Darwin Initiative – Final Report

(To be completed with reference to the Reporting Guidance Notes for Project Leaders (http://darwin.defra.gov.uk/resources/reporting/) -

it is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Darwin project information

Project Reference	15-035
Project Title	Ex-situ conservation of rare and threatened plants of Mauritius
Host country(ies)	Mauritius
UK Contract Holder Institution	Royal Botanic Gardens Kew
UK Partner Institution(s)	-
Host Country Partner Institution(s)	Ministry of Agro-Industry & Fisheries, Mauritius Sugar Industry Research Institute, National Threatened Plants Technical Committee
Darwin Grant Value	£60,560
Start/End dates of Project	July 2006 – June 2009
Project Leader Name	Steve Alton
Project Website	http://www.kew.org/msbp/where/Mauritius.htm
Report Author(s) and date	Steve Alton

1 Project Background

Mauritius houses some of the world's most threatened plant species and, for its size, has the second highest rate of endemism in the world, at 45%. Eleven taxa are reduced to populations of a single known individual.

Project purpose: Implementation of Target 8 of the Global Strategy for Plant Conservation in Mauritius - '60% of threatened plant species in accessible *ex situ* collections...'

This has been achieved through:

The creation of National seed bank facility in Mauritius, housing securely banked seed collections of rare and threatened species; the development of storage and germination protocols; and the collection of reference herbarium specimens.

2 Project support to the Convention on Biological Diversity (CBD)

The Global Strategy for Plant Conservation is an initiative developed as direct output of the CBD, and was ratified at a Conference of the Parties of the Convention on Biological Diversity in 2002. As such, this project directly supports a major mechanism of the CBD, and is in accordance with its broader principles:

- conservation a significant number of threatened taxa are now in long-term ex situ storage
- sustainable use this material is being made available for recovery and reintroduction projects
- the fair and equitable sharing of benefits the project was covered by a Memorandum
 of Understanding which determines the ownership and acceptable use of the banked
 resource and any benefits derived therefrom.

More specifically, the project has supported the implementation of Articles 7 (Identification and Monitoring), 8 (*in situ* conservation), 9 (*ex situ* conservation), 10 (Sustainable Use of Components of Biological Diversity), 12 (Research and Training), 13 (Public Education and Awareness), 15 (Access to Genetic Resources), 17 (Exchange of Information), 18 (Technical and Scientific Cooperation), with emphasis on the Global Taxonomy Initiative (GTI), Forest Biodiversity and Global Strategy for Plant Conservation.

The National Focal Point for the CBD is the Ministry of Environment & National Development Unit. However, implementation of the Convention is entrusted to NPCS, and one section is carried out by the Mauritius Herbarium (GTI). These organisations are in regular contact with each other through technical, strategic and management committees covering all aspects of conservation and sustainable development.

3 Project Partnerships

The need for the project was identified through a visit by a local NGO (the Mauritian Wildlife Foundation) to the Millennium Seed Bank (MSB) in 2004. A four-day follow-up visit to Mauritius was undertaken in August 2005 to consolidate the project proposal, culminating in a project development meeting on 1st September. Due to staff changes, the Mauritian Wildlife Foundation were unable to pursue their involvement at that stage, but maintained an interest in the project. Three additional partners were indentified at the meeting – the National Parks & Conservation Service (NPCS) of the Mauritian government, the national Mauritius Herbarium hosted at the Mauritius Sugar Industry Research Institute (MSIRI) and the National Native Threatened Plants Committee (NNTPC). It was further agreed that seed banking is a long-term, cost-effective *ex-situ* tool compared to other techniques, and was therefore the most likely way in which Mauritius would meet Target 8 of the Global Strategy for Plant Conservation (GSPC).

The following targets were drawn up at the meeting to guide the application for Darwin funding:

To store 60% of the threatened species of Mauritius in an *ex situ* seed storage facility, in line with Target 8 of the GSPC.

- To collect and store 20% of the threatened plant species of Mauritius per year over 3 years, with each species represented by at least 1 population.
- To focus collection on:

native plant species commonly collected and used in restoration plantings; threatened plant species, to complement the national *ex situ* conservation programme.

- To set up facilities in Mauritius for seed storage, with a replicate collection at MSB;
- To increase capacity of the Herbarium (MSIRI) to store voucher specimens;
- To carry out germination trials of material at MSB;
- To give training at MSB to the key staff member;
- To provide training for all stakeholders through a course taught in Mauritius by MSB;
- To use and enhance existing facilities at the Native Plant Propagation Centre, Robinson Road Nursery, Curepipe (managed by NPCS);
- To grow on critically endangered plant species successfully germinated at MSB for repatriation;
- To employ two staff specifically on this project;
- To use the project to streamline ex situ conservation of threatened plants in Mauritius

A Memorandum of Understanding between the four partners was drawn up, but negotiations over the precise wording resulted in a significant delay in this document being signed. This in turn resulted in a delay in recruitment of the two in-country posts. This delay impacted the resulting fieldwork, but it is unclear how it might have been avoided, other than by beginning the process much earlier. It was important that all parties were comfortable with the wording of the MoU, and the Mauritian government were understandably reluctant to commence recruitment without a legally binding agreement in place.

4 Project Achievements

4.1 Impact: achievement of positive impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The most fundamental impact of the project is the contribution it has made to the implementation of Target 8 of the Global Strategy for Plant Conservation. As a direct result of the work carried out, 183 threatened taxa have been collected and stored, both in country and as a back-up in the UK. This figure includes 47 species classed as Critically Endangered, 47 Endangered and 90 Vulnerable. In addition, these seed collections are supported by verified herbarium specimens and, where seed numbers allow, will be available for propagation using the germination protocols developed as part of the project.

To date, thirty-seven of a priority list of 50 Critically Endangered species have been propagated successfully by the NPCS, and collections made as part of this project are being added to this propagation programme. At the start of the project, a partial list of flowering and fruiting times of native species was generated based on the data obtained from vouchers at the Herbarium. This was used to plan field trips but importantly data missing from the above list was added through field observations. Also, data sheets for recording of fruiting and flowering of native plant species have been provided to park rangers of the following field stations: Pétrin, Bel Ombre and Lower Gorges. This phenological data will help the seed bank staff with their future seed collecting trips.

