

GTZ KIEN GIANG BIOSPHERE RESERVE PROJECT

BIODIVERSITY SURVEY

Rapid assessment of flora and terrestrial animals in Key Areas
of the Kien Giang Biosphere Reserve



Cỏ rần – *Aninga melanogaster* U Minh Thuong National Park

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Biodiversity survey – Rapid assessment of flora and terrestrial animals in the key areas of Kien Giang Biosphere Reserve

A report by Nguyen Xuan Dang

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Conservation and Development of the Biosphere Reserve
of Kien Giang Province Project,
Department of Science and Technology,
320 Ngo Quyen Street, Rach Gia City,
Kien Giang Province, Vietnam.

T +84 77 3942 937
F +84 77 3942 938
E office.kgbp@gtz-vietnam.com.vn
I www.gtz.de/vietnam

Responsible:

Dr. Sharon Brown, Project "Conservation and Development of the
Biosphere Reserve of Kien Giang Province

Author:

Nguyen Xuan Dang – Institute of Ecology and Biological Resources

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ABBREVIATIONS

AB-AM	- An Bien – An Minh
absl	- Above sea level
DARD	- Department of Agriculture and Rural Development
FIPI	- Forest Investigation and Planning Institute
FPD	- Forest Protection Department
GTZ/Project	- GTZ Project/ Conservation and Development of KGBSR
IEBR	- Institute of Ecology and Biological Resources
IUCN RL	- IUCN Red List of Threatened Species
KGBSR	- Kien Giang Biosphere Reserve
MARD-	Ministry of Agriculture and Rural Development
MAB	- Man and Biosphere
NR	- Nature Reserve
NP	- National park
NGOs	- Non-governmental organizations
VN RDB	- Red Data Book of Vietnam
UMT NP	- U Minh Thuong National Park
UMT-AB-AM	- U Minh Thượng – An Bien – An Minh
Sub-FIPI	- Forest Investigation and Planning Sub-Institute
WAR	- Wildlife at Risk

INTRODUCTION

This rapid biodiversity assessment of KGBSR is based on review of previous biodiversity studies conducted by many authors and our field study during 26 July to 20 August 2009 in Phu Quoc NP, U Minh Thuong NP, An Bien – An Minh Protection Forest and Hon Dat – Kien Ha Special Use and Protection Forest (Kien Luong, Kien Hai)

This assessment was planned and funded by GTZ Project/ Conservation and Development of Kien Giang Biosphere Reserve. The assessment team includes 4 scientists from Institute of Ecology and Biological Resources and one scientist from Hanoi Education University. The team leader is Ass. Prof. Dr. Nguyen Xuan Dang from Institute of Ecology and Biological Resources

The assessment Team would like to express its sincere thank to GTZ/Project for funding this study, all staff members of GTZ/Project Management board; all staff members of Phu Quoc NP, U Minh Thuong NP, An Bien – An Minh Protection Forests and Hon Dat – Kien Ha Special Use Forest and Protection Forest for their valuable help for our survey.

For all questions related to content of this report please contact Ass. Prof. Dr. Nguyen Xuan Dang directly or through phones (office: 0437562810, Mol. 0913312431) or e-mail:

dangnx@fpt.vn

EXECUTIVE SUMMARY

This rapid biodiversity assessment of KGBSR is based on review of previous biodiversity studies conducted by many authors and findings of our field study during 26 July to 20 August 2009 in Phu Quoc NP, UMT NP, AB – AM Protection Forest and Hon Dat – Kien Ha Special Use and Protection Forest (Kien Luong, Kien Hai)

The assessment results show that, in spite of in-sufficient investigation, KGBSR appears to have very high biodiversity potential. Until now, it was recorded in KGBSR:

- 6 main ecosystems with 22 different habitat types
- About 1,500 species of vascular plants belonging to 150 families, 70 orders
- 77 species of mammals belonging to 20 families, 8 orders
- 222 species of birds belonging to 50 families, 11 orders
- 107 species of reptiles and amphibians belonging to 20 families, 5 orders

Within it:

- Phu Quoc area has: 5 main forest types; 1,172 species of high vascular plants belonging to 562 genera, 137 families, 66 orders, 6 branches; 61 species of mammals belonging to 18 families, 7 orders; 134 species of birds belonging to 37 families, 11 orders; 23 species of amphibians and 55 species of reptiles.
- UMT-AB-AM area has: 3 main forest types; 387 species of high vascular plants belonging to 108 families, 31 species of mammals belonging to 13 families, 8 orders; 152 species of birds belonging to 38 families, 10 orders; 7 species of amphibians and 38 species of reptiles.
- Kien Luong – Kien Hai area has: 3 main forest types; 867 species of high vascular plants belonging to 157 families; 28 species of mammals belonging to 15 families, 8 orders; 95 species of birds belonging to 37 families, 10 orders; 13 species of amphibians and 85 species of reptiles.

Out of recorded species, 30 plant species, 20 mammal species, 19 bird species, 1 amphibian species and 26 reptile species are of conservation priority (threatened with extinction in Vietnam and/or in the World), namely:

- Phu Quoc area has 25 plant species, 14 mammal species, 5 bird species and 23 reptile species
- UMT-AB-AM area has 1 plant species, 11 mammal species, 15 bird species and 20 reptile species
- Kien Luong – Kien Hai area has 21 plant species, 6 mammal species, 3 bird species, 1 amphibian species and 19 reptile species

Four (4) forest types and/or plant communities are of special conservation priority:

1. Dwarf forest on sand hills in Phu Quoc NP
2. Stand of *Lumnitzera littorea* in Rach Tram estuary, Phu Quoc NP.
3. Natural *Melaleuca* forest on pitland in UMT NP
4. Coastal mangrove forest

There are 20 species identified as of special conservation priority including Roundleaf Cycad *Cycas litoralis*; Hairy-nosed Otter *Lutra sumatrana*, Jungle Cat *Felis chaus*, Fishing Cat *Prionailurus viverrinus*, Large-spotted Civet *Viverra megaspila*, Indochinese Silver Langur *Trachypithecus germaini*, Lylei's Fruit Bat *Pteropus lylei*, Large Flying Fox *Pteropus vampyrus*; Sarus Crane *Grus antigone*,

Indian Darter *Anhinga melanogaster*, Lesser Adjutant *Leptoptilos javanicus*, Great Hornbill *Buceros bicornis*; Reticulated Python *Python reticulatus*, King Cobra *Ophiophagus hannah*, Yellow-headed Temple Turtle *Heosemys annandalii*, Malayan Box Turtle *Cuora amboinensis*, Snail-eating Turtle *Malayemys subtrijuga*, Asiatic Softshell Turtle *Amyda cartilaginea*; Green Sea Turtle *Chelonia mydas* and Hawksbill Sea Turtle *Eresmochelys imbricata*.

Main forest management problems and threats to biodiversity are:

- Maintaining of high water level for forest fire prevention is causing negative impact on growth and development of *Melaleuca* forest.
- Conversion of forestry land with rare vegetation types in Phu Quoc NP into land for tourism infrastructure construction,...
- The existing of system of dykes surrounding household forest is disturbing dispersal and natural regeneration of coastal mangrove forests
- Existing encroachment/ destruction of coastal protection forest for aquaculture.
- Widespread wildlife hunting and trade
- Human encroachment and disturbance of wildlife habitat
- Environment pollution due to subsistence and industrial wastes, use of pesticides and herbicides
- Impacts of economic and tourism development leading to reduction of forest area and habitat degradation.
- Local community has low awareness on biodiversity conservation.
- Ineffectiveness of forest and wildlife management in the area

Based on the biodiversity assessment, following recommendations are made:

I. Additional biodiversity surveys for KGBSR

1. Additional biodiversity assessment of Hon Chong NR and coastal islands in Kien Luong – Kien Hai (2010)

Kien Luong – Kien Hai area represents a unique landscape. Tropical broadleaf forests in Hon Chong Semi-island (and also small islands) contain high biodiversity potential, but still poorly investigated. Many species new for science were discovered during recent years. This area is facing with increasing negative impacts from industrial development (Cement factory, future thermo-electricity factory, future sea port development, etc.) and tourism development. The biodiversity values of this area should be properly assessed for relevant conservation measures

2. Survey for assessing population status of species conservation priority species (2010-2011).

Additional surveys are necessary to identify population status of highly endangered species such as Indochinese Silver Langur *Trachypithecus germaini*, Long-Tailed Macaque *Macaca fascicularis*, Slow loris *Nycticebus coucang*, Jungle Cat *Felis chaus*, Fishing Cat *Prionailurus viverrinus*, Large-spotted Civet *Viverra megaspila*, Hairy-nosed Otter *Lutra sumatrana*, Small-clawed Otter *Aonyx cinerea*, Sarus Crane *Grus antigone*, Indian Darter *Anhinga melanogaster*, Lesser Adjutant *Leptoptilos javanicus* Yellow-headed Temple Turtle *Heosemys annandalii*, Malayan Box Turtle *Cuora amboinensis*, Snail-eating Turtle *Malayemys subtrijuga*, Asiatic Softshell Turtle *Amyda cartilaginea*, Green Sea Turtle *Chelonia mydas*, and Hawksbill Sea Turtle *Eresmochelys imbricata* and also Lyle's Fruit Bat *Pteropus lylei*, Large Flying

Fox *Pteropus vampyrus* in Phu Quoc NP, UMT NP, Hon Chong NR. These animal are strongly facing with various negative impacts (hunting, habitat degradation, infrastructural development, etc.)

To study stand of *Lumnitzera littorea* in Rach Tram estuary of Phu Quoc NP to identify its regeneration capacity and ecological requirement for applying relevant conservation measures.

3. Survey of wildlife trade in KGBSR area (2010)

To carry out a survey of wildlife hunting, trade and wildlife keeping in area of Phu Quoc NP, UMT NP, Hon Chong NR (Kien Luong District) to identify scale, network, dynamic of wildlife trade, participating people, importance of wildlife trade for livelihood of poor families, etc. in order to develop relevant measures for its control

4. Study of restoration and sustainable development of *Melaleuca* forests (2010-2012).

Study is necessary to identify environmental conditions for natural regeneration of *Melaleuca* forest and develop technical guidance for natural regeneration of *Melaleuca* forest in UMT NR, forest compartment 2 of AB-AM Protection Forest.

To assess impacts of long-term retaining of high water level for fire prevention on growth and development of *Melaleuca* forests in UMT NP and forest compartments 1 and 3 of AB-AM Protection Forest in order to determine relevant hydrological regime that can help to minimize risk of forest fire meanwhile support the normal development of *Melaleuca* forest

5. Study of disposal capacity and natural sea-encroachment capacity of mangrove forests (2011- 2013)

System of dykes for aquaculture and harvesting natural sea products is disturbing the natural dispersal and natural regeneration of mangrove forest trees (*Rhizophora spp*; *Bruguiera spp*; *Avicennia spp.*; *Aegiceras sp.* ; *Sonneratia spp.*) that reduce sea-encroachment and environmental protection function of the forest. Study of dispersal capacity, natural regeneration capacity of forest will help to find the measures for less expensive development of coastal mangrove forests that reflects natural forest processes/succession.

6. Investigation for developing vegetation map, soil map and hydrological map of UMT NP (2010-2011)

These maps together with accompanying data set will be an important scientific database for development of relevant management measures and monitoring of change in vegetation cover of UMT NP.

7. Environmental impact assessment of development projects inside and in vicinity of KGBSR (since 2010).

To conduct environmental impact assessment of Starbay Tourism Landscape Project (542.79 ha) and another proposed tourism project in Phu Quoc NP for reviewing these projects to meet biodiversity conservation purposes in this area .

To conduct environmental impact assessment of development projects in Kien Luong district close to Hon Chong NR and Kien Luong-Kien Hai Protection Forest such as Thermo-electric factory construction, Cement factory construction, new harbor construction and tourism development for mitigation measures

To conduct environmental impact assessment of aquaculture system inside protection forest to find measures for mitigating negative impacts and ensuring sustainable development in the area.

II. Biodiversity monitoring and evaluation programme

1. Monitoring of populations of high conservation priority species (since 2010).

Population status of following highly endangered species should be monitored for relevant conservation measures: Indochinese Silver Langur *Trachypithecus germaini*, Long-Tailed Macaque *Macaca fascicularis*, Slow loris *Nycticebus coucang*, Jungle Cat *Felis chaus*, Fishing Cat *Prionailurus viverrinus*, Large-spotted Civet *Viverra megaspila*, Hairy-nosed Otter *Lutra sumatrana*, Small-clawed Otter *Aonyx cinerea*, Sarus Crane *Grus antigone*, Lesser Adjutant *Leptoptilos javanicus*, Indian Darter *Anhinga melanogaster*, Yellow-headed Temple Turtle *Heosemys annandalii*, Malayan Box Turtle *Cuora amboinensis*, Snail-eating Turtle *Malayemys subtrijuga*, Asiatic Softshell Turtle *Amyda cartilaginea*, Green Sea Turtle *Chelonia mydas*, and Hawksbill Sea Turtle *Eresmochelys imbricata* in Phu Quoc NP, UMT NP and Hon Chong NR and also populations of Lyle's Fruit Bat *Pteropus lylei*, Large Flying Fox *Pteropus vampyrus* in Phu Quoc NP and UMT NP.

2. Monitoring forest area reduction due to negative impacts of human activities (since 2010)

Coastal Protection forests represent as narrow band along sea coast and always face with forest encroachment/destruction by aquaculture and other human activities, therefore, long-term monitoring programme must be set up in critical areas for monitoring the change and apply relevant mitigation measures. Remote sensing techniques (satellite images) should applied for large-scale forest area monitoring.

3. Monitoring factors that cause degradation of environment quality and wildlife habitats (since 2010).

Negative impacts on environment and habitats are caused by tourism development, pollution by subsistence wastes, industrial wastes, use of pesticides, herbicides, rodent poisonous baits, etc. These impacts should be monitored to undertake relevant prevention and mitigation measures.

III. Protection programme

1. Capacity building for Management Boards of Nature Reserves and Protection Forests (2010 – 2012)

Conducting various training courses for staff members of the forest management boards to increase their knowledge on biodiversity conservation, techniques of biodiversity monitoring and evaluation, their skill of key species identification, observation, recording and reporting, etc.

Conducting training courses to increase their knowledge and enforcement skill of national legislation on forest protection and wildlife conservation

Constructing additional guard posts in Hon Chong NR and Kien Luong – Kien Hai Protection forest to improve effectiveness of the forest protection.

Providing the forest management boards with equipments for forest patrol, law enforcement and forest fire prevention such as motorcycles, motorboats, car, GPS, binocular, etc.)

2. Intensification of forest patrolling and law enforcement (since 2010)

Intensification of forest patrolling and law enforcement to control:

- illegal forest encroachment/destruction
- wildlife hunting, trade and consumption in the area
- wildlife keeping and husbandry in the area to prevent catching animals from the wild for captive breeding stock as well as smuggling wild-caught animals under the guide of captive breeding of animals

3. Installing system of signboards with notification about boundaries and management regulations of KGBSR (2010).

Signboards notifying KGBSR boundary and management regulations are necessary to keep local people and visitors (tourists) aware and obey management regulations of KGBSR in term of nature protection, forest protection and wildlife conservation.

*4. Conservation of stand of *Lumnitzera littorea* and unique vegetation type "Dwarf forest on sand hills" in Phu Quoc NP (since 2010)*

Plant species *Lumnitzera littorea* is classified as VU-vulnerable in RDB VN (2007) and stand of *Lumnitzera littorea* in Phu Quoc NP is the only largest population of this species in Vietnam. It must be strictly protected for its long-term survival.

"Dwarf forest on sand hills" in Phu Quoc NP (located from Ganh Giau Guard Post to Bai Can Guard Post) is very rare vegetation type in Vietnam. This vegetation type has long history of adaptation to high salinity, acid and inundation. These vegetation type usually has small size and therefore highly sensitive to human affect. It will not be recovered if undergoing destruction impacts.

5. Development of community-based forest management model (since 2011)

Establishment of community-based forest management model is important to reduce pressure on biodiversity and improvement of livelihood of local communities. Objectives of this models include:

- Participatory reforestation, forest protection and enrichment of existing forests for sea wave prevention, environment protection and biodiversity conservation.
- Developing and applying system of sustainable use of forest resources and forest land by local community
- Increase forest products from Production forests including timbers, fuelwood, livestock food and other non-timber forest products to increase household income of local communities.

- Involvement of local households into planning and management of forest products.

IV. Conservation education and improvement of livelihood of local communities

1. Conducting educational programme to increase awareness of local communities on nature protection and biodiversity conservation (since 2010).

Some key activities are:

- Producing brochure about KGBSR
- Producing manuals for education on forest protection and biodiversity conservation and conducting training courses for local communities and schools.
- Producing and distributing posters, leaflet with messages on nature protection and biodiversity conservation.
- Conducting educational programmes by public media such as newspapers, radio and TV broadcasting, etc.

2. Conducting programmes that help to improve livelihood of local communities, involve local community into forest management activities so that they can receive certain direct benefits from forests; introducing alternative materials for forest products to reduce pressure on local forests (since 2010).

Following activities can be carried:

- Providing local community with credit for production development, introducing advanced technologies for increasing productivity of agricultivation, animal husbandry, development of traditional industries or applying new industries to create new job and new income sources for local communities.
- Conducting forest allocation for protection to local communities
- Introducing alternative materials for timber, fuelwood and other non-timber forest products.
- Contracting local people for forest growing and forest protection
- Involving local communities into tourism services that will create additional household income

CHAPTER 1. OBJECTIVES, STUDY SITES, TIME SCHEDULE AND ASSESSMENT METHODS

1.1. ASSESSMENT OBJECTIVES

As requested by GTZ/Project, objectives of this study are as following:

- Reviewing available literature about biodiversity assessment in KGBSR to identify biodiversity values of KGBSR and information gaps or out-of-date which need to be filled up and updated
- Conducting rapid field survey in biodiversity-rich areas of KGBSR to collect additional and updated information about status of vegetation, flora and terrestrial vertebrate wildlife with focus on species and areas with high biodiversity significance
- Identifying pressure and threats to biodiversity in general and taxa of high conservation significances in particular.
- Developing recommendations about conservation measures and biodiversity monitoring in KGBSR in coming years.

Due to short survey duration, this biodiversity assessment is based mainly on review of previous survey reports of many other researchers (see Reference for details) and of this team members (Nguyen Xuan Dang, Ngo Xuan Tuong, Pham Duc Tien). Field survey was focused on assessment of population status of high conservation priority species and identification of biodiversity conservation problems in the area.

1.2. SURVEY TIME SCHEDULE AND SITES

The field survey was conducted from 27 July to 16 August 2009 in 4 following sites (Figure 1; Annex 1):

- 27 – 31 July 2009: Surveyed in Phu Quoc area (Suoi Cai, Bai Thom, Suoi Can, Rach Tram, Xom Chai, Ganh Dau, Da Chong, Duong Dong, Vo Quap- Nui Chua mountain, Ham Ninh, etc.)
- 2 - 5 August 2009: Surveyed in AB-AM Protection Forest (Thu Bay village, An Dong Village of Nam Thai A Commune; Van Khanh, Can Gao village, Dong Hung B, Kinh Nam village, Kinh Muoi village etc.)
- 6 – 10 August 2009: Survey in UMT NP (Hoa Mai lake, Van Khanh, Kinh 21, Minh Thuan Market, etc.)
- 11 – 16 August 2009: Surveyed in Kien Luong – Kien Hai Forests (Binh An, Binh Tri, Mo So, Chua Hang, Ba Hon, Binh An Lake, Hon Chong NR, coastal mangrove forests, Ha Tien)

Assessment Team consists of 4 scientists from IEBR (Hanoi) and one scientist from Hanoi Education Institute (Annex 1). Team leader is Ass. Prof. Dr. Nguyen Xuan Dang from IEBR (Hanoi)

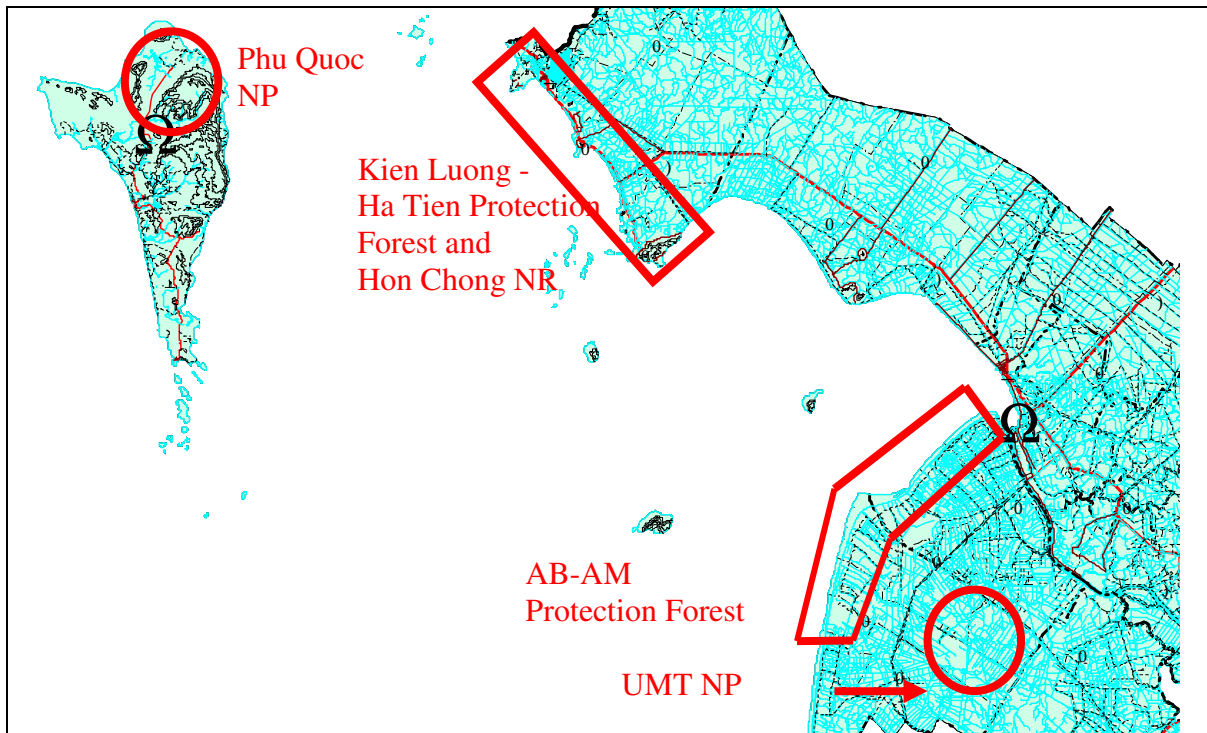


Figure 1. Location of survey sites in KGBSR

1.3. ASSESSMENT METHODS

1.3.1. Review of reports from previous surveys

Literature review is an important part of this assessment. We try to collect as much as possible publications and un-published reports from previous surveys. Totally, more than 40 literature sources (see Reference for details) have been collected and reviewed for this assessment.

1.3.2. Field survey methods

a) Methods for vegetation and flora survey

As a large area needing to be covered in a short time, following rapid assessment techniques were used:

- *Preparation for field study*

Before field study we revised all publications and reports related to vegetation, flora, terrain, geological, hydrological, tourism and socioeconomic features of survey area to determine where and what should be focused on.

- *Interviewing local forest management staff members*

In each surveyed sites, we firstly interviewed technical officers and other staff members of the forest management board about biodiversity related questions to get

preliminary information and to identify relevant places for field work, then we asked them to nominate good technical staff members and rangers to joint our survey. During 1-2 first days we made overview survey of the area to find out overall features of local vegetation and flora and during other days we conducted detailed study of vegetation structure and floral inventory.

- *Standard quadrat techniques*

Some standard quadrates were established to get better description of forest structure (layers, canopy coverage, floral composition, etc.). All statistic data were recorded in pre-prepared forms. Taxonomic identification was restricted to family level, only few common species were identified upto species level. The size of standard quadrat is 10x20m. In each quadrat, measurements were taken to all trees of more than 5cm in diameter. The height of trees was estimated using stick of 4-5m. Circumference of trees was measured by band measurer. Due to low number of quadrat conducted, the collected data just used for preliminary assessment.

b) Methods of mammal survey

- *Interviewing staff members of forest management boards and local residents*

The interviews were made to get general information about status of mammal fauna in study area, abundance of key species, extant species and status of wildlife hunting, use and trade. Interviewees are persons who have good knowledge about local fauna (former hunters, wildlife traders, etc.). Interviewees were asked to show all evidences of wild animals they have such as animal parts or live animals kept for pets in the village. Colour pictures of wildlife were used to support taxonomic identification.

- *Field transect survey*

Various survey transects/ routes crossing through various habitat types were used for searching direct animal sightings or their signs (tracks, dropping, vocalizations, dens, etc.). The survey was conducted mainly in daytime, normally from 6:30 – 12:00 and from 13:00 to 17:00. Several night surveys were also made to get sightings of nocturnal animals.

- *Live-trapping small mammals*

Fifty five (55) live box traps were used to catch small mammals (rodents, insectivores) and 8 mist-nets of total 64 m long were used to catch bats. All caught animals were measured (headbody length, hind foot length, tail length, body weight etc.), taxonomically identified and then released back at the same place.

- *Taxonomic identification*

Mammal taxonomic identification was based on following manuals Lekagul et al., (1988), Bate et al., (1997), Borissenko et al., (2003), Smith et al. (2008) và Fancis (2008). Scientific names and systematic order follow Wilson and Reeder (2005) with some updated review. Vietnamese names followed Nguyễn Xuân Đăng and Lê Xuân Cảnh 2009.

c) Methods of bird survey

- *Interviewing local residents*

Some bird species can be identified through interviewing local residents and local rangers. During interview, color photographs of living birds in field guide books are used to help taxonomic verification. Bird parts (feathers, bills, feets, etc.) remained in villages are also examined for supporting information.

- *Transect survey*

Using motorboats and walking routes to conduct various transect surveys through different habitat types of each survey areas. Birds were observed by naked eyes and binoculars and also recognized through their specific vocalizations.

- *Taxonomic identification*

Taxonomic identification of birds was based on field guide books with color pictures of birds by Craig Robson (2005); and also book "Birds of Vietnam" of Nguyen Cu et al.(2000). Vietnamese names and scientific names of birds followed Vo Quy and Nguyen Cu (1995) and Charles G. Sibley and Burt L. Monroe, Jr., 1990.

d) Methods of reptile and amphibian survey

- *Interviewing local residents*

Interviewees were selected as persons who often go to the forest, former hunters and wildlife traders. This method is useful for common and large-size species. We also visited some wildlife trade shops for examining animal collection and interviewing local traders

- *Transect survey and collecting specimens*

Transect survey was conducted using motorboats, motorcycles and walking to get direct animal sighting and their signs observation. Specimens were collected by naked hands, hand nets, pitpond traps, night spotting etc. Collected living specimens were released back to the field after getting taxonomic identifications.

- *Taxonomic identification*

Taxonomic identification was based on several guide books such as Serpents de l' Indochine. Bourret R., 1936 - Les Scrpents du Laos. Deuve J., 1970; A Field Guide to the Snakes of South Vietnam Simm. Campden - Main, 1970; Les Serpents du Cambodge. Saint Girons H., 1972. Systematic sequence, Vietnamese names and scientific names followed Nguyen Van Sang et al 2005 and Nguyen Van Sang et al., 2008.

1.3.3. Workshop for evaluation of preliminary report and recommendations for final report

Just after completion of field survey, Project Office has organized a workshop in Rach Gia City for evaluation of preliminary results and recommendations for final report. Attended the workshop are Project Director, CTA and other staff members of Project Offices; representatives of all National parks, Nature reserves and Protection forests where surveys were taken place; Director of Sub-Institute of Forestry Science in South; representatives of several organizations of Kien Giang Province. At the workshop, except for copies of preliminary report (30 pages) delivered to each

workshop participants, survey team made 5 PowerPoint presentations with picture illustration to enable participants better understand of the assessment results.

At the workshop, many questions, discussions and recommendations were made to correct information and enable final report to reach better quality. Generally, participants highly appreciated assessment results, especially its recommendations for follow-up actions. Survey Team welcomes all questions and recommendations from workshop participants. In this final report, we try to satisfy all recommendations about improving the assessment report.

CHAPTER 2. LITERATURE REVIEW OF BIODIVERSITY VALUES OF KIEN GIANG BIOSPHERE RESERVE

2.1. LOCATION AND PLANNING OF KGBSR

In 2007, UNESCO officially recognized KGBSR as a world biosphere reserve. According to Proposal document submitted by Kien Giang People Committee and Vietnam MAB Office (2005), KGBSR is situated in territory of 5 districts (Phu Quoc, An Minh, Vinh Thuan, Kien Luong and Kien Hai) of Kien Giang Province. KGBSR is an area of wetlands, coastal forests and islands. The area has elevation ranging from 0.6 to 490 m asl. Total area is 1,118,105 ha, of which 329,304 ha in mainland and 858,801ha in the sea. Geographically, KGBSR is divided into 3 areas:

- Phu Quoc area (304,933 ha) including Phu Quoc NP on Northern Phu Quoc Island and adjacent forests in Ham Rong, Ganh Dau and Ham Ninh areas.
- UMT-AB-AM area (148,758 ha), including UMT NP, its buffer zone and AB-AM Protection Forests.
- Kien Luong – Kien Hai area (734,415 ha) including coastal Protection forests in Kien Luong and Kien Hai Districts and Hon Chong NR (Kien Luong District).

KGBSR is divided into 3 functional zones: Core zone (36,935ha), Buffer Zone (172,578 ha) and Transition zone (978,591 ha) (Table 1).

Table 1. Zonation of Kien Giang Biosphere Reserve

Zone	Mainland (ha)	Sea (ha)	Total (ha)
1. Core zone	23,073	13,836	36,935
- Phu Quoc NP	12,037	13,862	25,899
- UMT NP	8,111	0	8,111
- Kien Luong -Kien Hai Protection Forest and Nature Reserve	2,926	0	2,926
2. Buffer zone	116,791	55,787	172,587
3. Transition zone	189,439	789,152	978,591
Total:	329,304	858,801	1,118,105

Source: People Committee of Kien Giang Province and Vietnam MAB Committee (2005)

Functions of KGBSR are:

- To protect landscape; conserve diversity of ecosystems, species, gene pool and culture
- To promote sustainable development of economy and human resource in term of ecology and social culture
- To support projects on environmental education, biodiversity research and monitoring and sustainable development

2.2. STATUS OF BIODIVERSITY STUDY IN KGBSR

Biodiversity of KGBSR have been studied by several organizations and agencies such as Southern Sub-FIPI and Sub-FIPI II (in Ho Chi Minh City), IEBC (Hanoi),

Institute of Tropical Biology (in Ho Chi Minh City), Forest Science Institute of Vietnam (in Hanoi), Southern Sub-Institute of Forestry Science, National University of Ho Chi Minh City, Can Tho University, Vietnam-Russian Tropical Centre, several NGOs (Care International in Vietnam, Birdlife International – Indochina Programme, Wildlife at Risk), etc.

2.2.1. Phu Quoc area

Before 2000, some scientists conducted fauna and floral studies in Phu Quoc Island (Van Peenen et al., 1969; Pham Hoang Ho, 1985; Đàng Huy Huynh et al., 1994;...). However, the information from these studies was preliminary and out of date.

In 2000, Sub-FIPI II conducted overall assessment for establishment of "Investment Plan for Development of Phu Quoc NP and Buffer zone, Phu Quoc District, Kien Giang Province, Period 2001-2005 (Sub-FIPI, 2001). This was the first overall assessment of biodiversity values of Phu Quoc area. This study provides first description of vegetation types and a list of 497 species of vascular plants belonging to 112 families, 360 genera and 150 species terrestrial vertebrate animals belonging to 69 families (Mammals: 26 species, 12 families; birds: 84 species, 34 families; reptiles: 29 species, 14 families and amphibians: 11 species, 4 families).

In 2003, Vietnam-Russian Tropical Centre conducted a survey on fauna of Phu Quoc NP, however, only few findings were published (Abramov et al. 2007, Abramov et al. 2008).

In 2002-2005, Sub-FIPI II together with IEBR conducted biodiversity surveys in Phu Quoc NP. By these surveys, Sub-FIPI compiled a list 1,164 species of vascular plants belonging to 137 families, 66 orders (Sub-FIPI II, 2003); IEBR recorded 202 species of terrestrial vertebrates belonging to 75 families, 26 orders (Mammals: 22 species, 14 families, 6 orders; birds: 119 species, 41 families, 16 orders; Reptiles: 47 species, 10 families, 3 orders; amphibians: 14 species, 4 families, 1 order) (Le Xuan Canh et al., 2005; Nguyen Xuan Dang et al., 2007, etc.). In comparison with previous lists, this study significantly increased number of recorded species, except mammals which reduced from 26 species to 22 species (due to some species were in-correctly recorded in previous study).

Recent years, WAR has conducted a number of wildlife surveys in Phu Quoc NP, however, the results have not published yet.

2.2.2. U Minh Thuong – An Bien – An Minh area

In 1991, FPD of Kien Giang conducted rapid survey for developing "Investment Plan for U Minh Thuong Nature Reserve and Historical Site" (People Committee of Kien Giang Province, 1992). This document reported 32 plant species and 144 animal species (19 species of mammals, 80 species of birds, 34 species of reptile and 11 species of amphibians)

During period of 2000-2003, CARE Project/ Community Development and Protection of U Minh Thuong NR" organized a series of basic biodiversity assessment of UMT NP. These studies provided an important database on biodiversity of UMT NP. The

assessment results were provided in the Project technical reports and book "Biodiversity of U Minh Thuong NP – Vietnam" (Nguyen Xuan Dang et al. 2004). According to latest document, in UMT NP, it was recorded 243 plant species of 84 families; 32 mammal species of 12 families, 8 orders; 151 bird species of 38 families; 34 reptile species of 10 families, 2 orders; 7 amphibian species of 3 families, 1 order; 34 fish species of 17 families, 7 orders; 181 insect species of 60 families, 11 orders. Part of these data was published in Journals and workshop proceedings (Tran Triet 2000, 2001; Nguyen Xuan Dang et al., 2000 to 2004; Nguyen Phuc Bao Hoa, 2002, etc.)

In 2001, Sub-FIPI II conducted survey for establishment of "Investment Plan for Development of U Minh Thuong NP and Buffer zones, Period 2002-2006" (Sub-FIPI II, 2001). However, a big forest fire happened in UMT NP, in March 2002, destroying large area of primary natural *Melaleuca* forest. After the fire, Sub-FIPI II, IEBR, Institute of Tropical Biology, Southern Sub-Institute of Forest Science, Department of Science, Technology and Environment of Kien Giang Province, DARD of Kien Giang Province, CARE International in Vietnam and some other organizations conducted re-assessment of biological resources of UMT NP. Based on these re-assessment, Sub-FIPI II developed an "Investment Plan for Recovery, Protection and Development of U Minh Thuong NP, Period 2003-2010"

According to this Investment Plan, UMT NP contained 601 ha of *Melaleuca* forest on pitland and over 1,000 ha of *Melaleuca* forest on acid land; 32 mammal species of 13 families, 8 orders; 147 bird species of 37 families, 13 orders; 32 reptile species of 11 families, 2 orders; 7 amphibian species of 3 families, 1 order. This study and also studies of other authors (Le Xuan Canh et al, 2002; Nguyen Xuan Dang et al, 2003, etc) showed that species diversity of vertebrate fauna after fire remained almost the same as before fire, but their abundance was significantly reduced.

In 2004, IEBR repeatedly conducted a rapid assessment of biodiversity in UMT NP. In its report, 299 species of vascular plants from 224 genera, 102 families; 32 mammal species from 12 families, 8 orders; 148 bird species from 31 families, 14 orders; 31 reptile species from 11 families, 2 orders; 7 amphibian species from 3 families, 1 order were reported to record in UMT NP (Le Xuan Canh et al., 2006). This study did not add significant number of species to previous list, possibly due to short survey duration. During recent years, Small Carnivore Programme (Cuc Phuong NP) and WAR conducted some wildlife surveys in UMT NP, however, results of these studies have not published.

Biodiversity in AB-AM Protection Forest have not studied yet. It can see that biodiversity of this area is much lower than in UMT NP.

2.2.3. Kien Luong – Kien Hai Area

This area is situated in Kien Luong – Kien Hai – Ha Tien Semi-Island with 30% of total area being hills and islands; the rest are coastal Protection Forests and *Melaleuca* forests. This area not only contains high biodiversity potential but also plays important role in coastal protection and national security protection. Therefore, since 1992, DARD of Kien Giang Province in collaboration with relevant organizations has conducted a number of surveys to establish Protection Forests and Nature reserve. After many changes in management structure, since 2008, this area

has been declared as "Hon Dat – Kien Ha NR and Protection Forests" which consists of Hon Chong NR in Kien Luong District (core zone: 868.4 ha, buffer zone 233.3 ha), coastal Protection Forest in Kien Luong, Kien Hai and Ha Tien Districts ((2,378.9 ha of mangrove forest) and Environment Protection Forest in Hon Dat District (7,013.1 ha of *Melaleuca* forest).

In spite of its multi-fold importance and changes in management structure, biodiversity of Kien Luong – Kien Hai area is poorly studied. The document that provides its first vegetation and floral assessment is " Investment Plan for Establishment of Kien Luong Protection and Ecosystem Conservation Forest, 2002-2010" by Sub-FIPI II in 2001. Unfortunately, we could not access to this document.

The "Investment Plan for Development of Kien Luong – Ha Tien – Kien Hai Special Use and Protection Forest" prepared by DARD of Kien Giang Province in 2002 reports 182 plant species belonging to 59 families (39 species found in Mangrove forests and 47 species found in *Melaleuca* forest) and 28 animal species. No species listed is included in this report.

In 2002, Birdlife International in Vietnam conducted rapid survey for identification Bird Important Areas in Vietnam. Kien Luong area was recognized as a Bird important area with occurrence of some endangered species such as White-winged Duck (*Pseudibis davisoni*), Sarus Crane (*Grus antigone*), Grey Pelican (*Pelicanus philippinsis*), Painted Stork (*Mycteria leucocephala*) (Buckton et al., 2002).

In 2005, IEBR conducted rapid biodiversity assessment of Kien Luong – Kien Hai – Ha Tien forests. The report provided important dataset of biodiversity for this area. Reports recorded 760 species of vascular plants belonging to 485 genera and 144 families; 16 mammal species of 11 family, 6 orders; 74 bird species of 37 families, 11 orders; 49 reptile species of 14 families, 2 orders; 10 amphibian species of 2 families, 2 orders (Le Xuan Canh et al., 2006).

2.3. OVERALL EVALUATION

In spite of in-sufficiency, these studies show that KGBSR has very high biodiversity potential, namely:

- Diversity of ecosystems: six (6) ecosystems and 22 different habitat types were described (Table 2) with 4 ecosystems typical for Mekong Delta:
 - + *Melaleuca* forest on pitland
 - + Mangrove forest
 - + Primary and secondary forest with domination of family Dipterocarpaceae
 - + Coral reef and seagrass

Table 2. Main ecosystems and habitat types in KGBSR

No.	Ecosystems and habitat types	PQ	UMT - AB-AM	KL-KH
	I. Primary and Secondary forest with domination of family (Dipterocarpaceae)			
1.	Primary Dipterocarp forest	+		
2.	Secondary forest after logging or shifting cultivation	+		
3.	Grassland of <i>Imperata cylindrica</i>	+		
	II. Limestone forest with domination of <i>Trestonia mergvensis</i> and <i>Dacrydium pierreii</i>			
4.	Limestone forest with domination of <i>Trestonia mergvensis</i> and <i>Dacrydium pierreii</i>	+		
5.	Steep-sloped limestone mountain with scattered shrubs			+
	III. <i>Melaleuca</i> forests on acid lands			
6.	Mixed <i>Melaleuca</i> forest on pitland		+	
7.	<i>Melaleuca</i> forest on pitland		+	
8.	<i>Melaleuca</i> forest on acid land	+	+	
9.	Grassland of <i>Phragmites vallatoria</i>		+	+
10.	Grassland of <i>Eleocharis spp.</i>		+	+
11.	Open water with or without <i>Salvinia</i> , <i>Pistia</i> , <i>Nymphaea</i> , <i>Typha</i>		+	
12.	Muddy beaches with <i>Melaleuca</i> trees			+
13.	Fruit trees and crop plants on dykes		+	
	IV. Mangrove forest with <i>Rhizophora apiculata</i>			
14.	Mangrove forest	+		
15.	Tidal beaches with <i>Avicennia</i>			+
16.	Tidal beaches with sand and mud			+
17.	Saline beaches with recovery forest of <i>Avicennia</i> and <i>Rhizophora</i>			+
	V. Coastal scrubland			
18.	Open forest of Dipterocarpaceae	+		
19.	Arid scrubland	+		
20.	Regenerating forest and Scrubland with scattered trees			+
21.	Scrubland			+
	VI. Coral reef and seagrasses			
22.	Coral reef and seagrasses	+		
	Total:	9	7	9

Notes: PQ: Phu Quoc area, UMT-AB-AM:U Minh Thuong – An Bien – An Minh area, KL-KH: Kien Luong – Kien Hai area

- High species diversity and high number of rare species: totally, it was recorded in Phu Quoc area: 529 species of vascular plants, 247 species of vertebrate animals; in UMT-AB-AM area: 299 species of vascular plants, 442 species of animals; in Kien Luong-Kien Hai area: 760 species of vascular plants, 149 species of vertebrate animals. Out recorded species, about 760 plant species and

100 animal species are nationally and globally threatened with extinction (Table 3).

