,4"	49°05'37,5''	583
SRA_043	SALICACEAE	Casearia	nigrescens	31/01/17	Lohanambatoaranana	18°01'32,8"	49°05'36,7''	594
SRA_046	RUBIACEAE	Gaertnera	phanerophlebia	31/01/17	Lohanambatoaranana	18°01'33,0"	49°05'36,8''	589
SRA_047	MORACEAE	Ficus	politoria	31/01/17	Lohanambatoaranana	18°01'33,1"	49°05'37,2''	587
SRA_048	LAURACEAE	Cryptocarya	polyneura	31/01/17	Lohanambatoaranana	18°01'32,4"	49°05'34,8''	579
SRA_050	MYRTACEAE	Eugenia	pluricymosa	31/01/17	Lohanambatoaranana	18°01'32,6"	49°05'36,3''	594
SRA_051	LAURACEAE	Ocotea	madagascariensis	31/01/17	Lohanambatoaranana	18°01'32,7"	49°05'36,8"	596
SRA_053	CLUSIACEAE	Garcinia	*	31/01/17	Lohanambatoaranana	18°01'32,2"	49°05'38,5"	586
SRA_054	SALICACEAE	Scolopia	*	31/01/17	Lohanambatoaranana	18°01'32,2"	49°05'38,3"	585
SRA_055	SAPOTACEAE	Mimusops	capuronii	31/01/17	Lohanambatoaranana	18°01'30,4"	49°05'38,4"	582
SRA_056	POACEAE	Coix	lacryma-jobi	08/02/17	Ambatoharanana	18°01'14,6"	49°05'34,6"	485
SRA_057	APOCYNACEAE	Carissa	boiviniana	08/02/17	Ambatoharanana	18°01'14,6"	49°05'34,5"	473
SRA_058	MALVACEAE	Dombeya	*	08/02/17	Ambatoharanana	18°01'14,3"	49°05'34,2"	456
SRA_060	EBENACEAE	Diospyros	*	08/02/17	Ambatoharanana	18°01'14,3"	49°05'34,2"	456
SRA_062	RUBIACEAE	Sabicea	diversifolia	31/01/17	Lohanambatoaranana	18°01'31,8"	49°05'37,2''	585
SRA_063	FLAGELLARIACEAE	Flagellaria	indica	08/02/17	Ambatoharanana	18°01'05,3"	49°05'36,7"	432
SRA_065	MORACEAE	Ficus	torrentium	08/02/17	Ambatoharanana	18°01'05,4"	49°05'36,8"	453
SRA_066	ANNONACEAE	Fenerivia	heteropetala	08/02/17	Ambatoharanana	18°00'58,9"	49°05'42,2"	373
SRA_067	ARALIACEAE	Polyscias	amplifolia	08/02/17	Ambatoharanana	18°00'59,1"	49°05'42,9"	372
SRA_068	SAPINDACEAE	Plagioscyphus	jumellei	08/02/17	Ambatoharanana	18°00'56,6"	49°05'45,1"	371
SRA_069	RUBIACEAE	Gaertnera	*	08/02/17	Ambatoharanana	18°00'56,1"	49°05'46,4"	365