The project has also made a significant contribution towards raising the profile of biodiversity conservation in Mauritius, through media coverage and visits to the Seed Bank facility by schools and colleges. In the UK, the project has been publicised through Kew's website and through a giant global map of Kew's collaborations on the lawn opposite Victoria Gate, the main public entrance to Kew Gardens.

4.2 Outcomes: achievement of the project purpose and outcomes

Purpose

Implementation of Target 8 of the Global Strategy for Plant Conservation (CBD) in Mauritius - '60% of threatened plant species in accessible ex situ collections, preferably in the country of origin, by 2010...':

Outcomes

Based on an IUCN Redlist assessment of the Threatened plants of Mauritius, carried out by the National Threatened Plants Technical Committee 2005-2006 - Preliminary results for Mauritius, January 2007:

Category	Mauritius Endemics	Mascarene Endemics	Total	Banked	%
Critically Endangered	113	28	141	47	33.4
Endangered	46	9	55	47	85.5
Vulnerable	81	17	98	90	91.8
TOTAL	245	54	299	184	61.5*

^{*}Includes native non-endemic species

So it can be seen that the primary project purpose has been achieved, though it should be noted that some of the taxa conserved are subspecies rather than species, though none the less threatened for that. Very few countries in the world have even come close to achieving Target 8 within the specified timescale; this is even more remarkable for a country with such a high proportion of threatened species in its flora.

4.3 Outputs (and activities)

Output 1. Access and Benefit Sharing Agreement (ABSA) developed

Activity 1.1 Although significantly delayed, the Memorandum of Collaboration (MoC), which covers access & benefit sharing and material transfer, was eventually signed by both parties.

Output 2. Securely banked seed collections of rare and threatened species Seed collections of 300 species cleaned, processed and divided between partner countries

Activity 2.1. Collection of seeds and associated herbarium samples was entirely dependant of the two project staff members being in post and trained up. This was inevitably delayed by the late signing of the MoC, but despite this a total of 263 taxa were collected by the end of the project. A high proportion of these were threatened, leading to the achievement of the '60%' target.

Output 3. Herbarium specimens held in duplicate herbaria
At least 2 herbarium specimens made for each seed collection, one for each country

Activity 3.1 Wherever practical, herbarium specimens were collected in the field along with the seeds and deposited with the Mauritian and Kew herbaria. In the case of particularly rare species (of which there are many), field identification was aided by the taking of photographs rather than actual herbarium specimens.

Output 4. Germination protocols developed for seed collections All seed collections tested at MSBP and germination results recorded

Activity 4.1 As seed collections arrive at Kew's Millennium Seed Bank they enter the cleaning and testing programme, along with material from the 53 other countries working in partnership with the MSB. An x-ray or dissection test determines the proportion of filled seeds in each cleaned sample, from which a sub-sample is then taken for germination testing. A standard germination test can take anything from a few weeks to more than a year, depending on whether special treatments are required to break dormancy. Some species are known or suspected to have storage problems, not surviving the freezing process or having reduced lifespans at -20C. For these species, additional studies are required. Consequently, information on storage behaviour and germination is still being generated and will continue to be so for some time to come. This information is being made available to the partners as it is generated, as well as being published on the internet through Kew's Seed Information Database.

Output 5. Storage protocols developed for all orthodox species Research carried out on species with storage problems

Activity 5.1 see 4.1

Output 6. Creation of National seed bank facility in Mauritius Establishment of native species seed bank

Activity 6.1 As has been mentioned already, recruitment was delayed by the late signing of the MoC. Additionally, the successful candidate for the second post (Seed Bank Assistant) later pulled out and the post had to be re-filled. Both posts were, however, successfully recruited. The Mauritian government contributed the time of a nurseryman to assist with fieldwork as support in kind.

Activity 6.2 The facilities at the Native Plant Propagation Centre, Robinson Road Nursery, Curepipe, were completed at the end of 2006 and equipment was shipped out from the UK during the period Jan-Feb 2007. In January the Millennium Seed Bank's Laboratory Manager, Mr. Keith Manger, undertook a visit to Mauritius to supervise the installation of the equipment and to provide training in its use. The list of equipment was adjusted slightly as a result of Keith's visit; the freezers available in Mauritius, for instance, were unsuitable and units had to be shipped in from the UK at considerable additional cost. It was decided, however, that it was

important to get the infrastructure right, even if it meant a reallocation of funds, in order to produce the best possible facility.

Output 7. Increased capacity in *ex situ* conservation for Mauritius 20 Mauritian Stakeholders successfully trained

Activity 7.1 Keith Manager carried out training for 4 members of staff from Government departments during his visit in January 2007. Visiting Kew horticulturalist Carlos Magdalena provided training on plant propagation techniques. This was attended 12 people: staff of the Seed Bank, National Parks and Conservation Service, Mauritian Wildlife Foundation, Mauritius Herbarium, Forestry Department, SSR Botanical Gardens and Plant Genetic Resources. The training was run on the 14 th and 15th of March 2007 at the National Plant Propagation Centre. As from November 2007 Assistant Park Rangers from all field stations have been involved in seed collecting trips and hence received training and guidance from Ms Pushpa Seepaul, Seed Bank Technician, on seed collecting techniques (four Assistant Park Rangers in all).

Main training period: 23rd- 29th April 2007 -The overall aim was to train key Mauritian staff involved in the project and those from other departments in seed collection and curation techniques. This was achieved through theoretical and practical sessions. This was attended by 11 people from various department and organizations: The Seed Bank, The National Parks and Conservation Service, The Mauritius Herbarium, The Mauritian Wildlife Foundation and The Forestry Services.

Pushpa Seepaul undertook training at the Millennium Seed Bank from the 22nd July to 14th August 2007. The training covered seed collection in the field, cleaning, storage, germination tests, X-raying of seeds and herbarium sample mounting.

On the 27th February 2008 Ms S. Ramdhany (Technical Assistant, NPCS) accompanied the Seed Bank staff on a field trip and also received the same training.

This makes a total of 33 staff members trained, though there may have been some overlap between courses, with some staff members being trained more than once. The total is likely, however, to be well in excess of 20.