Table 3. Number of plant and animal species recorded in KGBSR

Taxonomic groups	Phu Quoc Area	UMT-AB-AM Area	Kien Luong-Kien Hai Area
Vascular plants	1164 species, 137 families, 66 order	299 species, 224 genera, 102 families	760 species, 485 genera, 144 families
Mammals	56 species, 18 families, 7 orders	31 species, 13 families, 8 orders	16 species, 11 families, 6 orders
Birds	119 species, 41 families, 11 orders	150 species, 38 families, 10 orders	74 species, 37 families, 10 orders
Reptiles	55 species, 10 families, 3 orders	38 species, 10 families, 2 orders	46 species, 11 families, 2 orders
Amphibians	17 species, 4 families, 1 order	7 species, 3 families, 1 order	13 species, 5 families, 2 orders
Fishes	Not studied	34 species, 17 families, 7 orders	Not studied
Insects	Not studied	181 species, 60 families, 11 orders	Not studied
Total:	Flora: 529 species Fauna: 247 species	Flora: 299 species Fauna: 442 species	Flora: 760 species Fauna: 149 species

Except for great contribution to discovery of biodiversity values and biodiversity management of KGBSR; previous studies also showed a number of shortages:

- The studies have concentrated mainly on Phu Quoc NP and UMT NP, other places did not or poorly investigated.
- In regard to plants, the studies concentrated on description of vegetation types and inventory of some plant groups, mainly vascular plants. There is almost no ecological study of critical communities and species of high conservation priority for relevant conservation measures
- Regarding to fauna, the studies mostly concentrated on large size and medium size vertebrates species, other groups did not or poorly studied. There is almost no ecological study of species of high conservation priority for relevant conservation measures.
- There is no systematic biodiversity monitoring and evaluation programme, except some botanical studies in UMT NP during CARE Project implementation.
- Due to rapid population growth and economic development in recent decades, environment quality and biodiversity value significantly changed. This makes the dataset out-of-date.

CHAPTER 3. RESULTS OF VEGETATION AND FLORAL ASSESSMENT IN KIEN GIANG BIOSPHERE RESERVE

3.1. PHU QUOC AREA

Phu Quoc NP was established in 2003 with total area of 31,422 ha. The NP is situated in Northern Phu Quoc Island with elevation ranging from 0-603 m absl. Abundance and diversity of flora and fauna in Phu Quoc island has draw attention of many scientists. Before 1990, Pham Hoang Ho conducted floral study and has inventoried 583 plant species (Pham Hoang Ho, 1985). In order to support effective management and development of Phu Quoc NP, during period from 2000 to 2006, Sub-FIPI II conducted a number surveys in Phu Quoc NR. These studies recorded 9 typical vegetation types, 1,164 species of vascular plants belonging to 137 families and 66 orders. In spite of some mistakes such as incorrect scientific name of some species, record of hoang dan *Cupressus torulosa* D.Don.1825 needs to be checked (as reported by Phan Ke Loc 2001, this species has narrow distribution range; in Vietnam this species was found only in low Cai Kinh limestone forests of Huu Lien Commune, Huu Lung District, Lang Son Province, Northmost province of Vietnam), etc., These studies provided very important data set for evaluation of floral biodiversity values and some features in Phu Quoc NP.

3.1.1. Vegetation cover

The vegetation cover of Phu Quoc NP is affected by many factors such as altitude, ocean climate and anthropological activities. It could roughly describe vegetation types of Phu Quoc NP by a sketch of section perpendicular to Rach Tram estuary (Figure 2). From the sketch, 6 following vegetation types can be described:

a) *Mountain forest*

This forest type is found in altitudes from 300 – 350m to 603m absl. The forest is characterized by trees of 10-12m high, with nearly equal diameter of 10-20 cm, high density of trees, very few canopy-immerring trees. Simple forest structure, usually consisting of 3 layers:

- Ecological domination layer: is 10-12m high with high tree density, round canopy and coverage of 60-70%.
- Second layer: under-canopy is not clearly showed with low tree density; trees of 3-5m high are young trees of upper layer or under-canopy scrubs, coverage of 10-20%.
- Third layer: ground layer is not dense, coverage of 10-15%, common species are from Poaceae, Cyperaceae, Zingiberaceae, Polypodiophyta, Asclepiadaceae, Araceae, etc.

In tree layer, common species are from Theaceae, Lauraceae, Clusiaceae. Typical characteristics of this vegetation type is existence of *Dacrydium elatum*, *Dacrycarpus imbricatus* and *Nageia wallichiana*.

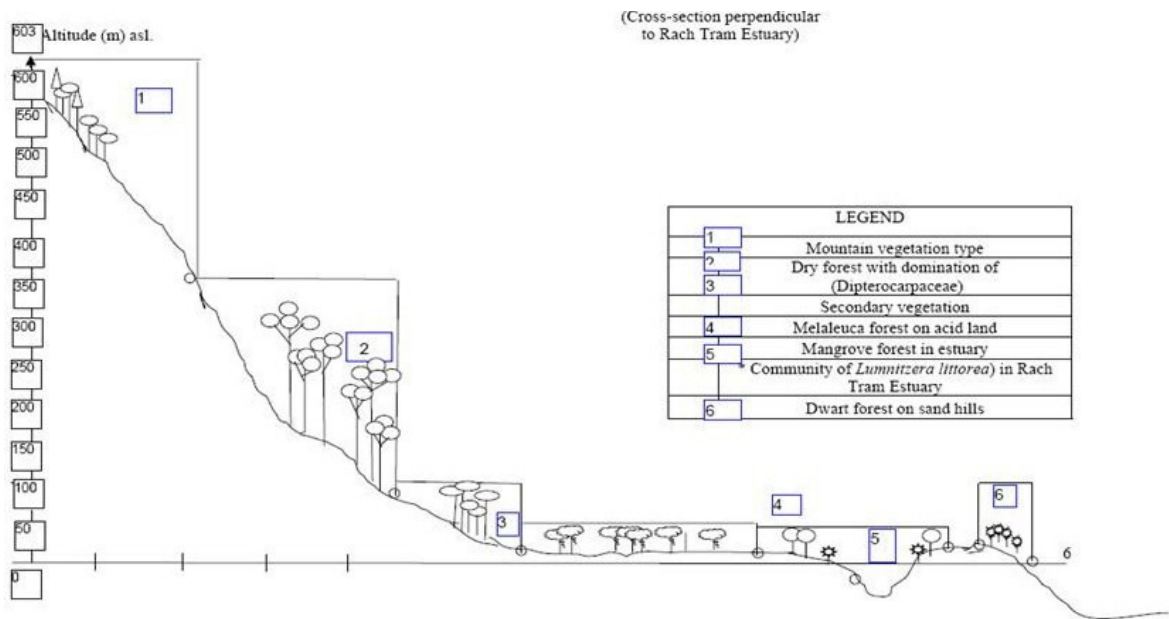


Figure 2. Sketch of vegetation types in Phu Quoc NP, Kien Giang province

Data from standard quadrat shows that plant density is relative high, about 70 trees ($D_{1.3} \geq 5 \text{ cm}$) / 200m^2 , average density of over 3,000 trees /ha, average height of tree is 7.48cm, average stem diameter is 10.06cm. In this quadrat, there are 3 trees of *Dacrydium elatum* and *Dacrycarpus imbricatus*

c) Secondary forest

Secondary forest occupies large area in Phu Quoc NP. There are some differences between secondary forests regenerated from exhausted logging and those generated from agricultural fields. The difference occurs mainly in species composition. Secondary forests are found in elevations below 100m to 30-40m asl. The forest has 3 layers:

- Layer 1: tall trees of 8-12m high with high density. Data from standard quadrat shows 46 trees ($D_{1.3} \geq 5\text{cm}$)/ 200m^2 or 2,300 trees/ha.
- Layer 2: shrubs with plants of 5-7m high and young regeneration trees of higher layer. In wet areas, tree density is high. Shrubs are families of Rubiaceae (genus *Psychotria*) and Euphorbiaceae.
- Layer 3: ground layer of 0.5-1.2m high; common species are from family Poaceae, Polypodiophyta, Cyperaceae, etc.

In some areas, there is a valuable timber species *Fagrea fragrans*. All big trees of this species were logged. In standard quadrat, 10 *Fagrea fragrans* trees are found within total number of 46 species. All these trees are regenerated from old logged stump. More study needs for this species, especially to study its seed-regenerating capacity.

d) Melaleuca forest on acid land

Natural *Melaleuca* forest on acid land follows secondary forest to Rach Tram River on elevation from 20-30m asl. Natural *Melaleuca* forest on acid land is transitional forest type of mountain forest to low flat valleys. These areas are inundated in rainy season, some are permanently inundated.

Forest structure consists of 2 layers:

- Layer 1: dominated by *Melaleuca cajuputi* of 5-7 m high, wide canopy, thick barks. In higher areas close to mountain, there are also trees resistant to drought, acidity from families Dipterocarpaceae, Theaceae, Myrtaceae. In flat inundated areas with high acidity, there is lower number of trees. In vicinity to river brackish water, appear also *Xylocarpus* sp., *Heliera litoralis*.
- Layer 2: in low flat areas, consists of many species from families of Cyperaceae, Poaceae; low bushes from families Myrtaceae, Melastomataceae, Polypodiophyta, Pandanaceae, Flagellariaceae, etc.

e) *Coastal mangrove forests*

This forest type is much different from above mentioned vegetation types in ecological conditions. This forest consists of many mangrove species (*Elaeocarpus tectorius*, *Avicennia* spp, *Sonneratia* spp., *Bruguiera* spp., *Ceriops* spp., *Lumnitzera* sp., *Lasianthus* sp., *Thespesis* sp., etc.)



Photo: Hà Văn Tuế

Figure 3. Mangrove forest with stand of *Lumnitzera littorea*

Specific feature is found in Mangrove forest in Rach Tram estuary, where there is almost monotonous stand of *Lumnitzera littorea* with big trees, usually of 10-15m high, large diameter of 0.3-0.6m; some trees of about 1 m in diameter. This mangrove forest is also different from other mangrove forest with the absence of *Rhizophora apiculata*; there are only *Rhizophora stylosa* and *Rhizophora mucronata*. The *Rhizophora stylosa* and *Rhizophora mucronata* appear closely to water, then follows stand *Lumnitzera littorea* and stand of *Melaleuca cajuputi*. We have observed mangrove forests in many areas of Vietnam, however, never seen a stand of *Lumnitzera littorea* which grows almost monotonously with big trees as in this

area. *Lumnitzera littorea* is endangered species listed in RDB VN (2007) at level VU (vulnerable). This stand needs more study for conservation.

f) Dwarf forest on coastal sandy hills

This vegetation type occurs at coordinates 0428736/1142035, altitude of 10m asl. This is special vegetation type which consists of one-layer structure of small timber trees or bush trees of relatively equal height (4-5m), large and round canopy, tailoring each other. Species composition is also simple, consisting of trees from several families: Myrtaceae, Apocynaceae, Sapotaceae, Verbenaceae, Bignoniaceae. Tree stems have specific features: short stem, rough and thick bark; branches concentrate in 2-3 points; each branch has many small branches, old branches become thorns, leaves are rigid, canopy concentrate on the peak of stem, largely expanded in form of an umbrella.

This forest type is unique by long evolutionary adaptation to extreme environment conditions: soils, water, air, light and wind. This forest formulates boundary between mainland and sea water at altitude of 5-10m asl.



Photo: Hà Văn Tuế

Figure 4. Dwarf forest on sand hills in Phu Quoc NP

Dwarf forest on coastal sand hills is rare in Vietnam, It occurs in small patches in some areas such as Bai Tu Long NP (in the end of Tra Ngo island), Ru Linh NR (Vinh Linh District, Quang Tri Province). This forest type can not recover if undergone destruction. This forest type must be protected and studied in more details for conservation.

We were informed that, in the area along sea lines from coordinates 0428736/1142035, altitude of 9m asl to Bai Dai Guard Station, at coordinates 0429482/1140017, altitude of 5m asl, there is plan to construct a STARBAY Ecotourism facility of about 541.79 ha. Except for this, there is also another project to develop tourism

base in area from Bai Dai Guard Station to coordinates 0433075/ 1137870, altitude of 10m asl. Implementation of these projects will completely destroy unique vegetation type "Dwarf forest on coastal sandy hills" of Phu Quoc NP. We would recommend competent authorities to:

- Conduct careful environmental impact assessment of these projects before implementation
- Conduct study of structure and ecological requirement of this forest types (soil, water, air,...) for relevant conservation measures. This forest type is poorly studied in Vietnam.

3.1.2. Flora

Due to the short survey duration (5 days), we can not carry out floral inventory. However, we could record some species which are not recorded by previous studies. They are:

- Family Amaranthaceae: *Amaranthus sessillis* (L.) DC.
- Family Combretaceae: *Quiqualis indica* (L.) and *Q. conferta* (Jack) Exell.
- Family Scrophulariaceae: *Scoparia dulcis* (L.)
- Family Dracaenaceae: *Dracaena cochinchinensis* (Lour.) S.C. Chen
- Family Taccaceae: *Tacca leontopetaloides* (L.) O. Ktze

Together with previous records, totally 1,172 species of vascular plants belonging to 562 genera, 137 families, 66 orders, 6 branches have been recorded in Phu Quoc NP (Table 4, Annex 2). This is only un-completed species list, further studies will add more species to the list.

Table 4. Updated number of floral taxa recorded in Phu Quoc NP

No.	Phyla	Order	Family	Genera	Species
1.	Lycopodiophyta	2	2	3	8
2.	Polypodiophyta	6	10	24	42
3.	Pinophyta	2	2	4	5
4.	Cycadophyta	1	1	1	1
5.	Gnetophyta	1	1	1	4
6.	Magnoliophyta	54	121	529	1112
	Total: 6 phyla	66	137	562	1,172

This list indicate the flora of Phu Quoc NP is very diverse in taxonomic composition and Phu Quoc NP plays important role in biodiversity conservation. Besides, Phu Quoc flora helps to study the affect of ocean climate factors on flora.

Economic value of Phu Quoc flora is very high. We will not go details on this report, just mention about some very high valuable species that need special conservation concern such as: *Fagraea fragrans*, *Anisoptera costata*, *Dipterocarpus grandifolius*, *Hopea pierrei*, *Hopea ferrea*, *Dalbergia cochinchinensis*, *Dysoxylum cauliflorum*, *D. loureiri*,...

Another interesting finding is that in mainland, *Dacrydium elatus*, *Decussocarpus fleuryi*, *Podocarpus imbricatus* normally occur at elevations above 800m asl in

Vietnam, however, in Phu Quoc NP, they naturally grow at altitude of 200m asl; more over, *Dacrydium elatum* grows even in inundated acid land together with mangrove trees in altitude of 1m asl.

3.1.3. Conservation values of flora

Except for high species diversity, Phu Quoc NP has 25 nationally endangered plant species (enlisted in RDB VN, 2007) and 9 globally endangered species (enlisted in IUCN RL, 2009 (Table 5). More globally threatened species can be found if more detailed study conducted.

Table 5. Endangered plant species in Phu Quoc NP

No	Vietnamese name	Scientific name	Family	RDB VN 2007	IUCN RL 2009
1	Tắc kè đá	<i>Drynaria bonii</i> Christ	Polypodiaceae	VU	
2	Cốt toái bở	<i>D. fortunei</i> (Kuntze ex Mett). J. Smith	Polypodiaceae	EN	
3	Hoàng đàn (?)	<i>Cupressus torulosa</i> D. Don	Cupressaceae	CR	NT
4	Thiên tuế tròn	<i>Cycas litoralis</i> K. D. Hill	Cycadaceae	VU	NT
5	Giêu Trắng	<i>Xylopia pierrei</i> Hance	Annonaceae	VU	VU
6	Vèn vèn	<i>Anisoptera costata</i> Korth.	Dipterocarpaceae	EN	EN
7	Dầu hoa to	<i>Dipterocarpus grandifolius</i> Blanco	Dipterocarpaceae	VU	
8	Săng đào	<i>Hopea ferrea</i> Pierre	Dipterocarpaceae	EN	EN
9	Kiền kiền	<i>Hopea pierrei</i> Hance	Dipterocarpaceae	EN	EN
10	Qua lâu	<i>Trichosanthes kirilowii</i> Maxim	Curcubitaceae	VU	
11	Cù đèn đà nẵng	<i>Croton touranensis</i> Gagn.	Euphorbiaceae	VU	VU
12	Trác	<i>Dalbergia cochinchinensis</i> Pierre	Fabaceae	EN	VU
13	Cóc đỏ	<i>Lumnitzera littorea</i> (Jack) Voigt	Combretaceae	VU	
14	Sơn đào	<i>Melanorrhoea loccifera</i> Pierre	Anacardiaceae	VU	
15	Dã sơn	<i>Melanorrhoea usitata</i> Wall.	Anacardiaceae	VU	
16	Huỳnh đằng, đinh hương	<i>Dysoxylum cauliflorum</i> Hiern	Meliaceae	VU	
17	Huỳnh đằng	<i>Dysoxylum loureiri</i> (Pierre) Pierre	Meliaceae	VU	
18	Cú chi trứng	<i>Strychnos nitida</i> D. Don	Loganiaceae	EN	
19	Ba gạc	<i>Rauwolfia cambodiana</i>	Apocynaceae	VU	

	cămpot	Pierre ese Pitard			
20	Ai lợi	<i>Alleizettela rubra</i> Pit.	Rubiaceae	VU	
21	Căng hai hợ	<i>Canthium dicocum</i> Gaertn. Taysm. & Binn	Rubiaceae	VU	VU
22	Kỳ nam kiến	<i>Hydnophytum formicarum</i> Jack	Rubiaceae	EN	
23	Găng việ	<i>Rothmannia vietnamensis</i> Tirv.	Rubiaceae	VU	
24	Xăng thon phú quốc	<i>Xantonnea quocensis</i> Pierre ex Pitard	Rubiaceae	VU	
25	Nừa chân vặ	<i>Tacca palmata</i> Bl.	Taccaceae	VU	

Notes: RDB VN (2007) – Red Data Book of Vietnam, IUCN RL (2009) – IUCN Red List of Threatened species. CR: Critically endangered, EN: Endangered, VU: Vulnerable, LR: Low Risk, NT: Near threatened, DD: Data Deficient

Nationally endangered species include:

- + 17 species at VU category
- + 7 species at EN category
- + 1 species at CR category

Global endangered species include:

- + 3 species at EN category
- + 4 species at VU category
- + 2 species at NT category

As mentioned above, except these 25 conservation priority species, Phu Quoc NP also has 2 very rare vegetation types: Rach Tram estuary mangrove forest with pure stand of *Lumnitzera littorea* and Dwarf forest on sand hills.

3.2. U MINH THUONG – AN BIEN – AN MINH AREA

3.2.1. Vegetation cover

UMT NP has total area of 8.111ha. Before big fire in March 2002, the vegetation and flora of UMT NP was studied by Tran Triet (2000, 2001). This author described 4 main vegetation types:

- Forests: *Melaleuca* forest on pitland, *Melaleuca* forest on acid land, mixed *Melaleuca* forests
- Grassland and Meadow: Grassland with domination of *Phragmites vallatoria* and meadows with domination of *Eleocharis dulcis*
- Open wetland with *Nymphaea nouchali*, *Pistia stratiotes*, *Salvina cucullata*, *Typha domingensis*, etc.
- Canals and natural streams

Tran Triet also reported 243 plant species belonging to 84 families with higher species number in families Poaceae (42 species); Cyperaceae (28 species); Asteraceae (12 species); Fabaceae (2 species), Rubiaceae (7 species). Study of Tran Triet has provided overall picture of vegetation types and flora in UMT NP. Here, the terms "Open land" and "Canal and flows" do not mean areas without vegetation but with floated plants such as *Pistia stratiotes*, *Salvina cucullata*, *Nymphaea nouchali*, *Typha domingensis* etc. In 2003, IEBC using these data and additional findings to compile a checklist of 299 species and 109 families.

During this short survey, we spent most of our time in observing vegetation along canals using motorboat for travel. Therefore, we could additionally record only one more species for previous plant list of UMT NP, however, following problems of *Melaleuca* forests have been found:

a) Natural Melaleuca forest

According to previous study, in UMT-AB-AM area, there were 7,000ha of natural *Melaleuca* forest on pitland and acid land (AB-AM area: 3,000 ha; UMT NP: 4,000 ha). During forest fire in March 2002, about 3,000 ha of natural *Melaleuca* forest on pitland and 2,000 ha of regenerating *Melaleuca* forest of UMT NP were lost.

Our observation during this survey shows that, in forest compartment 1 of AB-AM area, there is 1,500 ha of natural *Melaleuca* forest. This forest keeps its natural status: straight stems, of 5-7m high, without dense growth of *Phragmites* and ferns remain under forest canopy. In some logged areas, re-planted *Melaleuca* trees are small and short. While in compartment II of An Minh and in UMT NP, natural forests lose their normal status: most of trees fall in different directions; in some places, the trees show abnormal growth with roots emerging over water surface, over-expanded stump, bare branches (no leaves); many *Melaleuca* trees died making forest canopy open for ferns and other lianas to climbing up to top of trees.



Photo: Hà Văn Tuế

Figure 5. Natural *Melaleuca* forest in UMT NP

Similar picture is also found in *Melaleuca* forest regenerated after big fire: *Melaleuca* trees of 3-5m high died in many places leading to expansion of grasses, *Phragmites vactoria*, *Eleocharis dulcis*, *Asplenium spp.*, *Nymphaea nouchali*, *Pistia stratiotes*, *Salvina cucullata*, etc. In areas with low water (1.2-1.5m deep), appears cover of various floating plant species and aquatic plants.

High water level (0.6-1.2m deep) often retains for fire prevention significantly modifies natural growth of *Melaleuca* forests. This picture is most clear in Compartment 2 of AB – AM area and UMT NP. Many *Melaleuca* trees lost leaves and died. The decay of dead vegetation causes significant water pollution which disturbs the development of *Melaleuca* trees.

On the canals, floating vegetation is well developed covering about 60-79% water surface. This floating vegetation is undergone affected of wind blousing and daily motorboat movement.

b) *Rhizophora* plantations

Rhizophora plantations are of different ages. Plantations of the same age has relatively equal tree density, height and stem diameter. *Rhizophora* plantations are allocated to households for protection (3-5ha per household). Along boundaries of each household plantation there is a network of surrounding dykes for aquaculture or collecting natural aquatic resources. The *Rhizophora* plantations have only one layer of *Rhizophora* trees, under this layer there is a poor growth of some scattered fern or *Acanthus* clumps. Surrounding dykes disturb dispersal of *Rhizophora* sp. causing its poor regeneration state outside the dykes.



Photo: Hà Văn Tuế

Figure 6. *Rhizophora* plantations in AB-AM area

c) *Avicennia* plantations

In AB-AM area, there is *Avicennia* planting programme for sea-encroachment. This area is increasing by year. In the areas after *Rhizophora* plantations (towards sea), *Avicennia* plantations reach 4-5m high with green thick canopy and healthy trees. Sea water and waves have brought *Avicennia* seeds 30-40 m far towards sea where a patch of *Avicennia* trees grow. This phenomenon must be studied to assess natural sea-encroachment capacity of mangrove forest.

Some patches of natural *Rhizophora* forests occur on higher hills where there is a community of mangrove trees such as *Avicennia* spp., *Rhizophora* spp., *Bruguiera* spp., *Lumnitzera racemosa*, *Nypa fructicans*, etc.

3.2.2. Flora

Forest types in UMT-AB-AM are more diverse than in UMT NP alone with inclusion of AB-AM mangrove forest. Therefore, number of species recorded in UMT-AB-AM area is higher than only in UMT NP (77 species belonging to 11 families). Totally, 387 species of 108 families have been found (Table 6).

Table 6. Number of plant taxa recorded in UMT-AB-AM Area

Phyla	Tran Triet, 2001		IEBR, 2006		Survey in 8/2009	
	Family	Species	Family	Species	Family	Species
POLYPODIOPHYTA	2	4	8	13	8	16
MAGNOLIOPSIDA	32	239	89	297	100	372
Total:	34	279	97	310	108	387

Dominated in this area are families which adapt to acid land, inundation, pitland or saline water such as Asteraceae, Poaceae, Cyperaceae, Rhizophoraceae, Verbenaceae, Avicennia.

3.2.3. Conservation values of flora

Species composition of flora in UMT-AB-AM area is simple consisting mainly of herbaceous, lianas and grasses. Only one species is enlisted in RDB VN (2007) as VU –vulnerable: *Elaeocarpus hygrophilus* from family Elaeocarpaceae. This species has distribution range restrict to Mekong Delta.

3.3. KIEN LUONG – KIEN HAI AREA

3.3.1. Vegetation cover

Kien Luong – Kien Hai area has complicated terrains, which consists of Hon Chong mountain of 200-300m asl, limestone mountains of 300-400m asl along National Road No.80 and near Ha Tien Town, more than 100km long of coastal *Rhizophora* forests and a number of small islands with tall vegetation cover.

The complexity and especially existence of mountains make this area more diverse of habitat types and flora. Institute of Tropical Biology (in Ho Chi Minh City) conducted a number of surveys, however, there is no comprehensive report about the survey results. In 2005, IEHR conducted rapid biodiversity assessment for description of main vegetation types and floral species composition (Le Xuan Canh et al., 2006). During this survey, we could describe following vegetation types of Kien Luong – Kien Hai area.

a) Secondary forest restored after exhausted exploitation

Before 1990, forests in Hon Chong Mountain (Kien Luong District) and mountains near Ha Tien Town have been heavily exploited. However, since 1990, these forests received protection status for restoration. Therefore, at present, most of wood trees have almost the same height (10-12m) and diameter (10-15cm). The forests have 3 layers:

- Layer 1: many regenerating trees of 10-12 m high, equal canopies, coverage of 60-70%. Common species are from families of Clusiaceae, Fabaceae, Salpindaceae, Ebenaceae, Myristycaceae.
- Layer 2: scattered trees of 3-4m are young trees of higher layer or bush trees from families of Rubiaceae, Euphorbiaceae, Arecaeae.
- Layer 3: ground layer is not dense, of 0.5-1m high. Common species are from Polypodiophyta, families of Poaceae, Zingiberaceae.

Data from standard quadrat show density of 41 trees ($D \geq 5\text{cm}$)/ 200m^2 , or 2,000trees/ha; average height is 7.8m and average diameter is 11.84cm

b) *Rhizophora* plantation

Rhizophora plantations are of different age, 3-8m high. The *Rhizophora* plantations are simple in species composition, with only one layer, and coverage of 70-80%. Under canopy, very few plants grow. Not like mangrove forest in AB-AM area, mangrove forest in Kien Luong – Kien Hai area represents a narrow band and therefore few aquaculture sites exist.



Photo: Hà Văn Tuê

Figure 7. Secondary forest restored after exhausted logging in Hon Chong NR

c) Natural *Avicennia* forests

In coastal line along National Road 80, except *Rhizophora* plantations, there are also some patches of Natural *Avicennia* forests. In these forests, *Avicennia* trees are absolutely dominated in ecological layer and also has high percentage in whole area. Only small area of this forest type remains, however, it differs from *Rhizophora* plantations: *Avicennia* forest has very high tree density, complicated layer structure, more abundance of plant species and has 3 layers:

- Layer 1: Ecological layer, 8-10m high, only *Avicennia* trees with large crown, many branches, branches are not straight, stem diameter of 20-40cm.
- Layer 2: Undercanopy layer, 5-7m high, many mangrove species such as *Rhizophora apiculata*, *Rhizophora mucronata*, *Avicennia* spp., *Bruguiera* spp.;

many lianas from family Fabaceae, genus *Derris*; families Convolvulaceae; Asclepiadaceae; *Flagellariaceae*.

- Layer 3: 0.5-1m high. Often seen are *Acrostichum aureum*, *Acanthus ebracteatus*, *A. ilicifolius*, and generating trees of *Avicennia spp*, *Bruguiera spp.*, *Xylocarpus spp.*

In a standard quadrat (200m²) set up in *Avicennia* forests of Kien Luong District, it contains 37 trees of diameter \geq 5cm. This indicates relatively high tree density, about 2,000 tree/ha, average diameter of 14.42cm, average height is 5.67m.

In comparison with *Rhizophora* forests, natural *Avicennia* forests have more layers and much higher diversity of species composition with many regenerating trees of *Rhizophora*, *Avicennia* and *Bruguiera*. Therefore, this forests should have better coastal protection function and biodiversity conservation significance.



Photo: Hà Văn Tuế

Figure 8. Coastal Protection *Avicennia* forests (Kien Luong)

3.3.2. Flora

With complicated terrain, Kien Luong – Kien Hai area has diverse flora. In 2005, IEBR inventoried 760 species of vascular plants belonging to 485 genera, 144 families (Le Xuan Canh et al., 2006). During this survey, we could add 107 species of 13 families to the list. Totally, 867 species from 157 families of vascular plants were recorded in Kien Luong – Kien Hai area is (Table 7, Annex 3).

Table 7. Number of plant taxa recorded in Kien Luong – Kien Hai area

Phyla	IEBR, 2005		This survey - 8/2009	
	Families	Species	Families	Species
Polypodiophyta	11	20	11	23
Pinophyta	1	1	3	4
Magnoliophyta	132	739	143	840
Total:	144	760	157	867

Out of 867 recorded species, 224 species are wood trees from families Dipterocarpaceae, Rubiaceae, Fabaceae, Moraceae; 129 bush species from families Poaceae, Asteraceae, Cyperaceae.

3.3.3. Conservation values of flora

Flora of Kien Luong – Kien Hai area is poorly studied. Out of 867 recorded species, 21 species are nationally threatened, including 1 species at CR- critical, 8 species at En- endangered and 12 species at Vu – vulnerable. Four (4) species are globally threatened (Table 8).

Table 8. Threatened plant species recorded in Kien Luong – Kien Hai area

No	Vietnamese name	Scientific name	Family	RDB VN 2007	IUCN RL 2009
1.	Tắc kè đá	<i>Drynaria bonii</i> Christ	Polypodiaceae	VU	
2.	Thiên tuế tròn	<i>Cycas litoralis</i> K. D. Hill	Cycadaceae	VU	NT
3.	Ba gác cãm pót	<i>Rauvolfia cambodiana</i> Pierre ese Pitard	Apocynaceae	VU	
4.	Ba gác châu đốc	<i>Rauvolfia chaudocensis</i> Pierre ese Pitard	Apocynaceae	VU	
5.	Ba gác lá mỏng	<i>Rauvolfia micrantha</i> Hook. f.	Apocynaceae	VU	
6.	Ba gác vòng	<i>Rauvolfia verticillata</i> (Lour.) Baill.	Apocynaceae	VU	
7.	Sơn dịch	<i>Aristolochia indica</i> L.	Aristolochiaceae	VU	
8.	Dy gót	<i>Zygostelma benthamii</i> Baill.	Asclepiadaceae	CR	
9.	Gỗ đỏ	<i>Afzelia xylocarpa</i> (Kurz.) Craib.	Caesalpiniaceae	EN	
10.	Gụ mật	<i>Sindora tonkinensis</i> Teysm. ex Miq.	Caesalpiniaceae	EN	DD
11.	Cóc đỏ	<i>Lumnitzera littorea</i> (Jack) Voigt	Combretaceae	VU	
12.	Săng đào	<i>Hopea ferrea</i> Pierre	Dipterocarpaceae	EN	EN
13.	Mặc nưa	<i>Dyospyros mollis</i> Griff.	Ebenaceae	EN	
14.	Cà na	<i>Elaeocarpus hygrophylus</i> Kuz	Elaeocarpaceae	VU	
15.	Giáng hương	<i>Pterocarpus</i>	Fabaceae	EN	

		<i>macrocarpus</i> Kurz			
16.	Kỳ nam kiến	<i>Hydnophytum formicarum</i> Jack	Rubiaceae	EN	
17.	Vương tùng	<i>Murraya glabra</i> (Guillaum.) Guillaum.	Rutaceae	VU	
18.	Trầm hương	<i>Aquilaria crassna</i> Pierre ex Lecomte	Thymelaeaceae	EN	CR
19.	Từ gừng	<i>Dioscorea zingiberensis</i> Wright	Dioscoreaceae	VU	
20.	Kim điệp	<i>Dendrobium fimbriatum</i> Hook.	Orchideae	VU	
21.	Ý thảo	<i>Dendrobium harveyanum</i> Hook.	Orchideae	EN	

Notes: RDB VN (2007) – Red Data Book of Vietnam, IUCN RL (2009) – IUCN Red List of Threatened species. CR: Critically endangered, EN: Endangered, VU: Vulnerable, LR: Low Risk, NT: Nearly threatened, DD: Data Deficient

Hon Chong Mountain, mountains surrounding Ha Tien Town and Limestone mountains in Kien Luong area should contain many species of conservation priority and also undiscovered species. We observed an endemic species to limestone mountain of Kien Luong - *Cycas littoralis*. Unfortunately, this species is exploited for sale near Quan Y Cave (Kien Luong District).

3.4. SOME MANAGEMENT PROBLEMS FOR VEGETATION AND FLORA

Management boards of Phu Quoc NP, UMT NP, AB-AM Coastal Protection Forest and Hon Dat – Kien Ha Special Use and Protection Forest have great effort to protect forest and vegetation cover. However, there are some problems associated with inappropriate management:

1. *Retaining high water level for forest fire prevention causes negative effect on growth and development of Melaleuca forests*

A long system of dykes and canal were established for round-year retaining high water level in compartments 1,2 of AB-AM area and in UMT NP. This causes some negative effects on natural *Melaleuca* forests.

Melaleuca trees can well develop only on seasonally inundated land with low water level (0.2-0.4m). The permanent retaining water level of 0.8-1.2m high in these areas has disturbed normal growth and development of *Melaleuca* forests. In many places, *Melaleuca* seeds could not reach bottom to grow due to deep water and thick stand of floated *phragmites*, ferns and other plants. Long stay under water also spoils germinating capacity of *Melaleuca* seeds.

In compartment 2 of AB-AM forest, *Melaleuca* trees grow in high density. Due to high water, many tall trees felt and died causing significant water pollution. Polluted water disturbs normal growth of *Melaleuca* trees, however, local farmers do not agree to discharge this water into canals and field on fear of depleting their agricultural plantations. This problem must be solved as soon as possible.

2. Conversion of forest land into land for development of tourism facilities in Phu Quoc NP

An area (541,79ha) of Phu Quoc NP from Ghenh Giau Guard Station (coordinates:0428736; 1142035. Altitude 9m) to Bai Dai Guard Station (Coordinates: 0429482; 1140017) is planned to construct StarBay Ecotourism facility, another tourism facility is also planned to built nearby. These constructions will completely destroy rare vegetation type "Dwarf forest on sand hills" (about 1,000 ha) of Phu Quoc NP. This forest type is very rare in Vietnam, and will not recover if undergone severe impacts. These projects should carefully reviewed to protect the rare habitat type of Vietnam. Ecotourism will also loose its attract if this vegetation types lost.

The unique large stand of *Lumnitzera littorea* in Rach Tram estuary also must be protected, because *Lumnitzera littorea* has been enlisted in RDB VN (2007).

3. System of dykes along household forests disturbs dispersal and natural regeneration of mangrove forest

In AB-AM coastal Protection forest, a system of dykes was established for aquaculture and harvesting of natural aquatic products. These dykes disturb dispersal and natural regeneration of mangrove plants, because the seeds can not freely distributed by normal tides due to being blocked by the dykes. Natural dispersal and regeneration of mangrove forest play important role in sea-encroachment of vegetation cover with formulation of good coastal forests

4. Encroachment of coastal Protection forest

Many households try to widen their aquacultural area by encroaching Protection forests. This illegal activity does not cause loss of large area at once, but by the time it will cause significant lose of coastal mangrove forest. The encroachment of forest land for construction of houses and shelters along roads also causes the significant decrease of coastal Protection forest area.

CHAPTER 4. ASSESSMENT OF MAMMAL FAUNA IN KIEN GIANG BIOSPHERE RESERVE

4.1. OVERALL ASSESSMENT OF KGBSR MAMMAL FAUNA

4.1.1. Diversity and taxonomic structure of mammal fauna

Previous studies (see Chapter 2) recorded 56 mammal species in Phu Quoc NP, 31 mammal species in UMT NP and 16 mammal species in Kien Luong – Kien Hai area. During this survey, we recorded 32 species in Phu Quoc NP, 16 species in UMT NP and 23 species in Kien Luong – Kien Hai area. In this short survey, number of recorded mammal species is lower than that from previous studies except in Kien Luong – Kien Hai area. Nevertheless, we could add a number of species to previous list, namely, 5 species for Phu Quoc NP and 12 species for Kien Luong – Kien Hai area. Totally, 77 species belonging to 20 families and 8 orders were recorded in KGBSR (Table 9, Annex 5) and number of species recorded in:

- Phu Quoc area is 61 species from 18 families and 7 orders
- UMT-AB-AM area is 31 species from 13 families and 8 orders
- Kien Luong – Kien Hai area is 28 species from 15 families and 8 orders

Table 9. Number of mammal taxa recorded in KGBSR

Period	Phu Quoc area			UMT-AB-AM			Kien Luong-Kien Hai		
	Species	Family	Order	Species	Family	Order	Species	Family	Order
Before this survey	56	18	7	31	13	8	16	11	6
This survey	32	18	7	16	10	7	23	14	7
New records from this survey	5	16	7	0	0	0	12	2	1
Total:	61	18	7	31	13	8	28	15	8
Total for KGBSR: 77 species, 20 families, 8 orders									

Note: UMT-AB-AM: U Minh Thuong – An Bien – An Minh area

Within 3 surveyed areas, number of recorded species is the highest in Phu Quoc area, then following to UMT-AB-AM area and the lowest in Kien Luong – Kien Hai area. Highest number of species recorded in Phu Quoc area can be explained by its more diversity of habitat types. The number of mammal species in Kien Luong – Kien Hai is the lowest because of few surveys conducted. Principally, the number of mammal species in this area must be higher than that in UMT area due to more diversity of habitat types. In all 3 surveyed areas, further studies will definitely add more species to current species list of each areas.

Regarding to taxonomic structure, the highest species diversity belongs to orders of Bats (Chiroptera), Rodents (Rodentia) and Carnivores (Carnivora). Large and medium-size animals are mainly from 2 orders: Carnivores (Carnivora) and Primates (Primates) (Table 10)

Table 10. Number of species by orders of KGBSR mammal fauna

No	Order	Phu Quoc (species)	UMT – AB - AM (species)	KL-KH (species)
1	Tree shrews - Scandentia	1	1	1
2	Primates -Primates	5	1	2
3	Shrews - Soricomorpha	2	2	2
4	Bats - Chiroptera	28	7	4
5	Pangolins - Pholidota	0	1	1
6	Carnivores - Carnivora	6	10	7
7	Ungulates - Artiodactyla	3	1	3
8	Rodents - Rodentia	16	8	8
	Total:	61	31	28

Note: UMT-AB-AM: U Minh Thuong – An Bien – An Minh area; KL-KH: Kien Luong – Kien Hai area

4.1.2. Species of conservation priority

Out of 77 mammal species recorded in KGBSR, 20 species (about 26% of total species number) are of conservation priority. They are 17 nationally threatened (enlisted in RDN VN, 2007) and 14 globally threatened species (enlisted in IUCN RL, 2009) (Table 11). Number of conservation priority species is highest in Phu Quoc NR with 14 species (12 species enlisted in RDB VN and 9 species enlisted in IUCN RL), then follows UMT NP with 11 species (8 species enlisted in RDB VN and 8 species enlisted in IUCN RL) and lowest in Kien Luong – Kien Hai area with 6 species (6 species enlisted in RDB VN and 3 species enlisted in IUCN RL).

Table 11. List of conservation priority mammal species in KGBSR

No	Vietnamese name	Scientific name	Distribution			Threat level	
			Phu Quoc	UMT	KL-KH	RDB VN 2007	IUCN RL 2009
1.	Cu li lớn	<i>Nycticebus bengalensis</i>	+			VU	VU
2.	Cu li nhỏ	<i>Nycticebus pygmaeus</i>	+			VU	VU
3.	Khỉ mặt đỏ	<i>Macaca arctoides</i>	+			VU	VU
4.	Khỉ đuôi dài	<i>Macaca fascicularis</i>	+	+	+	LR	
5.	Voọc bạc nam bộ	<i>Trachypithecus germaini</i>	+		+	VU	EN
6.	Dơi ngựa thái lan	<i>Pteropus lylei</i>	+	+			VU
7.	Dơi ngựa lớn	<i>Pteropus vampyrus</i>	+	+			NT
8.	Dơi chó cánh ngắn	<i>Cynopterus brachyotis</i>	+	+		VU	
9.	Tê tê gia va	<i>Manis javanica</i>		+	+	EN	LRnt
10.	Mèo ri	<i>Felis chaus</i>	+			DD	
11.	Mèo cá	<i>Prionailurus viverrinus</i>		+		EN	EN
12.	Cầy giông sọc	<i>Viverra megaspila</i>		+		VU	VU
13.	Rái cá vuốt bé	<i>Aonyx cinerea</i>	+	+	+	VU	VU

14.	Rái cá lông mũi	<i>Lutra sumatrana</i>		+		EN	EN
15.	Cheo cheo nhỏ	<i>Tragulid kanchil</i>			+	VU	
16.	Nai	<i>Rusa unicolor</i>	+			VU	VU
17.	Sóc bay đen trắng	<i>Hylopetes alboniger</i>	+			VU	
18.	Sóc bay côn đảo	<i>Hylopetes lepidus</i>	+			VU	DD
19.	Sóc đỏ	<i>Callosciurus finlaysonii</i>	+	+	+	LR	
20.	Sóc đuôi ngựa	<i>Sundasciurus hippurus</i>		+			NT
		Total:	14	11	6	17	14

Notes: UMT-AB-AM: U Minh Thuong – An Bien – An Minh area; KL-KH: Kien Luong – Kien Hai area; RDB VN (2007) – Red Data Book of Vietnam, IUCN RL (2009) – IUCN Red List of Threatened species. **CR:** Critically endangered, **EN:** Endangered, **VU:** Vulnerable, **LR:** Low Risk, **NT:** Nearly threatened, **DD:** Data Deficient

Most species of conservation priority are large and medium-sized mammals. Based on conservation status, restrict distribution range and population size in studied area, 7 species are identified as special conservation priority including Hairy-nosed otter (*Lutra sumatrana*), Small-Clawed Otter (*Aonyx cinerea*), Jungle cat (*Felis chaus*), Fishing cat (*Prionailurus viverrinus*), Large Spotted civet (*Viverra megaspila*), Indochinese Silvered Langur (*Trachypithecus germaini*), Lyle's Flying Fox (*Pteropus lylei*) and Large Flying Fox (*Pteropus vampyrus*)

Hairy-nosed otter (*Lutra sumatrana*): This species is nationally and globally threatened at level EN – endangered. Currently, only few small populations remain in Thailand, Malaysia, Cambodia and Vietnam. In Vietnam, this species only finds in Mekong Delta, mainly in UMT NP. It may occur in other areas of KGBSR in small number.