SRA_070	EBENACEAE	Diospyros	decaryana	08/02/17	Ambinanibisifika	18°00'53,4"	49°05'47,3"	361
SRA_072	EBENACEAE	Diospyros	*	08/02/17	Ambinanisampantsaha	18°00'53,6"	49°05'49,0"	360
SRA_073	ARECACEAE	Dypsis	psammophila	10/02/17	Andalangy	18°01'11,5"	49°06'31,5"	592
SRA_074	PRIMULACEAE	Embelia	madagascariensis	09/03/17	Marovato	17°53'08,0"	49°13'53,4"	272
SRA_075	PITTOSPORACEAE	Pittosporum	ochrosiifolium	08/02/17	Ambatoharanana	17°52'58,0"	49°13'48,5"	355
SRA_076	MYRTACEAE	Syzygium	mortonianum	09/03/17	Lohanisahananto	17°52'58,1"	49°13'47,6"	352
SRA_077	LINACEAE	Hugonia	coursiana	09/03/17	Lohanisahananto	17°52'58,0"	49°13'48,0"	349
SRA_078	ANNONACEAE	Fenerivia	heteropetala	09/03/17	Lohanisahananto	17°52'58,0"	49°13'47,7"	347
SRA_079	BURSERACEAE	Canarium	pulchrebracteatum	09/03/17	Lohanisahananto	17°52'58,0"	49°13'47,7"	347
SRA_081	ANNONACEAE	Uvaria	*	09/03/17	Lohanisahananto	17°52'53,4"	49°13'46,1"	397
SRA_084	CELASTRACEAE	Elaeodendron	pauciflorum	09/03/17	Lohanisahananto	17°52'51,6"	49°13'45,2"	411
SRA_085	PRIMULACEAE	Oncostemum	*	09/03/17	Lohanisahananto	17°52'52,8"	49°13'45,4"	395
SRA_086	PRIMULACEAE	Oncostemum	*	12/03/17	Vodrifito	17°52'51,9"	49°15'51,5"	245
SRA_087	BURSERACEAE	Canarium	lamianum	12/03/17	Vodrifito	17°52'52,0"	49°15'52,3"	259
SRA_090	OCHNACEAE	Campylospermum	anceps	12/03/17	Vodrifito	17°52'49,8"	49°15'54,2"	305
SRA_091	BURSERACEAE	Canarium	*	12/03/17	Vodrifito	17°52'49,5"	49°15'53,8"	309
SRA_092	PHYLLANTHACEAE	Antidesma	madagascariense	25/03/17	Rokalava	17°57'33,4"	49°19'00,2"	51
SRA_093	ERYTHROXYLACEAE	Erythroxylum	corymbosum	25/03/17	Rokalava	17°57'28,0"	49°18'57,6"	54
SRA_094	RUBIACEAE	Gaertnera	robusta	25/03/17	Rokalava	17°57'26,2"	49°18'58,5"	52
SRA_095	VITACEAE	Cissus	sulfurosa	25/03/17	Rokalava	17°57'19,7"	49°18'58,0"	63
SRA_096	MENISPERMACEAE	Strychnopsis	thouarsii	25/03/17	Rokalava	17°57'18,4"	49°18'57,5"	73
SRA_097	POACEAE	Megastachya	madagascariensis	25/03/17	Rokalava	17°57'18,4"	49°18'57,5"	73
SRA_098	MYRTACEAE	Syzygium	mortonianum	25/03/17	Votrokolahy	17°57'18,4"	49°18'57,5"	66
SRA_099	ERYTHROXYLACEAE	Erythroxylum	*	27/03/17	Analabe	17°57'16,2"	49°18'57,2"	64
SRA_101	EBENACEAE	Diospyros	pervilleana	25/03/17	Votrokolahy	17°57'16,3"	49°18'57,1"	75
SRA_102	RUBIACEAE	Craterispermum	laurinum	25/03/17	Votrokolahy	17°57'16,3"	49°18'57,1"	75
SRA_103	ASPARAGACEAE	Dracaena	reflexa	29/03/17	Ambatoharanana	17°57'16,4"	49°18'56,4"	66
SRA_106	LINACEAE	Hugonia	coursiana	25/03/17	Votrokolahy	17°57'25,4"	49°18'52,2"	142
SRA_108	MONIMIACEAE	Tambourissa	*	29/03/17	Ambatobe	17°57'16,2"	49°18'35,6"	84