4.4 Project standard measures and publications

Please see Annex 4 for detailed reporting against Darwin Initiative Standard Measures.

4.5 Technical and Scientific achievements and co-operation

The project was by its very nature an exercise in technical cooperation, with the Herbarium providing the detailed knowledge of the Mauritian flora and the identification skills required to collect accurately in the field, and Kew providing the technical expertise in seed conservation techniques.

4.6 Capacity building

The project has built capacity in three main areas:

- 1. Enhancement of the Mauritius Herbarium at MSIRI. To deal with the extra plant specimens generated by the project, the Herbarium facilities have been improved. This involved increasing the available storage space by the purchase of a new shelving system, as well as the provision of the consumables needed to process and store the specimens. This has benefitted the wider work of the Herbarium, including its contribution to the Flore des Mascareignes project.
- 2. Creation of the Mauritius Seed Bank. Using a building donated by the Mauritian government, an all-new seed storage facility was created with processing, drying and freezing capacity well beyond the scope of this current project.

3. Training. A significant number of individuals from a range of organisations now have the technical skills to either collect or to collect, process and store seed material from Mauritian native plant species.

4.7 Sustainability and Legacy

The Seed Bank itself, as a built entity, and the seed collections it contains are likely to endure for as along as *ex situ* storage of seed material is seen as being necessary. In terms of the collecting programme and the staff associated with it, the existing partners were invited to participate in the second phase of the Millennium Seed Bank project (MSB2), which commences at the beginning of 2010. In anticipation of the continuation of this collaboration, the Mauritian government have allocated money to support a further 3 years' work, this time including the island of Rodrigues, and Dr. Claudia Baider of the MSIRI Herbarium will visit Kew in October 2009 as part of a celebration of the MSBP and its partners collecting 10% of the world's flora. This will provide an opportunity to discuss the future of the project within the framework of MSB2. It is hoped that the existing project staff will be re-employed to ensure continuity.

5 Lessons learned, dissemination and communication

The lessons learned are those that accompany any *ex situ* seed conservation programme – that such projects are, by their very nature, unpredictable and subject to a whole range of factors beyond the control of the project managers, chiefly connected with climate. Any targets set – and targets for such projects are invariably numerical, usually numbers of species collected or number of individual collections banked – are at the mercy of not only the short-term vagaries of the weather, but also longer term climatic variations. A 'bad' season - be it too dry, too cold or too wet - can drastically affect the availability of seed samples, and there is little that can be done to mitigate this. Also the logistics of collecting material from very rare, often hard to identify plant species in densely vegetated rough terrain are difficult to plan for in advance.

However, despite these uncertainties – and almost entirely down to the efforts of project partners and staff in country – the project has been a success, and it is intended that the achievement of 60% of threatened species in safe ex situ storage should be celebrated through publicity both in the UK and in Mauritius.

Information derived from the collections – phenological data, storage behaviour, germination protocols, etc – will continue to be produced for some time to come, and that information which is not sensitive (eg. localities of rare species) will be made available publicly through Kew's electronic Plant Information Centre (ePIC), as well as being provided directly to partners to aid future collecting, storage and propagation work.

5.1 Darwin identity

This was uniquely a Darwin project, rather than being part of a wider programme, and was promoted as such. The Darwin Initiative was mentioned in all press releases and its logo used on all publicity materials, including Kew's website.

Media coverage

An article on the Darwin Initiative funded Seed Bank was published in the Mauritian magazine "Weekend Scope".

The national television station, the Mauritius Broadcasting Corporation (MBC), interviewed Mr M. Puttoo and Mr S. Alton about the seed bank project. The interview was broadcast on 10th February 2008 on the MBC main news at 19:30h.

An interview and a short film on the project was produced by a Reuters journalist for worldwide syndication.

Visit by University Students

Students from BSc Biology of the University of Mauritius visited the seed bank on 26th February 2008. They were accompanied by their lecturer, Mr V. Florens. Ms. P. Seepaul explained to them the main features of the project:

The Millennium Seed Bank Project, the Mauritian Seed Bank Project and the Darwin Initiative.

Importance of seed banking

Seed collection on field

Seed curation and processing with practical demonstration in the laboratory

Visits by school parties

03/04/08 - Saddul College, Vacoas

12/06/08 - BPS Fatima College

17/07/08 - Friendship College Boys

20/02/09- Vacoas Girls State Secondary School

10/03/09- Emmanuel Anguetil State Secondary School

16/03/09- Mahatma Gandhi Institute, Moka

02/04/09- Sodnac State Secondary School

6 Monitoring and evaluation

There have been no significant changes to the project design since its inception – there was obviously some slippage of timescales due to the delayed recruitment at the start, and some of the capital costs were amended to ensure the best available equipment for the establishment of the Seed Bank, but essentially the project adhered to its original plan.

The project was fortunate to have relatively simple outcomes – seed bank built and equipped, staff recruited and trained, seeds and herbarium specimens collected and stored. From this point of view the logframe approach, whilst undoubtedly useful, was possibly less helpful than a detailed budget, broken down by partner institute, for each year of the project. This was created in Microsoft Excel, and guided much of the work, with the logframe tending to be used as a 6-monthly checklist to ensure that all necessary work had been carried out.

6.1 Actions taken in response to annual report reviews

Some minor points were raised in annual report reviews, but hopefully these have all been addressed or clarified as the project proceeded.

7 Finance and administration

7.1 Project expenditure

Costs	Grant	Claimed
Staff costs		
Rent, rates, heating, lighting, cleaning		
Postage, telephone, stationery		
Travel and subsistence		
Printing		
Conferences, seminars etc		
Capital items		
Others (please specify)		
TOTAL		

7.2 Additional funds or in-kind contributions secured

See Annex 4 point 23 for contributions in kind. These were not, however, additional to those in the original project proposal

7.3 Value of DI funding

The Millennium Seed Bank Project's business model involves enabling partners to build the capacity to bank and utilise genetic resources from their own native floras. There are 48 'main' partner institutions in 16 countries who received funding from the MSBP's budget as set out in the original business case – any partners added subsequently have had to be funded from external sources. The Darwin Initiative funding has allowed Mauritius to join the network of MSBP partners where, without that funding, collaboration would have been difficult and limited in scope. As a result of that collaboration, Mauritius has taken a significant step towards underpinning the future security of its highly threatened and unique flora.