Small clawed otter (*Aonyx cinerea*): this species is widespread in Southeast Asia, however, with small number. *Aonyx cinerea* is nationally and globally threatened species at level VU-vulnerable. In Vietnam, this species has wide distribution, however, has been extinct or nearly extinct in most of its range. Small clawed otter is quite abundant in UMT NP and also found in other areas of KGBSR (Phu Quoc NP, AB-AM Protection forests and Kien Luong – Kien Hai Special Use and Protection Forest

Jungle cat (*Felis chaus*): has wide distribution range in the World, however, very rare in Vietnam. Up to now, this species is recorded only in few localities (Gia Lai, Tay Ninh and Dak Lak Provinces) and always with very low density (only about 5 specimens collected so far from all localities). In Phu Quoc NP, Jungle cat is recently recorded. Based on encounter rate, it was estimated that the population of *Felis chaus* in Phu Quoc may be large (Hoang Trung Thanh et al, 2009). This species is enlisted in RDB VN 2007 as DD- data deficient due to lack of information.

Fishing cat (*Prionailurus viverrinus*): This species is highly threatened both nationally and globally (enlisted as EN- endangered in RDB VN and IUCN RL). Fishing cat widely distributes in many Asian countries, however, in all range, its populations are small and undergoing high threats. In Vietnam, Fishing cat is found in many provinces with very low density. However, in UMT NP, fishing cat is quite common. This species may occur in other areas of KGBSR but not yet recorded due to few surveys conducted.



Photo: Phạm Hồng Tuyền
Hairy-nosed otter from UMT NP



Photo: Phạm Hồng Tuyền
Large-spotted civet in UMT NP



Photo: Phạm Hồng Tuyền
Fishing cat in UMT NP



Photo: Hoàng Trung Thành
Jungle cat in Phu Quoc NP



Small clawed otter in An Bien Forest

Photo: Nguyễn Xuân Đặng

Figure 9. Some species of special conservation priority

Large spotted civet (*Viverra megaspila*): This species scatteredly distributes in Southeast Asian countries with very low number. Large spotted civet is nationally and

globally threatened at level VU-vulnerable. In Vietnam, this species found in few areas, while is quite common in UMT NP and may be other localities of KGBSR.

Indochinese silver langur (*Trachypithecus germaini*): Previously, only one species of silver langur (*Trachypithecus margarita*) was reported in Vietnam. However, results of genetic taxonomic study has recently revealed that 2 silver species occurs in Vietnam: Assamese silvered langur (*Trachypithecus margarita*) found in Central Vietnam and Indochinese silver langur (*Trachypithecus margarita*) found only in Kien Giang Province (Nadler et al., 2007).

Globally, Assamese silvered langur (*Trachypithecus margarita*) occurs in East side of Mekong Delta including Campuchia, Lao and Vietnam, while Indochinese silver langur (*Trachypithecus germaini*) occurs in West side of Mekong River including Thailand, Campuchia, Lao, Vietnam and Malaysia with small number. Indochinese silver langur is threatened at level VU-vulnerable in Vietnam and at level EN-endangered in the World. In Vietnam, this species occurs only Phu Quoc NP and Hon Chong NR of Kien Giang province, therefore, KGBSR plays the most important role in conservation of this species

Lyle's Flying Fox (*Pteropus lylei*) and Large Flying Fox (*Pteropus vampyrus*): are 2 globally endangered species of large fruit bats. Large Flying Fox occurs in some Asian countries while Lyle's Flying Fox occurs only in Thailand and West Southern Vietnam.

Two these species are not enlisted in RDB VN (2007) due their wide distribution in Mekong Delta, however, in practice, these species are significantly reduced and continue to reduce in number as a result of hunting and habitat loss. Large Flying Fox is enlisted in Governmental Decree 32/2006/ND-CP of Vietnam Government in group IIB (hunting and use are restricted and under control). Populations of these species in KGBSR are likely the largest in Vietnam, therefore, KGBSR plays important role on conservation of these species

4.2. ASSESSMENT BY SITES

4.2.1. Phu Quoc area

Phu Quoc area (31,422 ha) is situated in Northern part of Phu Quoc Island. The terrain consists of low hills (below 600m asl) with steep slopes, abundance of streams and valleys and diversity of habitat types: primary forest of Dipterocarp trees, Open forest of of Dipterocarp trees, secondary forests, limestone forests, mangrove forest, *Melaleuca* forest, swamps and grasslands. Diversity of habitat together with ocean climates creates a diverse and unique mammal fauna.

Fauna of Phu Quoc area is not fully investigated, evidence of this is that new species continue to be discovered during recent years (Abramov et al. 2008; Hoang Trung Thanh et al., 2009, Nguyen Truong Son et al., 2009). Up to now, totally, 61 mammal species from 18 families and 7 orders were recorded. The species composition is dominated by orders Bats Chiroptera (28 species), Rodents Rodentia (16 species), Carnivora (6 species and Primates (5 species (Figure 10).

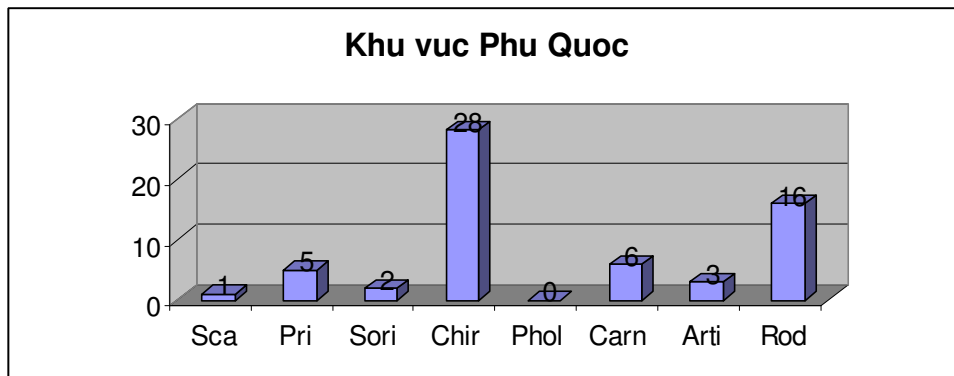


Figure 10. Comparison of species diversity between mammal orders

Sca: Scandentia, *Pri*: Primates, *Sori*: Soricomorpha, *Chir*: Chiroptera, *Phol*: Pholidota,
Carn: Carnivora, *Arti*: Artiodactyla, *Rod*: Rodentia

Except for high species diversity, mammal fauna of Phu Quoc area is characterized by high number of threatened species including 12 species enlisted in RDB VN (2007) and 9 species enlisted in IUCN RL (2009) (Table 11). Species of special conservation priority area Indochinese silver langur (*Trachypithecus germaini*), Jungle cat (*Felis chaus*), Grey-Cheeked Flying Squirrel (*Hylopetes lepidus*), Sambar deer (*Rusa unicolor*), Lyle's Flying Fox (*Pteropus lylei*), Large Flying Fox (*Pteropus vampyrus*), Slow loris (*Nycticebus bengalensis*). Population of Indochinese silver langur in Phu Quoc NP is the largest population of this species in Vietnam. Jungle cat in Phu Quoc NP may be also the largest population in Vietnam (Nguyen Trung Thanh et al. 2009 and Pham Trong Anh (pers.com.)). Besides, Phu Quoc NP also contains endemic subspecies of Finlayson's squirrel *Callosciurus finlaysonii harmandi* (Milne-Edwards, 1877). Recently, a new shrew species – Phu Quoc shrew *Crocidura phuquocensis* was described based on specimens collected from Phu Quoc NP (Abramov et al., 2008). Populations of Slow loris (*Nycticebus coucang*), Pygmy loris (*Nycticebus pygmaeus*) and Sambar deer (*Rusa unicolor*) in Phu Quoc NP may be the only population of these species in KGBSR. In 2009, a group of scientists from WAR and IEBR observed a very large colony of Lyle's Flying Fox (*Pteropus lylei*) and Large Flying Fox (*Pteropus vampyrus*) in Phu Quoc NP, estimated up to 1,500 individuals (Lê Quỳnh at <http://www.sgtt.com.vn:80>, Nguyen Truong Son, pers.com.). This fact again indicates very important role of Phu Quoc NP on conservation of these bats species for Vietnam and the World.

Shortly, it can be recognized that mammal fauna in Phu Quoc area in general and Phu Quoc NP in particular is very diverse and has high conservation values. This fauna must be thoroughly studied for management and conservation

4.2.2. U Minh Thuong – An Bien – An Minh Area

UMT – AB – AM area includes UMT NP (8,111ha), buffer zone of UMT NP (13,068ha) and An Bien-An Minh Protection Forest. UMT NP is fresh water and brackish water wetlands with several typical habitat types such as *Melaleuca* forest on pitland, *Melaleuca* forest on acid land, *Phragmites* grassland, open swamps and agricultural lands. AB-AM area is coastal wetland with mangrove forest and other wetland habitats which severely affected by human activities. UMT-AB-AM area has

less diversity of habitats than those of Phu Quoc area and Kien Luong – Kien Hai areas, however, the habitats are typical and unique of Mekong Delta.

In comparison with others sites in KGBSR, mammal fauna in UMT-AB-AM area is the best surveyed. Nevertheless, study of small size mammals (Rodents Rodentia, Bats Chiroptera, small carnivores Mustelidae) is still limited. Mammals in UMT-AB-AM area are not diverse as those in Phu Quoc area and concentrate mostly in UMT NP. Up to now, totally, 31 species from 13 families and 8 orders were recorded (Annex 5). Species dominance belongs to orders Carnivora (10 species), Rodentia (8 species) and Bat Chiroptera (7 species). Order of Primates has been seriously depredated with the only one species (Long-tailed macaques *Macaca fascicularis*) remained in small number (our estimation is not exceed 300 individuals).

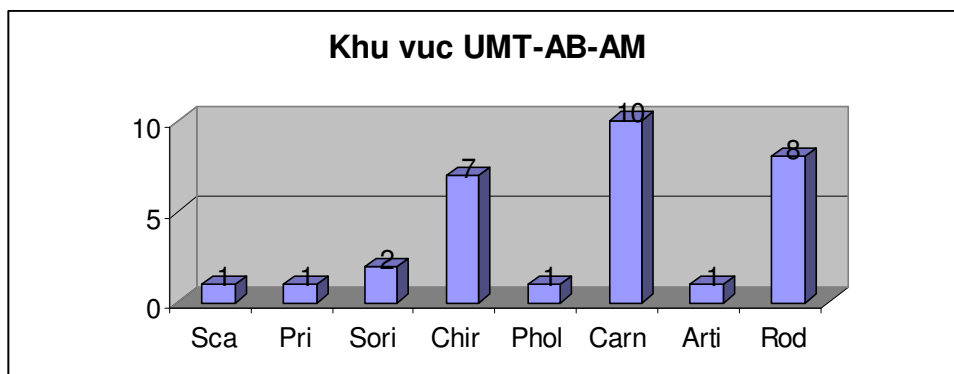


Figure 11. Comparison of species diversity between mammal orders

Sca: Scandentia, *Pri*: Primates, *Sori*: Soricomorpha, *Chir*: Chiroptera, *Phol*: Pholidota,
Carn: Carnivora, *Arti*: Artiodactyla, *Rod*: Rodentia

In spite of not high species diversity, mammal fauna of UMT-AB-AM area contains high conservation value due to the high number of nationally and globally threatened species and many of them have density much higher in other areas. Out of 31 recorded species, 11 species are of conservation priority including 8 species enlisted in RDB VN (2007) and 8 species enlisted in IUCN RL (2009); that account for about 35.5% total species number in the area. Species of special conservation priority are Hairy-nosed otter (*Lutra sumatrana*), Small clawed otter (*Aonyx cinerea*), Large spotted civet (*Viverra zibetha*), Fishing cat (*Prionailurus viverrinus*), Lyle's flying fox (*Pteropus lylei*) and Large flying fox (*Pteropus vampyrus*). Populations of these species in UMT NP are largest or second large populations in Vietnam. This relates especially to Hairy-nosed otter which possible remains only in Mekong Delta. Besides, a subspecies *Callosciurus finlaysonii cinnamomeus* (Temminckii, 1853) and subspecies *Sundasciurus hippurus ornatus* Dao et Cao, 1990 are endemic to U Minh areas

Shortly, mammal fauna in UMT-AB-AM area is not diverse but contains high conservation value (35.5% total species number are nationally and globally threatened species). Significantly, some species have their largest populations in this area.

4.2.3. Kien Luong – Kien Hai area

Kien Luong – Kien Hai area (734,415 ha) consists of coastal Protection forests in Kien Luong and Kien Hai Districts and Hon Chong NR (about 1,000ha) in Kien Luong District. Outstanding feature of Kien Luong – Kien Hai area is a chain of low limestone mountains merging upto sea. Mountains in the South of Hon Chong Mountain are covered by forest plantation, mountains in the west lack of forests. Hon Chong mountain is covered by secondary evergreen tropical forests. Vegetation cover of Kien Luong – Kien Hai area consists of many habitat types such as limestone forests, mountain forest, coastal mangrove forest, ocean island with forests etc.

In spite of vegetation degradation, habitat diversity should harbor high flora and wildlife diversity. Unfortunately, flora and fauna in this area are still poorly studied (see Chapter 1 for details). In regard to mammal fauna, only 28 mammal species from 15 families and 8 orders are recorded. Studies in future will definitely add much more species to this species list.

Dominant species belongs to order of Rodentia (8 species), Carnivora (7 species) and Bat Chiroptera (4 species) (Figure 12). Large sized mammals have been considerably reduced and mammal species are recorded mainly in Hon Chong NR (lake, Binh An mountain, Moso mountain and Chua Hang mountains).

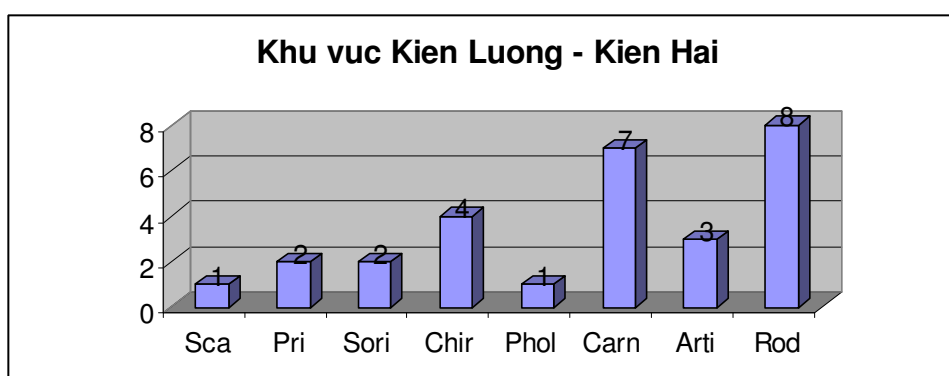


Figure 12. Comparison of species diversity between mammal orders

Sca: Scandentia, *Pri*: Primates, *Sori*: Soricomorpha, *Chir*: Chiroptera, *Phol*: Pholidota,
Carn: Carnivora, *Arti*: Artiodactyla, *Rod*: Rodentia

Six (6) species are of conservation priority (6 species enlisted in RDB VN 2007 and 3 species enlisted in IUCN RL 2009) were recorded in this area. Species of special conservation priority are Indochinese silver langur (*Trachypithecus germaini*), Long-tailed macaques (*Macaca fascicularis*) and Mouse deer (*Tragulus kanchil*). Especially, this area contains second population of Indochinese silver langur in Vietnam. During this survey, a group of 5-6 individuals of this species was observed in Chua Hang Mountain. As reported by local people, this population contain about

10-15 individuals . Kien Luong – Kien Hai area is the only place in KGBSR where Mouse deer still survives. Some caves with high number of bats have been found in this area.

Shortly, Kien Luong – Kien Hai area contains high mammal biodiversity, however, the fauna is still poorly studied.

4.3. THREATS TO MAMMAL FAUNA

Inside KGBSR, about 354,000 people live (People Committee of Kien Giang Province, 2005). Livelihood of major population depends on agriculture, aquaculture production and collection of forest products. Their livelihood is difficult and depends on forest products. Moreover, economic development, especially development of infrastructure constructions (roads, factories, sea harbor, urban living quarter, etc.) causes lots of negative impacts on local biodiversity resources. Below are main threats to biodiversity of KGBSR:

1. *Wildlife hunting and trade* occurs commonly in the area. Wild animals in general and mammals in particular are hunted for household use and also for sale in urban centers. Hunting is originated from local poverty and encouraged by outside traders. During this survey, we could observe a number of animals (Long-tailed macaque, Pig-tailed macaque, Banded squirrel, Finlayson's squirrels and other squirrel) which are caught from the wild and kept in very poor cages in Phu Quoc NP (Mr. Sau Khen house in Da Chong village, Coi Nguon Ecotourism Facility, etc.) and kept for sale in AB-AM area and Chua Hang area (Kien Luong District).



Photo: Phạm Đức Tiến

Figure 13. Mouse deer caught in Hon Chong NR (Kien Luong)

2. *Encroachment and disturbance of habitats*: due to high density of local peoples, habitat in study area are often undergoing encroachment for agriculture, aquaculture

and other purposes. This activity is especially in the areas outside protected areas. Illegal encroachment causes lots of disturbance for habitat security.

3. *Environmental pollution* caused by subsistence wastes, industrial wastes, use of insecticides, herbicides and toxic rat baits.

4. *Negative impacts of socio-economic development and tourism*: There are many socioeconomic development projects such as Cement factories, Thermo-electricity factory, tourism facilities, etc.). These projects often cause significantly negative impacts on surrounding environment and animals themselves if impact assessment is not conducted and mitigation measures are not applied.

SHORTLY, KGBSR contains high mammal diversity. Due to few surveys conducted, up to now, only 77 mammal species were recorded. Further surveys in future will definitely add more species to this primary list of KGBSR.

Number of large and medium-sized mammal species is not high, however, most of recorded species have high conservation significance. More over, some of them have much higher density in comparison with those in other areas of Vietnam. This indicates high importance of KGBSR for biodiversity conservation and threatened and rare species in particularly.

Mammals in KGBSR are facing with considerable pressures and threats that lead to the degradation. Therefore, a monitoring and evaluation programme must be applied to develop relevant management measures.

CHAPTER 5. ASSESSMENT OF BIRD FAUNA IN KIEN GIANG BIOSPHERE RESERVE

5.1. OVERALL ASSESSMENT FOR KGBSR

5.1.1. Species diversity and taxonomic composition

Previous studies (see Chapter 2) has recorded 119 bird species in Phu Quoc NP, 151 bird species in UMT NP and 74 bird species in Kien Luong – Kien Hai area. During this survey, we recorded 63 species in Phu Quoc NP, 72 species in UMT-AB-AM area and 56 species in Kien Luong – Kien Hai area. In this survey, number of recorded species is not high, usually lower than previous species list. Nevertheless, we could add 2 species to previous list of UMT NP and 23 species to previous list of Kien Luong – Kien Hai area. Totally, 222 bird species from 50 families and 11 orders were recorded in KGBSR (Table 12; Annex 6):

- Phu Quoc area: 143 species from 37 families and 11 orders
- UMT-AB-AM area: 152 species from 38 families and 10 orders
- Kien Luong – Kien Hai area: 95 species from 37 families and 10 orders.

Table 12. Species diversity of bird fauna in KGBSR

Period	Phu Quoc			UMT-AB-AM			Kien Luong-Kien Hai		
	Species	Family	Order	Species	Family	Order	Species	Family	Order
Before this survey	119	41	11	150	38	10	74	37	10
This survey	63	27	10	72	29	9	56	28	10
Additional records in this survey	0	0	0	2	0	0	23	0	0
Total:	134	37	11	152	38	10	95	37	10
Total for KGBSR: 222 species, 50 families, 11 orders									

Note: UMT-AB-AM: U Minh Thượng – An Biên – An Minh area

Number of 222 species recorded is not exhausted species number in KGBSR, however, it indicates high species diversity of bird fauna in this area, The number of recorded species represents 26.8% total bird species found in Vietnam. Out of 3 surveyed areas, UMT-AB-AM area has the highest species number, then follows Phu Quoc area and the lowest number is in Kien Luong – Kien Hai area. The highest number in UMT-AB-AM area is possibly because of the best investigation status. Low number in Kien Luong – Kien Hai area is because of poor investigation. The number of bird species in Phu Quoc area and Kien Luong – Kien Hai area is much higher than other sites due to the habitat diversity.

Regarding to taxonomic structure, the highest species number belongs to order of Passeriformes (95 species, 43,79% of total number in study area), then follows Ciconiformes (68 species, 30.63%). Coraciformes and Cuculiformes have 8 species each (3.6%). Bucerotiformes is the lowest with 2 species (0.9%) (Table 13).

Table 13. Species number by orders of bird fauna in KGBSR

No.	Order	No. families	No. species
1	Anseriformes	3	5
2	Piciformes	2	7
3	Bucerotiformes	1	2
4	Coraciiformes	5	11
5	Cuculiformes	3	11
6	Apodiformes	1	3
7	Strigiformes	3	4
8	Columbiformes	1	8
9	Gruiformes	2	8
10	Ciconiiformes	15	68
11	Passeriformes	16	95
Total: 11 orders		50	222

5.1.2. Species of conservation priority

Out of 222 species recorded in KGBSR, 19 species are of conservation priority (Table 14), including:

- 13 nationally threatened species (enlisted in RDB VN, 2007): 2 species at EN-endangered; 10 species at VU-vulnerable and 1 species at LR-low risk.
- 16 globally threatened species (enlisted in IUCN RL, 2009): 5 species at VU-vulnerable and 11 species at NT-near threatened

Number of conservation priority species is the highest in UMT NP (15 species), then follows Phu Quoc NP (5 species) and Kien Luong – Kien Hai area (3 species).

Table 14. Bird species of conservation priority recorded in KGBSR

No.	Vietnamese name	Scientific name	Distribution			Threatening level	
			PQ	UMT-AB-AM	KL K H	RDB VN 2007	IUCN RL 2009
1	Hồng hoàng	<i>Buceros bicornis</i>	+			VU	NT
2	Cú lợn lưng nâu	<i>Tyto capensis</i>		+		VU	
3	Sếu cổ trụi	<i>Grus antigone</i>			+	VU	VU
4	Choắt mỏ thẳng đuôi đen	<i>Limosa limosa</i>		+			NT
5	Choi Choi lưng đen	<i>Charadrius peronii</i>	+				NT
6	Đại bàng biển bụng trắng	<i>Haliaeetus leucogaster</i>	+	+			VU
7	Điều cá đầu xám	<i>Ichthyophaga ichthyaetus</i>	+	+		VU	NT
8	Điều hen	<i>Circus cyaneus</i>		+			NT
9	Đại bàng đen	<i>Aquila clanga</i>		+		EN	VU
10	Cắt nhỏ họng trắng	<i>Polihierax insignis</i>	+			LR	NT

11	Cổ rắn, Đèo đặng	<i>Anhinga melanogaster</i>		+		VU	NT
12	Cò quăm đầu đen	<i>Threskiornis melanocephalus</i>		+		VU	NT
13	Bồ nông chân xám, Chàng bè	<i>Pelecanus philippensis</i>		+		EN	VU
14	Cò lạo ấn độ, Giang sen	<i>Mycteria leucocephala</i>		+	+	VU	NT
15	Cò nhạn, Cò ốc	<i>Anastomus oscitans</i>		+		VU	
16	Hạc cổ trắng	<i>Ciconia episcopus</i>		+	+	VU	
17	Già đẫy java, Già sói	<i>Leptoptilos javanicus</i>		+		VU	VU
18	Rồng rộc vàng	<i>Ploceus hypoxanthus</i>		+			NT
19	Sẻ đồng ngực vàng	<i>Emberiza aureola</i>		+			NT
	Total:		5	15	3	13	16

Notes: PQ: Phu Quoc NP, UMT-AB-AM: U Minh Thuong – An Bien – An Minh area; KL-KH: Kien Luong – Kien Hai area; RDB VN (2007) – Red Data Book of Vietnam, IUCN RL (2009) – IUCN Red List of Threatened species. **CR:** Critically endangered, **EN:** Endangered, **VU:** Vulnerable, **LR:** Low Risk, **NT:** Near threatened, **DD:** Data Deficient

Species of special conservation priority are Sarus crane (*Grus antigone*), Indian Darter (*Anhinga melanogaster*), Grey Pelican (*Pelecanus philippensis*), Lesser Adjutant Stork (*Leptoptilos javanicus*) and Great Indian Hornbill (*Buceros bicornis*).

- **Great Indian Hornbill (*Buceros bicornis*)**

Great Indian Hornbill occurs in India, China and Southeast Asian countries. In Vietnam, this species is significantly reduced in the number as a result of hunting and forest degradation. During this survey, 2 individuals were observed in Phu Quoc NP (coordinates 10⁰19'56,1"N/ 103⁰59'10,5"E, altitude 39m). Interview information report that this species is quite common in Phu Quoc NP.

- **White-bellied Sea Eagle (*Haliaeetus leucogaster*)**

This species has distributed in India, Australia, Mianma, Malaysia and Indochina. In Vietnam, it was found in Khanh Hoa, Binh Thuan, some provinces of Mekong Delta and Con Dao island. In Phu Quoc NP, White-bellied Sea Eagle is reported quite abundant, this species is facing with severe hunting and trade currently. During this survey, no direct observation of this species was obtained. This species is illegally kept in large number in some tourism facilities in Phu Quoc Island for tourists attract.

- **Grey-headed Fishing Eagle (*Ichthyophaga ichthyaetus*)**

This species occurs in a number of Asian countries. In Vietnam, it was recorded in many provinces from Lai Chau to Kien Giang. This species is reported to exist in Phu Quoc NP in very small number. During this survey, no direct sighting of this species was obtained.



Photo: Ngô Xuân Tường
Haliaeetus leucogaster in Phu Quoc NP



Photo: Ngô Xuân Tường
Anhinga melanogaster in UMT NP



Photo: Ngô Xuân Tường
Ardea cinerea in UMT NP



Photo: Ngô Xuân Tường
Leptoptilos javanicus in UMT NP



Photo: Phạm Đức Tiến

A bird colony with about 3000 individuals of Indian Darter nesting in UMT NP

Figure 14. Some bird species of conservation priority

- **Indian Darter (*Anhinga melanogaster*)**

This species occurs in India and some Southeast Asian Countries. In Vietnam, it occurs in almost all provinces of Mekong Delta, including UMT NP. It is reported that after big forest fire in March 2002, this species has increased in the number (several hundreds individuals) in UMT NP and now nesting in this area. During this survey, we could observe a colony of about 300 individuals nesting in UMT NP, at coordinates 09°33'03,2"N/ 105°06'26,5"E.

- **Lesser Adjutant Stork (*Leptoptilos javanicus*)**

This species occurs in India, Srilanka, Mianma, Southeastern China, Thailand, Malaysia and Indochina. In Vietnam, it was found in Central and Southern Vietnam. This species is facing significantly reduced the number due to hunting and habitat loss. The birds often seen feeding in coastal mangrove forest, muddy beaches and inundated grasslands. During this survey, one individual was seen in UMT NP (coordinates 09°34'01,0"N/ 105°06'26,7"E), in 7 August 2009. It is reported that, at presents, about 200 individuals of this species live in UMT NP.

- **Sarus crane (*Grus antigone*)**

Sarus crane distributes in Southeast Asia. In Vietnam, it occurs mainly in Mekong Delta. In KGBSR, sarus crane is reported to occur in Kien Luong District (Mo So field) with very few number. This area is now severely affected by human activities and no more serving as the feeding ground for sarus crane. This species is usually found in Mekong Delta during October to March next year. During this survey, no direct sighting of sarus crane was obtained.

- **Painted Stork (*Mycteria leucocephala*)**

Painted stock distributes in Southeast Asian countries. In Vietnam, it is often seen in *Melaleuca* forest and Mangrove forests of Mekong Delta and Cat Tien NP (Dong Nai Province). This species is reduced in number due to hunting and habitat loss. During this survey, no direct sighting of this species was obtained.

- **Grey Pelican (*Pelecanus philippensis*)**

Grey pelican occurs in India, Mianma, Campuchia and Vietnam. In Vietnam, it was found in river estuary in Nam Dinh Province, coastal area of Mekong Delta. In KGBSR, this species was found in UMT NP and Kien Luong District with low number. During this survey, no direct observation of this species was obtained.

5.2. ASSESSMENT BY SITES

5.2.1. Phu Quoc area

Up to now, it was recorded in Phu Quoc NP 134 bird species from 37 families and 11 orders (Table 12; Annex 6). In this short survey, we could not assess their abundance. However, it can see some species with relative high abundance such as Great Indian Hornbill (*Buceros bicornis*), Indian Pied Hornbill (*Anthracoceros albirostris*), etc. Out of 134 recorded species, 5 species are of conservation priority

(Table 14), including 3 species enlisted in RDB VN, 2007 and 5 species recorded in IUCN RL, 2009. Great Indian Hornbill (*Buceros bicornis*) is reported to be reduced in number due to forest destruction and hunting for meat and bills for decoration. Other 2 species White-bellied Sea Eagle (*Haliaeetus leucogaster*) and Brahminy Kite (*Haliastur indus*) are facing with hunting for trade in large number.

Primary evergreen forest and secondary forest have the highest number of species (92 species, 68.66% total species number), then follows *Melaleuca* forests with 35 species (26.12%); lowest number is found in openlands, grasslands, swamps,.. with 30 species (22.39%) (Table 15). Lowland and mountain preliminary and secondary evergreen forests are important habitats for a number of endangered species such as Great Indian Hornbill (*Buceros bicornis*), Indian Pied Hornbill (*Anthracoceros albirostris*),...

Table 15. Main habitat types and distribution of birds

No.	Habitat type	No. species	Endangered species
1	Mountain and Lowland primary and secondary evergreen forest	92	Great Indian Hornbill (<i>Buceros bicornis</i>), Indian Pied Hornbill (<i>Anthracoceros albirostris</i>)
2	Coastal mangrove forests	77	White-bellied Sea Eagle (<i>Haliaeetus leucogaster</i>)
3	<i>Melaleuca</i> forests	35	No
4	Openland, swamp, wetland meadow, etc.	30	Malaysian Sand Plover (<i>Charadrius peronii</i>)

5.2.2. UMT – AB – AM Area

Up to now, 152 species from 38 families and 9 orders were recorded in UMT – AB – AM Area (Table 12, Annex 6). During this survey we discovered 2 more species for UMT NP. According to previous studies, 2 species, sarus crane (*Grus antigone*) and Grey Pelican (*Pelecanus philippensis*) were found in UMT NP. During this survey, we could not get any direct observation of these species. Local residents also reported not see these species for many years.

Short survey duration does not allow us to assess species abundance. However, some species are commonly seen in UMT NP include Indian Darter (*Anhinga melanogaster*), Grey Heron (*Ardea cinerea*), Great Frigate Bird (*Fregata minor*), Lesser Adjutant Stork (*Leptoptilos javanicus*), etc.

Out of 152 species recorded in UMT – AB – AM Area, 15 species are of conservation priority (Table 14). Some of them have relatively higher abundance in study area, especially, Indian Darter (*Anhinga melanogaster*) (estimated as about 300 individuals) and Lesser Adjutant Stork (*Leptoptilos javanicus*) (estimated as about 200 individuals). These species have restrict distribution range and very low number in Vietnam.

In UMT – AB – AM Area, *Melaleuca* forest inhabits the highest number of bird species (89 species, 58.59% of total species number), then follows coastal mangrove forest with 70 species (46.05%) and Grasslands along dykes with 68 species

(44.74%). The lowest number is found in openland, inundated area, meadows, agriculture land with 54 species (35.53%) (Table 16).

Table 16. Main habitat types and bird distribution in UMT-AB-AM area

No.	Habitat types	No. of species	Endangered species
1	Coastal mangrove forest	70	Grey-headed Fishing Eagle (<i>Ichthyophaga ichthyaetus</i>)
2	<i>Melaleuca</i> forests	89	Greater Spotted Eagle (<i>Aquila clanga</i>), Indian Darter (<i>Anhinga melanogaster</i>), Lesser Adjutant Stork (<i>Leptoptilos javanicus</i>), Woolly-necked Stork (<i>Ciconia episcopus</i>)
3	Grassland along dykes	68	Asian Golden Weaver (<i>Ploceus hypoxanthus</i>), Yellow-breasted Bunting (<i>Emberiza aureola</i>)
4	Openland, inundated area, swamp, agriculture land meadow.	54	Indian Darter (<i>Anhinga melanogaster</i>), Lesser Adjutant Stork (<i>Leptoptilos javanicus</i>), Javanese Cormorant (<i>Pharacrocorax niger</i>)

Melaleuca forests and open habitats are feeding ground and nesting sites for some important endangered species such as Indian Darter (*Anhinga melanogaster*), Lesser Adjutant Stork (*Leptoptilos javanicus*), Javanese Cormorant (*Pharacrocorax niger*),...

During this survey, a large bird colony (about 20ha) was observed in UMT NR where many species are nesting in large number such as Indian Darter (*Anhinga melanogaster*), Javanese Cormorant (*Pharacrocorax niger*), Woolly-necked Stork (*Ciconia episcopus*), etc. The birds break the branches of *Melaleuca* trees to make their nests. This activity will lead to death of *Melaleuca* trees after few years, then colony should move to new place. There is lack statistical data on bird colonies in UMT NP.

5.2.3. Kien Luong – Kien Hai area

Up to now, it was recorded 95 bird species from 37 families and 10 orders (Table 12; Annex 6). This survey has added 23 species to previous bird list of this area. Two species, Black ibis (*Pseudibis davisoni*) and Grey Pelican (*Pelecanus philippensis*) were reported to occur in this area (Buckton et al. 2000). During this survey, no direct sighting of these species was obtained and local interviewees confirm that these species are did not appear in this area for many years. Due to short survey duration,

we can not assess abundance of all species, however, some species seem quite abundant in this area are Javanese Cormorant (*Pharacrocorax niger*), Egrets (*Egretta spp.*), Herons (*Nycticorax*, *Gorsachius*),etc. while also some endangered species are very rarely seen in this area such as Sarus crane (*Grus antigone*), Painted Stork (*Mycteria leucocephala*),etc. Out of 95 bird species recorded in Kien Luong – Kien Hai area, 3 species are of conservation priority (Table 14). Sarus crane (*Grus antigone*) is reported to see only in Mo So area of Kien Luong District.

Within all habitat types occurring in Kien Luong – Kien Hai area, coastal mangrove forest has the highest number of recorded species (60 species, 63.16% of total species number). 2 other habitat types (mountain or lowland secondary forest and openlands) have 39 species each (41.05%) (Table 17).

Table 17. Main habitat types and bird distribution in Kien Luong – Kien Hai area

No	Habitat type	No. of species	Threatened species
1	Lowland secondary forest	39	No
2	Coastal mangrove forest	60	No
3	Openland (swamps, agriculture land, grasslands, meadows)	39	Sarus crane (<i>Grus antigone</i>) Painted Stork (<i>Mycteria leucocephala</i>), Woolly-necked Stork (<i>Ciconia episcopus</i>)

Secondary evergreen forest in Hon Chong mountain (Kien Luong District) is an important habitat for many forest birds. Bird fauna in this habitat is poorly studied, therefore, many species are likely unidentified.

One large bird colony was observed in *Rhizophora* forest of a local household (coordinates 0⁰13'03,8"N-104⁰35'34,7"E, altitude: 8m) with large number of many species such as Javanese Cormorant (*Pharacrocorax niger*), Egrets (*Egretta spp.*), Herons (*Nycticorax*, *Gorsachius*),etc. As reported by the forest owner, this colony appeared in 1993 with much less number of birds, then the number of birds is increased by the time.

5.3. Threat to bird fauna

1. *Wildlife hunting and trade* is common in study area: Birds and other wild animals are hunted for household use and for sale in urban centers as pet (White-bellied Sea Eagle *Haliaeetus leucogaster*, Brahminy Kite *Haliastur indus*, etc.) or as special dishes in restaurants (Doves *Streptopelia spp.*, Stonechat *Saxicola spp.*). Hunting pressure is driven by poverty and wildlife trade.

2. *Habitat encroachment and disturbance*: due to the high density of human population, habitats in KGBSR are always undergo encroachment for agriculture cultivation, aquaculture and disturbance by high rate of human entrance. Habitat encroachment causes loss or reduction of habitat area and feeding grounds for birds. Reduction and disturbance of *Melaleuca* forest, meadows, mangrove forests may eliminate important endangered species from this area such as Sarus crane (*Grus*

antigone), Grey Pelican (*Pelecanus philippensis*), Lesser Adjutant Stork (*Leptoptilos javanicus*), etc.

3. *Environmental impact by socio-economic development and tourism:* In KGBSR, there are many development projects that will cause negative impacts on forests and other wildlife habitats such as cement factory, thermo-electricity factory and tourism base in Kien Luong area; tourism and resort facilities in Phu Quoc area, etc. These projects must conduct proper environment impact assessment for mitigation measures

In KGBSR, it was recorded 222 bird species belonging to 50 families and 11 orders. This is a not exhausted species list of birds in KGBSR because the fauna is poorly studied. Further surveys will definitely add much more species to this list. Out of 222 bird species recorded, 19 species are of conservation priority. Some of these species (Indian Darter *Anhinga melanogaster*), Lesser Adjutant Stork *Leptoptilos javanicus*, etc.) have much higher number in comparison with those in other areas of Vietnam. This indicates the importance of KGBSR on conservation of bird biodiversity not only for Vietnam but also for the World.

CHAPTER 6. ASSESSMENT OF HERPETO FAUNA IN KIEN GIANG BIOSPHERE RESERVE

6.1. OVERALL ASSESSMENT FOR KGBSR

6.1.1. Species diversity and faunal characteristics

Previous studies (see Chapter 2) have recorded 17 amphibian species and 55 reptile species in Phu Quoc NP; 7 amphibian species and 38 reptile species in UMT NP and 7 amphibian species and 46 reptile species in Kien Luong – Kien Hai area. Some species from these lists may not correctly identified. During this survey, we recorded 33 amphibian and reptile species in Phu Quoc NP, 23 amphibian and reptile species in UMT NP and 20 amphibian and reptile species in Kien Luong – Kien Hai area. Combining results of previous studies (after correction) and our survey, we can make an updated herpetological list for KGBSR which consists of 107 species from 20 families and 5 orders (23 amphibian species from 6 families, 2 orders and 85 reptile species from 14 families and 3 orders) (Table 18, Annex 7).

Table 18. Number of herpetological species recorded in KGBSR

Area	Amphibian	Reptile	Total	%
Phu Quoc	17	55	72	69,2
UMT-AB-AM	7	38	45	42,3
Kien Luong – Kien Hai	13	46	59	54,0
Total :	23	85	107	100

This list of 107 species is still not exhausted list of herpetofauna in KGBSR because the fauna is still poorly studies. Further surveys will certainly increase the number species. Four (4) species of genera *Hemidactylus*, *Dixonius*, *Sphenomorphus* and *Scincella* are not surely identified due to not enough specimens collected. Some features of KGBSR herpetofauna can be noted as following:

Herpetofauna of KGBSR contains relatively high species diversity, but it is not as diverse as in other protected areas in Northern and Central Vietnam. This is because of several reasons such as smaller area of natural forests, less habitat diversity, simple terrain, other environment conditions and still less surveyed.

The fauna contains large number of species typical for herpetofauna in Southern Delta such as snakes *Enhydris bocourti*, *Enhydris innominata*, *Enhydris subtaeniata*, *Erpeton tentaculatum* and turtle *Heosemys annandalii*. Some species are rarely seen in other places but were found in KGBSR such as gekkons *Cyrtodactylus condorensis*, *Ptychozoon lionotum*. Especially, unlike in other places of Vietnam, genera *Enhydris* is very abundant in KGBSR and 6 of 7 species of this genera were found here.

Except for Saltwater crocodile *Crocodylus porosus* which was extinct from the wild, some other species may be no more exist in KGBSR such as: turtle *Batagur basca*, *Dermochelys coriacea*, *Lepidochelys olivacea*. Two species, *Pelodiscus sinensis* and

Crocodylus siamensis are introduced to KGBSR as captive breeding stocks in households

Sea living are 8 species (4 sea snake and 4 sea turtle species); freshwater living: 12 species including toads *Occidozyga* spp., snakes *Enhydris* spp., *Xenochrophis flavipunctatus*, *Bungarus fasciatus*, turtle *Amysda cartilaginea*. On land or underland living: 46 species such as toads, many frogs, *Leiolepis reevesii*, lizard *Cyrtodactylus*, many snakes, turtles, etc. Tree living: 12 species such as tree frogs (Rhacophoridae), Lizards *Calotes* spp., *Eutropis* spp., gekkos *Cyrtodactylus* spp., *gekko gekko*, etc. Some species live in two habitat types such as on trees and on land: *Acanthosaura lepidogaster*, *Calotes versicolor*, snakes *Dendrelaphis pictus*, *Coelognathus radiata*, *Ptyas korros*, etc.; on land and in water: frogs, *Bungarus fasciatus*, *Enhydris plumbea*, etc.

A number species recorded in KGBSR are found only in South Vietnam such as: varan *Varanus nebulosus* and snake *Naja kaouthia* occur only from Quang Tri Province southwards; snake *Cerberus rhynchops*, tree lizard *Acanthosaura capra* occur only from Khanh Hoa Province southwards; tree frog *Theloderma stellatum*, cobra *Naja siamensis* occur only from Kon Tum Province southwards; frog *Limnonectes dabanus* occurs only from Dak Lak province southwards; lizards *Cyrtodactylus condorensis*, *Hemidactylus platyurus* occur only from Baria-Vung Tau Province southwards; snake *Cryptelythrops macrops* occurs only in Dong Nai and Kien Giang and Ca Mau Provinces; Lizards *Cyrtodactylus intermedius*, *Ptychozoon lionotum* occur only in Dong Nai and Kien Giang Province.