SRA_110	MALVACEAE	Nesogordonia	crassipes	27/03/17	Analabe	17°57'14,3"	49°18'33,4"	92
SRA_112	CARDIOPTERIDACEAE	Leptaulus	citrioides	27/03/17	Analabe	17°57'15,0"	49°18'33,0"	98
SRA_114	PRIMULACEAE	Embelia	madagascariensis	29/03/17	Ambatoharanana	17°57'56,1"	49°18'56,2"	61
SRA_115	FABACEAE	Entada	rheedei	29/03/17	Ambatoharanana	17°57'56,1"	49°18'56,2"	61
SRA_116	LECYTHIDACEAE	Barringtonia	asiatica	29/03/17	Rokalava	17°57'56,1"	49°18'56,2"	61
SRA_117	LAMIACEAE	Volkameria	*	29/03/17	Ambatoharanana	17°58'02,7"	49°18'56,7"	44
SRA_118	ANNONACEAE	Annona	*	29/03/17	Ambatobe	17°58'20,4"	49°18'48,6"	78
SRA_119	MELASTOMATACEAE	Memecylon	*	29/03/17	Ambatobe	17°58'20,2"	49°18'50,2"	85
SRA_120	ANNONACEAE	Monanthotaxis	*	29/03/17	Ambatobe	17°58'20,6"	49°18'52,1"	115
SRA_121	ARALIACEAE	Polyscias	pentamera	29/03/17	Ambatobe	17°58'20,8"	49°18'52,2"	121
SRA_122	RUBIACEAE	Chassalia	pentachotoma	25/03/17	Ambatobe	17°58'20,7"	49°18'52,6"	125
SRA_125	LOGANIACEAE	Strychnos	*	12/03/17	Vodrifito	17°58'20,4"	49°18'54,4"	135
SRA_128	FABACEAE	Falcataria	moluccana	29/03/17	Ambatobe	17°58'20,0"	49°18'51,3"	102
SRA_278	RUBIACEAE	Clitoria	lasciva	22/09/2017	Ampasimadinika	17°55'05,8"	49°19'03,6"	73
SRA_279	SAPINDACEAE	Allophylus	cobbe	22/09/2017	Ampasimadinika	17°55'05,9"	49°19'03,9"	71
SRA_280	FABACEAE	Dalbergia	bathiei	22/09/2017	Ampasimadinika	17°55'06,3"	49°19'04,7"	77
SRA_281	PHYLLANTHACEAE	Uapaca	littoralis	22/09/2017	Ampasimadinika	17°55'08,4"	49°18'59,9"	78
SRA_282	RHAMNACEAE	Gouania	cupreifolia	22/09/2017	Ampasimadinika	17°55'08,2"	49°18'59,9"	80
SRA_286	MELASTOMATACEAE	Tristemma	mauritianum	22/09/2017	Ampasimadinika	17°55'07,4"	49°18'59,9"	77
SRA_287	HYDROLEACEEAE	Hydrolea	palustris	22/09/2017	Ampasimadinika	17°55'07,4"	49°18'59,9"	77
SRA_289	MELASTOMATACEAE	Memecylon	perangustum	22/09/2017	Ampasimadinika	17°55'09,3"	49°18'59,6"	90
SRA_290	ERYTHROXYLACEAE	Erythroxylum	corymbosum	22/09/2017	Ampasimadinika	17°55'09,3"	49°18'59,3"	95
SRA_291	RUBIACEAE	Psychotria	pachygrammata	22/09/2017	Ampasimadinika	17°55'09,6"	49°18'57,0"	87
SRA_292	COMBRETACEAE	Terminalia	ombrophila	22/09/2017	Ampasimadinika	17°55'10,7"	49°18'56,8"	97
SRA_294	OLEACEAE	Noronhia	*	22/09/2017	Ampasimadinika	17°55'10,4"	49°18'55,9"	86
SRA_295	LEEACEAE	Leea	guineensis	22/09/2017	Ampasimadinika	17°55'10,8"	49°18'56,1"	91
SRA_297	EUPHORBIACEAE	Anthostema	madagascariense	22/09/2017	Ampasimadinika	17°55'11,1"	49°18'59,8"	112
SRA_298	FABACEAE	Dialium	unifoliolatum	22/09/2017	Ampasimadinika	17°55'04,7"	49°18'59,8"	112
SRA_299	ARECACEAE	Ravenea	sambiranensis	26/09/2017	Ampasimadinika	17°55'05,6"	49°19'02,8"	86

SRA_302	SARCOLAENACEAE	Rhodolaena	leroyana	26/09/2017	Alahambana	17°54'48,7"	49°19'01,5"	159
SRA_304	SARCOLAENACEAE	Schizolaena	exinvolucrata	26/09/2017	Alahambana	17°54'49,0"	49°19'00,9"	161
SRA_310	RUBIACEAE	Psychotria	decaryi	26/09/2017	Alahambana	17°54'49,9"	49°19'00,8"	135
SRA_312	MELIACEAE	Astrotrichilia	voamatata	26/09/2017	Alahambana	17°54'45,7"	49°19'02,9"	194
SRA_321	SAPINDACEAE	Deinbollia	*	29/09/2017	Amparafaravahy	17°56'23,9"	49°20'09,3"	159
SRA_322	PHYLLANTHACEAE	Uapaca	*	29/09/2017	Amparafaravahy	17°56'22,7"	49°20'09,8"	168
SRA_323	SARCOLAENACEAE	Rhodolaena	*	29/09/2017	Amparafaravahy	17°56'22,2"	49°20'09,8"	162
SRA_329	MORACEAE	Ficus	*	10/11/2017	Lohanisahavongo	18°01'38,5"	49°07'00,5"	623
SRA_335	ARALIACEAE	Polyscias	*	12/11/2017	Lohanisahavongo	18°01'48,3"	49°07'00,7''	656
SRA_336	CLUSIACEAE	Garcinia	*	12/11/2017	Lohanisahavongo	18°01'47,6"	49°06'59,6''	656
SRA_337	ARECACEAE	Dypsis	*	12/11/2017	Lohanisahavongo	18°01'50,1"	49°06'52,4"	642
SRA_345	SAPINDACEAE	Tinopsis	*	12/11/2017	Lohanisahavongo	18°01'40,4"	49°07'02,6"	642
SRA_353	CLUSIACEAE	Garcinia	*	14/11/2017	Andratambe	18°01'31,8"	49°07'13,1"	648
SRA_362	RUBIACEAE	Peponidium	*	16/11/2017	Lohanisahavongo	18°01'55,2"	49°07'14,9"	697
SRA_367	ARECACEAE	Dypsis	*	18/11/2017	Zanaposa	18°01'20,7"	49°07'13,7"	652
SRA_384	ASTERACEAE	*	*	22/11/2017	Ambonitohakasahamahana	18°01'29,8"	49°17'13,7"	575
SRA_385	ANACARDIACEAE	Poupartia	*	22/11/2017	Ambonitohakasahamahana	18°01'29,3"	49°17'29,0"	565
SRA_391	SARCOLAENACEAE	Rhodolaena	*	22/11/2017	Ambonitohakasahamahana	18°01'26,7"	49°17'33,4"	603
SRA_392	SAPINDACEAE	*	*	22/11/2017	Ambonitohakasahamahana	18°01'27,1"	49°17'35,1"	618
SRA_401	SAPINDACEAE	Tinopsis	*	25/11/2017	Andasibe	18°01'39,3"	49°07'16,6"	634
SRA_402	SALICACEAE	Bembicia	*	25/11/2017	Andasibe	18°01'38,9"	49°07'17,7"	651