Annex 1 Report of progress and achievements against final project logframe for the life of the project

Project summary	Measurable Indicators	Progress and Achievements April 2006 - March 2007	Actions required/planned for next period
Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve The conservation of biological diversity, The sustainable use of its components, and The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources		The creation of the native species Seed Bank represents a significant contribution towards the conservation of biodiversity in Mauritius. The associated training will enable the sustainable utilisation of the collection held in the Bank.	(do not fill not applicable)
Purpose Implementation of Target 8 of the Global Strategy for Plant Conservation (CBD) in Mauritius - '60% of threatened plant species in accessible ex situ collections, preferably in the country of origin, by 2010'	Accurately identified samples of seed from 300 native plant species held in long-term secure storage in Mauritius and in UK	At the end of the project, samples from 263 species had been collected, though collecting work is continuing.	N/A
Output 1. Access and Benefit Sharing Agreement (ABSA) developed ABSA document signed by both parties		Completed	
Activity 1.1 MTA signed by both signal	atories	Completed	
Output 2. Securely banked seed collections of rare and threatened species Seed collections of 300 species cleaned, processed and divided between partner countries		At the end of the project, samples fro though collecting work is continuing. both in Mauritius and at the Millenniu herbarium specimens were also take Herbarium.	Samples have been split and stored m Seed Bank. Where appropriate,
Activity 2.1. Collect seeds and herbarium specimens (300 species, up to 5 replicate populations)		See above	
Output 3. Herbarium specimens held in duplicate herbaria At least 2 herbarium specimens made for each seed collection, one for each country		See Output 2	
Activity 3.1 see 2.1		See Output 2	

Output 4. Germination protocols developed for seed collections	All seed collections tested at MSBP and germination results recorded	-
Activity 4.1 Produce germination prot	ocols for ca. 100 problem species	In fact, germination protocols will be produced for all species collected, though due to the time taken for germination testing this is on-going.
Output 5. Storage protocols developed for all orthodox species	Research carried out on species with storage problems	-
Activity 5.1 Determine storage require problems	ements of those species with storage	Species with suspected storage problems are being passed on to the MSB's Technology Section for more detailed study. Results from this will be fed back to partners as available.
Output 6. Creation of National seed bank facility in Mauritius	Establishment of native species seed bank	Completed
Activity 6.1 Recruit seed technician and assistant		Completed
Activity 6.2 Set up laboratory facilities at the Native Plant Propagation Centre, Robinson Road Nursery, Curepipe (Mauritius)		Completed
Output 7. Increased capacity in ex situ conservation for Mauritius 20 Mauritian Stakeholders successfully trained		Completed
Activity 7.1 Train 2 key Mauritian staff at MSB in seed collecting and processing (UK)		In the end, one member of staff – the Seed Bank Technician – was trained in the UK. The rest of the training was undertaken in country.

Annex 2 Project's final logframe, including criteria and indicators

Project summary Measurable Indicators Means of verification Important Assumptions Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilisation of genetic resources Purpose Implementation Accurately identified · List of species held Availability of Target 8 of the samples of seed from with germination test sufficient plant material 300 native plant results Global Strategy for Plant Conservation species held in long-(CBD) in Mauritius term secure storage in Mauritius and in UK '60% of threatened plant species accessible ex situ collections. in the preferably country of origin, by 2010...': Outputs Access and Benefit ABSA document Signed copies held **Sharing Agreement** by both parties signed by both parties (ABSA) developed Securely banked Seed collections of List of collections Seed availability not seed collections of 300 species cleaned, held limited for some rare processed and divided species, and seed rare and threatened species between partner storage behaviour not a problem for others countries At least 2 herbarium List of herbarium Samples available Herbarium specimens held in specimens made for specimens held from all species duplicate herbaria each seed collection, one for each country Germination All seed collections Germination Enough seeds available for testing. protocols tested at MSBP and protocols held by developed for seed germination results both partners. collections recorded Young plants of rare species propagated in UK and Mauritius Storage protocols Research carried out Copies of research developed for all on species with reports held by both orthodox species storage problems partner countries Creation of Establishment of Facility in operation National seed bank native species seed facility in Mauritius bank Increased capacity 20 Mauritian Number of people Stakeholders receiving training in ex situ

successfully trained

conservation for

Mauritius

Annex 3 Project contribution to Articles under the CBD

Project Contribution to Articles under the Convention on Biological Diversity

Article No./Title	Project %	Article Description
6. General Measures for Conservation & Sustainable Use		Develop national strategies that integrate conservation and sustainable use.
7. Identification and Monitoring		Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.
8. In-situ Conservation		Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
9. Ex-situ Conservation	50	Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
10. Sustainable Use of Components of Biological Diversity		Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage cooperation between governments and the private sector.
11. Incentive Measures		Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.
12. Research and Training	10	Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).
13. Public Education and Awareness		Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
14. Impact Assessment and Minimizing Adverse Impacts		Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
15. Access to Genetic Resources	10	Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair and equitable way of results and benefits.

Article No./Title	Project %	Article Description
16. Access to and Transfer of Technology		Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
17. Exchange of Information	10	Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
19. Bio-safety Protocol		Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research.
Other Contribution	20	Smaller contributions (eg of 5%) or less should be summed and included here.
Total %	100%	Check % = total 100

Annex 4 Standard Measures

TRAINING MEASURES

General points

- The nationality of students/trainees should be reported
- Double counting must be avoided
- Workshops can only be claimed as providing training if the duration of the workshop is at least 3 days and if participants are gathered principally to work on, or in association with, the project. Otherwise workshop activities come under standard measure 14.
- A training week is defined as one that involves at least 30 hours of tuition/training per week.
 Below 30 hours, training weeks should be calculated on a pro-rata basis.

Code Number	Description (* indicates that the nationality of trainees should be stated)	Totals (plus additional detail as required)
6A 6B	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above) * Number of training weeks to be provided	4 main training sessions, covering seed bank equipment set-up and operation, seed collecting, processing and banking, and propagation techniques. Trained staff then cascaded this training to colleagues. 33 staff members attended training sessions.