Due to the short survey time, we can not assess species abundance, however, herpetological species in KGBSR can divide into 2 groups as following:

- Species of high abundance are species of small-size, wide distribution in Vietnam, non- or little-use by local residents, They are lizards *Hemidactylus*, frogs *Microhyla*, *Micryletta*, *Occidozyga*, *Hylarana*, *Polypedates leucomystax*, *Kaloula pulchra*, tree lizard *Acanthosaura*, skinks *Eutropis*, ect.
- Species rarely seen in the wild are species of large size, use for food and medicine or high commercial values. They are varans *Varanus* spp., pythons *Python* spp., many snakes, turtles, gecko, lizard *Draco maculatus*, etc. Number of these species is significantly reduced due to high market demand. Especially, sea turtles (*Chelonia mydas* *Eresmochelys imbricata*) are very rare seen, about 1-2 times per year.

6.1.2. Species of conservation priority

Out of 107 recorded species, 27 species are of conservation priority (enlisted in RDB VN, 2007 and IUCN RL, 2009) (Table 19), including:

- 26 species enlisted in RDB VN, 2007: 4 species at CR-critically endangered, 11 species at VU-vulnerable
- 12 species enlisted in IUCN RL, 2009: 2 species at CR-critically endangered, 6 species at VU-vulnerable and 2 species at NT-near threatened.
- 12 species enlisted in both red list.

Table 19. Herpetological species of conservation priority recorded in KGBSR

No.	Vietnamese name	Scientific name	Distribution			Threatening level	
			PQ	UMT-AB-AM	KL - KG	RDB VN 2007	IUCN RL 2009
1.	Ếch giun	<i>Ichthyophis bananicus</i>			+	VU	
2.	Tắc kè	<i>Gekko gecko</i>	+	+	+	VU	
3.	Nhông cát ri vờ	<i>Leiolepisreevesii</i>	+			VU	
4.	Rồng đất	<i>Physignathus cocincinus</i>	+			VU	
5.	Kỳ đà vân	<i>Varanus nebulosus</i>	+	+	+	EN	
6.	Kỳ đà hoa	<i>Varanus salvator</i>	+	+	+	EN	
7.	Trăn đất	<i>Python molurus</i>	+	+	+	CR	NT
8.	Trăn gấm	<i>Python reticulatus</i>	+	+	+	CR	NT
9.	Rắn sọc dưa	<i>Coelognathus radiata</i>	+	+	+	VU	
10.	Rắn sọc xanh	<i>Goniosoma prasinum</i>	+			VU	
11.	Rắn ráo	<i>Ptyas korros</i>	+	+		EN	
12.	Rắn ráo trâu	<i>Ptyas mucosus</i>	+	+	+	EN	
13.	Rắn bông voi	<i>Enhydris bocourti</i>	+	+		VU	
14.	Rắn cạp nong	<i>Bungarus fasciatus</i>	+		+	EN	
15.	Rắn hổ mang kau thia	<i>Naja kaouthia</i>		+		EN*	
16.	Rắn hổ mang xiêm	<i>Naja siamensis</i>	+	+	+	EN*	
17.	Rắn hổ chúa	<i>Ophiophagus hannah</i>	+	+	+	CR	
18.	Rùa răng	<i>Heosemys annandalii</i>	+	+	+	EN	EN
19.	Rùa hộp lưng đen	<i>Cuora amboinensis</i>		+	+	VU	VU
20.	Rùa ba gờ	<i>Malayemys subtrijuga</i>	+	+	+	VU	VU
21.	Rùa đất lớn	<i>Heosemys grandis</i>			+	VU	VU
22.	Rùa cổ bụ	<i>Siebenrockiella crassicollis</i>		+			VU
23.	Cua đỉnh	<i>Amysda cartilaginea</i>	+	+	+	VU	VU
24.	Đồi mồi	<i>Eresmochelys imbricata</i>	+		+	EN	CR
25.	Quản đồng	<i>Lepidochelys olivacea</i>	+	+	+	EN	VU
26.	Rùa da	<i>Dermochelys coriacea</i>	+			CR	CR
27.	Vích	<i>Chelonia mydas</i>	+		+	EN	EN
Total:			23	20	20	26	12

Notes: PQ: Phu Quoc NP, UMT-AB-AM: U Minh Thuong – An Bien – An Minh area; KL-KH: Kien Luong – Kien Hai area; RDB VN (2007) – Red Data Book of Vietnam, IUCN RL (2009) – IUCN Red List of Threatened species. **CR:** Critically endangered, **EN:** Endangered, **VU:** Vulnerable, **LR:** Low Risk, **NT:** Near threatened, **DD:** Data Deficient

* these 2 species were separated from one species *Naja naja* after publication of RDB VN, 2007



Photo: Lê Nguyễn Ngật
Python *Python reticulatus* in UMT NP



Photo: Lê Nguyễn Ngật
Snake *Enhydris bocourti* in Phu Quoc NP



Photo: Lê Nguyễn Ngật
Lizard *Leiolepis reevesii* in Phu Quoc NP



Photo: Lê Nguyễn Ngật
Turtle *Cuora amboinensis* in UMT NP



Photo: Phạm Đức Tiến
Toiturse *Heosemys grandis*
in Hon Chong NR



Photo: Phạm Đức Tiến
Turtle *Malayemys subtrijuga* in UMT NP

Figure 15. Some herpetological species of conservation priority

Several species that are new for science have just found in KGBSR by scientists from Institute of Tropical Biology such as White-tailed gecko (*Cnemaspis caudanivea*) described in 2007 from Hon Tre Island (Kien Hai District), Yellow-footed gecko (*Cnemaspis aurantiacopes*) described in 2007 from Hon Dat mountain (Hon Dat District), Gecko Eisenmani (*Cyrtodactylus eisenmani*) described in 2008 in Hon Son island (Kien Hai District) and Hon Son snake (*Cryptelythrops honsonensis*) described in 2008 in Hon Son Island (Kien Hai Island). These species are endemic to KGBSR and are not found else where in the World.

Out of 26 species of conservation priority, 8 species are of special conservation priority including King cobra *Ophiophagus hannah*, turtles *Heosemys annandalii*, *Cuora amboinensis*, *Malayemys subtrijuga*, *Amysda cartilaginea*, seaturtles *Chelonia mydas* and *Eresmochelys imbricata*. These species are highly threatened nationally and globally; occur mainly in several provinces of South Vietnam and have number rapidly reduced during recent years. Within these species, 3 species *Heosemys annandalii*, *Cuora amboinensis* and *Malayemys subtrijuga* remain relatively common in KGBSR

6.2. ASSESSMENT BY SITES

Highest number of recorded species is in Phu Quoc NP with 72 species, accounting for 69.23 % of total species number of KGBSR, then follows Kien Luong – Kien Hai area with 59 species (54%) and lowest is in UMT-AB-AM area with 45 species (42.30%). This difference in species number is because of the difference in habitat types and habitat diversity (more diversity in Phu Quoc area and Kien Luong – Kien Hai area) and also survey level (less in Kien Luong – Kien Hai area).

6.2.1. Phu Quoc area

Due to high habitat diversity, Phu Quoc area contains high number of species recorded, 72 species, accounting for 69.2% total species number recorded in KGBSR: 17 amphibian species and 55 reptile species. This is not exhausted list, further surveys will add many more species to this list. Out of 72 recorded species, 23 species are of conservation priority (enlisted in RDB VN, 2007 and IUCN RL 2009). Species of special conservation priority are Python *Python reticulatus*, King cobra *Ophiophagus hannah*, turtles *Heosemys annandalii*, *Malayemys subtrijuga*, *Amysda cartilaginea*, *Chelonia mydas* and *Eresmochelys imbricata*. Moreover, 2 lizard species *Leiolepis reevesii* and *Acanthosaura capra* found in Chai village, Phu Quoc Island are not found else where.

6.2.2. UMT-AB-AM area

This area was surveyed much better than other areas of KGBSR, however, due to less habitat diversity and small area, number of recorded species is lower than in two other surveyed areas. Totally, 7 amphibian species and 38 reptile species were recorded in UMT-AB-AM area. It is worth to mention that density and number of many species, including some endangered species in this area are much higher than those in other areas. This makes this area important for conservation of these species.

6.2.3. Kien Luong – Kien Hai area

This area has unique topographic features in KGBSR by ecosystem and habitat diversity (mountain forest, limestone forests, fresh water wetlands, mangrove forest, island ecosystems, etc.). This implicates high biodiversity of Herpetofauna. One evidence of this is recent discovery of 3 species new for science including White-tailed gecko *Cnemaspis caudanivea*, Eisenmani lizard *Cyrtodactylus eisenmani* and Hon son viper *Cryptelythrops honsonensis*. Unfortunately, herpetofauna in this area is poorly studied. So far, only 13 amphibian species and 46 reptile species were found. Further studies certainly will record many more species for this area, possibly also species new for science. Out of 59 recorded species, 20 species are threatened nationally and globally.

6.3. THREATS TO HERPETOFAUNA IN KGBSR

a) *Wildlife hunting and trade*: The most direct and serious threats to herpetofauna is hunting for different purposes:

- as food for households or in eating shops / restaurants
- as traditional medicines (making tonic liquor, balms, raw animal part such as python gall bladder, snake penis, varanus hands, etc.)
- as decorative purpose: dry stuffs, dry animals, production of souvenir goods
- as trade of live animals to big cities

We visited some wildlife shops in local markets and found 26 species were for sale (Table 20).

Table 20. Species in trade found in local markets in KGBSR

No	Vietnamese name	Scientific name	Local name	Types of trade
1	Rồng đất	<i>Physignathus cocincinus</i>	Kỳ tôm, càng tôm	Live animals
2	Thằn lằn bay đốm	<i>Draco maculatus</i>		Alcohol liquor, dry animals
3	Tắc kè	<i>Gecko gecko</i>	Tắc kè	Alcohol liquor, dry animals
4	Kỳ đà vân	<i>Varanus nebulosus</i>	Càng cuốc	Live animal
5	Kỳ đà hoa	<i>Varanus salvator</i>	Kỳ đà	Live animal
6	Rắn hai đầu	<i>Cylindrophis ruffus</i>	Rắn trun	Live animal
7	Trăn đất	<i>Python molurus</i>	nưa	Meat and live animal
8	Trăn gấm	<i>Python reticulatus</i>	Trăn	Meat and live animal
9	Rắn mồng	<i>Xenopeltis unicolor</i>	Hồ hành	Live animal
10	Rắn sọc dưa	<i>Coelognathus radiata</i>	Hồ ngựa	Alcohol liquor and live animal
11	Rắn ráo	<i>Ptyas korros</i>	Rắn lã	Alcohol liquor and live animal
12	Rắn ráo trâu	<i>Ptyas mucosus</i>	Hồ hèo	Alcohol liquor and live animal

13	Rắn bông voi	<i>Enhydris bocourti</i>	Rì tượng, ri voi	Live animal
14	Rắn bông súng	<i>Enhydris enhydris</i>		Live animal
15	Rắn bông không tên	<i>Enhydris innominata</i>	Hồ lác, hồ sậy	Live animal
16	Rắn bông chì	<i>Enhydris plumbea</i>		Live animal
17	Rắn râu	<i>Erpeton tentaculatum</i>		Live animal
18	Rắn ri cá	<i>Homalopsis buccata</i>		Live animal
19	Rắn nước	<i>Xenochrophis flavipunctatus</i>		Live animal
20	Rắn cạp nong	<i>Bungarus fasciatus</i>	Mai gầm	Alcohol liquor and live animal
21	Rắn hổ mang kau thia	<i>Naja kaouthia</i>	Hổ đất	Alcohol liquor and live animal
22	Rùa hộp lưng đen	<i>Cuora amboinensis</i>	Rùa nắp	Live animal
23	Rùa rặng	<i>Heosemys annandalii</i>	Càng đước	Live animal
24	Rùa đất lớn	<i>Heosemys grandis</i>		Live animal
25	Rùa ba gờ	<i>Malayemys subtrijuga</i>	Rùa yếm vàng	Live animal
26	Đồi mồi	<i>Eresmochelys imbricata</i>		Dry shell and processed products

b) *Reduction of habitats*: Habitats of many species is reduced due to encroachment of agriculture lands, aquaculture, road building, industrial development (Cement factory, Stone exploitation), tourism facilities construction (Phu Quoc, Chua Hang and Ha Tien areas) and new settlement areas (Kien Luong District), etc.

c) *Living environmental quality degradation*: due to harvesting of forest products (timber, rattans, etc.), forest fire, subsistence wastes of local residents and tourists, etc. These cause great negative impacts on living environment of wildlife in general and herpetofauna in particular.



Ha Tien Ciment Factory Photo: Ngô Xuân Tường

Figure 16. Cement factory cause loss of limestone habitats and environmental pollution

d) Low conservation awareness: Local residents' livelihood mainly depends on harvesting natural aquatic and forest products, including many herpetological species. Their awareness about nature protection and wildlife conservation is still low.

e) Effect of forest management is not high. Evidence of this is that wild animals, including rare and threatened species are commonly hunted and traded in the local markets (An Binh, Minh Thuan, etc.)

SHORTLY, although preliminary, this assessment shows high potential biodiversity of herpetofauna in KGBSR. Up to now, 107 species of amphibians and reptiles were recorded in KGBSR with 5 species typical for Mekong Delta fauna. Further studies of both herpetofauna and habitats are necessary to get better understanding of this unique fauna. Out of 107 recorded species, 4 species are possibly extinct from the wild, 2 species are not found elsewhere in Vietnam, 25 species enlisted in RDB VN, 2007 and 13 species enlisted in IUCN RL, 2009. Wildlife hunting, trade and habitat degradation are most serious threats to herpetofauna in KGBSR.

CHAPTER 7. CONCLUSION AND RECOMENDATION

7.1. CONCLUSION

KGBSR contains very high biodiversity values, though studied are not sufficient. Up to now, it was recorded in KGBSR:

- 6 main ecosystems with 22 different habitat types
- About 1.500 species of vascular plants from 150 families and 70 orders
- 77 species of mammals belonging to 20 families, 8 orders
- 222 species of birds belonging to 50 families, 11 orders
- 107 species of reptiles and amphibians belonging to 20 families, 5 orders

Within recorded species, 30 plant species, 20 mammal species, 19 bird species, 1 amphibian species and 26 reptile species are threatened with extinction in Vietnam and/or in the World. There are 20 species of special conservation priority including Roundleaf Cycad *Cycas litoralis*; Hairy-nosed Otter *Lutra sumatrana*, Jungle Cat *Felis chaus*, Fishing Cat *Prionailurus viverrinus*, Large-spotted Civet *Viverra megaspila*, Indochinese Silver Langur *Trachypithecus germaini*, Lylei's Fruit Bat *Pteropus lylei*, Large Flying Fox *Pteropus vampyrus*; Sarus Crane *Grus antigone*, Indian Darter *Anhinga melanogaster*, Lesser Adjutant *Leptoptilos javanicus*, Great Hornbill *Buceros bicornis*; Reticulated Python *Python reticulatus*, King cobra *Ophiophagus hannah*, Yellow-headed Temple Turtle *Heosemys annandalii*, Malayan Box Turtle *Cuora amboinensis*, Snail-eating Turtle *Malayemys subtrijuga*, Asiatic Softshell Turtle *Amyda cartilaginea*; Green Sea Turtle *Chelonia mydas* and Hawksbill Sea Turtle *Eresmochelys imbricata*.

Four (4) forest types and/or plant stand are of special conservation priority:

- Dwarf forest on sand hill in Phu Quoc NP
- Stand of *Lumnitzera littorea* in Rach Tram estuary, Phu Quoc NP.
- Natural *Melaleuca* forest on pit in UMT NP
- Coastal mangrove forest

Main forest management problems and threats to biodiversity are:

- Maintaining of high water level for forest fire prevention is causing negative impact on growth and development of *Melaleuca* forests.
- Conversion of forestry land with rare vegetation types in Phu Quoc NP into land for tourism infrastructure construction,...
- System of dykes surrounding household forest is disturbing dispersal and natural regeneration of coastal mangrove forests
- Existing encroachment/destruction of coastal protection forest for aquaculture.
- Widespread wildlife hunting and trade
- Human encroachment and disturbance of wildlife habitat
- Environment pollution due to subsistence and industrial wastes and use of pesticides and herbicides
- Impacts of economic and tourism development leading to reduction of forest area and habitat degradation.
- Local community has low awareness on biodiversity conservation.
- Low effect of forest and wildlife management in the area

7.2. RECOMMENDATIONS

7.2.1. Additional biodiversity surveys for kgbsr

1. Additional biodiversity assessment of Hon Chong NR and coastal islands in Kien Luong – Kien Hai (2010)

Kien Luong – Kien Hai area represents a unique landscape. Tropical broadleaf forests in Hon Chong Semi-island (and also small islands) contain high biodiversity potential, but still poorly investigated. Many species that are new for science have discovered during recent years. This area is facing with increasing negative impacts from industrial development (Cement factory, future thermo-electricity factory, future sea port development, etc.) and tourism development. The biodiversity values of this area should be properly assessed for relevant conservation measures

2. Survey for assessing population status of species conservation priority species (2010-2011).

Additional surveys are necessary to identify population status of highly endangered species such as Indochinese Silver Langur *Trachypithecus germaini*, Long-Tailed Macaque *Macaca fascicularis*, Slow loris *Nycticebus coucang*, Jungle Cat *Felis chaus*, Fishing Cat *Prionailurus viverrinus*, Large-spotted Civet *Viverra megaspila*, Hairy-nosed Otter *Lutra sumatrana*, Small-clawed Otter *Aonyx cinerea*, Sarus Crane *Grus antigone*, Indian Darter *Anhinga melanogaster*, Lesser Adjutant *Leptoptilos javanicus* Yellow-headed Temple Turtle *Heosemys annandalii*, Malayan Box Turtle *Cuora amboinensis*, Snail-eating Turtle *Malayemys subtrijuga*, Asiatic Softshell Turtle *Amyda cartilaginea*, Green Sea Turtle *Chelonia mydas*, and Hawksbill Sea Turtle *Eresmochelys imbricata* and also Lylei's Fruit Bat *Pteropus lylei*, Large Flying Fox *Pteropus vampyrus* in Phu Quoc NP, UMT NP, Hon Chong NR. These animals are strongly facing with various negative impacts (hunting, habitat degradation, infrastructural development, etc.)

To implement a further study for stand of *Lumnitzera littorea* in Rach Tram estuary of Phu Quoc NP to identify its regeneration capacity and ecological requirement for applying relevant conservation measures.

3. Survey of wildlife trade in KGBSR area (2010)

To carry out a survey of wildlife hunting, trade and wildlife keeping in area of Phu Quoc NP, UMT NP, Hon Chong NR (Kien Luong District) to identify scale, network, dynamic of wildlife trade, participating people, importance of wildlife trade for livelihood of poor families, etc. in order to develop relevant measures for its control

4. Study of restoration and sustainable development of *Melaleuca* forests (2010-2012).

Study is necessary to identify environmental conditions for natural regeneration of *Melaleuca* forest and develop technical guidance for natural regeneration of *Melaleuca* forest in UMT NR, forest compartment 2 of AB-AM Protection Forest.

To assess impacts of long-term retaining of high water level for fire prevention on growth and development of *Melaleuca* forests in UMT NP and forest compartments 1 and 3 of AB-AM Protection Forest in order to determine relevant hydrological regime that can help to minimize risk of forest fire meanwhile support the normal development of *Melaleuca* forest

5. Study of disposal capacity and natural sea-encroachment capacity of mangrove forests (2011- 2013)

System of dykes for aquaculture and harvesting natural sea products is disturbing the natural dispersal and natural regeneration of mangrove forest trees (*Rhizophora spp*; *Bruguiera spp*; *Avicennia spp.*; *Aegiceras sp.* ; *Sonneratia spp.*) that reduce sea-encroachment and environmental protection function of the forest. Study of dispersal capacity, natural regeneration capacity of forest will help to find the measures for less expensive development of coastal mangrove forests that reflects natural forest processes/succession.

6. Investigation for developing vegetation map, soil map and hydrological map of UMT NP (2010-2011)

These maps together with accompanying data set will be an important scientific database for development of relevant management measures and monitoring of change in vegetation cover of UMT NP.

7. Environmental impact assessment of development projects inside and in vicinity of KGBSR (since 2010).

To conduct environmental impact assessment of Starbay Tourism Landscape Project (542.79 ha) and another proposed tourism project in Phu Quoc NP for reviewing these projects to meet biodiversity conservation purposes in this area .

To conduct environmental impact assessment of development projects in Kien Luong district close to Hon Chong NR and Kien Luong-Kien Hai Protection Forest such as Thermo-electric factory construction, Cement factory construction, new harbor construction and tourism development for mitigation measures

To conduct environmental impact assessment of aquaculture system inside protection forest to find measures for mitigating negative impacts and ensuring sustainable development in the area.

7.2.2. Biodiversity monitoring and evaluation programme

1. Monitoring of populations of high conservation priority species (since 2010).

Population status of following highly endangered species should be monitored for relevant conservation measures: Indochinese Silver Langur *Trachypithecus germaini*, Long-Tailed Macaque *Macaca fascicularis*, Slow loris *Nycticebus coucang*, Jungle Cat *Felis chaus*, Fishing Cat *Prionailurus viverrinus*, Large-spotted Civet *Viverra megaspila*, Hairy-nosed Otter *Lutra sumatrana*, Small-clawed Otter *Aonyx cinerea*, Sarus Crane *Grus antigone*, Lesser Adjutant *Leptoptilos javanicus*, Indian Darter *Anhinga melanogaster*, Yellow-headed Temple Turtle *Heosemys annandalii*,

Malayan Box Turtle *Cuora amboinensis*, Snail-eating Turtle *Malayemys subtrijuga*, Asiatic Softshell Turtle *Amyda cartilaginea*, Green Sea Turtle *Chelonia mydas*, and Hawksbill Sea Turtle *Eresmochelys imbricata* in Phu Quoc NP, UMT NP and Hon Chong NR and also populations of Lylei's Fruit Bat *Pteropus lylei*, Large Flying Fox *Pteropus vampyrus* in Phu Quoc NP and UMT NP.

2. Monitoring forest area reduction due to negative impacts of human activities (since 2010)

Coastal Protection forests represent as narrow strip along sea coast and always face with forest encroachment/destruction by aquaculture and other human activities, therefore, long-term monitoring program must be set up in critical areas for monitoring the change and apply relevant mitigation measures. Remote sensing techniques (satellite images) should be applied for large-scale forest area monitoring.

3. Monitoring factors that cause degradation of environment quality and wildlife habitats (since 2010).

Negative impacts on environment and habitats causing by tourism development, pollution by subsistence wastes, industrial wastes, use of pesticides, herbicides, rodent poisonous baits, etc should be monitored to undertake relevant prevention and mitigation measures.

7.2.3. Forest protection programme

1. Capacity building for Management Boards of Nature Reserves and Protection Forests (2010 – 2012)

Conducting various training courses for staff members of the forest management boards to increase their knowledge on biodiversity conservation, techniques of biodiversity monitoring and evaluation, their skill of key species identification, observation, recording and reporting, etc.

Conducting training courses to improve the knowledge and enforcement skill of national legislation on forest protection and wildlife conservation

Constructing additional guard posts in Hon Chong NR and Kien Luong – Kien Hai Protection forest to improve effectiveness of the forest protection.

Providing the forest management boards with equipments for forest patrol, law enforcement and forest fire prevention such as motorcycles, motorboats, car, GPS, binocular, etc.)

2. Intensification of forest patrolling and law enforcement (since 2010)

Intensification of forest patrolling and law enforcement to control:

- illegal forest encroachment/destruction
- wildlife hunting, trade and consumption in the area

- wildlife keeping and husbandry in the area to prevent catching animals from the wild for captive breeding stock as well as smuggling wild-caught animals under the guide of captive breeding of wild animals

3. Installing system of signboards with notification about boundaries and management regulations of KGBSR (2010).

Signboards notifying KGBSR boundary and management regulations are necessary to keep local people and visitors (tourists) aware and obey management regulations of KGBSR in terms of nature protection, forest protection and wildlife conservation.

*4. Conservation of stand of *Lumnitzera littorea* and unique vegetation type "Dwarf forest on sand hills" in Phu Quoc NP (since 2010)*

Plant species *Lumnitzera littorea* is classified as VU-vulnerable in RDB VN (2007) and stand of *Lumnitzera littorea* in Phu Quoc NP is the largest population of this species in Vietnam. It must be strictly protected for its long-term survival.

"Dwarf forest on sand hills" in Phu Quoc NP (located from Ganh Giau Guard Post to Bai Can Guard Post) is very rare vegetation type in Vietnam. This vegetation type has long history of adaptation to high salinity, acid and inundation. This vegetation type usually has small size and therefore highly sensitive to human impact. It will not be recovered if it is undergone of destruction.

5. Development of community-based forest management model (since 2011)

Establishment of community-based forest management model is important to reduce pressure on biodiversity and improvement of livelihood of local communities. Objectives of this models include:

- Participatory reforestation, forest protection and enrichment of existing forests for sea wave prevention, environmental protection and biodiversity conservation.
- Developing and applying system of sustainable use of forest resources and forest land by local community
- Increase forest products from Production forests including timbers, fuelwood, livestock food and other non-timber forest products to increase household income of local communities.
- Involvement of local households into planning and management of forest products.

7.2.4. Conservation education and improvement of livelihood for local communities

1. Conducting educational programme to increase awareness of local communities on nature protection and biodiversity conservation (since 2010).

Some key activities are:

- Producing brochure about KGBSR
- Producing manuals for education on forest protection and biodiversity conservation and conducting training courses for local communities and schools.

- Producing and distributing posters, leaflet with messages on nature protection and biodiversity conservation.
- Conducting educational programmes by public media such as newspapers, radio and TV broadcasting, etc.

2. Conducting programmes that help to improve livelihood of local communities, involving of the local community in forest management activities so that they can receive certain benefits from forests; introducing alternative materials for forest products to reduce pressure on local forests (since 2010).

Following activities can be carried:

- Providing local community with credit for production development, introducing advanced technologies for increasing productivity of agricultivation, animal husbandry, development of traditional industries or applying new industries to create new job and new income sources for local communities.
- Conducting forest allocation for protection to local communities
- Introducing alternative materials for timber, fuelwood and other non-timber forest products.
- Contracting local people for forest growing and forest protection
- Involving local communities into tourism services that will create additional household income

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ANNEX 1: ACTIVITIES OF ASSESSMENT TEAM

Rapid assessment of biodiversity (plants, mammals, birds, reptiles and amphibians)
in KGBSR

Date	Location	Task
21/7/2009	Hanoi	<ul style="list-style-type: none"> • Searching and reviewing biodiversity literature of KGBSR
22/7/2009	Hanoi	<ul style="list-style-type: none"> • Searching and reviewing biodiversity literature of KGBSR
23/7/2009	Hanoi	<ul style="list-style-type: none"> • Assessment team meeting for discussing results of literature review and identifying information lack and out-of-date • Preparation for field trip
26/7/2009	HCM City	<ul style="list-style-type: none"> • Flight from Hanoi to HCM City • Overnight in HCM City
27/7/2009	Rach Gia Phu Quoc	<ul style="list-style-type: none"> • Flight from HCM City to Rach Gia City • Meeting with GTZ Project management board in Rach Gia • Travel to Phu Quoc Island • Meeting with Management Board of Phu Quoc NR (Vice-Director and Technical staffs) for preliminary information and fieldwork organization
28-31/7/2009	Phu Quoc	<ul style="list-style-type: none"> • Survey in Phu Quoc NP and adjacent area
1/8/2009	Rach Gia An Bien, An Minh	<ul style="list-style-type: none"> • Travel from Phu Quoc to Rach Gia City, meeting with Project management board for communicating survey areas • Travel to An Bien area, meeting with Management Board of AB-AM Protection Forests (Director and technical staffs).
2-5/8/2009	An Bien, An Minh	<ul style="list-style-type: none"> • Survey in AB-AM Protection Forests
6/8/2009	UMT NP	<ul style="list-style-type: none"> • Travel to UMT NP • Meeting with UMT NP Management Board (Director, Vice-director, technical staffs) for preliminary information and fieldwork organization
7-10/8/2009	UMT NP	<ul style="list-style-type: none"> • Survey in UMT NP and adjacent area
11/8/2009	Kien Luong	<ul style="list-style-type: none"> • Travel to Kien Luong- Kien Hai area • Meeting with Management Board of Kien Luong- Hon Dat Special Use and Protection Forest for preliminary information and fieldwork organization • Survey in Hon Chong NR (Kien Luong District)
12-15/8/2009	Kien Luong Kien Hai	<ul style="list-style-type: none"> • Survey in Kien Luong – Kien forests (NR and Protection forests).
16/8/2009	Kien Luong Rach Gia	<ul style="list-style-type: none"> • Survey in Hon Chong NR • Travel to Rach Gia City
17-20/8/2009	Rach Gia	<ul style="list-style-type: none"> • Meeting with Mr. Phong, Mr. Cuong for workshop preparation • Data analysis and preparation of report of preliminary results

Date	Location	Task
		<ul style="list-style-type: none"> • Preparation of presentations for workshop
21/8/2009	Rach Gia	<ul style="list-style-type: none"> • Workshop for evaluating preliminary results of rapid assessment of biodiversity in KGBSR • Travel from Rach Gia City to HCM City
22/8/2009	Hanoi	<ul style="list-style-type: none"> • Flight from HCM City to Hanoi
24-27/8/2009	Hanoi	<ul style="list-style-type: none"> • Data analysis and preparation of thematic reports (vegetation and flora; mammal fauna, bird fauna and herpetofauna)
27/8/2009	Hanoi	<ul style="list-style-type: none"> • Team meeting for overall evaluation of assessment results and development of recommendation for follow-up actions of Project
28 & 31/8/2009	Hanoi	<ul style="list-style-type: none"> • Preparation of final report (Vietnamese version) by Teamleader
1 & 3/9/2009	Hanoi	<ul style="list-style-type: none"> • Preparation of final report (English version) by Teamleader

ANNEX 2 : A LIST OF PLANT SPECIES RECORDED IN PHU QUOC NP

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
	NGÀNH THẠCH TÙNG	LYCOPODIOPHYTA					
1	BỘ THẠCH TÙNG	LYCOPODIALES					
1	HỌ THẠCH TÙNG	LYCOPODIACEAE					
1.	Thạch tùng sóng	<i>Huperzia carinata</i> (Poir.) Trevis	04	X		X	+
2.	Râu cây	<i>Huperzia phlegmaria</i> (L.) Roth.	09	X	X		+
3.	Thạch tùng đẹp	<i>Lycopodium complanatum</i> L.	15	X			+
2	BỘ QUYẾN BÁ	SELAGINELLALES					
2	HỌ QUYẾN BÁ	SELAGINELLACEAE					
4.	Quyến bá rẽ vàng	<i>Selaginella chrysorrhizos</i> Spring	39	X			+
5.	Quyến bá yếu	<i>Selaginella delicatula</i> (Desv.) Alst.	41	X			+
6.	Quyến bá lông	<i>Selaginella pubescens</i> (Wall.) Spring.	21	X			+
7.	Quyến bá xiêm	<i>Selaginella siamensis</i> Hieron	56	X	X	X	+
8.	Quyến bá Willdenow	<i>Selaginella willdenowii</i> (Desv.) Baker.	33		X		
	NGÀNH DƯƠNG XỈ	POLYPODIOPHYTA					
3	BỘ BÔNG BÔNG	SCHIZAEALES					
3	HỌ BÔNG BÔNG	SCHIZEACEAE					
9.	Bông bông tai	<i>Lygodium auriculatum</i> (Willd.) Alst.	104	X	X	X	+
10.	Bông bông hợp	<i>Lygodium conforme</i> C. Chr.	105	X	X		+
11.	Bông bông dẻo	<i>Lygodium flexuosum</i> (L.) Sw.	109	X	X		+
12.	Bông bông gié nhỏ	<i>Lygodium microstachyum</i> Desv.	111	X	x	X	+
13.	Bông bông lá liễu	<i>Lygodium salicifolium</i> Presl.	107	X	X	X	+
14.	Bông bông leo	<i>Lygodium scandens</i> (L.) Sw.	112	X			+
15.	Ráng A diệp đơn	<i>Schizea digitata</i> (L.) Sw.	101	X		X	+
4	BỘ SẼO GÀ	PTERIDALES					
4	HỌ NGUYỆT XỈ	ADIANTACEAE					
16.	Ráng đại	<i>Acrostichum aureum</i> L.	193	X	x	X	+
17.	Ráng nguyệt xỉ có đuôi	<i>Adiantum caudatum</i> L.	147	X		X	+
18.	Ráng lưỡi beo dài	<i>Antrophyum coriaceum</i> (D. Don) Wall.	152	X			+
19.	Thần mô lá mảnh	<i>Cheilanthes tenuifolia</i> (Burm.f.) Sw.	122	X	X	X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
20.	Ráng chân xỉ đặc biệt	<i>Pteris insignis</i> Mett.	164	X			+
21.	Ráng chân xỉ cuống dài	<i>Pteris longipes</i> D. Don.	187	X			+
22.	Chại (Choại)	<i>Stenochlaena palustris</i> (Burm.f.) Bedd	195	X	x	X	+
23.	Ráng đai dực	<i>Taenitis blechnoides</i> (Willd.) Sw.	131	X	X	X	+
5	HỌ MẠC DIỆP	HYMENOPHYLLACEAE					
24.	Ráng đầu mạt Java	<i>Cephalomanes javanicum</i> (Bl.) Van den Bosch.	226		x	X	
25.	Ráng đầu mạt tối	<i>Cephalomanes obscurum</i> (Bl.) Copel.	227	X		X	+
26.	Đầu mạt Sumatra	<i>Cephalomanes sumatranum</i> (V.d.B.) Copel.	238	X			+
5	BỘ GUỘT	GLEICHENIALES					
6	HỌ RÁNG TÂY SƠN	GLEICHENIACEAE					
27.	Tây sơn lưỡng phân	<i>Dicranopteris dichotoma</i> (Thunb.) Bernh	249	X			+
28.	Ráng tây sơn ngay	<i>Dicranopteris linearis</i> (Burm.) Underw.	248	X		X	+
29.	Tây sơn lộng lẫy	<i>Dicranopteris splendida</i> I Tagawa.	250	X			+
30.	Ráng tây sơn đoạn	<i>Gleichenia truncata</i> (Willd.) Spr.	243	X			+
6	BỘ DƯƠNG XỈ	POLYPODIALES					
7	HỌ ĐA TÚC	POLYPODIACEAE					
31.	Ráng long cước	<i>Aglaomorpha coronans</i> (Mett.) Copel.	262	X			+
32.	Ẩn thuú-thuú nhãn	<i>Crypsinus oxylobus</i> (Wall.) Copel.	333	X			+
33.	Tắc kè đá	<i>Drynaria bonii</i> H. Christ					+
34.	Cốt toái bồ	<i>D. fortunei</i> (Kuntze ex Mett) J. Smith					+
35.	Ráng đuôi phụng lá sồi	<i>Drynaria propinqua</i> (Mett.) J. Sm.	260	X	x	X	+
36.	Ổ rắng	<i>Platyserium grande</i> A. Cunn.ex J. Sm.	266	X	X	X	+
37.	Ráng hoả mạt héo	<i>Pyrrosia stigmosa</i> (Sw.) Ching.	283		x	X	
38.	Ráng Saliên	<i>Selliguea heterocarpa</i> var. <i>lateritium</i> (Bak.) Tag.	329	X		X	+
7	BỘ CẦU TÍCH	DICKSONIALES					
8	HỌ ĐÀNG TIẾT	DENNSTAEDTIACEAE					
39.	Ráng liên sơn dị điệp	<i>Lindsaea heterophylla</i> Dryand.	427	X			+
40.	Ráng liên sơn	<i>Lindsaea javanensis</i> Bl.	438	X		X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
	Java						
41.	Liên sơn sáng	<i>Lindsaea lucida</i> Bl.	428	X			+
8	BỘ ÁO KHIÊN	ASPIDIALES					
9	HỌ CÁN XỈ	ASPLENIACEAE					
42.	Ráng cán xỉ lộn	<i>Asplenium confusum</i> Tard. & Ching.	612	X		x	+
43.	Ráng ổ phụng	<i>Asplenium nidus</i> L.	572	X	X	X	+
44.	Song quần thô	<i>Diplazium crassiusculum</i> Ching.	645	X			+
10	HỌ SƯU XỈ	LOMARIOPSIDACEAE					
45.	Ráng ơ nông	<i>Egenolfia asplenifolia</i> Fee.	788		x	X	
11	HỌ RÁNG ĐÀ HOA	DAVALLIACEAE					
46.	Ráng đà hoa có răng	<i>Davallia denticulata</i> (Burm.f.) Mett. ex Kuhn.	804			X	
47.	Ráng thổ xỉ dị diệp	<i>Davallia heterophylla</i> J. Sm.	799	X	X	X	+
48.	Ráng thổ xỉ lông chim	<i>Davallia pectinata</i> J. Sm.	802	X		X	+
49.	Ráng trúc xỉ dúng	<i>Oleandra undulata</i> (Willd.) Ching.	824	X		X	+
12	HỌ RÁNG DỪA	BLECHNACEAE					
50.	Ráng biệt xỉ	<i>Brainea insignis</i> (Hook.) J. Smith.	840	X		X	+
	NGÀNH THÔNG	PINOPHYTA					
9	BỘ HOÀNG ĐÀN	CUPRESSALES					
13	HỌ TÙNG	CUPRESSACEAE					
51.	Tùng có ngấn	<i>Cupressus torulosa</i> D. Don.	898	X			?
10	BỘ KIM GIAO	PODOCARPALES					
14	HỌ KIM GIAO	PODOCARPACEAE					
52.	Hoàng đàn giả	<i>Dacrydium elatum</i> Wall. ex. Hook.	910	X	x	X	+
53.	Kim giao Fleury	<i>Decussocarpus fleuryi</i> (Hick.) de Laubenf.	907	X	X		?
54.	Kim giao Wallich	<i>Nageia wallichiana</i> (Presl.) O. Ktze.	908	X	x	x	+
55.	Thông nàng	<i>Podocarpus imbricatus</i> (Bl.) de Laubenf.	903	X	X		+
	NGÀNH TUẾ	CYCADOPHYTA					
11	BỘ TUẾ	CYCADALES					
15	HỌ TUẾ	CYCADACEAE					
56.	Thiên tuế tròn	<i>Cycas circinalis</i> L.	853	X	x	X	+
	NGÀNH DÂY GẮM	GNETOPHYTA					
12	BỘ GẮM	GNETALES					
16	HỌ GẮM	GNETACEAE					
57.	Gắm đẹp	<i>Gnetum formosum</i> Margf.	863	X			+
58.	Gắm (Bét)	<i>Gnetum gnemon</i> L. var. <i>domesticum</i> (Rumph.)	860	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		Margf.					
59.	Gắm cọng	<i>Gnetum latifolium</i> var. <i>funiculare</i> (Bl.) Margf.	867	X	x	X	+
60.	Sốt (Gắm)	<i>Gnetum leptostachyum</i> Bl. Var. <i>elongatum</i> Margf.	866	X			+
	NGÀNH NGỌC LAN	MAGNOLIOPHYTA					
13	BỘ MỘC LAN	MAGNOLILES					
17	HỘ NÀ (MĂNG CẦU)	ANNONACEAE					
61.	Cây đầu gối	<i>Anaxagorea luzonensis</i> A. Gray.	1062	X			+
62.	Bình bát nước	<i>Annona glabra</i> L.	975	X	X	X	+
63.	Vô danh hoa	<i>Anomianthus dulcis</i> (Dun.) Sinclair.	981	X	X	X	+
64.	Công chúa trung gian	<i>Artabotrys intermedius</i> Hassk.	1007	X	x	X	+
65.	Gié Trung quốc	<i>Desmos chinensis</i> Lour.	1011	X			+
66.	Gié Nam bộ	<i>Desmos cochinchinensis</i> Lour.	1012	X			+
67.	Gié bụi	<i>Desmos dumosus</i> (Roxb.) Safford.	1016	X			+
68.	Cách thư sét	<i>Fissistigma rubiginosa</i> (A. DC.) Merr.	1074	X	x	X	+
69.	Cườm chài	<i>Friesodielsa fornicata</i> (Roxb.) D.Don.	980	X			+
70.	Giác đế thanh lịch	<i>Goniothalamus elegans</i> Ast.	1110	X	X		+
71.	Tháp hình Harmand	<i>Orophea harmandiana</i> Pierre.	1093	X			+
72.	Quần đầu Hance	<i>Polyalthia hancei</i> (Pierre) Fin. & Gagn.	1030	X			+
73.	Mã trình	<i>Polyalthia jucunda</i> (Pierre) Fin. & Gagn.	1034	X		X	+
74.	Dù dẻ	<i>Rauwenhoffia siamensis</i> Scheff.	985	X			+
75.	Săng mây	<i>Sageraea elliptica</i> (A.DC.) Hook. & Thoms.	977	X		X	+
76.	Stelechocarpus	<i>Stelechocarpus cauliflorus</i> (Scheff.) J. Sinel.	976	X			+
77.	Chuối con chồng	<i>Uvaria grandiflora</i> Roxb.	991	X			+
78.	Bồ quả Hamilton	<i>Uvaria hamiltonii</i> Hook.f. & Thoms.	993	X		x	+
79.	Bồ quả bông nhỏ	<i>Uvaria micrantha</i> Hook. f. & Thoms.	995	X	X	X	+
80.	Bồ quả hoe	<i>Uvaria rufa</i> Bl.	1000	X			+
81.	Giến láng	<i>Xylopi nitida</i> Ast.	1060	X			+
82.	Giến trắng	<i>Xylopi pierrei</i> Hance.	1059	X		x	+
83.	Giến đỏ	<i>Xylopi vielana</i> Pierre ex Fin. & Gagn.	1061	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
18	HỌ ĐẬU KHẤU	MYRISTICACEAE					
84.	Xăng máu hạnh nhân	<i>Horsfieldia amygdalina</i> (Wall.) Warb.	1143	X			+
85.	Xăng máu rạch	<i>Horsfieldia irya</i> (Gaertn.) Warb.	1145	X	X		+
86.	Xăng máu sp.	<i>Horsfieldia</i> Sp.		X			+
87.	Xăng máu Thorel	<i>Horsfieldia thorelii</i> Lec.	1148	X			+
88.	Máu chó lưu linh	<i>Knema erratica</i> (Hook.f & Th.) Sincl.	1130	X			+
89.	Máu chó cầu	<i>Knema globularia</i> (Lamk.) Warb.	1131	X	X		+
90.	Máu chó thấu kính	<i>Knema lenta</i> Warb.	1133	X			+
91.	Máu chó đá	<i>Knema saxatilis</i> de Wilde.	1139	X			+
92.	Máu chó hoa không cọng	<i>Knema sessiliflora</i> de Wilde.	1140	X	X		+
93.	Đậu khấu lười	<i>Myristica iners</i> Bl.	1129	X			+
14	BỘ LONG NÃO	LAURALES					
19	HỌ LIÊN ĐĂNG	HERNANDIACEAE					
94.	Tung	<i>Hernandia nymphaefolia</i> (Presl) Kubitski.	1618	X	X	x	+
20	HỌ QUẾ	LAURACEAE					
95.	Tơ xanh	<i>Cassytha filiformis</i> L.	1615	X	X	X	+
96.	Quế ô dước	<i>Cinamomum curvifolium</i> (Lour.) Nees.	1408	X		X	+
97.	Nhục quế (Quế thanh)	<i>Cinamomum loureirii</i> Nees.	1375	X			+
98.	Quế bạc	<i>Cinamomum mairei</i> Levl.	1404	X			+
99.	Quế quan	<i>Cinamomum verum</i> Presl.	1376	X		X	+
100.	Quế cuống dài	<i>Cinnamomum longepetiolatum</i> Kost.	1392	X			+
101.	Quế rừng (Hậu phát)	<i>Cinnamomum iners</i> Reinw.	1410	X	x	X	+
102.	Quế bời lờ	<i>Cinnamomum polyadelphum</i> (Lour.) Kost.	1393	X		X	+
103.	ô phát (ô phát tơ)	<i>Cinnamomum sericans</i> Hance.	1415	X		X	+
104.	Quế Bắc bộ	<i>Cinnamomum tonkinensis</i> (Lec.) Chev.	1399	X			+
105.	Cà đuối Bắc bộ	<i>Cryptocarya impressa</i> Miq. Var. <i>tonkinensis</i> Lec.	1513			X	
106.	Cà đuối xoan ngược	<i>Cryptocarya obovata</i> R.Br.	1518	X			+
107.	Cà đuối lá dài (Tiểu hoa)	<i>Dehaasia cuneata</i> var. <i>longifolia</i> Lec.	1553	X			+
108.	Bời lờ Cam bốt	<i>Litsea cambodiana</i> Lec.	1433	X			+
109.	Bời lờ nhót	<i>Litsea glutinosa</i> (Lour.) Rob.	1443	X	X		+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
110.	Bời lời lá to	<i>Litsea grandifolia</i> Lec.	1444	X			+
111.	Bời lời chân dài	<i>Litsea longipes</i> (Meissn.) Hook. f.	1453	X	X		+
112.	Bời lời mạnh	<i>Litsea robusta</i> Bl.	1461	X			+
113.	Bời lời đấng	<i>Litsea variabilis</i> Hemsl.	1466	X	X		+
114.	Bời lời đa tán	<i>Litsia multumbellata</i> Lec.	1457	X			+
115.	Bời lời đực(Kháo thơm)	<i>Machilus odoratissimus</i> Nees.	1594	X	x	X	+
116.	Kháo Thunberg	<i>Machilus thunbergii</i> Sieb. & Zucc.	1589	X			+
117.	Tân bời Hạ long	<i>Neolitsea alongensis</i> Lec.	1472	X			+
118.	Tân bời Trung bộ	<i>Neolitsea chuii</i> Merr. f. <i>annaensis</i> Liouho.	1476	X			+
119.	Tân bời đa quả	<i>Neolitsea polycarpa</i> Liouho.	1481	X			+
120.	Tân bời tích lan	<i>Neolitsea zeylanica</i> Merr.	1482	X	X	X	+
121.	Giả sụ dày	<i>Nothaphoebe condensata</i> Ridl.	1584			X	
122.	Bời lời vàng	<i>Nothaphoebe umbelliflora</i> Bl.	1586	X		X	+
123.	Sụ thon	<i>Phoebe lanceolata</i> (Nees) Nees.	1575	X			+
124.	Sụ chùm tụ tán	<i>Phoebe paniculata</i> Nees.	1577	X			+
15	BỘ HỒ TIỂU	PIPERALES					
21	HỌ TIỂU	PIPERACEAE					
125.	Càng cua	<i>Peperomia pellucida</i> Kunth.	1159	X			+
126.	Lót	<i>Piper lolot</i> C. DC.	1192	X			+
127.	Tiêu rận	<i>Zippelia begonifolia</i> Bl. In Roem. ex Schult.	1157			X	
16	BỘ HOÀNG LIÊN	RANUNCULALES					
22	HỌ DÂY MỎI	MENISPERMACEAE					
128.	Dây xanh nhọn	<i>Tiliacora acuminata</i> (Lamk.) Miers.	1345	X		X	+
23	HỌ MAO CÁN	RANUNCULACEAE					
129.	Vằng kim cang ông lão	<i>Clematis smilacifolia</i> Wall.	1279	X		x	+
17	BỘ GAI	URTICALES					
24	HỌ SẾU (DU)	ULMACEAE					
130.	Trần mai cần	<i>Trema cannabina</i> Lour.	6140		x	X	
131.	Trần mai đông	<i>Trema orientalis</i> (L.) Bl.	6141	X			+
25	họ Dâu tằm	Moraceae					
132.	Mít rừng	<i>Artocarpus chaplasha</i> Roxb.	6182	X			+
133.	Mít chay	<i>Artocarpus gomezianus</i> Wall.	6189	X			+
134.	Mít gỗ mật	<i>Artocarpus melinoxyla</i> Gagn.	6186	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
135.	Mít nài	<i>Artocarpus rigida</i> subsp. <i>asperulus</i> (Gagn.) Jarr.	6185	X		X	+
136.	Da rất cao	<i>Ficus altissima</i> Bl.	6218	X	X	X	+
137.	Si (Xanh)	<i>Ficus benjamina</i> L.	6239	X			+
138.	Gừa lá đẹp	<i>Ficus callophylla</i> Bl. var. <i>callophylla</i> .	6241	X			+
139.	Da cuống mảnh	<i>Ficus capillipes</i> Gagn.	6244	X			+
140.	Ngái giấy	<i>Ficus chartacea</i> Wall. Ex King.	6279	X	X	X	+
141.	Sung xoài (Da nước)	<i>Ficus depressa</i> Bl.	6213	X		X	+
142.	Sung nhân	<i>Ficus drupacea</i> Thunb.	6215	X	X	X	+
143.	Sung lông	<i>Ficus drupacea</i> var. <i>pubescens</i> (Roth) Corner.	6216	X			+
144.	Da cao su	<i>Ficus elastica</i> Roxb.	6243	X	X		+
145.	Ngái vàng	<i>Ficus fulva</i> Reinw. Ex Bl.	6276		x	X	+
146.	Da trụi	<i>Ficus glaberrima</i> Bl.	6224	X			+
147.	Ngái tuyến	<i>Ficus glandulifera</i> (Miq.) Wall. ex King.	6278	X			+
148.	Ngái lông ngắn	<i>Ficus hirta</i> var. <i>brevipila</i> Corn.	6273	X		X	+
149.	Sung đất	<i>Ficus hispida</i> var. <i>badiostriosa</i> Corner.	6316	X			+
150.	Ngái lâm bông	<i>Ficus lamponga</i> Miq.	6277	X			+
151.	Sung ốm	<i>Ficus macilentia</i> King.	6285		X	x	+
152.	Sung Maclelland	<i>Ficus maclellandi</i> King.	6231	X			+
153.	Gừa	<i>Ficus microcarpa</i> L. f.	6233	X		X	+
154.	Sung đốm trong	<i>Ficus pellucido-punctata</i> Griff.	6234			X	
155.	Sung thần lằn	<i>Ficus pumila</i> L.	6290	X			+
156.	Sung	<i>Ficus racemosa</i> L.	6249	X	X	X	+
157.	Lâm vồ	<i>Ficus rumphii</i> Bl.	6209	X		X	+
158.	Sung đầu tên	<i>Ficus sagitta</i> Vahl var. <i>sagitta</i> .	6293	X		X	+
159.	Sung bông	<i>Ficus septica</i> Burm. F. var. <i>fistulosa</i> (Bl.) Corner.	6317	X	x	X	+
160.	Sung cứng	<i>Ficus subgeldereri</i> Corn. Var. <i>rigida</i> Corner.	6223	X	X	X	+
161.	Sung hơi xẻ	<i>Ficus subincisa</i> J.E. Sm. Var. <i>subincisa</i> .	6251	X			+
162.	Sung Sumatra	<i>Ficus sumatrana</i> var. <i>subsumatrana</i> (Gagn.) Corner.	6229	X			+
163.	Sung kiêu	<i>Ficus superba</i> Miq. Var. <i>superba</i> .	6202	X			+
164.	Sung trổ	<i>Ficus variegata</i> Bl. var. <i>variegata</i> .	6314			X	
165.	Da bông	<i>Ficus vasculosa</i> Wall. Ex Miq.	6246	X		X	+