Annex 4.6. Summary of environmental education events hosted by the Darwin Initiative Project

Date	Event	Theme	Duration	No. participants
16/05/2017	School visit	Introduction to work of nursery (with application)	1 day	32
17/05/2017	School visit	Introduction to work of nursery (with application)	1/2 day	25
26/01/2018	School visit	Introduction to work of nursery (with application)	1 day	26
03/03/2018	Visit by scouts	Tree planting	1 day	450
			TOTAL	533

Annex 4.7. Summary of training events hosted by the Darwin Initiative Project

Date	Event	Theme	Duration	No. participants
09/06/2017	Training of nurserymen/women from Montagne des Français	Best practice for propagating trees	14 days	4
04/10/2017	Training of nurserymen/women from Association Tsirivao - Sainte Marie	Best practice for propagating trees	07 days	9
05/10/2017	Training of nurserymen/women from Diégo	Best practice for propagating trees	20 days	3
			TOTAL	16

Annex 4.8. A selection of key images





Forest fragment in the Ivoloina River valley

Second Darwin Initiative nursery



Providing training in best practice for propagating native trees for nursery men from Ile Sainte Marie.



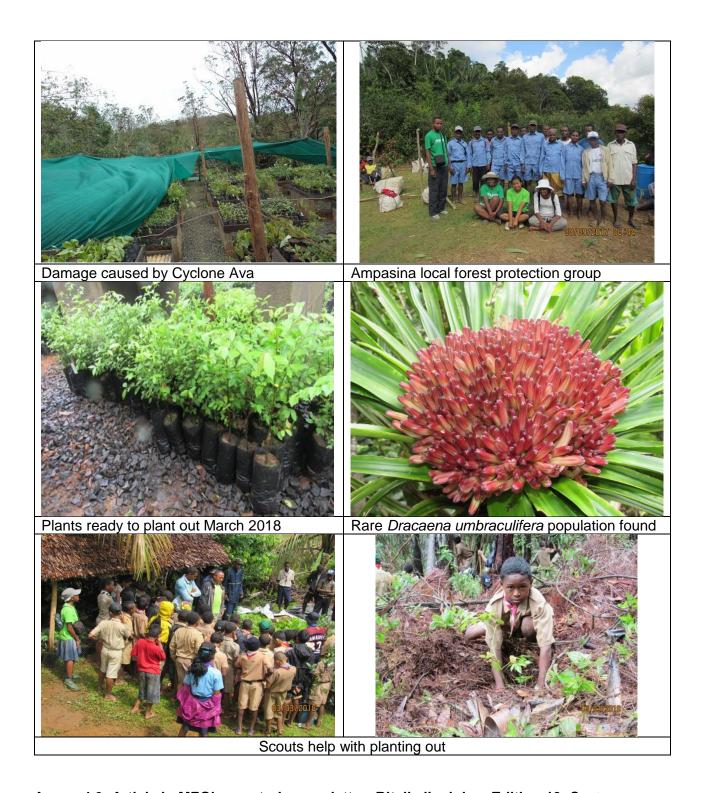
Planting-out seedlings at Parc Ivoloina (note cleared *Dicranopteris* fern)



The British Consul opens the first DI nursery with representatives of the Malagasy local and regional authorities in attendance



Nursery panel explaining the Darwin Initiative funding and partner organisations



Annex 4.9. Article in MFG's quarterly newsletter: Bitsika'lvoloina, Edition 19. Sent as separate pdf.

Annex 4.10 Article in MBG's quarterly newsletter: Missouri Botanical Garden Bulletin, Winter 2017-2018. Sent as separate pdf.

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@Itsi.co.uk putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	