RESEARCH MEASURES

General points

- Research measures will only be reported when they have been completed ie. only final reports are reported as standard measures. Most research measures will therefore occur at/towards the end of the project
- Any types of research measures not mentioned below should be listed without a code number.

Code Number	Description	Totals (plus additional detail as required)
8	Number of weeks to be spent by UK project staff on project work in the host country	5
12B	Number of computer based databases to be enhanced and handed over to the host country	2 – Herbarium's BRAHMS database enhanced with further specimen data, plus phenological observations from fieldwork recorded separately.
13A 13B	Number of species reference collections to be established and handed over to the host country(ies) Number of species reference collections to be enhanced and handed over to the host country(ies)	1 – Seed Bank seed collection established1 – Herbarium specimen collection enhanced.

DISSEMINATION	ON MEASURES	
15A	Number of national press releases in host country(ies)	Press releases may be a short statement on the progress of the project or its key findings to the press, a short publicity article in either a popular
15C	Number of national press releases in UK	or an institution's magazine. National press releases will include those which have an international circulation.
18A	Number of national TV programmes/features in host country(ies)	Full length documentaries or news items planned should be included.
18B	Number of national TV programmes/features in UK	
18C	Number of local TV programmes/features in host country(ies)	
18D	Number of local TV programmes/features in UK	
19A	Number of national radio interviews/features in host county(ies)	
19B	Number of national radio interviews/features in UK	
19C	Number of local radio interviews/features in host country(ies)	
19D	Number of local radio interviews/features in UK	
PHYSICAL N	T EASURES	
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	£16,328
21	Number of permanent educational/training/research facilities or organisations to be established and then continued after Darwin funding has ceased	1 – National Seed Bank established.
FINANCIAL I	MEASURES	
23	Value of resources raised from other sources (ie. in addition to Darwin funding) for project work	£71,663 – includes rents, rates, heating, cleaning, overheads, office costs eg postage, telephone, stationary and printing, as well as some staff costs and capital items

Annex 5 Publications

Type *	Detail	Publishers	Available from	Cost
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	£
N/A				

Annex 6 Darwin Contacts

Ref No	15-035
Project Title	Ex-situ conservation of rare and threatened plants of Mauritius
UK Leader Details	,
Name	Steve Alton
Role within Darwin Project	Project Leader
Address	Millennium Seed Bank, Royal Botanic Gardens Kew, Wakehurst Place, Ardingly, West Sussex RH17 6TN
Phone	
Fax	
Email	
Partner 1	
Name	Kevin Ruhomaun
Organisation	National Parks & Conservation Service, Government of Mauritius
Role within Darwin Project	Principal contact
Address	National Parks and Conservation Service (NPCS) Ministry of Agro-Industry and Fisheries, Réduit, Mauritius
Fax	
Email	
Partner 2 (if relevant)	,
Name	Dr Claudia Baider
Organisation	Herbarium, Mauritius Sugar Industry Research Institute
Role within Darwin Project	Principal contact
Address	MSIRI, Réduit, Mauritius
Fax	
Email	

Annex 7 Species collected

	opecies conceted				
		No. of			
E2	0	sites	IUCN	Distribution	Distribution
Family	Species	coll.	criteria	Species	Infraspecies
1	Abrus precatorius subsp.			NI-C	
Leguminoseae	africanus	1	LC	Native	
Cumborbiosos	Acalypha integrifolia subsp.	4	DD	End Mass	Endomio
Euphorbiaceae	integrifolia var. longifolia	1	DD VU	End Masc End Masc	Endemic
Orchidaceae Ericaceae	Agarinta policifolio yar policifolio	1	VU	Native	Endemic
Sapindaceae	Agarista salicifolia var. salicifolia Allophylus borbonicus	1	VU	End Masc	Endeniic
Orchidaceae	Angraecum cadetii	1	CR	End Masc	
Oromadocac	7 ingraceam eadein		OIX	Native (End	
Orchidaceae	Angraecum calceolus	1	VU	Hotspot)	
	g			Native (End	
Orchidaceae	Angraecum eburneum	1	CR	Hotspot)	
Orchidaceae	Angraecum minutum	1	DD	End Masc	
Orchidaceae	Angraecum obversifolium	1	CR	End Masc	
				Native (End	
Orchidaceae	Angraecum pectinatum	4	LC	Hotspot)	
Orchidaceae	Angraecum sp.	1			
Orchidaceae	Angreacum ramosum	2	VU	End Masc	
Phyllantaceae	Antidesma madagascariense	3	LC	End Masc?	
Rubiaceae	Antirhea bifurcata	1	VU	End Masc	
Rubiaceae	Antirhea borbonica	1	LC	End Masc	
Aphloiaceae	Aphloia theiformis	2	LC	Native	
Asparagaceae	Asparagus umbellullatus	2	VU	Native	
Chenopodiaceae	Atriplex halimus	1	LC	Native	
Myrsinaceae	Badula insularis	2	VU	Endemic	
Myrsinaceae	Badula multiflora	1	VU	Endemic	
Myrsinaceae	Badula ovalifolia	1	CR	Endemic	
Myrsinaceae	Badula sieberi	2	EN	Endemic	
Loranthaceae	Bakerella hoyifolia var. bojeri	2 1	EN CR	End Masc	
Acanthaceae	Barleria observatrix Benthamia sp. (B spiralis if it is	I	CK	Endemic	
Orchidaceae	the sample at MAU)	1			
Orchidaceae	Benthamia spiralis	1	DD	Native	
Rubiaceae	Bertiera zaluziana	6	VU	Endemic	
Poaceae	Brachiaria umbellata	1	LC	Native	
Rubiaceae	Bremeria landia var. holosericea	2	CR	Native	End Masc
Rubiaceae	Bremeria landia var. landia	2	VU	Native	End Masc
				Native (End	
Orchidaceae	Bulbophyllum nutans	1	VU	Hotspot)	
	, ,			Native (End	
Orchidaceae	Bulbophyllum occultum	1	EN	Hotspot)	
Orchidaceae	Bulbophyllum sp.	1			
Cyperaceae	Bulbostylis barbata	1	DD	Native	
Fabaceae	Caesalpinia bonduc	1	VU	Native	
	Callophylum eputamen var.				
Clusiaceae	eputamen	1	VU	Endemic	
Burseraceae	Canarium paniculatum	2	VU	Endemic	
Leguminosae	Canavalia rosea	2	LC	Native	
Cyperaceae	Carex brunnea	2	LC	Native	
Salicaceae	Casearia coriacea	1 7	VU	End Masc	
Celastraceae	Cassine orientalis	1	VU LC	End Masc	
Lauraceae Rubiaceae	Cassytha filiformis Chassalia capitata	1	CR	Cryptogenic Endemic	
Rubiaceae	Chassalia capitata Chassalia coriacea var. coriacea	1	VU	End Masc?	
Rubiaceae	Chassalia conacea var. conacea Chassalia grandiflora	1	CR	End Masc? Endemic	
Rubiaceae	Chassalia grandinora Chassalia petrinesis	1	EN	Endemic	
Rubiaceae	Chassalia sp.	1	LIV	LIIGOIIIIO	
Nabiaccac	Claoxylon linostachys subsp.	1			
Euphorbiaceae	brachyphyllum	1	CR	Endemic	
				-	