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				01	02	03	
166.	Duối nhám	<i>Streblus asper</i> Lour.	6162	X	X		+
26	Họ Cây ngứa	Urticaceae					
167.	Rum trung bộ	<i>Poikilospermum annamensis</i> (Gagn.) Merr.	6322	X		X	+
18	BỘ PHI LAO	CASUARILALES					
27	HỌ PHI LAO	CASUARINACEAE					
168.	Phi lao	<i>Casuarina equisetifolia</i> J.R. & G. Forst.	6662	X		X	+
19	BỘ DẼ	FAGALES					
28	HỌ DẼ	FAGACEAE					
169.	Kha thụ Piere	<i>Castanopsis pierrei</i> Hance.	6483	X	x	X	+
170.	Kha thụ Uông bí	<i>Castanopsis uonbiensis</i> Hick. & Cam.	6499	X			+
171.	Dẻ Trung bộ	<i>Lithocarpus annamensis</i> (Hick.&Cam.) Cam.	6504	X			+
172.	Dẻ Cam bột	<i>Lithocarpus campyloptropis</i> A. Cam.	6514	X	X	X	+
173.	Dẻ sáp	<i>Lithocarpus ceriferus</i> (Hick.&Cam.) Cam.	6516	X			+
174.	Dẻ núi tượng	<i>Lithocarpus eleopphantus</i> (Hance) H. & C.	6534	X			+
175.	Dẻ trái láng	<i>Lithocarpus leiocarpa</i> A.Cam.	6555	X			+
176.	Dẻ gié láng	<i>Lithocarpus leiostachyus</i> A. Cam .	6557	X			+
177.	Dẻ the	<i>Lithocarpus magneinii</i> (Hick.&Cam.) A.Cam.	6566	X			+
178.	Dẻ dạng -phủ	<i>Lithocarpus pseudovestitus</i> A.Cam.	6591	X			+
20	BỘ CẨM CHƯỞNG	CARYOPHYLLALES					
29	HỌ RAU ĐĂNG ĐẤT	AIZOACEAE					
179.	Tri sơn	<i>Gisekia africana</i> (Lour.) Kuntze var. <i>africana</i>	2882	X		X	+
30	HỌ CẨM NHUNG	CARYOPHYLLACEAE					
180.	Đa quả cát	<i>Polycarpaea arenaris</i> (Lour.) Gagn.	2961			X	
181.	Đa quả Gaudichaud	<i>Polycarpaea gaudichaudii</i> Gagn	2963	X		X	+
182.	Đa quả chùm	<i>Polycarpaea rosulans</i> (Gagn.) Gagn.	2965	X	X	X	+
31	HỌ DÈN	AMARANTHACEAE					
183.	Cỏ sứt	<i>Achyranthes aspera</i> L.	2924	X		x	+
184.	Rau dệu	<i>Alternanthera sessilis</i> (L.) A. DC.					+
185.	Dền tái (Dền cơm)	<i>Amaranthus lividus</i> L.	2916	X			+
186.	Dền gai	<i>Amaranthus spinosus</i> L.	2917	X		x	+
21	BỘ SỔ	DILLENIALES					

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				01	02	03	
32	HỌ SỔ	DILLENIACEAE					
187.	Sổ trai	<i>Dillenia ovata</i> Wall. ex. Hook. f. & Th.	1630	X		X	+
188.	Sổ ngũ thư	<i>Dillenia pentagyna</i> Roxb.	1631	X	X		+
189.	Sổ ấn	<i>Dillenia indica</i> L.	1629	X	X	x	+
190.	Sổ xoan	<i>Dillenia obovata</i> (Bl.) Hoogland.	1627	X	X		+
191.	Sổ nhám	<i>Dillenia scabrella</i> (D. Don) Roxb.	1632	X	X		+
192.	Chiêu	<i>Tetracera indica</i> (Chr. & Panz.) Merr.	1635	X	X		+
193.	Tứ giác Loureiri	<i>Tetracera loureiri</i> (Fin. & Gagn.) Craib.	1636	X	x		+
194.	Dây chiêu	<i>Tetracera sarmentosa</i> (L.) Vahl. ssp. asiatica (Lour.) Hoogl.	1637	X		X	+
195.	Tứ giác leo	<i>Tetracera scandens</i> (L.) Merr.	1638	X		x	+
22	BỘ CHÈ	THEALES					
33	HỌ MAI	OCHNACEAE					
196.	Mai cánh lõm	<i>Campylospermum serratum</i> (Gaertn.) Bittr. & Amar.	1654	X	x	X	+
197.	Mai sọc	<i>Campylospermum striatum</i> V. Tiegh.	1655	X			+
198.	Mai (Huỳnh mai)	<i>Ochna intergerrima</i> (Lour.) Merr.	1652	X	x	X	+
34	HỌ DẦU	DIPTEROCARPACEAE					
199.	Vên vên	<i>Anisoptera costata</i> Korth.	1764	X	x	X	+
200.	Dầu con rái (Dầu nước)	<i>Dipterocarpus altus</i> Roxb.	1751	X	X		+
201.	Dầu mít (Dầu cát)	<i>Dipterocarpus costatus</i> Gaertn.	1752	X	x	X	+
202.	Dầu song nàng	<i>Dipterocarpus dyeri</i> Pierre.	1753	X	X	X	+
203.	Dầu hoa to	<i>Dipterocarpus grandiflorus</i> Blco.	1754	X			+
204.	Dầu lông (Dầu trai)	<i>Dipterocarpus intricatus</i> Dyer.	1755	X	X	X	+
205.	Săng đào	<i>Hopea ferrea</i> Pierre in Lan.	1766	X	x	X	+
206.	Sao đen	<i>Hopea odorata</i> Roxb.	1772	X	X	X	+
207.	Kiền kiền Pierre	<i>Hopea pierreii</i> Hance.	1773	X	x	X	+
208.	Sao mạng	<i>Hopea reticulata</i> Tard.	1776	X			+
209.	Kiền kiền	<i>Hopea siamensis</i> Heim.	1774	X			+
210.	Sao Thorel	<i>Hopea thorelii</i> Pierre	1777	X			+
211.	Choe (Chai)	<i>Shorea farinosa</i> C. Fisch.	1782	X			+
212.	Chai (Chò, Bô bô)	<i>Shorea guiso</i> (Blco) Bl.	1783	X			+
213.	Sến nghệ (Sến hồ qua)	<i>Shorea henryana</i> Pierre.	1784	X	X		+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
214.	Vên vên bộp	<i>Shorea hypochra</i> Hance.	1777b	X	X	X	+
215.	Cà chắc	<i>Shorea obtusa</i> Wall.	1778	X		x	+
216.	Xén đỏ (Xén cật)	<i>Shorea roxburghii</i> G.D on.	1779		X	X	
217.	Chai Thorel	<i>Shorea thorelii</i> Pierre.	1785	X			+
218.	Táo muối	<i>Vatica chevalieri</i> (Gagn.) Smitin.	1788	X			+
219.	Táo mật (Vu)	<i>Vatica cinerea</i> King.	1789	X		X	+
220.	Lầu táo trắng	<i>Vatica odorata</i> (Griff.) Sym. Subsp. <i>Odorata</i> .	1792	X	X		+
221.	Táo ít hoa	<i>Vatica pauciflora</i> (Korth.) Bl.	1795	X			+
222.	Táo nước	<i>Vatica philastreana</i> Pierre.	1796	X			+
223.	Lầu táo	<i>Vatica sp.</i>		X			+
35	HỌ TRUNG QUÂN	ANCISTROCLADACEAE					
224.	Trung quân nam	<i>Ancistrocladus cochinchinensis</i> Gagn.	1797	X	X		+
225.	Trung quân lợp nhà	<i>Ancistrocladus tectorius</i> (Lour.) Merr.	1798	X	X	X	+
36	HỌ TRÀ	THEACEAE					
226.	Sum nguyên vẹn	<i>Adinandra integerrima</i> T. And.	1681	X	X	x	+
227.	Chữn nôm	<i>Archytea vahlii</i> Choisy	1657		X	X	
228.	Trà hoa lá ôm	<i>Camellia amplexicaulis</i> (Pit.) Coh.-Swart.	1733	X			+
229.	Trà hoa hoa vàng	<i>Camellia chrysantha</i> (Hu) Tuyama.	1732	X			+
230.	Trà hoa Dormoy	<i>Camellia dormoyana</i> (Pierre) Sealy.	1714	X	x	x	+
231.	Chơn trà Nhật	<i>Eurya japonica</i> Thumb.	1698	X	X	X	+
232.	Chè cầu	<i>Eurya nitida</i> Korth.	1701	X			+
233.	Linh Bắc bộ	<i>Eurya trichocarpa</i> Korth.	1705	X			+
234.	Săng sóc	<i>Schima crenata</i> Korth.	1750 ^b	X			+
235.	Săng sóc ấn	<i>Schima khasyana</i> Dyer ex Hook.f.	1750 ^c	X			+
236.	Săng sóc nguyên	<i>Schima wallichii</i> (DC.) Korth. ssp. <i>noronhae</i> (Bl.) Bloemb.	1750	X	x	X	+
237.	Quản hoa	<i>Ternstroemia chapaensis</i> Gagn.	1670	X			+
238.	Giang hoa trần	<i>Ternstroemia gymnanthera</i> (W.& A.) Sprague.	1672	X			+
239.	Giang Quảng đông	<i>Ternstroemia kwangtungensis</i> Merr.	1673	X			+
240.	Huỳnh nương	<i>Ternstroemia penangiana</i> Choisy.	1674	X	x	X	+
241.	Giang núi	<i>Ternstroemia pseudoverticillata</i> Merr. & Chun var. <i>meridionalis</i>	1671			X	

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				01	02	03	
		Gagn.					
37	HỌ BỨA	GUTTIFERAE					
242.	Cồng tía	<i>Calophyllum calaba</i> L.	1839	X			+
243.	Cồng nước	<i>Calophyllum dongnaiense</i> Pierre.	1841	X	X		+
244.	Cồng núi (Cồng trắng)	<i>Calophyllum dryobalanoides</i> Pierre.	1842		X		
245.	Mù u	<i>Calophyllum inophyllum</i> L.	1837	X	X	X	+
246.	Cồng dây	<i>Calophyllum pisiferum</i> Pl. ex Triana.	1844	X	x		+
247.	Cồng nhiều hoa	<i>Calophyllum polyanthum</i> Wall. ex Choisy.	1845		X		
248.	Cồng trắng	<i>Calophyllum soulatri</i> Burm. f.	1848		x	X	
249.	Vẩy ốc	<i>Calophyllum tetrapterum</i> Miq.	1849	X	X	X	+
250.	Choi	<i>Calophyllum touranensis</i> Gagn. ex Stevens.	1851	X	x	X	+
251.	Thành ngạnh đẹp	<i>Cratoxylon formosum</i> (Jack.) Dyer.	1865	X			+
252.	Thành ngạnh đẹp (Đỏ ngọn)	<i>Cratoxylon formosum</i> subsp. <i>Prunifolium</i> (Kurz) Gog.	1866	X	X		+
253.	Thành ngạnh	<i>Cratoxylon maingayi</i> Dyers in Hook. f.	1864	X	X		+
254.	Thành ngạnh nam	<i>Cratoxylum cochinchinensis</i> (Lour.) Bl.	1867	X		X	+
255.	BứA Hậu giang	<i>Garcinia bassacensis</i> Pierre.	1813	X			+
256.	BứA Delpy	<i>Garcinia delpyana</i> Pierre.	1816	X	x	X	+
257.	Rỏi mật (Gỏi)	<i>Garcinia ferrea</i> Pierre.	1817	X	X	X	+
258.	BứA lửa	<i>Garcinia fusca</i> Pierre.	1818	X			+
259.	Vàng nghệ (Gỏi)	<i>Garcinia gaudichaudii</i> Planch. & Triana.	1819	X	X	X	+
260.	BứA xẻ (Gò chai)	<i>Garcinia gracilis</i> Pierre.	1821	X			+
261.	Vàng nghệ	<i>Garcinia handburyi</i> Hook. f.	1820	X	X	X	+
262.	BứA mọi	<i>Garcinia harmandii</i> Pierre.	1823		X		
263.	Sơn vé	<i>Garcinia merguensis</i> Wight.	1826	X			+
264.	BứA núi	<i>Garcinia oliveri</i> Pierre.	1831	X	x	X	+
265.	BứA Scheffer	<i>Garcinia schefferi</i> Pierre.	1833	X	X	X	+
23	BỘ HOA TÍM	VIOLALES					
38	HỌ HỒNG QUÂN	FLACOURTIACEAE					
266.	Casearia	<i>Casearia annamensis</i> (Gagn.) Lesc.&Sleum	2174	X		X	+
267.	Chà ran hoa to	<i>Homalium grandiflorum</i> Benth.	2151	X		X	+

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				01	02	03	
268.	Bom Trung quốc	<i>Scolopia chinensis</i> (Lour.) Clos.	2140	X	X		+
269.	Mộc hương lá dài	<i>Xylosma longifolium</i> Clos.	2169	X		X	+
39	Họ Hoa tím	Violaceae					
270.	Quần diệp rắn	<i>Rinorea anguifera</i> (Lour.) O. Ktze.	2211	X	X	X	+
271.	A ban lá to	<i>Rinorea macrophylla</i> (DC.) O. Ktze.	2214	X			+
40	HỌ NHÂN LÔNG	PASSIFLORACEAE					
272.	Thư diệp	<i>Adenia heterophylla</i> (Bl.) Koord. subsp. <i>arcta</i> (Craib) de Wilde.	2245	X	x	X	+
273.	Nhân lông	<i>Passiflora foetida</i> L.	2221	X	X	X	+
24	BỘ BẦU BÍ	CUCURBITALES					
41	HỌ BẦU BÍ	CUCURBITACEAE					
274.	Lưỡng luân chân vịt	<i>Diplocyclos palmatus</i> (L.) Jeffrey	2301	X			+
275.	Cứt quạ	<i>Gymnopetalum cochinchinensis</i> (Lour.) Kurz.	2282	X		X	+
276.	Bạc bát (Qua lâu)	<i>Trichosanthes kirilowii</i> Maxim.	2290	X			+
25	BỘ THU HẢI ĐƯỜNG	BEGONIALES					
42	HỌ THU HẢI ĐƯỜNG	BEGONIACEAE					
277.	Thu hải đường uốn	<i>Begonia sinuata</i> Wall.	2344		x	X	
26	BỘ MÀN MÀN	CAPPARALES					
43	HỌ CÁP	CAPPARACEAE					
278.	Cáp Henry	<i>Capparis henryi</i> Matsum	2366	X			+
279.	Cáp gai nhỏ	<i>Capparis micrantha</i> DC. subsp. <i>micranth.</i>	2371	X			+
280.	Màng màng tím	<i>Cleome chelidonii</i> L.f.	2387	X		x	+
281.	Màng màng đẹp	<i>Cleome speciosa</i> Rafin.	2389	X		X	+
282.	Màng màng trăn	<i>Cleome viscosa</i> L.	2390	X	x	x	+
44	HỌ CHÙM NGÂY	MORINGACEAE					
283.	Chùm ngây	<i>Moringa oleifera</i> Lamk.	2428	X		x	+
27	BỘ ĐỎ QUYỀN	ERICALES					
45	ĐỎ QUYỀN	ERICACEAE					
284.	Nen lá liễu	<i>Vaccinium iteophyllum</i> Hance.	2484	X			+
285.	Sơn trâm Nha trang	<i>Vaccinium nhatrangense</i> Dop.	2489	X			+
46	Họ mã kỳ	Epacridaceae					
286.	Mã kỳ	<i>Styphelia malayana</i> (Jack) Spreng.	2434	X		X	+
28	BỘ THỊ	EBENALES					
47	HỌ DUNG	SYMPLOCACEAE					
287.	Dung trung bộ	<i>Symplocos annamensis</i> Nooteb.	2666	X	X		+

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				01	02	03	
288.	Dung ô liu đen	<i>Symplocos atriolivacea</i> Merr. & Chun ex Li.	2668	X			+
289.	Dung lá trà	<i>Symplocos cochinchinensis</i> (Lour.) Moore subsp. <i>Laurina</i> (Retz.) Nooteb.	2672	X	x	X	+
290.	Dung đen	<i>Symplocos glomerata</i> subsp. <i>Congesta</i> var. <i>poilanei</i> (Guill.) Nooteb.	2682	X			+
291.	Dung lá dài	<i>Symplocos longifolia</i> Fletcher.	2688	X	x	X	+
292.	Dung như râu	<i>Symplocos pseudobarberina</i> Gontcharov.	2695	X			+
48	Họ hồng	ebenaceae					
293.	Vảy ốc (Sang hột)	<i>Diospyros buxifolia</i> (Bl.) Hieron.	2587	X	X	X	+
294.	Thị Candolle	<i>Diospyros candolleana</i> Wight.	2572	X			+
295.	Xăng đen (Thị da)	<i>Diospyros crumenata</i> Thw.	2576	X	X	X	+
296.	Thị huyền	<i>Diospyros ebenum</i> Koenig.	2583	X		X	+
297.	Thị cùm rùm	<i>Diospyros ehretioides</i> Wall. ex G. Don.	2584	X			+
298.	Thị Nyhom	<i>Diospyros ferrea</i> (Willd.) Bakh.	2585	X		X	+
299.	Thị duyên hải	<i>Diospyros ferrea</i> var. <i>littorea</i> (R. Br.) Bakh	2586	X		X	+
300.	Thị lắc (Vảy ốc)	<i>Diospyros filipendula</i> Pierre ex Lec.	2588	X	X		+
301.	Thị roi (Da nghệ, Bu du)	<i>Diospyros frutescens</i> Bl.	2589	X			+
302.	Thị lá dài rộng	<i>Diospyros latisepala</i> Ridl.	2597	X			+
303.	Thị trâm	<i>Diospyros lobata</i> Lour.	2598	X			+
304.	Thị đầu heo (Cườm thị)	<i>Diospyros malabarica</i> (Desv.) Kostel.	2602	X			+
305.	Cầm thị (Vàng nghệ)	<i>Diospyros maritima</i> Bl.	2596	X	X	X	+
306.	Thị Morris	<i>Diospyros morrisana</i> Hance.	2608	X			+
307.	Thị treo	<i>Diospyros pendula</i> Hass. ex Hasselt var. <i>schmidtii</i> (Craib) Phengklai	2615	X			+
308.	Thị đài dúng	<i>Diospyros pilosanthera</i> Blco.	2618	X		X	+
309.	Thị núi	<i>Diospyros silvatica</i> Roxb.	2631	X			+
310.	Săng đen	<i>Diospyros venosa</i> Wall. ex DC.	2638	X	X		+

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				01	02	03	
49	HỌ XAPO CHẾ	SAPOTACEAE					
311.	Săng sáp	<i>Donella lanceolata</i> (Bl.) Aubr.	2545	X		X	+
312.	Mu cua (Xà com)	<i>Madhuca butyrospermoides</i> Chev.	2526	X			+
313.	Sến Nam bộ	<i>Madhuca cochinchinensis</i> (Dub.) H.J. Lam.	2527	X	x	X	+
314.	Viết (Sến bầu dục)	<i>Madhuca elliptica</i> (Dub.) H.J. Lam.	2528	X		X	+
315.	Sến cứng	<i>Madhuca firma</i> (Dub.) H.J. Lam.	2529	X			+
316.	Sến nhiều hoa	<i>Madhuca floribunda</i> (Dub.) H.J. Lam	2530	X			+
317.	Găng néo	<i>Manilkara hexandra</i> (Roxb.) Dub.	2520	X			+
318.	Xây dao (Chay)	<i>Palaquium obovatum</i> (Griff.)	2538	X	X	X	+
319.	Chay Poilane	<i>Palaquium ridleyi</i> King & Gamble var. <i>poilanei</i> (Lec.) H. Lam	2540	X			+
320.	Cà ta	<i>Payena lanceolata</i> Ridl. var. <i>annamensis</i> (Lec.) Van Bruggen.	2535	X			+
321.	Chối (Mộc)	<i>Pouteria obovata</i> (R. Br.) Baehnie.	2556	X			+
322.	Nhục tử lá hẹp	<i>Sarcosperma angustifolium</i> Gagn.	2558	X			+
323.	Mai lai Wight	<i>Sinosideroxylon wightianum</i> (W. & A.) Aubr.	2548	X			+
29	BỘ TRÂN CHÂU	PIRIMULALES					
50	HỌ CƠM NGUỘI	MYRSINACEAE					
324.	Cơm nguội lá nhọn	<i>Ardisia aciphylla</i> Pit.	2744	X			+
325.	Cơm nguội răng	<i>Ardisia crenata</i> Sims.	2748	X			+
326.	Cơm nguội nhãn	<i>Ardisia crenata</i> var. <i>angusta</i> Clarke.	2749	X			+
327.	Cơm nguội nhãn	<i>Ardisia crispa</i> (Thunb.) A.DC.	2753	X		X	+
328.	Cơm nguội Helfer	<i>Ardisia helferiana</i> Kurz.	2784	X	x	X	+
329.	Cơm nguội đốm	<i>Ardisia maculosa</i> Mez.	2752	X			+
330.	Cơm nguội Petelot	<i>Ardisia petelotii</i> Walk.	2839	X			+
331.	Cơm nguội cà	<i>Ardisia villosula</i> Pit.	2825	X		X	+
332.	Ngút hoa trắng	<i>Embelia laeta</i> Mez.	2734	X			+
333.	Đơn đơn	<i>Maesa membranacea</i> A. DC.	2710	X			+
334.	Đơn lông dày	<i>Maesa tomentella</i> Mez.	2722	X			+
335.	Xay Nam bộ	<i>Rapanea cochinchinensis</i> Mez.	2725	X		X	+
336.	Xay hẹp	<i>Rapanea linearis</i> (Lour.)	2726	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		Moore.					
30	BỘ BÔNG	MALVALES					
51	HỌ CÔM	ELAEOCARPACEAE					
337.	Côm Fleury	<i>Elaeocarpus fleury</i> Chev. ex Gagn.	1879	X			+
338.	Côm Griffith	<i>Elaeocarpus griffithii</i> (Wight) A. Gray.	1883	X	X	X	+
339.	Côm Harmand	<i>Elaeocarpus harmandii</i> Pierre.	1887	X	X		+
340.	Côm có cuống	<i>Elaeocarpus petiolatus</i> (Jack.) Wall. ex Kurz.	1900c	X	X	X	+
341.	Côm lá bẹ	<i>Elaeocarpus stipularis</i> Bl.	1905	X			+
342.	Đước núi (Chan chan)	<i>Elaeocarpus tectorius</i> (Lour.) Poir.	1903	X	X	X	+
52	HỌ CÒ KE	TILIACEAE					
343.	Bồ an	<i>Colona auriculata</i> (H. Baill.) Craib.	1952	X	X	x	+
344.	Cò ke dợn	<i>Grewia sinuata</i> Wall.	1949	X	X	X	+
345.	Cò ke	<i>Grewia tomentosa</i> Roxb. ex DC.	1950	X	x	X	+
346.	Gai đầu hình thoi	<i>Triumfetta bartramia</i> L.	1966	X	X	X	+
347.	Gai đầu răng to	<i>Triumfetta grandidens</i> Hance	1964		x	X	
348.	Gai đầu vàng	<i>Triumfetta pilosa</i> Roth.	1962	X			+
349.	Gai đầu bò	<i>Triumfetta repens</i> (Bl.) Merr. & Rolfe.	1965	X	x	X	+
53	HỌ TRÔM	STERCULIACEAE					
350.	Thung (Chung sao)	<i>Commersonia bartramia</i> (L.) Merr.	1985	X		x	+
351.	Dó lông	<i>Helicteres hirsuta</i> Lour.	1995	X	X	X	+
352.	Dó hẹp (ổ kén)	<i>Helicteres angustifolia</i> L.	1990	X	X		+
353.	Huỳnh	<i>Heritiera cochinchinensis</i> (Pierre) Kost.	2051	X	X	X	+
354.	Cui	<i>Heritiera littoralis</i> Dryand.	2055	X		X	+
355.	Cui lá to	<i>Heritiera macrophylla</i> Wall.	2056	X			+
356.	Lòng mán dị điệp	<i>Pterospermum heterophyllum</i> Hance.	2005	X	X		+
357.	Lòng mán bạc	<i>Pterospermum argenteum</i> Tard.	2001	X	X		+
358.	Lòng mán lá đa dạng	<i>Pterospermum diversifolium</i> Bl.	2002	X	X		+
359.	Lòng mán hoa to	<i>Pterospermum grandiflorum</i> Craib.	2003	X	X		+
360.	Lòng mán nhỏ	<i>Pterospermum grewiaefolium</i> Pierre.	2004	X	X		+
361.	Màng tía	<i>Pterospermum jackianum</i> Wall.	2006	X		X	+
362.	Lòng mán Sài gòn	<i>Pterospermum jackinum</i> var. <i>saigonense</i> (Pierre)	2007	X	X		+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		Gagn.					
363.	Lòng mán trái to	<i>Pterospermum megalocarpum</i> Tard.	2009	X			+
364.	Lòng máng mũi	<i>Pterospermum mucronatum</i> Tard.	2010	X	x	X	+
365.	Lòng mán Pierre	<i>Pterospermum pierrei</i> Hance.	2011	X		X	+
366.	Cước mộc (Chọc mộc)	<i>Sterculia alata</i> Roxb.	2022	X			+
367.	Trôm Nam bộ	<i>Sterculia cochinchinensis</i> Pierre.	2024	X			+
368.	Trôm hôi	<i>Sterculia foetida</i> L.	2025	X	x	X	+
369.	Sang sé (Trôm thon)	<i>Sterculia lanceolata</i> Cav.	2031	X	X		+
370.	Bảy thưa sét	<i>Sterculia rubiginosa</i> Vent.	2040		x	X	
371.	Bảy thưa nuốm quay	<i>Sterculia stigmatota</i> Pierre.	2042	X			+
54	Họ Gòn ta	Bombacaceae					
372.	Gạo Thorel	<i>Bombax thorelii</i> Gagn.	2062	X	X		+
55	HỌ BỤP	MALVACEAE					
373.	Cối xay (Nhĩ hưỡng)	<i>Abutilon indicum</i> (L.) Sweet.	2079	X	x	X	+
374.	Thập tử Harmand	<i>Decaschistia harmandii</i> Pierre.	2091	X			+
375.	Đùi gà	<i>Decaschistia parviflora</i> Kurz.	2092	X	X	X	+
376.	Bụp Gagnepain	<i>Hibiscus gagnepainii</i> Boiss.	2109	X			+
377.	Bụp xước (Xương chua)	<i>Hibiscus surattensis</i> L.	2102		X	X	
378.	Tra làm chèo	<i>Hibiscus tiliaceus</i> L.	2106	X	X	X	+
379.	Chối đực (Bái nhọn)	<i>Sida acuta</i> Burm. f.	2070	X		X	+
380.	Bái bò	<i>Sida cordata</i> (Burm.f.) Boiss.	2067	X		X	+
381.	Bái trắng(Ké đồng tiền)	<i>Sida cordifolia</i> L.	2074	X	X	X	+
382.	Tra lâm vồ (Tra bồ đề)	<i>Thespesia populnea</i> (L.) Soland. ex Correa.	2130	X	X	X	+
383.	Ké hoa đào	<i>Urena lobata</i> L.	2084	X	x	X	+
31	BỘ THẦU DẦU	EUPHORBIALES					
56	HỌ ĐỨC DIỆP	DAPHNIPHYLLACEAE					
384.	Vai Pierre	<i>Daphniphyllum majus</i> Muell.-Arg. var. <i>Pierrei</i> (Hance) Huang	6126	X	x	X	+
385.	Vai Phan rang	<i>Daphniphyllum majus</i> var. <i>phanrangense</i> (Gagn.) Huang.	6127	X			+
57	Họ đại kích	Euphorbiaceae					
386.	Hoà phương ắn	<i>Agrostistachys indica</i> Dalz.	4923	X	X	X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
387.	Chân nôm	<i>Antidesma chonmon</i> Gagn.	4834	X			+
388.	Chòi mòi sóng	<i>Antidesma costulatum</i> Pax & Hoffm.	4837	X			+
389.	Chòi mòi (Chua mòi)	<i>Antidesma ghaesembilla</i> Gaertn.	4826	X	x	X	+
390.	Chòi mòi Henry	<i>Antidesma henryi</i> Pax & Hoffm.	4842	X			+
391.	Chòi mòi	<i>Antidesma japonica</i> var. <i>robusta</i> Airy-Shaw.	4844	X			+
392.	Cù chinh	<i>Antidesma phanrangense</i> Gagn.	4848	X			+
393.	Chòi mòi Roxburgh	<i>Antidesma roxburghii</i> Wall.	4852	X	x	X	+
394.	Chòi mòi Walker	<i>Antidesma walkerii</i> Pax & Hoffm.	4856	X			+
395.	Chòi mòi Vân nam	<i>Antidesma yunnanensis</i> Pax & Hoffm.	4830	X			+
396.	Tai nghệ	<i>Aporusa ficifolia</i> H.Baillon.	4808	X	X		+
397.	Tai nghệ Planchon	<i>Aporusa planchoniana</i> H.Baill. ex Muell.	4811	X	x	X	+
398.	San	<i>Aporusa tetrapleura</i> Hance.	4814	X			+
399.	Tai nghệ Vân nam	<i>Aporusa yunnanensis</i> (Pax & Hoffm.) Metc.	4817	X			+
400.	Dâu ta	<i>Baccaurea ramiflora</i> Lour.	4818	X	X	X	+
401.	Sòi (Ổ cừu)	<i>Balacata baccata</i> (Roxb.) Essia.	5086	X	x	X	+
402.	Dé Baudouin	<i>Breynia baudouini</i> Beille.	4760	X	X	X	+
403.	Cù đề	<i>Breynia vitis-idaea</i> (Burm. f.) C.E.C. Fischer.	4771	X	x	X	+
404.	Đỗm Balansa	<i>Briedelia balansae</i> Tutcher.	4872	X			+
405.	Đỗm	<i>Briedelia glauca</i> Bl.	4874	X			+
406.	Đỗm hoa nhỏ	<i>Briedelia minutiflora</i> Hook. f.	4875	X	X	X	+
407.	Đỗm thon	<i>Briedelia monoica</i> var. <i>lancaefolia</i> (Muell.-Arg.)	4878	X	X	x	+
408.	Cức quả (Dạ nâu)	<i>Chaetocarpus castanocarpus</i> (Roxb.) Thw.	5076	X	X	X	+
409.	Lậy đông cuống ngắn	<i>Cleidion brevipetiolatum</i> Pax & Hoffm.	4972	X			+
410.	Cách hoa phún	<i>Cleistanthus hirsutulus</i> Hook. f.	4866	X			+
411.	Cách hoa nhiều hoa	<i>Cleistanthus myrianthus</i> (Hassk.) Kurz.	4864	X			+
412.	Cách hoa Pierre	<i>Cleistanthus pierrei</i> (Gagn.) Croiz.	4867	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
413.	Cách hoa Sumatra	<i>Cleistanthus sumatranus</i> (Miq.) Muell.-Arg.	4869	X	x	X	+
414.	Hồ ly Java	<i>Cnesmone javanica</i> Bl.	5011			X	
415.	Cù đèn Chevalier	<i>Croton chevalieri</i> Gagn.	4909	X			+
416.	Cù đèn Delpy	<i>Croton delpyi</i> Gagn.	4911	X			+
417.	Cù đèn dị quả	<i>Croton heterocarpus</i> Muell.-Arg.	4914	X			+
418.	Cù đèn Cửu long	<i>Croton kongensis</i> Gagn.	4897	X			+
419.	Cù đèn Caba	<i>Croton krabas</i> Gagn.	4898	X		X	+
420.	Cù đèn Phú quốc	<i>Croton phuquocensis</i> Croiz.	4916	X	X	X	+
421.	Cù đèn Poilane	<i>Croton poilanei</i> Gagn.	4917	X	x	X	+
422.	Côn chè (Cù đèn trà)	<i>Croton potabilis</i> Croiz.	4903	X			+
423.	Cù đèn Đà Nẵng	<i>Croton touranensis</i> Gagn.	4889	X			+
424.	Săng trắng Biên hoà	<i>Drypetes hoensis</i> Gagn.	4797	X			+
425.	Săng trắng Poilane	<i>Drypetes poilanei</i> Gagn.	4800	X			+
426.	Thượng dẻ Silhet	<i>Epiprinus silhetianus</i> (H.Baill.) Croiz.	5006	X			+
427.	Mao hoa Trung quốc	<i>Erismanthus sinensis</i> Oliv.	5074			X	
428.	Euphorbia	<i>Euphorbia arenarioides</i> Gagn.	5102	X			+
429.	Đại kích biển	<i>Euphorbia atoto</i> Forst. f.	5103	X	X	x	+
430.	Cỏ sữa lông	<i>Euphorbia hirta</i> L.	5111	X		X	+
431.	Giá	<i>Excoecaria agallocha</i> L.	5080	X	x	X	+
432.	Sòi đặc biệt	<i>Falconeria insigne</i> Royle.	5090	X			+
433.	Sóc Balansa	<i>Glochidion balansae</i> Beille.	4742	X			+
434.	Sóc lá dẻ	<i>Glochidion fagifolium</i> Muell.-Arg.	4745	X			+
435.	Sóc láng	<i>Glochidion laevigatum</i> Muell.-Arg.	4750	X			+
436.	Sóc xéo (Ghê)	<i>Glochidion obliquum</i> Dcne.	4736	X	X	X	+
437.	Sóc nam	<i>Glochidion pilosum</i> (Lour.) Merr.	4753	X			+
438.	Sóc cứng	<i>Glochidion rigidum</i> Muell.-Arg.	4754	X			+
439.	Sóc đỏ	<i>Glochidion rubrum</i> Bl.	4755	X	x	X	+
440.	Mã rạn răng	<i>Macaranga denticulata</i> (Bl.) Muell.-Arg.	4979	X	X		+
441.	Mã rạn ba thùy	<i>Macaranga triloba</i> (Bl.) Muell.-Arg.	4976	X	x	X	+
442.	Ba bét trắng	<i>Mallotus apelta</i> Muell. Arg.	4952	X	X		+
443.	Ruối Clelland	<i>Mallotus clellandii</i> Hook.f.	4955	X		X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
444.	Ruối Trung bộ	<i>Mallotus floribundus</i> (Bl.) Muell.-Arg.	4934	X	X	X	+
445.	Bông bệt	<i>Mallotus paniculatus</i> (Lamk.) Muell.-Arg.	4954	X		X	+
446.	Ba chia	<i>Mallotus philippensis</i> (Lamk.) Muell.-Arg.	4946	X		X	+
447.	Ruối Thorel	<i>Mallotus thorelii</i> Gagn. in Lec.	4937	X	x	X	+
448.	Hắc lân nhiều-tuyến	<i>Melanolepis multiglandulosa</i> (Bl.) Reichb. f. & Zoll.	4966	X	X		+
449.	Diệp hạ châu thanh lịch	<i>Phyllanthus elegans</i> Wall.ex Muell.-Arg.	4718	X	x	X	+
450.	Diệp hạ châu lá nhỏ	<i>Phyllanthus parvifolius</i> Buch.-Ham. ex G. Don.	4699	X			+
451.	Diệp hạ châu Phú quốc	<i>Phyllanthus phuquocianus</i> Beille.	4692	X	x	X	+
452.	Diệp hạ châu lá tùng	<i>Phyllanthus taxodiifolius</i> Beille.	4725	X		X	+
453.	Sòi bạc	<i>Sapium discolor</i> (Benth.) Muell.-Arg.	5088	X		X	+
454.	Sòi lá tròn	<i>Sapium rotundifolium</i> Hemsl.	5089	X			+
455.	Bồ ngót phì quả	<i>Sauropus bacciformis</i> (L.) Airy-Shaw.	4773	X			+
456.	Bồ ngót Poilane	<i>Sauropus poilanei</i> Beille.	4785	X			+
457.	Kén son	<i>Suregada cicerosperma</i> (Gagn.) Croiz.	5070	X			+
458.	Kén (Cổ ngỗng)	<i>Suregada multiflora</i> (Juss.) H. Baill.	5069	X	X	X	+
459.	Tam thụ hùng vàng-tái	<i>Trigonostemon flavidus</i> Gagn.	5040	X	x		+
460.	Tam thụ hùng lai	<i>Trigonostemon hybridus</i> Gagn.	5043			X	
461.	Tam thụ hùng lông-chim	<i>Trigonostemon murtonii</i> Craib.	5048			X	
462.	Tam thụ hùng Pierre	<i>Trigonostemon pierrei</i> Gagn.	5047	X		X	+
463.	Tam thụ hùng Phú quốc	<i>Trigonostemon quocensis</i> Gagn.	5050	X		X	+
464.	Tam thụ hùng đỏ	<i>Trigonostemon rubescens</i> Gagn.	5052	X		X	+
58	Họ a -tràng	dichapetalaceae					
465.	A tràng cánh hoa dài	<i>Dichapetalum longepetalum</i> (Turcz.) Engl.	4661	X		X	+
32	BỘ TRÂM HƯƠNG	THYMELAEALES					
59	HỌ TRÂM HƯƠNG	THYMAELAEACEAE					
466.	Trâm (Dó bầu)	<i>Aquilaria crassna</i> Pierre ex Lec.	4080	X	x	X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
467.	Dó mười tiêu nhụy	<i>Linostoma decandrum</i> (Roxb.) Wall. ex Endl.	4095		X	X	
33	BỘ TÀI HÙM	SAXIFRAGALES					
60	HỌ LÔI	CRYPTERONIACEAE					
468.	Lôi	<i>Crypteronia paniculata</i> Bl. Var. <i>affinis</i> (Pl.) Beus.	4079	X			+
34	BỘ HOA HỒNG	ROSALES					
61	HOA HỒNG	ROSACEAE					
469.	Sơn trà Poilane	<i>Eriobotrya poilanei</i> J. E. Vid.	3120	X			+
470.	Cám	<i>Parinari annamensis</i> Hance.	3252	X	X	X	+
471.	Xoan đào	<i>Prunus arborea</i> var. <i>montana</i> (Hook. f.) Kalm.	3236	X		x	+
472.	Dum ngầy(Ngầy trắng)	<i>Rubus cochinchinensis</i> var. <i>glabrescens</i> Card.	3143	X	X		+
473.	Dum có cạnh	<i>Rubus moluccalus</i> var. <i>angulosus</i> Kalm.	3165	X		X	+
474.	Dum đảo Mô lúc	<i>Rubus moluccanus</i> L. var. <i>moluccanus</i> .	3162	X		X	+
35	BỘ ĐẬU	FABALES					
62	HỌ TRINH NỮ	MIMOSOIDEAE					
475.	Sống rắng (Keo nhiều đầu)	<i>Acacia pluricapitata</i> Steud. ex Benth.	3320	X		X	+
476.	Keo đẹp (Phì tạo giáp)	<i>Acacia concinna</i> (Willd) A. DC.	3313	X	X		+
477.	Trạch quạch	<i>Adenanthera pavonina</i> L.	3279	X		X	+
478.	Ràng ràng	<i>Adenanthera pavonina</i> var. <i>microsperma</i> (Teysm. & Binn.) I. Niels.	3280	X			+
479.	Sống rắn sừng nhỏ	<i>Albizia corniculata</i> (Lour.) Druce.	3326	X		X	+
480.	Giác (Mán đĩa)	<i>Archidendron clypearia</i> (Jack.) I. Niels.	3344	X		X	+
481.	Doi Phú quốc	<i>Archidendron quocense</i> (Pierre) I. Niels.	3346	X		X	+
482.	Bàm bám	<i>Entada phaseoloides</i> (L.) Merr.	3281	X	X		+
483.	Bàm bám	<i>Entada pursaetha</i> A.P.DC.	3282	X		X	+
484.	Bọ chét	<i>Leucoena leucocephala</i> (Lamk.) de Wit.	3292	X	x	X	+
485.	Trinh nữ móc	<i>Mimosa diplotricha</i> C. Wright ex Sauvalle.	3288	X		X	+
486.	Mai dương	<i>Mimosa pigra</i> L.	3289			X	
487.	Trinh nữ (Mắc cỡ)	<i>Mimosa pudica</i> L.	3287	X	X	X	+
63	HỌ ĐIẾP	CAESALPINIOIDEAE					
488.	Móng bò Hậu giang	<i>Bauhinia bassacensis</i> Pierre ex Gagn.	3441	X		X	+
489.	Móng bò cánh dơi	<i>Bauhinia bracteata</i> (Benth.) Barker subsp.	3442	X		X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		bracteata					
490.	Càng cua	<i>Bauhinia carcinophylla</i> Merr.	3456	X			+
491.	Móng bò Curtis	<i>Bauhinia curtisii</i> Prain.	3439	X			+
492.	Máu đỏ (Gố)	<i>Bauhinia ornata</i> var. <i>balansae</i> (Gagn.) K. & S.S. Lars.	3463	X			+
493.	Móng bò đài túi	<i>Bauhinia saccocalyx</i> Pierre.	3434	X			+
494.	Vuốt hùm	<i>Caesalpinia bonduc</i> (L.) Roxb.	3380	X		X	+
495.	Muồng trâu	<i>Cassia alata</i> L.	3407	X		X	+
496.	Bò cạp nước	<i>Cassia fistula</i> L.	3398	X			+
497.	Muồng lông	<i>Cassia hirsuta</i> L.	3411	X		X	+
498.	Muồng lá khế	<i>Cassia occidentalis</i> L.	3412	X		x	+
499.	Muồng hôi(Muồng lặc)	<i>Cassia tora</i> L.	3414	X		X	+
500.	Mót	<i>Cynometra ramiflora</i> L.	3466			X	
501.	Gỗ nước	<i>Intsia bojuga</i> (Colebr.) O. Ktze.	3478	X		X	+
502.	Lim vàng	<i>Peltophorum dasyrrachis</i> (Miq.) Kurz.	3368	X		X	+
64	HỌ ĐẬU	PAPILIONOIDEAE					
503.	Cườm thảo mềm	<i>Abrus mollis</i> Hance.	3567	X	x	X	+
504.	Cườm thảo đỏ	<i>Abrus precatorius</i> L.	3566	X	X		+
505.	Điền ma Mỹ	<i>Aeschynomene americana</i> L.	3896	X		x	+
506.	Hàng the	<i>Alysicarpus vaginalis</i> (L.) A.p. de Cand.	3748	X		X	+
507.	Hột mát (Xa)	<i>Antheroporum pierrei</i> Gagn.	3630	X			+
508.	Bình đậu	<i>Cajanus volubilis</i> (Blco) Blco.	3866	X		X	+
509.	Đậu cộ biển	<i>Canavalia cathartica</i> Du Petit-Thouars.	3786	X		x	+
510.	Trung châu (Bướm)	<i>Centrosema pubescens</i> Benth.	3818		X	X	
511.	Biếc tím	<i>Clitoria marianna</i> L.	3825	X	x	X	+
512.	Biếc	<i>Clitoria ternatea</i> L.	3819	X	X		+
513.	Sục sục tái	<i>Crotalaria pallida</i> Aiton.	3944	X			+
514.	Sục sục lỏm	<i>Crotalaria retusa</i> L.	3969	X		X	+
515.	Trắc một hột (Me nước)	<i>Dalbergia candenatensis</i> (Dennst.) Prain.	3536	X		X	+
516.	Trắc (Cắm lai Nam bộ)	<i>Dalbergia cochinchinensis</i> Pierre in Lan.	3546			X	
517.	Trắc nhiều hoa	<i>Dalbergia multiflora</i> Heyne ex Wall. var. <i>glabrescens</i> Prain.	3528	X		X	+
518.	Trắc hoa nhỏ	<i>Dalbergia parviflora</i> Roxb.	3518	X			+
519.	Trắc Pierre	<i>Dalbergia pierreana</i>	3540	X		X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		Prain.					
520.	Trắc dây	<i>Dalbergia rimosa</i> Roxb.	3525	X			+
521.	Trắc leo	<i>Dalbergia volubilis</i> Roxb.	3561	X		X	+
522.	Dây lim (Máu)	<i>Derris indica</i> Benn.	3608	X			+
523.	Cóc kèn bìa	<i>Derris marginata</i> Benth.	3615	X		X	+
524.	Cóc kèn(Cóc kèn nước)	<i>Derris trifolia</i> Lour.	3609	X		X	+
525.	Tràng quả dị diệp	<i>Desmodium heterophyllum</i> (Willd.) DC.	3712	X			+
526.	Tràng quả ba hoa	<i>Desmodium triflorum</i> DC.	3716			X	
527.	Tràng quả Wallich	<i>Desmodium wallichii</i> Prain.	3679	X			+
528.	Vông nem	<i>Erythrina variegata</i> L.	3758	X		X	+
529.	Tóp mỡ có chồi	<i>Flemingia strobilifera</i> (L.) R. Br. ex Ait. f.	3886	X	x	X	+
530.	Chàm lông	<i>Indigofera hirsuta</i> L.	3659	X	X	X	+
531.	Ổ chim	<i>Mecopus nidulans</i> Benth.	3728	X	X		+
532.	Máu gà	<i>Millettia reticulata</i> Benth.	3596	X			+
533.	Ràng ràng Bắc bộ	<i>Ormosia tonkinensis</i> Gagn.	3504	X			+
534.	Hoè lông	<i>Sophora tomentosa</i> L.	3516	X		X	+
535.	Đậu biển	<i>Vigna marina</i> (Burm.f.) Merr.	3852	X		X	+
36	BỘ DÂY KHÉ	CONNARALES					
65	HỌ LỚP BỐP	CONNARACEAE					
536.	Trường ngân	<i>Agelaea trinervis</i> (L. lan.) Merr.	3047	X		X	+
537.	Trường khé	<i>Cnestis palala</i> (Lour.) Merr.	3034	X		X	+
538.	Lớp bốp	<i>Connarus cochinchinensis</i> (Baill.) Pierre.	3042	X	x	X	+
539.	Quả giùm	<i>Connarus paniculatus</i> Roxb. var. <i>paniculatus</i> .	3043	X		X	+
540.	Dây trường điều	<i>Connarus paniculatus</i> var. <i>hainanensis</i> (Merr.) Vid.	3044	X			+
541.	Lớp bốp	<i>Connarus semidecandrus</i> Jack (C. <i>quocensis</i> Pierre).	3046	X		X	+
542.	Dây lửa lá trinh nữ	<i>Rourea mimosoides</i> (Vahl) Planch.	3040	X		X	+
543.	Đóc chó (Tróc cầu)	<i>Rourea minor</i> (Gaertn.) Aubl. Subsp. <i>Minor</i> .	3037	X			+
544.	Cơm xôi (Dây khé rai)	<i>Rourea minor</i> subsp. <i>microphylla</i> (H. & A.) Vid.	3039	X		X	+
545.	Roureopsis	<i>Roureopsis acutipetala</i> (Miq.)	3031	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		Leenh.subsp. <i>borneensis</i> (Schell.) Leenh					
37	BỘ GỌNG VÓ	NEPENTHALES					
66	HỘ TRƯ' LUNG	NEPENTHACEAE					
546.	Bình nước kỳ quan	<i>Nepenthes mirabilis</i> (Lour.) Druce.	2133	X	x	X	+
547.	Bình nước Thorel	<i>Nepenthes thorelii</i> H. Lec.	2135	X		X	+
38	BỘ SIM	MYRTALES					
67	HỘ BĂNG LĂNG	LYTHRACEAE					
548.	Mùi chó tai	<i>Ammania auriculata</i> Willd.	4069	X		X	+
549.	Băng lăng dị dục	<i>Lagerstroemia anisoptera</i> Koehne.	4065	X			+
550.	Thao lao(Băng lăng ổi)	<i>Lagerstroemia calyculata</i> Kurz.	4059	X	X		+
551.	Băng lăng ổi	<i>Lagerstroemia crista</i> Pierre ex Lan.	4049	X			+
552.	Băng lăng vàng	<i>Lagerstroemia loudonii</i> Teijsm. & Binn.	4058	X			+
553.	Băng lăng lá xoan	<i>Lagerstroemia ovalifolia</i> Teijsm	4047	X	X		+
554.	Băng lăng nước	<i>Lagerstroemia speciosa</i> (L.) Pers.	4051	X		X	+
555.	Băng phi	<i>Pemphis acidula</i> J. R. & G. Forst.	4068	X			+
68	Họ Bần	Sonneratiaceae					
556.	Bần trắng	<i>Sonneratia alba</i> J.E. Smith.	4042	X	X		+
557.	Bần đắng, Bần ổi	<i>Sonneratia griffithii</i> Kurz.	4044	X	X		+
69	HỘ ĐUỐC	RHIZOPHORACEAE					
558.	Vẹt dù	<i>Bruguiera gymnorrhiza</i> (L.) Lamk.	4389	X	X		+
559.	Vẹt đen	<i>Bruguiera sexangula</i> (Luor.) Poir. in Lamk.	4391	X		X	+
560.	Xăng mã chẻ	<i>Carallia brachiata</i> (Lour.) Merr.	4392	X	X	X	+
561.	Xăng mã trâm	<i>Carallia eugenioidea</i> King.	4393	X			+
562.	Xăng mã răng	<i>Carallia suffruticosa</i> Ridl.	4395		x	X	
563.	Dà đen (Dà quanh)	<i>Ceriops decandra</i> (Griff.) Ding Hou.	4385	X			+
564.	Dà đỏ	<i>Ceriops tagal</i> (Perr.) C.B. Rob.	4386	X	X		+
565.	Đước đôi	<i>Rhizophora apiculata</i> Bl.	4382	X	X	X	+
566.	Đước nhọn	<i>Rhizophora mucronata</i> Poir. In Lamk.	4383	X	X		+
70	HỘ CHỤN BẦU	COMBRETACEAE					
567.	Dực dài	<i>Calycopteris floribunda</i> (Roxb.) Lamk.	4376	X	X	X	+
568.	Quỳnh tàu	<i>Combretum latifolium</i> Bl.	4353	X		X	+
569.	Chụn bầu	<i>Combretum</i>	4349	X	X		+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		<i>quadrangulare</i> Kurz.					
570.	Cọc đỏ	<i>Lumnitzera litorea</i> (Jack) Voigt.	4378	X		X	+
571.	Cọc vàng	<i>Lumnitzera racemosa</i> Willd.	4377	X		x	+
572.	Dây giun nhỏ	<i>Quisqualis conferta</i> (Jack) Exell					+
573.	Dây giun	<i>Quisqualis indica</i> L.					+
574.	Bàng hôi (Bàng mốc)	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	4363	X			+
575.	Chiêu liêu nước	<i>Terminalia calamansanai</i> (Bl.) Rolfe.	4364	X	X		+
576.	Xàng (Tiểu)	<i>Terminalia chebula</i> Retz.	4366	X			+
577.	Chiêu liêu xanh	<i>Terminalia pierrei</i> Gagn.	4369	X			+
578.	Chiêu liêu nghệ	<i>Terminalia triptera</i> Stapf.	4373	X	X	X	+
71	HỌ SIM	MYRTACEAE					
579.	Chổi xể	<i>Baeckea frutescens</i> L.	4200	X	X		+
580.	Trâm ô	<i>Cleistocalyx circumcissa</i> (Gagn.) Pham hoang.	4165	X			+
581.	Thập tử hoa nhỏ	<i>Decaspermum parviflorum</i> (Lam.) J. Scott.	4103	X			+
582.	Tràm	<i>Melaleuca cajuputi</i> Powel.	4199	X			+
583.	Tiểu sim	<i>Rhodamnia dumetorum</i> (Poir.) Merr.	4101	X		X	+
584.	Hồng sim	<i>Rhodomyrtus tomentosa</i> (Ait.) Hassk.	4105	X		X	+
585.	Trâm Bois	<i>Syzygium boisianum</i> (Gagn.) Merr. & Perry	4117	X			+
586.	Trâm Bullock	<i>Syzygium bullockii</i> (Hance) Merr. & Perry	4121	X			+
587.	Trâm hoa xanh	<i>Syzygium chloranthum</i> Duthie.	4124	X			+
588.	Trâm trắng	<i>Syzygium chnlos</i> (Gagn.) Merr. & Perry.	4123	X	X		+
589.	Trâm chụm ba	<i>Syzygium formosum</i> var. <i>ternifolium</i> (Roxb.) Merr. & Perry.	4130	X			+
590.	Trâm to	<i>Syzygium grandis</i> Wight.	4132		X	X	
591.	Trâm Hance	<i>Syzygium hancei</i> Merr. & Perry.	4133	X			+
592.	Lý (Bồ đào)	<i>Syzygium jambos</i> (L.) Alston.	4109	X		X	+
593.	Lý	<i>Syzygium jambos</i> var. <i>silvaticum</i> (Gagn.) Merr. & Perry	4110	X			+
594.	Trâm hoa mảnh	<i>Syzygium leptanthum</i> (Wight) Niedenz.	4136	X			+
595.	Trâm ba vỏ	<i>Syzygium lineatum</i> (Bl.) Merr. & Perry.	4138	X		X	+
596.	Trâm rộng	<i>Syzygium oblatum</i>	4140	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		(Roxb.) A.M. & J.M.					
597.	Sắn (Sắn thuyền)	<i>Syzygium polyanthum</i> (Wight) Walp.	4146	X			+
598.	Mận	<i>Syzygium semarangense</i> (Bl.) Merr. & Perry.	4107	X			+
599.	Trâm kiền kiền	<i>Syzygium syzygioides</i> (Miq.) Amsh.	4152	X		X	+
600.	Trâm	<i>Syzygium szemaoense</i> Merr. & Perry.	4161	X			+
601.	Trâm nhuộm	<i>Syzygium tinctorium</i> (Gagn.) Merr. & Perry.	4154	X			+
602.	Trâm rim	<i>Syzygium tramnion</i> (Gagn.) Merr. & Perry.	4156	X			+
603.	Trâm Wight	<i>Syzygium wightianum</i> W. & Arn.	4160	X	x	X	+
604.	Trâm tích lan	<i>Syzygium zeylanicum</i> (L.) DC.	4162	X		X	+
605.	Tri tân Burmann	<i>Tristaniopsis burmanica</i> (Griffith) Wils. & Waterhouse	4172	X			+
606.	Tri tân (ổi rừng)	<i>Tristaniopsis merguensis</i> (Griff.) Wils. & Waterh.	4173	X	X	X	+
72	HỌ MUÔI	MELASTOMATACEAE					
607.	Muôi Chevalier	<i>Melastoma chevalieri</i> Guill.	4220	X			+
608.	Muôi Eberhardt	<i>Melastoma eberhardtii</i> Guill.	4222	X	X		+
609.	Muôi dằm	<i>Melastoma palaceum</i> Naudin	4229	X	X		+
610.	Muôi lông	<i>Melastoma saigonense</i> (Kuntze) Merr.	4216	X	X		+
611.	Muôi bà	<i>Melastoma sanguineum</i> Sims.	4230	X	X		+
612.	Muôi đa hùng	<i>Melastoma affine</i> D. Don.	4215	X	X		+
613.	Sầm nhọn	<i>Memecylon acuminatum</i> Sm. in Rees var. <i>tenuis</i> Guill.	4333	X			+
614.	Sầm lam	<i>Memecylon caeruleum</i> Jack.	4336	X			+
615.	Sầm bù	<i>Memecylon edule</i> Roxb.	4338	X			+
616.	Sầm Harmand	<i>Memecylon harmandii</i> Guill.	4341	X			+
617.	Sầm râm	<i>Memecylon ligustrinum</i> Champ. ex B. & H.	4343	X			+
618.	Sầm láng	<i>Memecylon lilacinum</i> Zoll. & Morr.	4344	X			+
619.	Sầm tán	<i>Memecylon umbellatum</i> Burm	4347	X			+
620.	Pseudodissochaeta	<i>Pseudodissochaeta septentrionalis</i>	4329	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		(W.W.Sm.) Nayar.					
621.	Gót hùng	<i>Pternandra coerulescens</i> Jack.	4332	X	X	X	+
73	HỌ CHIẾC	LECYTHIDACEAE					
622.	Chiếc (Lộc vừng)	<i>Barringtonia acutangula</i> (L.) Gaertn.	4027	X	x	X	+
623.	Chiếc khế	<i>Barringtonia acutangula</i> subsp. <i>spicata</i> (Bl.) Payens.	4028	X			+
624.	Vừng	<i>Barringtonia angusta</i> Kurz.	4030	X		X	+
625.	Chàm bì	<i>Barringtonia cf. schmidtii</i> Warb.	4029	X	X	X	+
626.	Chiếc chùy	<i>Barringtonia conoidea</i> Griff.	4031	X			+
627.	Chiếc Eberhardt	<i>Barringtonia ebehardtii</i> Gagn.	4032	X			+
628.	Chiếc hoa nhỏ	<i>Barringtonia micrantha</i> Gagn.	4035	X			+
39	BỘ RONG XƯƠNG CÁ	HIPPURIDALES					
74	HỌ ĐUÔI CHÓ	HALORAGACEAE					
629.	Đuôi chó xiêm	<i>Myriophyllum siamense</i> (Craib) Tard.	4018			X	
40	BỘ CAM	RUTALES					
75	HỌ XOÀI	ANACARDIACEAE					
630.	Thanh trà	<i>Bouea oppositifolia</i> (Roxb.) Meissn.	5430	X	x	X	+
631.	Chây lớn	<i>Buchanania arborescens</i> (Bl.) Bl.	5412	X			+
632.	Chay sáng	<i>Buchanania lucida</i> Bl.	5415	X		X	+
633.	Mô ca	<i>Buchanania reticulata</i> Hance.	5416	X			+
634.	Xoài bui	<i>Mangifera camptosperma</i> Pierre.	5421	X			+
635.	Xoài nục	<i>Mangifera cochinchinensis</i> Engl.	5420	X	X		+
636.	Xoài vàng	<i>Mangifera flava</i> Evr.	5424	X			+
637.	Xoài cọng dài	<i>Mangifera longipes</i> Griff.	5426	X			+
638.	Quéo	<i>Mangifera reba</i> Pierre.	5428	X		x	+
639.	Sơn tiên	<i>Melanorrhoea laccifera</i> Pierre.	5456	X	X		+
640.	Sơn đào	<i>Melanorrhoea usitata</i> Wall.	5455	X			+
641.	Dã sơn	<i>Rhus javanica</i> L. var. <i>roxburghii</i> (DC.) Redh. & Wils.	5483	X			+
642.	Sưng Nam bộ	<i>Semecarpus cochinchinensis</i> Engl.	5473	X	X		+
643.	Sưng hoa mảnh	<i>Semecarpus graciliflora</i> Evr. & Tard.	5474	X			+
76	Họ Trám	Burseraceae					

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
644.	Bursena	<i>Bursera tonkinensis</i> Guill.	5411	X			+
645.	Trám trắng	<i>Canarium album</i> (Lour.) Raeusch.ex. DC.	5400	X			+
646.	Trám lý	<i>Canarium lyi</i> Đại & Yakol.	5404	X			+
647.	Xuyên mộc dung	<i>Dacryodes dungii</i> Đại & Y akovf.	5397	X			+
77	HỌ KHỔ MỘC	SIMAROUBACEAE					
648.	Càng hom lá nguyên	<i>Ailanthus integrifolia</i> Lamk.	5504	X	X		+
649.	Khổ sâm nam	<i>Brucea javanica</i> (Bl.) Merr.	5498	X		X	+
650.	Bá bệnh	<i>Eurycoma longifolia</i> Jack subsp. <i>longifolia</i> .	5501	X		X	+
78	HỌ CAM QUÝT	RUTACEAE					
651.	Bí bái	<i>Acronychia pedunculata</i> (L.) Miq.	5622	X	x	X	+
652.	Tiểu quật Roxburgh	<i>Atalantia roxburghiana</i> Hook. f.	5678	X	X		+
653.	Giối Dunn	<i>Clausena dunniana</i> Lévl.&Fedde.	5657	X			+
654.	Giối lõm	<i>Clausena excavata</i> Burm. f.	5658	X	X	X	+
655.	Giối trái	<i>Clausena lenis</i> Drake.	5662	X			+
656.	Dầu đầu lá đẹp	<i>Euodia calophylla</i> Guill.	5605	X			+
657.	Dầu đầu lá mập	<i>Euodia crassifolia</i> Merr.	5606	X		x	+
658.	Dầu đầu ba lá	<i>Euodia lepta</i> (Spreng.) Merr.	5607	X	X	X	+
659.	Cơm rượu lá mập	<i>Glycosmis crassifolia</i> Ridl.	5630	X		X	+
660.	Cơm rượu trái xanh	<i>Glycosmis cyanocarpa</i> (Bl.) Spr. var. <i>cymosa</i> Kurz.	5631	X			+
661.	Cơm rượu mảnh	<i>Glycosmis gracilis</i> Tanaka ex C.B. Stone.	5632	X			+
662.	Cơm rượu lùn	<i>Glycosmis nana</i> Tan.	5634	X			+
663.	Cơm rượu hoa nhỏ	<i>Glycosmis parviflora</i> (Sims.) Little.	5636	X			+
664.	Cơm rượu	<i>Glycosmis pentaphylla</i> (Retz.) DC.	5638	X	X	X	+
665.	Trang xa láng	<i>Luvunga nitida</i> Pierre.	5667			X	
666.	Bưởi bung ít gân	<i>Macclurodendron oligophlebia</i> (Merr.) Harrtl.	5621	X			+
667.	Mắt trâu (Lá méo)	<i>Micromelum hirsutum</i> Oliv.	5648	X	X		+
668.	Mắt trâu cong	<i>Micromelum minutum</i> (Forst.f.) W.& A.	5649	X	X	X	+
669.	Nguyệt quới Koenig	<i>Murraya koenigii</i> (L.) Spreng.	5654	X			+
670.	Hoàng liệt	<i>Zanthoxylum nitidum</i>	5601		X		

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		(Lamk.) DC.					
79	Họ Xoan	meliaceae					
671.	Ngâu Trung bộ	<i>Aglaia annamensis</i> Pell.	5556	X			+
672.	Ngâu dju	<i>Aglaia edulis</i> (Roxb.) Gray.	5563	X	x	X	+
673.	Ngâu nhót	<i>Aglaia elaeagnoidea</i> (A. Juss.) Benth.	5564	X			+
674.	Ngâu Roxburgh	<i>Aglaia elaeagnoidea</i> (A. Juss.) Benth.	5580	X	x	X	+
675.	Gội giống nhãn	<i>Aglaia euphoroides</i> Pierre.	5565	X		X	+
676.	Ngâu Biên hòa	<i>Aglaia hoaensis</i> Pierre	5568	X			+
677.	Ngâu rất thơm	<i>Aglaia odoratissima</i> Bl.	5574	X			+
678.	Ngâu Poilane	<i>Aglaia poilanei</i> Pell.	5577	X			+
679.	Gội ổi	<i>Aglaia quocensis</i> Pierre.	5578		X	X	
680.	Ngâu Repơ	<i>Aglaia repoeuensis</i> Pierre.	5579	X		X	+
681.	Gội tiá	<i>Amoora gigantea</i> Pierre.	5553	X	X	X	+
682.	Bò nang	<i>Chisocheton ceramicus</i> (Miq.) C. DC.	5546	X	x	X	+
683.	Gội tôm	<i>Chisocheton cumingianus</i> (C.DC.) Harms subsp. <i>balansae</i> (C.DC.) Mabb.	5547	X	X		+
684.	Cà muối (Độc khế)	<i>Cipadessa baccifera</i> (Roth) Miq.	5518	X			+
685.	Huỳnh đàn hoa ở thân	<i>Dysoxylum cauliflorum</i> Hiern.	5535	X			+
686.	Huỳnh đàn Phú Quốc	<i>Dysoxylum cyrtophyllum</i> Miq var. <i>quocensis</i> Pierre.	5536	X		X	+
687.	Huỳnh đàn dài	<i>Dysoxylum excelsum</i> Bl.	5537	X			+
688.	Huỳnh đàn Biên hòa	<i>Dysoxylum hoaensis</i> (Pierre) Pell.	5538	X			+
689.	Huỳnh đàn hồ đào	<i>Dysoxylum juglans</i> (Hance) Pell.	5539	X		X	+
690.	Huỳnh đàn	<i>Dysoxylum loureirii</i> Pierre.	5540	X	X		+
691.	Huỳnh đàn Poilane	<i>Dysoxylum poilanei</i> Pell.	5542	X			+
692.	Huỳnh đàn báp	<i>Dysoxylum tpongense</i> Pierre.	5545	X			+
693.	Sang nước	<i>Heynia (=Hearnia) trijuga</i> (Roxb).	5586	X			+
694.	Xương mộc	<i>Toona sureni</i> (Bl.) Merr.	5509	X			+
695.	Nhãn mọi	<i>Walsura cochinchinensis</i> Harms.	5588			X	
696.	Xương cá to	<i>Xylocarpus granata</i> Koen.	5516	X		x	+
697.	Xương cá nhỏ	<i>Xylocarpus moluccensis</i> (Lamk.) Roem.	5515	X	X	X	+
41	BỘ BÒ HÒN	SAPINDALES					

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
80	HỌ NHÂN	SAPINDACEAE					
698.	Ngoại mộc phún	<i>Allophylus hirsutus</i> Radlk.	5211	X			+
699.	Ngoại mộc chân-dài	<i>Allophylus longipes</i> Radlk.	5215	X			+
700.	Ngoại mộc nơi mặn	<i>Allophylus serrulatus</i> Radlk.	5220	X		X	+
701.	Ngoại mộc có răng	<i>Allophylus serrulatus</i> Radlk.	5221	X		X	+
702.	Trường Duyên hải	<i>Arytera littoralis</i> Bl.	5251	X			+
703.	Dimocarpus	<i>Dimocarpus fumatus</i> (Bl.) Leenh. Subsp. <i>indochinensis</i> Leenh.	5237	X			+
704.	Nhân tà	<i>Dimocarpus longan</i> subsp. <i>longan</i> var. <i>obtusus</i> (Pierre.) Leenh.	5235	X		X	+
705.	Nhân Mã lai	<i>Dimocarpus longan</i> subsp. <i>malesianus</i> Leenh.	5236	X			+
706.	Chành răng	<i>Dodonea viscosa</i> Jacq.	5259	X			+
707.	Chua khẹt	<i>Glenniea philippinensis</i> (Radlk.) Leenh.	5245	X			+
708.	Gùi da cánh hoa nhiều	<i>Guioa diplopetala</i> (Hassk.) Radlk.	5248	X			+
709.	Hoạt bì	<i>Harpullia arborea</i> (Blco.) Radlk.	5261	X			+
710.	Bấp- muôi	<i>Lepisanthes fruticosa</i> (Roxb.) Leenh.	5230	X			+
711.	Nhân dê	<i>Lepisanthes rubiginosa</i> (Roxb.) Leenh.	5225	X		X	+
712.	Nây đo đở	<i>Mischocarpus paradoxus</i> Radlk.	5253	X	X		+
713.	Nây Poilane	<i>Mischocarpus poilanei</i> Gagn.	5252	X			+
714.	Nây Sunda	<i>Mischocarpus sundaicus</i> Bl.	5254			X	
715.	Chôm chôm trắng dưới	<i>Nephelium hypoleucum</i> Kurz.	5240	X	X		+
716.	Bốc (Chôm chôm mặn)	<i>Nephelium melliferum</i> Gagn.	5242	X			+
717.	Đàn bì	<i>Sisyrolepis muricata</i> (Pierre) Leenh.	5224	X			+
718.	Trường	<i>Xerospermum glabratum</i> Pierre. Non Radlk.	5243b	X			+
719.	Trường	<i>Xerospermum microcarpum</i> Pierre.	5243c	X			+
720.	Trường	<i>Xerospermum noronhianum</i> (Bl.) Bl.	5243	X			+
42	BỘ MỔ HẠC	GENIALES					
81	HỌ LIN	LINACEAE					

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
721.	Hiệp nữ núi	<i>Hugonia montana</i> Pierre.	5188			X	
722.	Vu -sa	<i>Indorouchera contestiana</i> (Pierre) Hall. f.	5190			X	
82	Họ xang	Ixonanthaceae					
723.	Cây	<i>Irvingia malayana</i> Oliv. ex Benn.	5185	X	X	X	+
724.	Dân cóc	<i>Ixonanthes reticulata</i> Jack.	5183	X		X	+
83	HỌ CỎ CA	ERYTHROXYLACEAE					
725.	Cỏ ca Cambốt	<i>Erythroxylum cambodianum</i> Pierre	5180	X		X	+
43	BỘ KÍCH NHŨ	POLYGALES					
84	HỌ KÍCH NHŨ	POLYGALACEAE					
726.	Sa môn rìa lông	<i>Salomonium ciliata</i> DC.	5378	X		X	+
85	HỌ SĂNG ỚT	XANTHOPHYLLACEAE					
727.	Săng ớt hai lá hoa	<i>Xanthophyllum bibracteatum</i> Gagn.	5381	X			+
728.	Săng ớt mốc	<i>Xanthophyllum glaucum</i> Wall (Miq.) J.J.Sm.	5387	X			+
729.	Săng ớt Poilane	<i>Xanthophyllum poilanei</i> Meyd.	5390	X			+
44	BỘ THỪ DU	CORNALES					
86	HỌ QUẢNG	ALANGIACEAE					
730.	Thối thanh	<i>Alangium kurzii</i> Craib.	4399	X	X		+
87	HỌ ĐINH LẰNG	ARALIACEAE					
731.	Chân chim bầu dục	<i>Schefflera elliptica</i> (Bl.) Harms.	5940	X		X	+
88	HỌ NGÒ	APIACEAE (UMBELLIFEREAE)					
732.	Rau má	<i>Centella asiatica</i> (L.) Urb.	5879	X		X	+
45	BỘ CHÂN DANH	CELASTRALES					
89	HỌ BÙI	AQUIFOLIACEAE					
733.	Bùi Trung bộ	<i>Ilex annamensis</i> Tard.	4593	X	X		+
734.	Bùi Nam bộ	<i>Ilex cochinchinensis</i> (Lour.) Loesen.	4598	X			+
735.	Bùi Côn sơn	<i>Ilex condorensis</i> Pierre.	4594	X	X		+
736.	Bùi tụ tán	<i>Ilex cymosa</i> Bl.	4602	X			+
737.	Bùi Wallich	<i>Ilex wallichii</i> Hook. f.	4631	X			+
90	Họ chân danh	Celastraceae					
738.	Chân danh Java	<i>Euonymus javanicus</i> Bl.	4523			X	
739.	Chân danh Tà lơn	<i>Euonymus javanicus var. talungensis</i> Pierre	4524			X	
740.	Xàng dùm	<i>Loeseneriella chesseana</i> (Pierre) Tard.	4570	X	X	X	+
741.	Sang trắng	<i>Lophopetalum duperreanum</i> Pierre.	4562	X			+
742.	Vi lờng tái	<i>Microtropis pallens</i> Pierre.	4538			X	
743.	Nơ rông	<i>Salacia noronhoides</i> Pierre.	4582	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
744.	Chóp mau Phú quốc	<i>Salacia phuquocensis</i> Tard.	4584	X	X	X	+
745.	Chóp mau mũi	<i>Salacia rostrata</i> Pierre.	4585	X			+
746.	Chóp mau	<i>Salacia typhina</i> Pierre.	4587	X		X	+
46	BỘ TÁO	RHAMNALES					
91	HỌ TÁO	RHAMNACEAE					
747.	Đồng sợi	<i>Ventilago fascigera</i> Pierre.	5727	X			+
748.	Táo rừng	<i>Zizyphus oenoplia</i> (L.) Mill.	5741	X	x	X	+
92	HỌ NHO	VITACEAE					
749.	Hồ nho nhiều chùm	<i>Ampelocissus polythyrsa</i> (Miq.) Gagn.	5869	X		X	+
750.	Vác chân	<i>Cayratia pedata</i> (Lamk.) Juss.	5850			X	
751.	Vác	<i>Cayratia trifolia</i> (L.) Domino.	5838	X		X	+
752.	Hồ đăng 6 cạnh	<i>Cissus hexangularis</i> Thor. ex Gagn.	5827			X	
753.	Tứ thư cọng mập	<i>Tetrastigma crassipes</i> Planch.	5806	X			+
754.	Tứ thư hồng	<i>Tetrastigma erubescens</i> Pl. in DC.	5785	X			+
755.	Tứ thư Gaudichaud	<i>Tetrastigma gaudichaudianum</i> Pl.	5787	X			+
756.	Tứ thư Harmand	<i>Tetrastigma harmandii</i> Pl in DC.	5809	X		X	+
757.	Tứ thư dài dài	<i>Tetrastigma longisepalum</i> Gagn.	5790	X			+
758.	Tứ thư dạng ô liu	<i>Tetrastigma oliviforme</i> Pl. in DC.	5792			X	
759.	Tứ thư xá lị	<i>Tetrastigma pyriforme</i> Gagn.	5813	X			+
760.	Nho cong queo	<i>Vitis flexuosa</i> Thunb.	5875	X			+
93	HỌ GỎI HẠC	LEEACEAE					
761.	Củ rối bằng	<i>Leea aequata</i> L.	5768	X			+
762.	Củ rối Ấn	<i>Leea indica</i> (Burm. f.) Merr.	5775a	X	X	X	+
763.	Củ rối Thorel	<i>Leea thorelii</i> Gagn.	5777	X	X	X	+
47	BỘ NHÀI	OLEALES					
94	HỌ LÀI	OLEACEAE					
764.	Lài gân	<i>Jasminum nervosum</i> Lour.	7604	X			+
765.	Lài tam kinh	<i>Jasminum trineuron</i> Kob.	7608	X	X		+
766.	Tráng phát hoa to	<i>Linociera brachythyrsa</i> Merr.	7557	X	X		+
767.	Tráng Cambốt	<i>Linociera cambodiana</i> Hance.	7555	X		X	+
768.	Tráng	<i>Linociera microstigma</i> Gagn.	7558	X			+
769.	Hồ bì	<i>Linociera ramiflora</i> Wall.	7563	X		X	+
95	Họ dương đầu	Olacaceae					