C. wala a while a a a a	Claoxylon linostachys subsp.	4	CD.	En de este	
Euphorbiaceae	linostachys	1	CR LC	Endemic	
Lamiaceae	Clerodendron heterophyllum	3	LC	End Masc	
Connaraceae	Cnestis glabra	2	LC	Native (End Hotspot)	
Rubiaceae	Coffea macrocarpa	2	VU	Endemic	
Rubiaceae	Coffea mauritiana	1	VU	End Masc	
Rubiaceae	Coffea myrtifolia	1	VÜ	Endemic	
Bignoniaceae	Colea colei	1	VÜ	Endemic	
Rubiaceae	Coptosperma borbonicum	1	VÜ	End Masc	
Sapindaceae	Cossinia pinnata	3	VŪ	End Masc	
Amaryllidaceae	Crinum mauritianum	2	CR	Endemic	
Euphorbiaceae	Croton fothergillifolius	1	EN	Endemic	
Orchidaceae	Cryptopus elatus	1	EN	End Masc	
Asteraceae	Cylindrocline commersonii	1	CR	Endemic	
Poaceae	Cymbopogon caesius	1	DD	Native	
Cyperaceae	Cyperus compressus	1	LC	Native	
Cyperaceae	Cyperus conglomeratus	1	DD	Native	
Cyperaceae	Cyperus longifolius	1	DD	Native	
Cyperaceae	Cyperus rubicundus	1	LC	Native	
Poaceae	Dactyloctenium ctenoides	1	LC	Native	
Leguminosae	Dendrolobium umbellatum	4	LC	Native	
Phormiaceae	Dianella ensifolia	3	LC	Native	
Arecaceae	Dictyosperma album var. album	1	CR	End Masc	
Poaceae	Digitaria didactyla	1	LC	Native	
Ebenaceae	Diopsyros abraganyllaus	1	CR CR	Endemic	
Ebenaceae	Diospyros carottarum	1	EN	Endemic Endemic	
Ebenaceae Ebenaceae	Diospyros egrettarum Diospyros leucomelas	1	EN	Endemic	
Ebenaceae	Diospyros nelanida	1	VU	Endemic	
Ebenaceae	Diospyros meianida Diospyros neraudii	1	EN	Endemic	
Ebenaceae	Diospyros rieradali Diospyros revaughanii	1	EN	Endemic	
Ebenaceae	Diospyros tessellaria	1	VU	Endemic	
Asteraceae	Disthephanus populifolius	2	ĖN	Endemic	
Sapindaceae	Dodonaea viscosa	7	LC	Native	
	Dombeya ferruginea subsp.		_		
Malvaceae	ferruginea	1	EN	End Masc	Endemic
Malvaceae	Dombeya mauritiana	1	CR	Endemic	
	Doratoxylon apetalum var.			Native (End	
Sapindaceae	diphyllum	1	VU	Hotspot)	End Masc
Ruscaceae	Draceana concinna	2	EN	Endemic	
Ruscaceae	Draceana floribunda	1	EN	Endemic	
Ruscaceae	Draceana reflexa	2	VU	Native	
Elaeocarpaceae	Elaeocarpus borjeri	1	CR	Endemic	
Myrsinaceae	Embelia angustifolia	1	EN	End Masc	
Myrsinacae	Embelia micrantha	1	EN	End Masc	
Poaceae	Eragrostis amabilis	1	LC	Native	
Eriocaulaceae	Eriocaulon wildenovianum	1	EN	Endemic	
A chariagea	Erythrospermum monticolum var.	4	1/11	Endomio	
Achariaceae	amplifolium	1	VU	Endemic	
Achariaceae	Erythrospermum monticolum var. monticolum	2	VU	Endemic	
Acrianaceae	Erythrospermum monticolum var.	2	VU	Endemic	
Achariaceae	pyrifolium	1	VU	Endemic	
Erythroxylaceae	Erythroxylum hypericifolium	1	VU	End Masc	
Erythroxylaceae	Erythroxylum macrocarpum	1	VU	End Masc	
Erythroxylaceae	Erythroxylum sideroxyloides	2	VU	End Masc	
Myrtaceae	Eugenia elliptica	1	EN	Endemic	
.,	Eugenia kanakana	•			
Myrtaceae	(Monimiastrum globusum)	1	VU	Endemic	
Myrtaceae	Eugenia lucida	2	VÜ	Endemic	
Myrtaceae	Eugenia pollicina	1	VÜ	Endemic	
•				Native (End	
Euphorbiaceae	Euphorbia pyrifolia	1	DD	Hotspot)	
Asteraceae	Faujasiopsis flexuosa subsp.	3	VU	End Masc	Endemic