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
770.	Xun Griffith	<i>Anacolosa griffithii</i> Masters.	4424			X	
771.	Táo Phú quốc	<i>Ximenia americana</i> Willd.	4422	X		X	+
96	HỌ LÂN VÍ	OPIACEAE					
772.	Lân vĩ rừng	<i>Lepionurus silvestris</i> Bl.	4435	X			+
97	Họ Bạch đàn	Santalaceae					
773.	Thượng mộc lá bụi	<i>Dendrotrophe buxifolia</i> (Bl.) Miq.	4445	X		X	+
774.	Thượng mộc tán	<i>Dendrotrophe umbellata</i> (Bl.) Miq.	4447	X			+
775.	Cương lê Wallich	<i>Scleropyrum wallichianum</i> (W.& A.) Arn.	4438			X	
776.	Giả loa tùng	<i>Thesium psilotoides</i> Hance.	4443			X	
98	HỌ CHÙM GỬI	LORANTHACEAE					
777.	Chùm gửi trụ	<i>Helixanthera cylindrica</i> (Roxb.) Dans.	4463	X			+
778.	Chùm gửi kí sinh	<i>Helixanthera paracitica</i> Lour.	4465	X		X	+
779.	Đại cán Nam bộ	<i>Macrosolen cochinchinensis</i> (Lour.) van Tiegh.	4455	X	x	X	+
780.	Đại cán Robinson	<i>Macrosolen robinsonii</i> (Gamble) Dans.	4457	X			+
781.	Mộc vệ đen đỏ	<i>Scurrula atropurpurea</i> (Bl.) Dans.	4474	X			+
782.	Chùm gửi dẹt	<i>Viscum articulatum</i> Burm. f.	4486	X			+
48	BỘ QUẢN HOA	PROTEALES					
99	HỌ QUẢN HOA	PROTEACEAE					
783.	Quần hoa cao	<i>Helicia excelsa</i> (Roxb) Blume.	3990	X		X	+
784.	Quần hoa	<i>Helicia nilagirica</i> Bedd.	3996	X			+
49	BỘ LONG ĐỒM	GENTILIALES					
100	HỌ MÃ TIỀN	LOGANIACEAE					
785.	Trai tai	<i>Fagraea auriculata</i> Jack.	6693	X	x	X	+
786.	Trai tích lan	<i>Fagraea ceilanica</i> Thunb.	6694	X	X	X	+
787.	Trai	<i>Fagraea fragrans</i> Roxb.	6696	X	x	X	+
788.	Trai chùm	<i>Fagraea racemosa</i> Jack. in Roxb.	6697	X		X	+
789.	Củ chi (Kén)	<i>Strychnos angustiflora</i> Benth.	6672	X			+
790.	Củ chi nách	<i>Strychnos axillaris</i> Colebr.	6673	X	X		+
791.	Mã tiền Đắc lặc	<i>Strychnos daclacensis</i> Khánh.	6675	X			+
792.	Kim luân(Thuốc mọi)	<i>Strychnos minor</i> Dennst. var. <i>thorelii</i> (Hill) Tirel	6680	X			+
793.	Củ chi láng	<i>Strychnos nitida</i> G. Don.	6682	X			+

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				01	02	03	
794.	Củ chi trứng	<i>Strychnos ovata</i> Hill.	6684	X			+
795.	Củ chi nhiều hoa	<i>Strychnos polyantha</i> Pierre ex Dop.	6685	X			+
796.	Củ chi Sơn la	<i>Strychnos sonlaensis</i> Khánh.	6687	X			+
101	Họ trước đào	Apocynaceae					
797.	Dang	<i>Aganonerion polymorphum</i> Pierre ex Spire.	6883	X	X	X	+
798.	Chè long	<i>Aganosma acuminata</i> (Roxb.) G.Don.	6854	X		X	+
799.	Mớp lá to	<i>Alstonia macrophylla</i> Wall.	6758	X	X	X	+
800.	Mò cua	<i>Alstonia scholaris</i> (L.) R. Br.	6760	X	x	X	+
801.	Ngôn lá mập	<i>Alyxa crassifolia</i> Pit.	6786	X			+
802.	Ngôn hạt đậu	<i>Alyxa pisiformis</i> Pierre ex Pit.	6792			X	
803.	Tóc thẳng chùm tụ tán	<i>Anodendron paniculatum</i> A.DC.	6886	X		X	+
804.	Bù liêu Cửu long	<i>Bousingonia mekongense</i> Pierre in Pl.	6731	X		x	+
805.	Bông dừa (Dừa cạn)	<i>Cantharanthus roseus</i> (L.) G. Don.	6764	X		X	+
806.	Mướp xác hương	<i>Cerbera manghas</i> L. ex Gaertn.	6806	X	x	X	+
807.	Mướp xác vàng	<i>Cerbera odollam</i> Gaertn.	6805	X			+
808.	Quận hoa vòi lông	<i>Chonemorpha eriostylis</i> Pit.	6861	X			+
809.	Hồ liên nhỏ	<i>Holarrhena curtisii</i> King & Gamble.	6765	X			+
810.	Ba gạc Cam bột	<i>Rauwolfia cambodiana</i> Pierre ex Pit.	6774	X			+
811.	Ba gạc lá mỏng	<i>Rauwolfia membranifolia</i> Kerr.	6777	X		X	+
812.	Ba gạc đại mộc	<i>Rauwolfia reflexa</i> Teijsm. & Binn.	6773	X			+
813.	Luân thủy Cam bột	<i>Spirolobium cambodianum</i> H. Baill.	6768	X		X	+
814.	Thuốc bắn đuôi	<i>Strophanthus caudatus</i> (Burm.f.) Kurz.	6826	X	x	X	+
815.	Sừng dê	<i>Strophanthus divaricatus</i> (Lour.) Hook. & Arn.	6828			X	
816.	Lài trâu	<i>Tabernaemontana buffalina</i> Lour.	6810	X		x	+
817.	Lài trâu núi Lu(ớt rừng)	<i>Tabernaemontana luensis</i> Pierre ex Pit.	6814	X	X	X	+
818.	Mặc sang hoa nhỏ	<i>Urceola micrantha</i> (G.Don) Middl.	6878			X	
819.	Mộc tỉnh	<i>Urceola minutiflora</i> (Pierre) Middl.	6879	X			+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
820.	Guồ	<i>Willughbeia edulis</i> Roxb.	6728	X		X	+
102	HỌ THIÊN LÝ	ASCLEPIADACEAE					
821.	Bồng bông to	<i>Calotropis gigantea</i> (L.) Dryand. ex Ait. f.	6943	X	x	X	+
822.	Ấn phi Ớn Ớp	<i>Cryptostegia elegans</i> Vahl.	6906	X			+
823.	Song ly l«ng phón	<i>Dischidia hirsuta</i> (Bl.) Dcne.	7014	X	X	X	+
824.	Song ly to	<i>Dischidia major</i> (Vahl) Merr.	7015	X	x	X	+
825.	Song ly tiền	<i>Dischidia nummularia</i> R. Br.	7016	X	X	X	+
826.	Hồ da cầu	<i>Hoya globulosa</i> Hook. f.	6995	X			+
827.	Hồ da Wallich	<i>Hoya wallichii</i> Wight.	7009	X	X	X	+
828.	Bạc căn Horsfield.	<i>Streptocaulon horsfieldii</i> Miq.	6915	X		x	+
829.	Bạc căn Klein	<i>Streptocaulon kleinii</i> W. & Arn.	6916	X			+
830.	Đầu đài ấn	<i>Tylophora indica</i> (Burm. f.) Merr.	6975	X		X	+
831.	Đầu đài Kôi	<i>Tylophora koi</i> Merr.	6976	X			+
832.	Đầu đài mảnh	<i>Tylophora tenuis</i> Bl.	6970	X	x	X	+
103	HỌ CÀ PHỄ	RUBIACEAE					
833.	Găng Nam bộ	<i>Aidia cochinchinensis</i> Lour.	8320	X			+
834.	Găng Henry	<i>Aidia henryi</i> (Pritz.) yamazaki.	8326	X			+
835.	Găng răng nhọn	<i>Aidia oxyodonta</i> (Drake) yamazaki.	8321	X			+
836.	Găng	<i>Aidia pycnantha</i> (Drake) Tirv.	8323	X			+
837.	Ai lợi	<i>Alleizettella rubra</i> Pit.	8374	X			+
838.	Căng hai hột	<i>Canthium dicoccum</i> (Gaertn.) Tinn. & Binn.	8386	X		X	+
839.	Xương cá	<i>Canthium dicoccum</i> Gaerth. Var. <i>rostratum</i> Thw. Ex Pit.	8387	X	X		+
840.	Căng không lông	<i>Canthium glabrum</i> Bl.	8389	X	X	X	+
841.	Khai	<i>Coptosapelta tomentosa</i> (Bl.) Vahl ex Heyne var. <i>dongnaiense</i> (Pit.) Phamhoang.	8243	X	x	X	+
842.	Song tử dị điệp	<i>Diplospora singularis</i> Korth.	8372	X			+
843.	Dành dành Thái lan	<i>Gardenia sootepensis</i> Hutch.	8355	X			+
844.	Dành dành ống	<i>Gardenia tubifera</i> Wall.	8358	X	X	X	+
845.	Trùng sơn (Cho)	<i>Greenia corymbosa</i> (Jack) Schum.	8224	X			+
846.	Lâm bông	<i>Guettarda speciosa</i> L.	8394	X	X	X	+
847.	An điền hai hoa	<i>Hedyotis biflora</i> (L.) Lam.	8127	X		X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
848.	An điền lẩn	<i>Hedyotis lineata</i> Roxb.	8135	X	X	X	+
849.	An điền đầu nhỏ	<i>Hedyotis microcephala</i> Pierre ex Pit.	8177	X		X	+
850.	An điền nhiều chụm	<i>Hedyotis multiglomerulata</i> (Pit.) Phamhoang.	8179	X			+
851.	An điền Philippin	<i>Hedyotis philippinensis</i> (Spr.) Merr. Ex C. B. Rob.	8172			X	
852.	An điền lá thông	<i>Hedyotis pinifolia</i> Wall. Ex G. Don.	8173		X	X	
853.	An điền Phú quốc	<i>Hedyotis quocensis</i> Pierre ex Pit.	8175	X	x	X	+
854.	An điền chùm	<i>Hedyotis racemosa</i> Lam.	8138	X		X	+
855.	Kỳ nam kiến	<i>Hydnophytum formicarum</i> Jack.	8548	X	x	X	+
856.	Sứa	<i>Hypobathrum racemosum</i> (Roxb.) Kurz.	8368			X	
857.	Trang Balansa	<i>Ixora balansae</i> Pit.	8416	X			+
858.	Trang mang đầu	<i>Ixora cephalophora</i> Merr.	8418	X			+
859.	Trang sơn	<i>Ixora coccinea</i> L.	8409	X	x	X	+
860.	Trang Delpy	<i>Ixora delpyana</i> Pierre ex Pit.	8421	X			+
861.	Trang dũi	<i>Ixora flexilis</i> Pierre.	8426	X			+
862.	Trang lớn lá	<i>Ixora grandifolia</i> Zoll. & Mor.	8427	X		X	+
863.	Trang thanh	<i>Ixora krewanhensis</i> Pierre ex Pit. Var . <i>polita</i> Pierre ex Pit.	8430	X			+
864.	Trang trở đen	<i>Ixora nigricans</i> R.Br. & W. & Arn.	8432	X	X	X	+
865.	Trang Pierre	<i>Ixora pierreii</i> Merr.	8434	X			+
866.	Xú hương Côn sơn	<i>Lasianthus condorensis</i> Pierre ex Pit.	8514	X			+
867.	Xú hương ten-đồng	<i>Lasianthus cupreus</i> Pierre	8515	X		X	+
868.	Xú hương trái lam	<i>Lasianthus cyanocarpus</i> Jack var. <i>asperulatus</i> Pierre ex Pit.	8516	X		X	+
869.	Xú hương Biên Hoà	<i>Lasianthus hoaensis</i> Pierre.	8524	X			+
870.	Xú hương Lecomte	<i>Lasianthus lecomtei</i> Pit.	8529	X			+
871.	Xú hương có-cọng	<i>Lasianthus rhinocerotis</i> Bl. var. <i>pedunculata</i> Pit.	8533	X			+
872.	Xú hương luân sinh	<i>Lasianthus verticillatus</i> (Lour.) Merr.	8537	X			+
873.	Vàng vé	<i>Metadina trichotoma</i> (Zoll. & Mor.) Bakh. f.	8273	X		X	+
874.	Nhàu	<i>Morinda citrifolia</i> L. var.	8559	X	X	X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		<i>bracteata</i> Hook. f.					
875.	Bướm bạc Cam bột	<i>Mussaenda cambodiana</i> Pierre.	8277	X	x	X	+
876.	Bướm bạc vui	<i>Mussaenda hilaris</i> Pierre ex Pit.	8288	X		X	+
877.	Khuẩn quả lá dài	<i>Mycetia longifolia</i> (Wall.) O.Ktze.	8312	X			+
878.	Gáo vàng (Cốc độ)	<i>Nauclea orientalis</i> (L.) L.	8266	X			+
879.	Gáo trắng (Cà tôm)	<i>Neolamarckia cadamba</i> (Roxb.) Bosser.	8268	X	x	X	+
880.	Gáo đỏ (Vàng kiền)	<i>Neonauclea purpurea</i> (Roxb.) Merr.	8264	X			+
881.	Gáo không cuống	<i>Neonauclea sessilifolia</i> Hook.f.) Merr.	8265	X			+
882.	Găng hai gai	<i>Oxyceros bispinosus</i> (Griff.) Tirv.	8344	X			+
883.	Găng gai cong	<i>Oxyceros horridus</i> Lour.	8343	X	x	X	+
884.	Dọt sành đen	<i>Pavetta indica</i> L.	8455	X		X	+
885.	Dọt sành gân	<i>Pavetta nervosa</i> Craib.	8464	X			+
886.	Dọt sành Bắc bộ	<i>Pavetta tonkinensis</i> Brem.	8469	X			+
887.	Lấu tuyến	<i>Psychotria adenophylla</i> Wall.	8476	X	x	X	+
888.	Lấu Ba vì	<i>Psychotria baviensis</i> (Drake) Pit.	8487	X			+
889.	Lấu bon	<i>Psychotria bonii</i> Pit.	8477	X			+
890.	Lấu mang đầu	<i>Psychotria cephalophora</i> Merr.	8479	X			+
891.	Lấu hoa cong	<i>Psychotria curviflora</i> Wall.	8501			X	
892.	Lấu bầu dục	<i>Psychotria elliptica</i> Ker.-Gawl.	8480	X			+
893.	Lấu Fleury	<i>Psychotria fleuryi</i> Pit.	8481	X			+
894.	Lấu núi	<i>Psychotria montana</i> Bl.	8483	X	X		+
895.	Lấu nhàu	<i>Psychotria morindoides</i> Hutch.	8484	X			+
896.	Psychotria	<i>Psychotria ovoidea</i> (Pierre ex Pit.) Phamhoang.	8502	X			+
897.	Dé (Lấu leo)	<i>Psychotria sarmentosa</i> Bl.	8473	X			+
898.	Gén	<i>Psychotria sarmentosa</i> var. <i>membranacea</i> (Pit.) Phamhoang.	8474	X		X	+
899.	Lấu bò	<i>Psychotria serpens</i> L.	8475	X	x	X	+
900.	Lấu rừng	<i>Psychotria silvestris</i> Pit.	8493	X			+
901.	Găng cambốt	<i>Randia cambodiana</i> Pit.	8324	X			+
902.	Găng nhung	<i>Randia dasycarpa</i> (Kurz) Bakh. f.	8328	X	X		+
903.	Găng lông	<i>Randia fasciculata</i> var. <i>velutina</i> Pierre.	8333	X		X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
904.	Găng nước (Tô)	<i>Randia uliginosa</i> (Retz) DC.	8327	X			+
905.	Găng Wallich	<i>Randia wallichii</i> Hook. F.	8334	X			+
906.	Găng Việt nam	<i>Rothmannia vietnamensis</i> Tirv.	8342	X			+
907.	Côi	<i>Scyphiphora hydrophyllacea</i> Gaertn. f.	8375	X		X	+
908.	Trên á châu	<i>Tarenna asiatica</i> (L.) O.Ktze.	8438	X			+
909.	Trên thon	<i>Tarenna attenuata</i> (Hook. f.) Hutch.	8439	X			+
910.	Trên Ba vì	<i>Tarenna baviensis</i> Pit.	8440	X			+
911.	Trên Chevalier	<i>Tarenna chevalieri</i> Pit.	8443	X			+
912.	Trên Collins	<i>Tarenna collinsae</i> Craib.	8445	X			+
913.	Trên Biên hoà	<i>Tarenna hoaensis</i> Pierre ex Pit.	8447	X		X	+
914.	Trên Phú quốc	<i>Tarenna quocense</i> Pierre ex Pit.	8451	X		X	+
915.	Vuốt len	<i>Uncaria lanosa</i> Wall. F. ferrea (Bl.) Ridsd.	8254	X		X	+
916.	Vuốt leo (Móc ó)	<i>Uncaria scandens</i> (Smith) Hutch.	8257	X	X	X	+
917.	Huân lang đẹp	<i>Wendlandia formosa</i> Cowan.	8227	X			+
918.	Xuân thôn Phú quốc	<i>Xantonnea quocensis</i> Pierre ex Pit.	8370			X	
50	BỘ HOA BÉ	POLEMONIALES					
104	HỌ BÌM BÌM	CONVOLVULACEAE					
919.	Bìm chuông	<i>Ipomoea campanulata</i> Prain.	7178			X	
920.	Bìm mảnh	<i>Ipomoea gracilis</i> R. Br.	7158	X		X	+
921.	Bìm chân dê	<i>Ipomoea pes-caprae</i> (L.) subsp. <i>brasiliense</i> (L.) Ooststr. (<i>Convolvulus pes-caprae</i> L.)	7166	X	x	X	+
922.	Cà giang	<i>Neuropeltis racemosa</i> Wall. in Roxb.	7099		X	X	
923.	Bìm ba răng	<i>Xenostegia tridentata</i> (L.) Austin & Staples.	7145	X		X	+
105	HỌ TỜ HỒNG	CUSCUTACEAE					
924.	Tờ hồng Nam	<i>Cuscuta australis</i> R.Br.	7209	X		x	+
106	HỌ VỎI VOI	BORAGINACEAE					
925.	Tâm mộc Nam bộ	<i>Cordia cochinchinensis</i> Gagn.	7223	X			+
926.	Tâm mộc tim	<i>Cordia subcordata</i> Poir.	7230	X		X	+
927.	Vôi voi	<i>Heliotropium indicum</i> L.	7254	X	x	X	+
928.	Tích lan	<i>Trichodesma zeylanicum</i> (Burm.f.) R. Br.	7250	X			+
51	BỘ HOA MỒM CHÓ	SCROPHULARIALES					
107	HỌ CÀ	SOLANACEAE					

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
929.	Cà dược	<i>Datura metel</i> L.	7080	X	x	X	+
930.	Thù lù cạnh	<i>Physalis angulata</i> L.	7062	X	X	X	+
931.	Cà án	<i>Solanum violaceum</i> Ortega.	7052		x	X	
108	HỌ HOA MỖM CHÓ	SCROPHULARIACEAE					
932.	Hương dạ thảo	<i>Angelonia goyazensis</i> Benth.	7717			X	
933.	Vùng đất	<i>Artanema longifolia</i> (L.) Benth.	7665	X			+
934.	Cam thảo đất	<i>Scoparia dulcis</i> L.					+
109	Họ quao (đinh)	BIGNONIACEAE					
935.	Quao nước	<i>Dolichandrone spathacea</i> (L.f.) K. Schum.	8065	X		X	+
936.	Đinh thoi	<i>Fernandoa brilletii</i> (Dop.) Steen.	8060	X			+
937.	Thiết đỉnh lá bẹ	<i>Markhamia stipulata</i> var. <i>pierrei</i> (Dop.) Sant.	8069	X			+
938.	Núc nác	<i>Oroxylon indicum</i> (L.) Vent.	8045	X		X	+
110	HỌ THƯỢNG TIỀN	GESNERACEAE					+
939.	Song bẻ Nam bộ	<i>Paraboea cochinchinensis</i> (C.B. Cl.) Burt.	7799	X	x	X	+
111	HỌ NHĨ CÁN	UTRICULARIACEAE					
940.	Nhĩ cán lông	<i>Utricularia hirta</i> Klein ex Link.	8078	X		x	+
941.	Nhĩ cán rất nhỏ	<i>Utricularia minutissima</i> Vahl.	8079	X	X	X	+
942.	Nhĩ cán tím	<i>Utricularia punctata</i> Wall.	8071	X		X	+
943.	Nhĩ cán phao	<i>Utricularia stellaris</i> L.f.	8072			X	
112	HỌ Ô RÔ	ACANTHACEAE					
944.	Ô rô	<i>Acanthus ebracteatus</i> Vahl.	7934	X	X	X	+
945.	Ô rô to	<i>Acanthus ilicifolius</i> L.	7935	X			+
946.	Xuyên tâm liên	<i>Andrographis paniculata</i> Nees in Wall.	7939	X		X	+
947.	Kiến cò	<i>Rhinacanthus nasutus</i> (L.) Kurz.	7963	X		X	+
948.	Giáo tràn	<i>Rostellularia diffusa</i> Willd.	8026			X	
949.	Nhụy Malacca thập	<i>Staurogyne malaccensis</i> C.B. Clarke.	7831			X	
950.	Chùy Maingay hoa	<i>Strobilanthes maingayi</i> C.B. Clarke.	7886	X	X	X	+
951.	Cát đặng thơm	<i>Thunbergia fragrans</i> Roxb.	7846	X	x	X	+
52	BỘ HOA MÔI	LAMIALES					
113	HỌ NGŨ TRẢO	VERBENACEAE					
952.	Mầm trắng	<i>Avicennia alba</i> Bl.	7406	X	x	X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
953.	Mắm	<i>Avicennia officinalis</i> L.	7405	X			+
954.	Tử châu Girard	<i>Callicarpa girardiana</i> Hesse var. <i>subcanescens</i> Rehd.	7284	X			+
955.	Tử châu Nhật bản	<i>Callicarpa japonica</i> Thunb.	7286	X			+
956.	Tử châu lá dài	<i>Callicarpa longifolia</i> Lam.	7288	X			+
957.	Tử châu Poilane	<i>Callicarpa poilanei</i> Dop.	7295	X	X	X	+
958.	Bạch đồng nữ (Ngọc nữ thơm)	<i>Clerodendrum chinense</i> (Osb.) Mabb. Multiplex (Sw.) Mold.	7353	X	X		+
959.	Ngọc nữ nam bộ	<i>Clerodendrum cochinchinensis</i> P. Dop.	7358	X	X	X	+
960.	Ngọc nữ lá chân vịt	<i>Clerodendrum palmatilobatum</i> P. Dop.	7376	X			+
961.	Ngọc nữ Pierre	<i>Clerodendrum pierreanum</i> P. Dop in Lec.	7382	X			+
962.	Ngọc nữ Schmidt	<i>Clerodendrum schmidtii</i> C.B. Cl.	7383	X	X		+
963.	Ngọc nữ leo	<i>Clerodendrum siamensis</i> Craib.	7390	X		X	+
964.	Ngọc nữ Colebrook	<i>Clerodendrum colebrookianum</i> Walp.	7359	X			+
965.	Chỉ thiên	<i>Clerodendrum indicum</i> (L.) O. Ktze.	7367	X		X	+
966.	Ngọc nữ biển	<i>Clerodendrum inerme</i> (L.) Gaertn.	7368	X		x	+
967.	Tu hú	<i>Gmelina asiatica</i> L.	7339	X		X	+
968.	Mạng tháp Nha trang	<i>Hymenopyramis</i> Sp.	7393	X			+
969.	Thơm ổi	<i>Lantana camara</i> L.	7265	X	X	X	+
970.	Cách	<i>Premna cumingiana</i> Shau. var. <i>pierreana</i> (Dop) phamhoang	7306	X			+
971.	Vọng cách	<i>Premna serratifolia</i> L.	7302	X	X	X	+
972.	Bội tinh sét	<i>Sphenodesma ferruginea</i> Briq.	7396	X			+
973.	Bội tinh ngũ hùng	<i>Sphenodesma pentandra</i> Jack.	7400	X	X	X	+
974.	Hải tiên	<i>Stachytarpheta jamaicensis</i> (L.) Vahl.	7267	X	x	X	+
975.	Cam thảo	<i>Teijsmanniodendron sarawakanum</i> (Pears.) Kost.	7350			X	
976.	Mạ	<i>Vitex glabrata</i> R. Br.	7320	X			+
977.	Bình linh cọng mảnh	<i>Vitex leptobotrys</i> Hallier.	7322	X			+
978.	Bình linh đá	<i>Vitex pierreana</i> P. Dop.	7329	X			+
979.	Bình linh lông	<i>Vitex pinnata</i> L.	7330	X	X	X	+
980.	Mạ kinh	<i>Vitex quinata</i> (Lour.)	7332	X	X		+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
		Williams.					
981.	Bình linh xoan (Từ bi biển)	<i>Vitex rotundifolia</i> L.	7333	X		X	+
982.	Bình linh lục lạc	<i>Vitex sumatrana</i> var. <i>urceolatas</i> King & Gamble	7334	X			+
983.	Quan âm	<i>Vitex trifolia</i> L. var. <i>trifolia</i>	7336	X			+
984.	Từ bi 3 lá	<i>Vitex trifolia</i> var <i>subtrisecta</i> (O.Ktze) Mold.	7337	X			+
114	HỌ HÚNG	LAMIACEAE = LABIATAE					
985.	Hồng vĩ hẹp	<i>Euthralis peguana</i> (Prain) Mur.	7460			X	
986.	Ế lớn đầu	<i>Hyptis rhomboidea</i> Mart. & Gal.	7442	X	X	X	+
987.	Bạch thiệt nhám	<i>Leucas aspera</i> (Willd.) Link.	7502	X		X	+
988.	Bạch thiệt tích lan	<i>Leucas zeylanica</i> (L.) R. Br.	7506	X			+
53	BỘ HOA CHUÔNG	CAMPANULALES					
115	HỌ HÉP	GOODENIACEAE					
989.	Gù đề	<i>Goodenia koningsbergii</i> (Back.) Back. Ex Bold.	8116			X	
990.	Hép Hải nam	<i>Scaevola hainanense</i> Hance.	8115	X			+
991.	Hép	<i>Scaevola taccada</i> (Gaertn.) Roxb.	8114	X			+
54	BỘ CÚC	ASTERALES					
116	HỌ CÚC	ASTERACEAE: COMPOSITAE					
992.	Quả đầu rìa	<i>Athroisma laciniatum</i> DC.	8760			X	
993.	Phượng phụng	<i>Bidens leucorhiza</i> DC.	8824			X	
994.	Tâm nhầy	<i>Centratherum</i> <i>intermedium</i> Less.	8631	X			+
995.	Cynotis	<i>Cynotis cappa</i> (D.Don)C.Jeffrey &Y.L.Chen.	8868	X			+
996.	Chân voi mềm	<i>Elephantopus mollis</i> HBK.	8661	X		X	+
997.	Yên bạch	<i>Eupatorium odoratum</i> L.	8668	X	X	X	+
998.	Thiệt thư Côn sơn	<i>Glossogyne condorensis</i> Gagn.	8819	X		X	+
999.	Lúc ắn	<i>Pluchea indica</i> (L.) Lees.	8756	X			
1000	Cúc mai	<i>Tridax procumbens</i> L.	8833			X	
1001	Bạch đầu nhỏ	<i>Vernonia patula</i> (Dryand.) Merr.	8648	X		X	+
1002	Sơn cúc hai hoa	<i>Wendelia biflora</i> (L.) DC.	8798	X		x	+
55	BỘ HÀNH	LILIALES					

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
117	HỌ A GAO	AGAVACEAE					
1003	Huyết giác	<i>Dracaena cochinchinensis</i> (Lour.) S.C. Chen					+
1004	Phất dụ mảnh	<i>Dracaena gracilis</i> Vall.	10726	X		X	+
118	HỌ XA THẢO	HEMODORACEAE					
1005	Bì xà	<i>Ophiopogon peliosanthoides</i> W. & Arn.	9584	X			+
1006	Peliosanthes	<i>Peliosanthes teta</i> subsp. <i>humilis</i> (Andr.) Jess.	9591	X	X	X	+
119	họ Bạch huệ	Liliaceae					
1007	Xương quật (Lâm nữ)	<i>Dianella nemorosa</i> Lam. ex Schiller f.	9606	X	X	X	+
120	họ Kim cang	smilacaeae					
1008	Dị kim Borneo	<i>Heterosmilax borneensis</i> A.C. DC.	9677	X		X	+
1009	Dị kim đa hùng	<i>Heterosmilax polyandra</i> Gagn.	9680	X			+
1010	Kim cang lá hoa	<i>Smilax bracteata</i> Presl.	9661	X		X	+
1011	Kim cang Cambốt	<i>Smilax cambodiana</i> Gagn.	9667	X	X		+
1012	Kim cang thúng nhỏ	<i>Smilax corbularia</i> Kunth. subsp. <i>corbularia</i> .	9656	X			+
1013	Kim cang liên hùng	<i>Smilax corbularia</i> subsp. <i>synandra</i> (Gagn.) Koy.	9657	X			+
121	HỌ KHOAI NGỌT	DIOSCOREACEAE					
1014	Từ ngược mùa	<i>Dioscorea intempestiva</i> Prain & Burk.	10765	X			+
1015	Khoai mọi	<i>Dioscorea kratika</i> Prain & Burk.	10759	X		X	+
1016	Từ Pierre	<i>Dioscorea pierrei</i> Prain & Burk.	10793	X			+
1017	Từ lá xá lị	<i>Dioscorea pyrifolia</i> Kunth.	10772	X	X	X	+
1018	Từ Scortechi	<i>Dioscorea scortechini</i> Prain & Burk.	10796	X			+
1019	Từ nhám	<i>Dioscorea triphylla</i> L. var. <i>reticalata</i> Prain & Burk.	10797	X	X	X	+
122	Họ bạch tinh	Taccaceae					
1020	Bạch tinh	<i>Tacca leontopetaloides</i> (L.) O. Ktze.					+
1021	Nửa chân vịt	<i>Tacca palmata</i> Bl.	10745	X	X	X	+
123	HỌ LỤC BÌNH	PONTEDERIACEAE					
1022	Rau mác cao	<i>Monochoria elata</i> Ridl.	9572			X	
1023	Rau mác bầu	<i>Monochoria ovata</i> Kunth.	9574	X			+
56	BỘ LÁ ĐƠN	IRIDALES					
124	HỌ CÀO CÀO	BURMANNIACEAE					
1024	Cào cào lam	<i>Burmannia coelestis</i> D. Don.	10800	X		X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
1025	Cào cào vàng-trắng	<i>Burmanna luteo-alba</i> Gagn.	10805			X	
1026	Cào cào Nepal	<i>Burmanna nepalensis</i> Hook. f.	10806			X	
57	BỘ GỪNG	ZINGIBERALES					
125	HỘ GỪNG	ZINGIBERACEAE					
1027	Riềng rừng	<i>Alpinia conchigera</i> Griff.	9459	X	x	x	+
1028	Sa nhân trứng	<i>Amomum ovoideum</i> Pierre ex Gagn.	9440	X	X	X	+
1029	Riềng đẹp	<i>Catimbium speciosum</i> (Wendl.) Holtt.	9476		x	X	
1030	Riềng núi	<i>Cenolophon oxymitrum</i> (K.Schum.) Holtt.	9470	X		X	+
1031	Chóc	<i>Costus speciosus</i> (Koenig) Smith.	9433	X	x	X	+
58	BỘ LAN	ORCHIDALES					
126	HỘ LAN	ORCHIDACEAE					
1032	A cam sét	<i>Acampe ochracea</i> (Lindl.) Hochr.	11456	X		X	+
1033	Tổ yến Java	<i>Acriopsis javanica</i> Reinw. ex Bl.	11439	X	X		+
1034	Xích hủ thân đẹp	<i>Agrostophyllum planicaule</i> (Lindl.) Reichb. f.	10948	X	X	X	+
1035	Cổ lan trần	<i>Apostasia nuda</i> R. Br.in Wall.	10809	X		X	+
1036	Vệ lan lục hùng	<i>Appendicula hexandra</i> (Koen.) J.J. Sm.	10954	X		X	+
1037	Cầu diệp thanh	<i>Bulbophyllum lepidum</i> (Bl.) J.J. Smith.	11155	X		X	+
1038	Cầu diệp sói	<i>Bulbophyllum rufinum</i> Reichb. f.	11151	X			+
1039	Mật khẩu sọc	<i>Cleisostoma striatum</i> (Reichb. f.) Garay	11494	X			+
1040	Thanh đạm ba gân	<i>Coelogyne trinervis</i> Lindl.	11293		X	X	
1041	Ăn mao	<i>Cryptopylos clausus</i> (J. J. Sm.) Garay.	11473			X	
1042	Đoạn kiếm lô hội	<i>Cymbidium aloifolium</i> (L.) Sw.	11404	X	X		+
1043	Đoạn kiếm Finlayson	<i>Cymbidium finlaysonianum</i> Lindl.	11412	X			+
1044	Hoàng lan hoại sinh	<i>Cymbidium macrorhizon</i> Lindl.	11422			X	
1045	Thạch hộc (Tuyết mai)	<i>Dendrobium crumenatum</i> Sw.	11084	X	X	X	+
1046	Acinaciforme	<i>Dendrobium acinaciforme</i> Roxb.	11092		X	X	
1047	Móng rồng	<i>Dendrobium aloifolium</i> (Bl.) Reichb. .	11093	X		X	+
1048		<i>Dendrobium coccinum</i> Miq.	11103	X	X	X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
1049		<i>Dendrobium excavatum</i> (Bl.) Miq.	11104			X	
1050	Luồn	<i>Dendrobium intricatum</i> Gagn.	11073	X		X	+
1051	Cánh sét	<i>Dendrobium ochraceum</i> De Wild.	11060	X			+
1052	Lan- trăm	<i>Dendrobium terminale</i> Parish. & Reichb. F.	11097	X	X		+
1053		<i>Dendrobium truncatum</i> Lindl.	11090	X			+
1054	Nữ lan hôi	<i>Eria foetida</i> Aver.	10995	X			+
1055	Nữ lan hoa nhỏ	<i>Eria tenuiflora</i> Ridl.	11003	X	X	X	+
1056	Tuyết nhung	<i>Eria tomentosa</i> (Koenig) Hook.	10978	X	X		+
1057	Xích lan	<i>Erythrorchis ochobiensis</i> (Hay.) Garay.	10930	X		X	+
1058	Luân lan lộng lẫy	<i>Eulophia spectabilis</i> (Dennst.) Suresh.	11400			X	
1059	Flickengeria	<i>Flickengeria albopurpurea</i> Seidenf.	11110	X			+
1060	Túi thơ gót	<i>Gastrochilus calceolaris</i> (J.E. Sm.) D. Don.	11441	X	X		+
1061	Túi-thơ trung gian	<i>Gastrochilus intermedius</i> (Lindl.) O. Ktze.	11443	X			+
1062	Túi thơ song đỉnh	<i>Gastrochilus pseudodistichus</i> (King & Pantl.) Schltr.	11446	X			+
1063	Hà biện lưỡi đỏ	<i>Habenaria rhodocheila</i> Hance.	10871	X		X	+
1064	Hà biện Rumph	<i>Habenaria rumphii</i> (Brongn.) Lindl.	10874	X	X	X	+
1065	Nhãn diệp rất nhọn	<i>Liparis acutissima</i> Reichb. f.	11365	X			+
1066	Ai lan lá rộng	<i>Malaxis latifolia</i> J.E. Sm.	11343	X			+
1067	Microsaccus	<i>Microsaccus griffithii</i> (Par. & Reichb. f.) Seidenf.	11465	X	X	X	+
1068	Tục đoạn Leveillé	<i>Pholidota leveilleana</i> Schltr.	11305	X			+
1069	Tục thiệt trung gian	<i>Podochilus intermedius</i> Aver.	10950	X			+
1070	Tục thiệt lá nhỏ	<i>Podochilus microphyllus</i> Lindl.	10951	X	X	X	+
1071	Pomatocalpa	<i>Pomatocalpa spicata</i> Breda	11471	X			+
1072	Dực giác tròn	<i>Pteroceras teres</i> (Bl.) Holtt.	11563			X	
1073	Lan Phú quốc	<i>Robiquetia spathulata</i> (Bl.) J. J. Smith.	11468	X		X	+
1074	Mao từ rít	<i>Thrixspermum centipeda</i> Lour.	11533	X			+
1075	Mao thiệt tà	<i>Trichoglottis retusa</i> Bl.	11514	X	X		+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
1076	Mao lan gối	<i>Trichostia pulvinata</i> (Lindl.) Kraenzl.	10959	X	X	X	+
1077	Mao lan lông	<i>Trichostia velutina</i> (Lindl.) Kraenzl.	10960	X		X	+
59	BỘ CỎI	CYPERALES					
127	HỘ LÁC	CYPERACEAE					
1078	Chát (Bòm râu)	<i>Bulbostylis barbata</i> (Rottb.) C.B. Cl.	9761	X	X		+
1079	Bòm lông	<i>Bulbostylis puberula</i> (Poir.) C.B. Cl.	9764			X	
1080	Chô	<i>Cladium maingayi</i> C.B. Cl.	9857	X			+
1081	Cú củ	<i>Cyperus bulbosus</i> Vahl.	9880	X	X	X	+
1082	Cú rơm	<i>Cyperus castaneus</i> Willd.	9914	X	X	x	+
1083	Cú dẹp	<i>Cyperus compressus</i> L.	9891			X	
1084	Lác tràn gié lớn	<i>Cyperus diffusus</i> Vahl. Var. <i>macrostachyus</i> Boeck.	9896	X		X	+
1085	U du đầu đỏ	<i>Cyperus haematocephalus</i> Boeck.	9905		X	X	
1086	Lác lông	<i>Cyperus pilosus</i> Vahl.	9874	X	X		+
1087	Cú nhỏ	<i>Cyperus pumilus</i> L.	9933	X		X	+
1088	Cú xạ	<i>Cyperus radians</i> Nees & Mey. Ex Nees.	9899	X			+
1089	U du phù	<i>Cyperus sphacelatus</i> Rottb.	9881	X		X	+
1090	Cú biển	<i>Cyperus stoloniferus</i> Vahl.	9878	X	X	x	+
1091	Lác ba cánh	<i>Cyperus trialatus</i> (Boeck) Kern.	9898	X		X	+
1092	Năng ngọt	<i>Eleocharis dulcis</i> (Burm.f.) Hensch.	9752	X		X	+
1093	Năng xoắn	<i>Eleocharis spiralis</i> (Rottb.) R. & S.	9755	X	X	X	+
1094	Mao thư tụ tán	<i>Fimbristylis cymosa</i> R.Br.	9772	X	x	X	+
1095	Mao thư có dấu	<i>Fimbristylis insignis</i> Thw.	9770			X	
1096	Cỏ lông bò	<i>Fimbristylis pauciflora</i> R. Br.	9786	X		X	+
1097	Cỏ đấng tán	<i>Fuirena umbrellata</i> Roth.	9744	X		X	+
1098	Hạ sĩ Ohwi	<i>Hypolytrum ohwianum</i> Koy.	9957	X		x	+
1099	Bàng	<i>Lepironia articulata</i> (Retz.) Domin.	9974	X		X	+
1100	Nhãn diệp đầu nhỏ	<i>Lipocarpa microcephala</i> (R.Br.) Kunth.	9976			X	
1101	Lác dứa Kurz	<i>Mapania kurzii</i> C.B. Cl.	9967	X	X	X	+
1102	Chùy tử Wight	<i>Rhynchospora wightiana</i> Kunth.	9841	X		x	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
1103	Scirpodendron	<i>Scirpodendron ghaeri</i> (Gaertn.) Merr.	9961	X	X	X	+
1104	Cương chụm	<i>Scleria caricina</i> (R. Br.) Benth.	9977		X	x	
1105	Cương láng	<i>Scleria levis</i> Retzius.	9986	X	X	X	+
1106	Cương trái đá	<i>Scleria lithosperma</i> (L.) Sw.	9987			X	
1107	Cương rộng (Cỏ mây)	<i>Scleria oblata</i> S.T.Bl.	9990			X	
1108	Cương tía	<i>Scleria purpurascens</i> Steud.	9994	X	X	x	+
1109	Tam kinh	<i>Tricostularia undulata</i> (Thw.) Kern.	9852	X			+
60	BỘ RAU TRAI	COMMELINALES					
128	HỌ RAU TRAI	COMMELINACEAE					
1110	Bê trai lông	<i>Belosynapsis ciliata</i> (Bl.) Rao.	9243			X	
1111	Bích trai lông	<i>Cyanotis ciliata</i> (Bl.) Bakh. f.	9252	X	X		+
1112	Loã trai dao	<i>Murdannia vaginata</i> (L.) Bruckner	9231			X	
129	HỌ HOÀNG ĐẦU	XYRIDACEAE					
1113	Hoàng đầu dẹp	<i>Xyris complanata</i> R. Br.	9190	X			+
1114	Hoàng đầu ấn	<i>Xyris indica</i> L.	9191	X	X	X	+
1115	Hoàng đầu ít hoa	<i>Xyris pauciflora</i> Willd.	9196		x	X	
1116	Hoàng đầu củ	<i>Xyris tuberosa</i> Ridl.	9198	X			+
61	BỘ CỎ DÙI TRỎNG	ERIOCAULALES					
130	HỌ DÙI TRỎNG	ERIOCAULACEAE					
1117	Dùi trống nhiễm	<i>Eriocaulon echinulatum</i> Mart. In Wall.	9274	X	X	x	+
1118	Dùi trống sáu cạnh	<i>Eriocaulon sexangulare</i> L.	9290			X	
62	BỘ CHANH LƯƠNG	RESTIONALES					
131	HỌ CHANH LƯƠNG	RESTIONACEAE					
1119	Cỏ chanh hương	<i>Leptocarpus disjunctus</i> Mast.	9295	X	x	X	+
132	HỌ MÂY NƯỚC	FLAGELLARIACEAE					
1120	Mây nước	<i>Flagellaria indica</i> L.	9294	X	X		+
133	HỌ HẮC GA	HANGUANACEAE					
1121	Hắc ga	<i>Hanguana malayana</i> (Jack) Merr.	10743	X			+
63	BỘ HOÀ BÀN	POALES					
134	HỌ HOÀ BÀN	POACEAE					
1122	Cỏ lá gừng	<i>Axonopus compressus</i> (Sw.) P.Beauv.	10367	X		X	+
1123	Cỏ may	<i>Chrysopogon aciculatus</i> (Retz.) Trin.	10574	X		X	+
1124	Cỏ may đông	<i>Chrysopogon orientalis</i> (Desv.) A. Cam.	10578	X	X	X	+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
1125	Cỏ chỉ	<i>Cynodon dactylon</i> (L.) Pers. var. <i>dactylon</i> .	10325			X	
1126	Cỏ chân gà	<i>Dactyloctenium aegyptiacum</i> (L.) Willd.	10311	X	X	X	+
1127	Song chi Kurz	<i>Dimeria kurzii</i> Hook.f.	10615			X	
1128	Song chi Thwaites	<i>Dimeria thwaitesii</i> Hack.	10617			X	
1129	Mần trâu	<i>Eleusine indica</i> (L.) Gaertn.	10309	X		X	+
1130	Tranh (Bạch mao)	<i>Imperata cylindrica</i> (L.)P.Beauv. var. <i>major</i> (Nees) Hubb.	10522	X		X	+
1131	Đắng hoa Nam bộ	<i>Isachne</i> cf. <i>cochinchinensis</i> Bal.	10471	X		X	+
1132	Đắng hoa lông	<i>Isachne lisboae</i> Hook. F.	10478	X	X	X	+
1133	Mồm trĩ	<i>Ischaemum muticum</i> L.	10596	X		X	+
1134	Cỏ trứng (San trứng)	<i>Paspalum commersonii</i> Lamk.	10429	X		X	+
1135	Sậy	<i>Phragmites vallatoria</i> (L.) Veldk.	10260	X	X	X	+
1136	Hóp rêm	<i>Schizostachyum gracile</i> Munro.	10208	X	X	X	+
1137	Cương phượng Milroy	<i>Sclerostachya milroyi</i> Bor.	10533	X			+
1138	Cồng cồng	<i>Zoysia matrella</i> (L.) Merr.	10336			X	
64	BỘ CAU DỪA	ARECALES					
135	HỌ DỪA	ARECACEAE					
1139	Cau rừng	<i>Areca triandra</i> Roxb.	9353	X	X	x	+
1140	Mây tàu	<i>Calamus palustris</i> Griff. var. <i>cochinchinensis</i> Becc.	9385	X		X	+
1141	Mây song	<i>Calamus rudentum</i> Lour.	9399	X	X		+
1142	Mây dẻ	<i>Calamus viminalis</i> Willd.	9389	X	X	X	+
1143	Đùng đĩnh	<i>Caryota mitis</i> Lour.	9342	X		X	+
1144	Dừa	<i>Cocos nucifera</i> L.	9370	X	X	X	+
1145	Mây rút	<i>Daemonorops pierreanus</i> Becc.	9405	X	x	X	+
1146	Ra lầy	<i>Licuala paludosa</i> Griff.	9320	X	X	X	+
1147	Mật cật gai	<i>Licuala spinosa</i> Wurmmb.	9314	X	x	X	+
1148	Dừa lá	<i>Nypa fruticans</i> Wurmmb.	9373	X			+
1149	Nhum	<i>Oncosperma tigillaria</i> (Jack) Ridl.	9354	X	x	X	+
1150	Cau chuột Nam bộ	<i>Pinanga cochinchinensis</i> Bl.	9363	X		X	+
1151	Cau chuột Duperré	<i>Pinanga duperreana</i> Pierre ex Gagn.	9364	X		X	+
1152	Mật cật hoa nhỏ	<i>Rhapis micrantha</i> Becc.	9312	X			+
65	BỘ RÂY	ARALES					
136	HỌ MÔN	ARACEAE					
1153	Minh ty đơn	<i>Aglaonema simplex</i> Bl.	9112			X	
1154	Minh ty chân	<i>Aglaonema tenuipes</i>	9113	X	X		+