	flexuosa			
Rubiaceae	Fernelia buxifolia	3	VU	End Masc
Moraceae	Ficus densifolia	1	CR	End Masc
Moraceae	Ficus mauritiana	1	VU	End Masc
		-		Native (End
Moraceae	Ficus reflexa	2	LC	Hotspot)
				Native (End
Moraceae	Ficus rubra	1	VU	Hotspot)
Cyperaceae	Fimbristylis cymosa	5	LC	Native [′]
Cyperaceae	Fimbristylis dichotoma	1	LC	Native
Cyperaceae	Fimbrystilis sp.	1		
Cyperaceae	Fimbrystylis ferruginea	3	LC	Native
Flagellariaceae	Flagellaria indica	2	VU	Native
Lecythidaceae	Foetida mauritiana	2	EN	End Masc
Cyperaceae	Fuirena umbellata	1	DD	Native
Rubiaceae	Gaertnera cuneifolia	1	CR	Endemic
Rubiaceae	Gaertnera edentata	2	CR	Endemic
Rubiaceae	Gaertnera hirtiflora	1	CR	Endemic
Rubiaceae	Gaertnera psychotrioides	5	LC	Endemic
Rubiaceae	Gaertnera rotundifolia	2	VU	Endemic
		_		Native (End
Fabaceae	Gagnebina pterocarpa	2	EN	Hotspot)
Araliaceae	Gastonia mauritiana	1	EN	Endemic
Loganiaceae	Geniostoma borbonicum	1	VU	End Masc
Loganiaceae	Geniostoma pedunculatum	1 2	EN	End Masc
Rhamnaceae	Gouania tiliifolia	2	CR VU	End Masc End Masc
Chrysobalanaceae Clusiaceae	Grangeria borbonica	1	LC	Native
Asteraceae	Harungana madagascariensis Helichrysum proteioides	1	EN	Endemic
Hernandiaceae	Hernandia nymphaefolia	1	CR	Native
Malvaceae	Hibiscus fragilis	1	CR	Endemic
Malvaceae	Hibiscus genevii	1	CR	Endemic
Boraginaceae	Hilsenbergia petiolaris	4	LC	Native
Sapindaceae	Hornea mauritiana	1	EN	Endemic
Linaceae	Hugonia tomentosa	1	VU	Endemic
Arecaceae	Hyophorbe lagenicaulis	1	CR	Endemic
Arecaceae	Hyophorbe vaughanii	2	CR	Endemic
Cyperaceae	Hypolytrum mauritianum	1	VU	Endemic
	Ipomea pes-caprae subsp.			
Convolvulaceae	brasiliensis	3	LC	Native
Convolvulaceae	Ipomea violacea	1	LC	Cryptogenic
Poaceae	Isachne mauritiana	5	LC	Native
Sapotaceae	Labourdonnaisia glauca	1	VU	Endemic
Sapotaceae	Labourdonnaisia revoluta	1	VU	Endemic
Arecaceae	Latania loddigesii	2	EN	Endemic
Asteraceae	Launaea sarmentosa	3	DD	Native
Vitaceae	Leea guineensis	1	VU	Native
Asphodelaceae	Lomatophyllum purpureum	2	LC	Endemic
Asphodelaceae	Lomatophyllum tormentorii	2	VU	Endemic
Salicaceae	Ludia mauritiana	1	VU	Native
Onagraceae	Ludwigia sp.	1	⊏NI.	Nativa
Solanaceae	Lycium mascarenense	2 1	EN DD	Native
Cyperaceae	Machaerina anceps Machaerina iridifolia	1	DD	Native End Masc
Cyperaceae Euphorbiaceae	Margaritaria anamola	1	VU	Endemic
Celastraceae	Maytenus pyria	2	VU	Endemic
Rutaceae	Melicope chapelieri var. chapelieri	1	EN	Endemic
Sapotaceae	Mimusops erythroxylon	1	VU	Endemic
Sapotaceae	Mimusops erytiroxylori Mimusops maxima	1	VU	End Masc
Sapotaceae	Mimusops maxima Mimusops petiolaris	1	VU	Endemic
Sapindaceae	Molinaea alternifolia	i 1	VU	End Masc
Sapindaceae	Molinaea laevis	1	VU	Endemic
Rubiaceae	Mussaenda arcuata	2	VÜ	Native
Rubiaceae	Myonima violacea var. ovata	3	LC	Endemic
Rubiaceae	Myonima violacea var. violacea	3	LC	Endemic

Myoporaceae	Myoporum mauritianum	1	CR	End Masc	
Orchidaceae	Oberonia disticha	1	VU	Native	
Ochnaceae	Ochna mauritiana	2	LC	Endemic	
Apocynaceae	Ochrosia borbonica	1	CR	End Masc	
Rubiaceae	Oldenlandia sieberi var sieberi	1	CR	End Masc	Endemic
				Native (End	
Oleaceae	Olea lancea	1	LC	Hotspot)	
Pandanaceae	Pandanus barklyi	1	EN	Endemic	
Pandanaceae	Pandanus eydouxia	1	VU	Endemic	
Pandanaceae	Pandanus glaucocephalus	1	CR	Endemic	
Pandanaceae	Pandanus macrostigma	1	CR	Endemic	
Pandanus	Pandanus microcarpus	1	CR	Endemic	
Pandanaceae	Pandanus rigidifolius	1	EN	Endemic	
Pandanaceae	Pandanus vandermeeschii	2	VU	Endemic	
Pandanaceae	Pandanus wiehei	1	EN	Endemic	
Asteraceae	Parafaujasia mauritiana	1	CR	Endemic	
Poaceae	Paspalum vaginatum	1 1	LC DD	Native	
Piperaceae	Peperomia cf. elliptica	2	טט	End Masc	
Piperaceae Orchidaceae	Peperomia sp.	1	CR	End Masc	
Rhamnaceae	Phaius longibracteatus	1	VU	End Masc	
	Phylica nitida	1	VU	Native	
Phyllantaceae	Phyllanthus casticum Phyllanthus revaughanii	2	EN	Endemic	
Phyllantaceae	Pittosporum ferrugineum	1	VU		
Pittosporaceae	Pittosporum senacia subsp.		VU	Cryptogenic	
Pittosporaceae	senacia	4	LC	Native (End Hotspot)	End Masc
Araliaceae	Polyscias mauritiana	1	EN	Endemic	LIIU Masc
Araliaceae	Polyscias mauntiana Polyscias neraudiana	1	CR	Endemic	
Orchidaceae	Polystachya concreta	2	VU	Endemic	
Anacardiaceae	Poupartia borbonica	1	CR	End Masc	
Verbenaceae	Premna serratifolia	1	LC	Native	
Burseraceae	Protium obtusifolium	2	VU	Endemic	
Darsoraccac	Psathura borbonica var.	_	vo	Litacinio	
Rubiaceae	grandiflora	1	VU	End Masc	Endemic
Rubiaceae	Psathura cf. myrtifolia	1	ĖN	Endemic	Liidoiiiio
Asteraceae	Psiadia arguta	1	VU	Endemic	
Asteraceae	Psiadia cataracte	1	CR	Endemic	
Asteraceae	Psiadia lithospermifolia	1	VU	Endemic	
Asteraceae	Psiadia penninervia	1	EN	Endemic	
Asteraceae	Psiadia terebenthina	1	VU	Endemic	
Asteraceae	Psidia viscosa	1	LC	Endemic	
Psiloxylaceae	Psiloxylon mauritianum	2	VU	End Masc	
Cyperaceae	Pycreus inactus	1	DD	Native	
Cyperaceae	Pycreus polystachys	1	LC	Native	
Cyperaceae	Rhynchospora holoschenoides	1	DD	Native	
Cyperaceae	Rhynchospora rugosa	1	DD	Native	
Rousseaceae	Roussea simplex	1	CR	Endemic	
Goodeniaceae	Scaevola taccada	2	LC	Native	
Cyperaceae	Scleria sieberi	1	LC	End Masc	
Salicaceae	Scolopia heterephylla	1	VU	End Masc	
Rhamnaceae	Scutia myrtina	1	LC	Native	
Apocynaceae	Secamone dilapidans	2	CR	End Masc	
Apocynaceae	Secamone volubilis var. salicifolia	1	CR	End Masc	Endemic
Aizoaceae	Sesuvium ayresii	1	LC	End Masc	
Sapotaceae	Sideroxylon boutonianum	2	EN	Endemic	
Sapotaceae	Sideroxylon cinerium	3	VU	Endemic	
Sapotaceae	Sideroxylon grandiflorum	1	EN	Endemic	
Sapotaceae	Sideroxylon puberulum	1	VU	Endemic	
Sapotaceae	Sideroxylon sessiliflorum	1	EN	Endemic	
Smilacaceae	Smilax anceps	1	LC	Native	
Fabaceae	Sophora tomentosa	2	VU	Native	
Rubiaceae	Spermacoce sp.	1		NI d	
Poaceae	Sporobolus virginicus	1	LC	Native	
Coningle	Stadmania oppositofolia subsp.	,	\/L1	No.	Noth:
Sapindaceae	oppositofolia	1	VU	Native	Native

Euphorbiaceae	Stilingea lineata	2	VU	Endemic	
Surianaceae	Suriana maritima	2	LC	Native	
Myrtaceae	Syzygium commersonii	1	VU	Endemic	
Myrtaceae	Syzygium coriaceum	1	VU	Endemic	
Myrtaceae	Syzygium latifolium	1	EN	Endemic	
Myrtaceae	Syzygium mauritianum	1	VU	Endemic	
Myrtaceae	Syzygium petrinense	1	EN	Endemic	
Myrtaceae	Syzygium sp.	1	LIV	Litacinic	
Myriaceae	Tabernaemontana	1			
A n. a. a. m. a. a. a. a.		4	1/11	Fad Mass	
Apocynaceae	persicariaefolia	1	VU	End Masc	
Malvaceae	Talipariti tiliaceum	2	LC	Native	
Monimiaceae	Tambourissa cordifolia	1	EN	Endemic	
Monimiaceae	Tambourissa ficus	2	EN	Endemic	
Monimiaceae	Tambourissa peltata	3	VU	Endemic	
Monimiaceae	Tambourissa quadrifida	1	CR	Endemic	
Monimiaceae	Tambourissa sieberi	1	EN	Endemic	
	Terminalia bentzoë subsp.				
Combretaceae	bentzoë	1	VU	End Masc	End Masc
Lythraceae	Tetrataxis salicifolia	1	CR	Endemic	
Malvaceae	Thespesia populnea	2	LC	Native	
Boraginaceae	Tournefortia argentea	2	LC	Native	
Malvaceae	Trochetia blackburniana	1	VU	Endemic	
Malvaceae	Trochetia boutoniana	1	CR	Endemic	
Malvaceae	Trochetia parviflora	1	CR	Endemic	
Malvaceae	Trochetia triflora	2	VU	Endemic	
Malvaceae	Trochetia uniflora	1	ĖN	Endemic	
Meliaceae	Turraea rigida	1	EN	Endemic	
Meliaceae	Turraea thouarsiana	1	VU	End Masc	
Meliaceae	Turraea trichopoda	1	EN	Endemic	
Meliaceae			□IN	Endeniic	
Mahaaaaa	Urena lobata subsp. lobata var.	4	1.0	Nativa	Endomio
Malvaceae	mauritiana	4	LC	Native	Endemic
Makinana	Urena lobata subsp. lobata var.	4	OD.	NI-45	Cool Mass
Malvaceae	multifida	1	CR	Native	End Masc
Malana	Urena lobata subsp. lobata var.	0		NI - Con-	□l N4
Malvaceae	umbonata	2	EN	Native	End Masc
Rutaceae	Vepris lanceolata	1	VU	Native	
Melastomataceae	Warneckea trinervis	1	LC	Endemic	
Annonaceae	Xylopia richardii	3	EN	End Masc	
Xyridaceae	Xyris cf. anceps	1	EN	Native	
Rutaceae	Zanthoxylum heterophyllum	2	CR	End Masc	
Poaceae	Zoisia matrella	1	LC	Native	
Fabaceae	Zornia vaughaniana	2	VU	Endemic	
Species discorded					
Species discarded	Cylindraelina loranasi	4	EW	Endomio	
Asteraceae	Cylindrocline Iorencei	1		Endemic	
Rubiaceae	Myonima nitens	1	VU	Endemic	
Poaceae	Chloris filiformis	1	DD	Native	
To remove, alien					
species					
Cyperaceae	Isolepis fluitans	1		ALIEN!	
	Cyperus nutans var.				
Cyperaceae	eleucionoides	1		ALIEN!	