No.	Vietnamese name	Scientific name	Plant code	Documents used			Survey in 08/09
				01	02	03	
	mảnh	Engler					
1155	Ráy lá dài	<i>Alocasia longiloba</i> Miq.	9136			X	
1156	Nửa Cửu long	<i>Amorphophallus mekongensis</i> Engler & Gehrm.	9152	X			+
1157	Nửa khổng lồ	<i>Amorphophallus sp.</i>	9165	X		X	+
1158	Môn nước	<i>Colocasia esculenta</i> (L.) Schott.	9125	X		X	+
1159		<i>Homalomena pierreana</i> Engler.	9098	X			+
1160		<i>Homalomena tonkinensis</i> Engler.	9100	X			+
1161	Pothos	<i>Pothos angustifolius</i> Presl.	9060	X			+
1162	Ráy leo	<i>Pothos scandens</i> L.	9068			X	
1163	Ráy Vân nam	<i>Pothos yunnanensis</i> Engler.	9069	X		X	+
1164	Nửa bất thường	<i>Pseudodracuntium anomalum</i> N.E.Br.	9138			X	
1165	Nửa Lacour.	<i>Pseudodracuntium lacourii</i> N.E.Br.	9140		X	X	
1166	Trâm đài trung	<i>Raphidophora media</i> Schott.	9083			X	
1167		<i>Scindapsus annamicus</i> Gagn.	9089	X			+
1168		<i>Scindapsus hederaceus</i> Schott.	9090	X			+
1169		<i>Scindapsus officinalis</i> (Roxb.) Schott.	9091	X			+
66	BỘ DỨA DẠI	PANDANALES					
137	HỌ DỨA GAI	PANDANACEAE					
1170	Dừa nhiễm	<i>Pandanus capusii</i> Mart.	9039	X	X	x	+
1171	Dừa nuốm ngang	<i>Pandanus horizontalis</i> St-John.	9045	X	X	X	+
1172	Dừa nhỏ	<i>Pandanus humilis</i> Lour.	9038	X			+

Note: Used documents: 01 – Sub-FIPI , 2003; 02 – Sub-FIPI, 2000; 03 – Pham Hoang Ho, 1985

**ANNEX 3: A LIST OF PLANT SPECIES RECORDED IN UMT- AB – AM AREA
AND KIEN LUONG – KIEN HAI AREA**

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
	I. NGÀNH DƯƠNG XÍ	II. POLYPODIOPHYTA					
	1. HỌ TỔ ĐIỀU	2. ASPLENIACEAE					
1	Tổ điều nhắn	<i>Asplenium confusum</i> Tard.	+	+	X	+	X
2	Tổ điều dài	<i>Asplenium longissimum</i> Blume	+	+	X	+	X
3	Tổ điều thật	<i>Asplenium nidus</i> L.		+	X	+	X
4	Tổ điều gân	<i>Asplenium affine</i> Sw.		+	X	+	X
	2. HỌ BÈO DẦU	3. AZOILACEAE					
5	Bèo dậu	<i>Azolla pinnata</i> R. Br.	+				
	3. HỌ RÁNG LÁ DỪA	4. BLECHNACEAE					
6	Ráng lá dứa ần	<i>Blechnum indicum</i> Burm. f.		+	X	+	X
7	Dây choại	<i>Stenochlaena palustris</i> (Burm. f.) Bedd.		+	X	+	X
	4. HỌ RÁNG ĐÀN TIẾT	6. DENNSTAEDTIACEAE (LINDSAEACEAE)					
8	Ráng vi lân to	<i>Microlepia speluncae</i> (L. ex Kuhn) T. Morr.				+	X
	5. HỌ QUỘT	8. GLEICHENIACEAE					
9	Tế	<i>Dicranopteris linearis</i> (Burm. f.) Underw				+	X
	6. HỌ RAU BỢ	9. MARSILEACEAE					
10	Rau bợ	<i>Marsilea quadrifolia</i> L.	+		X	+	X
	7. HỌ RAU CẦN TRỜI	11. PARKERIACEAE					
11	Cần trời	<i>Ceratopteris thalictroides</i> (L.) Brongn	+	+	X	+	X
	8. HỌ RÁNG NHIỀU CHÂN	12. POLYPODIACEAE					
12	Ráng thư hàng	<i>Phymatosorus scolopendria</i> (Burm. f.) Pic. Serm.	+				
13	Ráng tai chuột lá dài	<i>Pyrrosia longifolia</i> (Burm. f.) F. Morton		+	X	+	X
14	Ráng cổ ly giả	<i>Selliguea lateritea</i> (Baker) Hovek.			X	+	X
15	Ổ rồng	<i>Aglaomorpha coronans</i> (Wall ex Mett.) Copel.			X	+	
16	Tắc kè đá bon	<i>Drynaria bonii</i> H. Christ				+	X
17	Tắc kè đá lá sồi	<i>Drynaria quercifolia</i> (L.) J. Sm.				+	X
	93. HỌ RÁNG SỢ GÀ	13. PTERIDACEAE					
18	Ráng biển thường	<i>Acrostichum aureum</i> L.	+	+	X	+	X
19		<i>Acrostichum speciosum</i>			X		X
20	Ráng sọ gà crêta	<i>Pteris cretica</i> L.			X		
21	Ráng sọ gà giải	<i>Pteris vittata</i> L.				+	X
22		<i>Stenochlaena palustris</i> (Burm.) Bedd.	+				
	10. HỌ BÈO TAI CHUỘT	14. SALVINIACEAE					
23	Bèo tai chuột	<i>Salvinia cucullata</i> Roxb. ex Boiig	+	+	X	+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
24	Bèo tai chuột	<i>Salvinia natans</i> (L.) All.	+	+		+	X
	11. HỌ BÔNG BONG	15. SCHIZEACEAE					
25	Bông bong to	<i>Lygodium conforme</i> C.Chr.					X
26	Bông bong lắt léo	<i>Lygodium flexuosum</i> (L.) Sw.					X
27	Bông bong nhật	<i>Lygodium micotahyum</i> Desv	+	+	X	+	X
28	Bông bong bò	<i>Lygodium scandens</i> (L.) Sw.	+				
	12. HỌ RĂNG THỰC DỪC	16. THELYPTERIDACEAE					
29		<i>Cyclosorus gongylodes</i> (Schkur) Link.	+				
30	Răng ố tròn đứt đoạn	<i>Cyclosorus interruptus</i> (Willd.) H. Ito				+	
31	Răng cù lân ký sinh	<i>Christella parasitica</i> (L.) H. Lévl.				+	
	13. HỌ RĂNG GỖ NHỎ	17. WOODSIACEA					
32	Rau dớn	<i>Diplazium esculentum</i> (Retz.) Sw.		+	X		X
	III. NGÀNH THÔNG	III. PINOPHYTA					
	14. HỌ BÁCH TÁN	18. ARAUCARIACEAE					
33	Vương tùng	<i>Araucaria columnaris</i> (G. Forst) Hook.					X
	15. HỌ HOÀNG ĐÀN	19. CUPRESSACEAE					
34	Trắc bách diệp	<i>Thuja orientalis</i> L.					X
	16. HỌ TUẾ	20. CYCADACEAE					
35	Tuế kiên giang	<i>Cycas clivicola</i> K. D. Hill.				+	X
36	Tuế lược	<i>Cycas pectinata</i> Buch.-Ham.					X
37	Tuế biển	<i>Cycas lithoralis</i> K. D. Hill					X
38	Thiên tuế xiêm	<i>Cycas siamensis</i> Miq					X
	IV. NGÀNH NGỌC LAN	IV. MAGNOLIOPHYTA					
	A. LỚP MỘC LAN	A. MAGNOLIOPSIDA					
	18. HỌ Ô RÔ	22. ACANTHACEAE					
39	Ô rô	<i>Acanthus ebracteatus</i> Vahl	+	+	X	+	X
40	Ô rô nước	<i>Acanthus ilicifolius</i> L.		+	X	+	X
41	Xuyên tâm liên	<i>Andrographis paniculata</i> (Burm. f.) Wall. ex Nees			X		X
42	Bán tự lông	<i>Hemigraphis hirsuta</i> T. Anders.	+	+			
43	Đình lịch	<i>Hygrophila salicifolia</i> (Vahl.) Nees	+	+			
44	Nổ sả	<i>Ruellia patula</i> Jacq.					X
45	Nổ	<i>Ruellia tuberosa</i> L.	+	+	X	+	X
46	Nhụy thập malaca	<i>Staurogyne malaccensis</i> C.B. Clarke				+	
47	Cát đằng thơm	<i>Thunbergia fragrans</i> Roxb.				+	
48	Dây bông xanh	<i>Thunbergia grandiflora</i> (Roxb. ex Rottl.) Roxb.			X	+	X
	20. HỌ HẢI CH ÂU	23. AIZOACEAE					
49		<i>Glinus oppositifolius</i> (L.) DC.	+				
50	Rau sam biển	<i>Sesuvium portulacastrum</i> Willd		+		+	X
	21. HỌ RAU DÈN	24. AMARANTHACEAE					
51	Cỏ xước	<i>Achyranthes aspera</i> L.			X	+	X
52	Rau chua	<i>Aerva sanguinolenta</i> (L.) Blume		+	X	+	X

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			TL1	TL2	08/09	TL3	08/09
53	Rau dệu trườn	<i>Alternanthera paronychioides</i> St.-Hil.	+	+	X	+	X
54	Rau dệu	<i>Alternanthera sessilis</i> (L.) A. DC.	+	+	X	+	X
55	Dền cơm, Dền tái	<i>Amaranthus lividus</i> L.		+	X	+	X
56	Dền gai	<i>Amaranthus spinosus</i> L.	+	+	X	+	X
57	Mào gà đuôi lợn	<i>Celosia argentea</i> L.	+	+	X	+	X
58	Địa linh nhiều hạt	<i>Deeringia polysperma</i> (Roxb.) Moq.				+	
59	Quang mao sét	<i>Psilotrichum ferrugineum</i> (Roxb.) Moq.		+	X	+	
	22. HỌ ĐÀO LỘN HỘT	25. ANACARDIACEAE					
60	Giầu da xoan	<i>Allospondias lakonensis</i> (Pierre) Stapf.			X		X
61	Đào lộn hạt	<i>Anacardium occidentale</i> L.					X
62	Thanh trà	<i>Bouea oppositifolia</i> (Roxb.) Meisn.				+	X
63	Mà ca	<i>Buchanania arborescens</i> (Blume) Blume		+	X	+	X
64	Mô ca	<i>Buchanania reticulata</i> Hance				+	
65	Xoài	<i>Mangifera indica</i> L.				+	X
66	Xoài lá nhỏ	<i>Mangifera minutifolia</i> Evrard					X
67	Muối	<i>Rhus chinensis</i> Muell.				+	X
68	Cóc, Sấu tàu	<i>Spondias cytherea</i> Sonn.	+	+	X		X
	23. HỌ TRUNG QUÂN	26. ANCISTROCLADACEAE					
69	Trung quân nam bộ	<i>Ancistrocladus cochinchinensis</i> Gagnep.				+	X
70	Trung quân	<i>Ancistrocladus tectorius</i> (Lour.) Merr.				+	X
	24. HỌ NA	27. ANNONACEAE					
71	Bình bát	<i>Annona glabra</i> L.	+	+	X	+	X
72	Mãng cầu xiêm	<i>Annona muricata</i> L.		+	X	+	X
73	Na	<i>Annona squamosa</i> L.		+	X	+	X
74	Móng rồng nhỏ	<i>Artabotrys intermedius</i> Hassk.				+	X
75	Mao đài có ngấn	<i>Dasymaschalon lomentaceum</i> Fin. & Gagnep.				+	X
76	Mao quả robinson	<i>Dasymaschalon robinsonii</i> Ast				+	X
77	Giẻ nam bộ	<i>Desmos cochinchinensis</i> Lour.				+	X
78	Giác đế	<i>Goniothalamus gabriacianus</i> (Baill.) Ast.				+	
79	Săng mây	<i>Sageraea elliptica</i> (A.DC.) Hook. & Thoms.				+	X
80	Bồ đề lá lớn	<i>Uvaria cordata</i> (Dun.) Wall. ex Alston				+	X
	25. HỌ HOA TÁN	28. APIACEAE					
81	Rau má	<i>Centella asiatica</i> (L.) Urb.	+	+	X	+	X
82	Rau cần	<i>Oenanthe javanica</i> (Blume) DC.	+	+			X

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			TL1	TL2	08/09	TL3	08/09
	26. HỌ TRÚCĐÀO	29. APOCYNACEAE					
83	Sữa lá to	<i>Alstonia macrophylla</i> Wall. ex G. Don		+	X		X
84	Sữa	<i>Alstonia scholaris</i> (L.) R. Br.					X
85	Sữa lá bàng	<i>Alstonia spathulata</i> Blume	+	+	X	+	X
86	Dừa cạn	<i>Catharanthus roseus</i> (L.) G. Don.					X
87	Mướp sắc hương	<i>Cerbera manghas</i> L.		+	X	+	X
88	Ba gác cam bột	<i>Rauwolfia cambodiana</i> Pierre ex Pitard					X
89	Ba gác lá nhỏ	<i>Rauwolfia micrantha</i> Hook. f.				+	X
90	Sừng châu đười	<i>Strophanthus caudatus</i> (Burm.) Kurz		+		+	X
91	Lài châu choải	<i>Tabernaemontana bufalina</i> Lour.					X
92	Bánh hời	<i>Tabernaemontana divaricata</i> (L.) R. Br. ex Roem.				+	X
93	Lài trâu ít hoa	<i>Tabernaemontana pauciflora</i> Blume				+	X
94	Mộc tinh hoa nhỏ	<i>Urceola minutiflora</i> (Pierre) Middl.				+	X
95	Lòng mức lông	<i>Wrightia pubescens</i> R.Br.					X
96	Mai chiếu thủy	<i>Wrightia religiosa</i> (Teijm. & Binn.) Benth. & Hook. f.			X		X
	30. HỌ BÙI	30. AQUIFOLIACEAE					
97	Bùi đen	<i>Ilex cochinchinensis</i> (Lour.) Loes.		+	X	+	X
98	Nhựa ruồi	<i>Ilex cymosa</i> Blume	+	+	X	+	X
		ARACEAE					
99		<i>Acorus verus</i> Houtt.	+		X		X
100		<i>Aglaodora griffithii</i> (Schott.) Schott.	+		X		X
101		<i>Colocasia esculenta</i> (L.) Schott.	+		X		X
102		<i>Pistia stratiotes</i> L.	+		X		X
	31. HỌ NGŨ GIA BÌ	31. ARALIACEAE					
103	Chân chim	<i>Schefflera heterophylla</i> (L.) Frodin		+	X	+	X
	32. HỌ MỘC HƯƠNG	32. ARISTOLOCHIACEAE					
104	Sơn dịch	<i>Aristolochia indica</i> L.				+	X
	33. HỌ THIÊN LÝ	33. ASCLEPIADACEAE					
105	Bồng bông	<i>Calotropis gigantea</i> (L.) Dry. ex Ait. f				+	X
106	Bạch tiền lá liễu	<i>Cynanchum stauntonii</i> (Decne.) Hand.-Mazz.				+	X
107	Song ly to	<i>Dischidia major</i> (Vahl) Merr.	+	+	X	+	X
108	Dây mộc tiền nhỏ	<i>Dischidia nummularia</i> R. Br.	+	+	X	+	X
109	Dây bù ốc leo	<i>Dregea volubilis</i> (L. f.) Benth. ex				+	X

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			TL1	TL2	08/09	TL3	08/09
		Hook. f.					
110	Phin lay sơn	<i>Finlaysonia obovata</i> Wall.				+	X
111		<i>Gymnanthera nitida</i> R. Br.	+				
112	Lõa ti giả	<i>Gymnanthera oblonga</i> (Burm. f.) P.S. Green		+	X	+	X
113	Lõa ty yunnan	<i>Gynema yunnanense</i> Tsiang				+	
114	Củ mài ăn được	<i>Oxystema esculentum</i> (L. f) R. Br. ex Schult.	+			+	X
115	Dây cá m	<i>Sarcolobus globosus</i> Wall.	+	+	X	+	X
116	Tiết căn	<i>Sarcostemma acidum</i> (Roxb.) Voigt				+	X
117	Hà thủ ô nam	<i>Streptocaulon juvenas</i> (Lour.) Merr.		+	X	+	X
118	Oa nhị đẵng lá nhỏ	<i>Tylophora flexuosa</i> R. Br.				+	
119	Thuốc hen	<i>Tylophora indica</i> (Burm. f.) Merr.				+	
120	Oa nhị đẵng	<i>Tylophora ovata</i> (Lindl.) Hook. & Steud.				+	
121	Dây di gốt	<i>Zygotelma benthamii</i> Baill.				+	
	34. HỌ CÚC	34. ASTERACEAE					
122	Cỏ mịch	<i>Adenostemma lavenia</i> (L.) O.Kuntze				+	X
123	Cỏ cú t lợn	<i>Ageratum conyzoides</i> L.	+	+	X	+	X
124	Ngải biển	<i>Artemisia campestris</i> L.				+	X
125	Đơn buốt	<i>Bidens pilosa</i> L.		+	X	+	X
126	Hoàng đầu chụm	<i>Blumea fistulosa</i> (Roxb.) Kurz				+	X
127	Cải trời	<i>Blumea lacera</i> (Burm. f.) DC.	+	+	X		
128	Cúc tím hồng	<i>Centratherum intermedium</i> Less.				+	X
129	Cỏ nhọ nôi	<i>Eclipta prostrata</i> (L.) L.	+	+	X	+	X
130	Cúc chỉ thiên	<i>Elephantopus scaber</i> L.		+	X	+	X
131	Rau má tía	<i>Emilia sonchifolia</i> (L.) DC.		+	X	+	X
132	Rau ngổ trâu	<i>Enydra fluctuans</i> Lour.	+	+	X		X
133	Rau lúi	<i>Erechtites valerianaefolia</i> (Wolf.) DC.				+	X
134	Cỏ lào	<i>Eupatorium odoratum</i> L.	+	+	X	+	X
135	Rau cóc	<i>Grangea maderaspatana</i> (L.) Poir.	+	+	X	+	X
136	Kim thất	<i>Gynura procumbens</i> (Lour.) Merr.	+	+	X		X
137	Hương dương	<i>Heilianthus annuus</i> L.			X	+	X
138	Cúc tần	<i>Pluchea indica</i> (L.) Less.	+	+	X	+	X
139	Cỏ sài hồ	<i>Pluchea pteropoda</i> Hemsl.		+	X	+	X
140	Cỏ chân vịt	<i>Sphaeranthus africanus</i> L.		+	X	+	X
141	Chân vịt ấn	<i>Sphaeranthus indicus</i> L.	+	+	X		X
142		<i>Spilanthes acmella</i> L.	+				X
143	Nụ áo gân tím	<i>Spilanthes oleracea</i> L.		+	X	+	X

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			TL1	TL2	08/09	TL3	08/09
144	Dạ hương ngưu	<i>Vernonia cinerea</i> (L.) Less.	+	+	X		X
145	Dây dọi	<i>Vernonia elliptica</i> DC.	+	+	X	+	X
146	Hải cúc	<i>Wedelia biflora</i> (L.) DC.		+	X	+	X
147	Ké đầu ngựa	<i>Xanthium inaequilaterum</i> DC.		+	X	+	X
	35. HỌ DÓ ĐẤT	35. BALANOPHORACEAE					
148	Dó đất	<i>Balanophora indica</i> (Arnott) Griff.				+	X
	36. HỌ BÓNG NƯỚC	36. BALSAMINACEAE					
149	Thuỷ trang	<i>Hydrocera triflora</i> (L.) Wight & Arn.	+	+	X		X
	37. HỌ MỒNG TƠI	37. BASELLACEAE					
150	Mồng tơi	<i>Basella rubra</i> L.	+	+	X	+	X
	38. HỌ THU HẢI ĐƯỜNG	38. BEGONIACEAE					
151	Thu hải đường harmand	<i>Begonia harmandii</i> Gagnep.				+	X
152	Thu hải đường trên đá	<i>Begonia rupicola</i> Miq.				+	
	39. HỌ ĐINH	39. BIGNONIACEAE					
153	Quao nước	<i>Dolichandrone spathacea</i> (L. f.) Schum.	+	+	X	+	X
154	Thiết đỉnh lá bẹ	<i>Markhamia stipulata</i> var. <i>pierrei</i> (Dop) Santisuk				+	
155	Núc nác	<i>Oroxylum indicum</i> (L.) Vent				+	X
156	Quao núi	<i>Stereospermum colais</i> (Dillw.) Mabberl.				+	X
	40. HỌ BÔNG GÒN	40. BOMBACACEAE					
157	Gạo hoa đỏ	<i>Bombax anceps</i> Pierre					X
158	Gòn rùng	<i>Bombax ceiba</i> L.				+	X
159	Gòn ta	<i>Ceiba pentandra</i> (L.) Gaertn.	+	+	X	+	X
160	Sầu riêng	<i>Durio zibethinus</i> Murr.				+	X
	41. HỌ VỎI VOI	41. BORAGINACEAE					
161	Phong ba	<i>Argusia argentea</i> (L. f.) Heine				+	X
162	Tâm mộc nam bộ	<i>Cordia cochinchinensis</i> Gagnep.				+	X
163	Tâm mộc hình tim	<i>Cordia subcordata</i> Poir. ex Lamk.				+	X
164	Vòi voi	<i>Heliotropium indicum</i> L.	+	+	X	+	X
	42. HỌ TRÁM	42. BURSERACEAE					
165	Trám lá đỏ	<i>Canarium subulatum</i> Guillaum.				+	X
	43. HỌ XƯƠNG RỒNG	43. CACTACEAE					
166	Xương rồng khế	<i>Cereus peruvianus</i> (L.) Mill.				+	X
167	Thanh long	<i>Hylocereus undatus</i> (Haw.) Britt. & Rose					X
	44. HỌ VANG	44. CAESALPINOIDEAE					
168	Gỗ đỏ	<i>Azelia xylocarpa</i> (Kurz) Craib					X
169	Móng bò hậu giang	<i>Bauhinia bassacensis</i> Pierre ex				+	X

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			TL1	TL2	08/09	TL3	08/09
		Gagnep.					
170	Đậu cánh dơi	<i>Bauhinia bracteata</i> (Benth.) Baker				+	X
171	Móng bò tai voi	<i>Bauhinia malabarica</i> Roxb.				+	X
172	Móc mèo	<i>Caesalpinia bonduc</i> (L.) Roxb.		+	X	+	X
173	Chiêng chiêng	<i>Caesalpinia crista</i> L.				+	X
174	Kim phượng	<i>Caesalpinia pulcherrima</i> (L.) Sw.				+	X
175		<i>Caesalpinia alata</i> L.	+				
176	Ô môi	<i>Cassia grandis</i> L. f.				+	X
177	Bọ cạp java	<i>Cassia javanica</i> L.					X
178	Muồng trinh nữ	<i>Chamaecrista mimosoides</i> (L.) Greene					X
179	Lá lựu	<i>Cynometra ramiflora</i> L.		+		+	X
180	Phượng vĩ	<i>Delonix regia</i> (Hook.) Raf.			X		X
181	Xoay	<i>Dialium cochinchinense</i> Pierre				+	
182	Gỗ nước	<i>Intsia bijuga</i> (Colebr.) Kuntze		+		+	X
183	Hoàng tinh	<i>Peltophorum dasyrrhachis</i> (Miq.) Kurz				+	X
184	Lim xẹt	<i>Peltophorum pterocarpum</i> (DC.) Backer ex K. Heyne				+	X
185	Muồng trâu	<i>Senna alata</i> (L.) Roxb.				+	X
186	Muồng hoa vàng	<i>Senna surattensis</i> (Burm. f.) Irwin					X
187	Thảo quyết minh	<i>Senna tora</i> L.		+	X	+	X
188	Gụ mật	<i>Sindora siamensis</i> Teysm. ex Miq.					?
189	Me	<i>Tamarindus indica</i> L.		+	X	+	X
	45. HỌ BẠCH HOA	45. CAPPARACEAE					
190	Cáp trần	<i>Capparis diffusa</i> Ridl.				+	X
191	Cáp gai nhỏ	<i>Capparis micracantha</i> DC.				+	X
192	Màn màn hoa vàng	<i>Cleome viscosa</i> L.		+	X	+	X
193	Màn màn hoa trắng	<i>Cleome gynandra</i> L.		+	X	+	X
194		<i>Cleome rutidosperma</i> DC.	+				
195	Bún trái đỏ	<i>Crateva adansonii</i> DC.				+	
196	Bún ba lá	<i>Crateva adansonii</i> ssp. <i>trifoliata</i> (Roxb.) Jacobs				+	
197	Búng lợ	<i>Crateva religiosa</i> Forst. f.		+	X		
	46. HỌ CẨM CHƯÔNG	46. CARYOPHYLLACEAE					
198	Sài hồ nam	<i>Polycarpaea arenaria</i> (Lour.) Gagnep.				+	X
199	Cóc mần	<i>Polycarpon indicum</i> (Retz.) Merr.				+	X
	47. HỌ PHI LAO	47. CASUARINACEAE					
200	Phi lao	<i>Casuarina equisetifolia</i> G. Forst.			X	+	X
	48. HỌ DÂY GỎI	48. CELASTRACEAE					
201	Chân danh nam bộ	<i>Euonymus cochinchinensis</i> Pierre				+	X
	49. HỌ RONG ĐUÔI	49. CERATOPHYLLACEAE					

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			TL1	TL2	08/09	TL3	08/09
	CHÓ						
202	Rong đuôi chó	<i>Ceratophyllum demersum</i> L.	+	+	X		X
	50. HỌ RAU MUÔI	50. CHENOPODIACEAE					
203	Phì điệp biển	<i>Suaeda maritima</i> (L.) Dumort.		+	X	+	X
	51. HỌ HOA SÓI	51. CHLORANTHACEAE					
204	Sói đứng	<i>Chloranthus elatior</i> Link				+	X
	52. HỌ CẨM	52. CHRYSOBALANACEAE					
205	Cẩm	<i>Parinari annamensis</i> (Hance) J. E. Vidal				+	X
	53. HỌ BỨA	53. CLUSIACEAE					
206	Mù u	<i>Calophyllum inophyllum</i> L.	+		X	+	X
207	Măng cụt	<i>Garcinia mangostana</i> L.		+	X	+	X
208	Bứa mủ vàng	<i>Garcinia xanthochymus</i> T. Anders				+	X
	54. HỌ BÀNG	54. COMBRETACEAE					
209	Chưng bầu vuông	<i>Combretum quadrangulare</i> Kurz		+		+	X
210	Chưng bầu 4 cạnh	<i>Combretum tetralophum</i> C.B. Clarke				+	
211	Cóc đỏ	<i>Lumnitzera littorea</i> (Jack) Voigt				+	X
212	Cóc trắng	<i>Lumnitzera racemosa</i> Willd.			X	+	X
213	Dây giun	<i>Quisqualis indica</i> L.		+	X	+	X
214	Bàng hôi	<i>Terminalia bellirica</i> (Gaertn.) Roxb.				+	X
215	Chiêu liêu nước	<i>Terminalia calamansanai</i> (Blume) Rolfe				+	X
216	Bàng	<i>Terminalia catappa</i> L.		+	X	+	X
217	Bàng nước	<i>Terminalia procera</i> Roxb.					X
218	Chiêu liêu nghệ	<i>Terminalia triptera</i> Stapf				+	X
	55. HỌ TRƯỜNG ĐIỀU	55. CONNARACEAE					
219	Lớp bốp	<i>Connarus cochinchinensis</i> (Baill.) Pierre				+	X
220	Trường điều	<i>Connarus paniculatus</i> Roxb.				+	X
221	Độc chó	<i>Rourea minor</i> (Gaertn.) Alston				+	X
	56. HỌ BÌM BÌM	56. CONVULVACEAE					
222	Bìm nước	<i>Aniseia martinicensis</i> (Jacq.) Choisy	+	+	X	+	X
223	Bạc thau mê kông	<i>Argyreia mekongensis</i> Gagnep. & Curch.	+	+	X		X
224	Rau muống	<i>Ipomoea aquatica</i> Forsk.	+	+	X	+	X
225		<i>Ipomoea carnea</i> subsp. <i>fistulosa</i> (Chois.) Austin	+				
226	Muống biển	<i>Ipomoea pes-caprae</i> (L.) R. Br.		+	X	+	X
227	Bìm duyên hải	<i>Ipomoea stolonifera</i> (Cirillo) Gmel.				+	X
228	Bìm củ	<i>Merremia tuberosa</i> (L.) Rendle	+	+			X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
	57. HỌ THUỐC BÔNG	57. CRASSULACEAE					
229	Trường sinh lá to	<i>Kalanchoe crenata</i> (Andr.) Haw.				+	X
230	Sừng hươu	<i>Kalanchoe laciniata</i> (L.) DC.				+	X
231	Thuốc bông	<i>Kalanchoe pinnata</i> (Lamk.) Pers.				+	X
	59. HỌ BẦU BÍ	59. CUCURBITACEAE					
232	Mảnh bát	<i>Coccinia grandis</i> (L.) Voigt					X
233	Cứt quạ lớn	<i>Gymnopetalum cochinchinense</i> (Lour.) Kurz	+	+	X	+	X
234	Cứt quạ	<i>Gymnopetalum integrifolium</i> (Roxb.) Kurz		+		+	X
235	Cầu qua ấn	<i>Mukia maderaspatana</i> (L.) Roem.				+	X
236	Qua lâu trứng	<i>Trichosanthes ovigera</i> Blume		+	X	+	X
237	Lâu táo	<i>Trichosanthes tricuspidata</i> Lour.	+	+	X		X
238	Dây pọp nhỏ	<i>Zanonia maysorensis</i> Arn		+		+	X
239	Dây pọp	<i>Zehneria indica</i> (Lour.) Keraudren	+	+	X		X
	60. HỌ TƠ HỒNG	60. CUSCUTACEAE					
240	Tơ hồng nam	<i>Cuscuta australis</i> R. Br.	+	+	X	+	X
	61. HỌ SỔ	61. DILLENACEAE					
241	Sổ bà	<i>Dillenia indica</i> L.					X
242	Sổ trai	<i>Dillenia ovata</i> Wall. ex Hook. f.				+	X
243	Chặc chùi	<i>Tetracera scandens</i> (L.) Merr.				+	X
	62. HỌ DẦU	62. DIPTEROCARPACEAE					
244	Vên vên	<i>Anisoptera costata</i> Korth.				+	X
245	Dầu con rái	<i>Dipterocarpus alatus</i> Roxb.				+	X
246	Dầu cát	<i>Dipterocarpus costatus</i> Gaertn. f.				+	X
247	Dầu song nàng	<i>Dipterocarpus dyeri</i> Pierre				+	X
248	Dầu trai	<i>Dipterocarpus intricatus</i> Dyer				+	X
249	Chò kiền kiền	<i>Hopea ferrea</i> Pierre				+	X
250	Sao đen	<i>Hopea odorata</i> Roxb.					X
	63. HỌ THỊ	63. EBENACEAE					
251	Mắc nưa	<i>Diospyros mollis</i> Griff.				+	X
252	Thị lọ nôi	<i>Diospyros variegata</i> Kurz				+	X
	64. HỌ CÔM	64. ELAEOCARPACEAE					
253	Côm tầng	<i>Elaeocarpus griffithii</i> (Wight) A. Gray				+	X
254	Côm cánh ướt	<i>Elaeocarpus hygrophilus</i> Kurz	+	+	X		X
255	Côm đồng nai	<i>Elaeocarpus tectorius</i> (Lour.) Poir.				+	X
	65. HỌ THÊU DẦU	65. EUPHORBIACEAE					
256	Đóm đóm	<i>Alchornea rugosa</i> (Lour.) Muell.-Arg.				+	X

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			TL1	TL2	08/09	TL3	08/09
257	Chòi mòi chua	<i>Antidesma acidum</i> Retz.				+	X
258	Chòi mòi	<i>Antidesma ghaesembilla</i> Gaertn.		+	X	+	X
259	Chòi mòi gân lõm	<i>Antidesma montanum</i> Blume				+	X
260	Thầu tấu	<i>Aporosa dioica</i> (Roxb.) Muell.-Arg.				+	X
261	Ngăm rừng	<i>Aporosa planchoniana</i> Baill.				+	X
262	Dâu gia đất	<i>Baccaurea ramiflora</i> Lour.				+	X
263	Cắm tứ núi	<i>Baliospermum montanum</i> (Willd.) Muell.-Arg.				+	X
264	Nhội	<i>Bischofia javanica</i> Blume				+	X
265	Sang đàng andaman	<i>Blachia andamanica</i> (Kurz) Hook. f.				+	X
266	Bồ cu vẽ	<i>Breynia fruticosa</i> (L.) Hook. f.			X	+	X
267	Cù đề	<i>Breynia vitisidaea</i> (Burm. f.) C. Fisch.				+	X
268	Đỏm lông	<i>Bridelia monoica</i> (Lour.) Merr.				+	X
269	Bi diên xoan	<i>Bridelia ovata</i> Decne.			X		X
270	Đỏm lá bẹ	<i>Bridelia stipularis</i> (L.) Blume				+	X
271	Dạ nâu	<i>Chaetocarpus castanocarpus</i> (Roxb.) Thwaites				+	X
272	Cách hoa phún	<i>Cleistanthus hirsutulus</i> Hook. f.				+	X
273	Cọc rào nhon	<i>Cleistanthus sumatranus</i> (Miq.) Muell.-Arg.				+	X
274	Ba đậu lá nhót	<i>Croton cascarilloides</i> Raeusch.				+	X
275	Cù đèn lá dày	<i>Croton crassifolius</i> Geisel				+	X
276	Ba đậu tuyến	<i>Croton thorelii</i> Gagnep.				+	X
277	Lá khóm	<i>Epiprinus siletianus</i> (Baill.) Croiz.				+	
278	Xương rồng ông	<i>Euphorbia antiquorum</i> L.		+	X	+	X
279	Đại kích biển	<i>Euphorbia atoto</i> Forst. & Forst. f.				+	X
280	Cỏ sữa lá lớn	<i>Euphorbia hirta</i> L.	+	+	X	+	X
281	Cỏ sữa lá nhỏ	<i>Euphorbia thymifolia</i> L.	+	+	X	+	X
282	Trao táo	<i>Excoecaria indica</i> (Willd.) Muell.-Arg.				+	X
283	Giá	<i>Excoecaria agallocha</i> L.		+	X	+	X
284	Nổ quả trắng	<i>Flueggea virosa</i> (Roxb. ex Willd.) Voigt			X	+	X
285	Sóc lông	<i>Glochidion hirsutum</i> (Roxb.) Voigt				+	X
286	Bọt ếch lá bóng	<i>Glochidion lanceolarium</i> (Roxb.) Voigt			X	+	X
287	Trâm bột	<i>Glochidion littorale</i> Blume	+	+		+	X
288	Sóc cái tròn	<i>Glochidion sphaerogynum</i> (Muell.-Arg.) Kurz				+	X
289	Sóc tích lan	<i>Glochidion zeylanicum</i> A. Juss.				+	X

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			TL1	TL2	08/09	TL3	08/09
290	Vông đồng	<i>Hura crepitans</i> L.				+	X
291	Quả dẹt	<i>Hymenocardia punctata</i> Wall. ex Lindl.				+	X
292	Ba soi	<i>Macaranga denticulata</i> (Blume) Muell.-Arg.				+	X
293	Mã rạn	<i>Macaranga tanarius</i> (L.) Muell.-Arg.				+	X
294	Ba soi lông	<i>Macaranga trichocarpa</i> (Reichb. f. & Zoll.) Muell.-Arg.				+	X
295	Long màng	<i>Macaranga triloba</i> (Blume) Muell.-Arg.		+		+	X
296	Ruối khế	<i>Mallotus anisopodus</i> (Gagnep.) Airy-Shaw				+	X
297	Bùng bực	<i>Mallotus barbatus</i> Muell.-Arg.				+	X
298	Duối rừng	<i>Mallotus cuneatus</i> Ridl.		+			X
299	Đỏ đọt	<i>Mallotus eberhardtii</i> Gagnep.			X	+	X
300	Ba bét nhẵn	<i>Mallotus glabriusculus</i> (Kurz) Pax & Hoffm.				+	X
301	Chóc non	<i>Mallotus oblongifolius</i> (Miq.) Muell.-Arg.				+	X
302	Bực bực	<i>Mallotus paniculatus</i> (Lamk.) Muell.-Arg.			X	+	X
303	Cánh kiến	<i>Mallotus philippinensis</i> (Lamk.) Muell.-Arg.				+	X
304	Nhung diện mụt	<i>Mallotus resinusus</i> (Blanco) Merr.				+	X
305	Ba bét lửa	<i>Mallotus ustulatus</i> (Gagnep.) Airy-Shaw				+	X
306	Sắn	<i>Manihot esculenta</i> Crantz			X	+	X
307	Mac ga rit	<i>Margaritaria indica</i> (Dalz.) Airy-Shaw				+	X
308	Ngũ tuyến	<i>Pantadenia adenanthera</i> Gagnep.				+	X
309	Me rừng	<i>Phyllanthus emblica</i> L.				+	X
310	Diệp hạ châu geoffroy	<i>Phyllanthus geoffroyi</i> Beille				+	X
311	Phèn đen	<i>Phyllanthus reticulatus</i> Poir.				+	X
312	Chó đẻ răng cưa	<i>Phyllanthus urinaria</i> L.	+	+	X	+	X
313		<i>Ricinus communis</i> L.	+				X
314	Cô nàng	<i>Sapium baccatum</i> Roxb.				+	X
315	Sòi tía	<i>Sapium discolor</i> (Champ. ex Benth.) Muell.-Arg.				+	X
316	Rau ngót	<i>Sauropus androgynus</i> (L.) Merr.		+	X	+	X
317	Bò ngót dị nhánh	<i>Sauropus heteroblastus</i> Airy-Shaw				+	X
318	Ngót lá dày	<i>Sauropus pierrei</i> (Beille) Croiz.				+	X
319		<i>Securinega virosa</i> (Willd.) Pax & Hoffm.	+				
320	Kén son	<i>Suregada cicerosperma</i> (Gagnep.) Croiz.				+	X

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			TL1	TL2	08/09	TL3	08/09
321	Kẹn son chụm	<i>Suregada glomerulata</i> (Blume) Baill.				+	X
322	Mân mây	<i>Suregada multiflora</i> (A. Juss.) Baill.				+	X
323	Tam thụ phú quốc	<i>Trigonostemon quocensis</i> Gagnep.				+	X
324	Tin tranh	<i>Trigonostemon reidioides</i> (Kurz) Craib				+	X
325	Tam thụ hùng đồ	<i>Trigonostemon rubescens</i> Gagnep.				+	X
	66. HỌ ĐẬU	66. FABACEAE					
326	Dây cam thảo	<i>Abrus precatorius</i> L.				+	X
327	Rút đất	<i>Aeschynomene americana</i> L.				+	X
328	Rút nhám	<i>Aeschynomene aspera</i> L.	+		X	+	X
329	Rút dại	<i>Aeschynomene indica</i> L.	+	+	X	+	X
330	Đậu đao	<i>Canavalia cathartica</i> Thouars	+			+	
331	Đậu biển	<i>Canavalia maritima</i> (Aubl.) Thouars		+		+	X
332	Đậu cánh dơi pierre	<i>Christia pierrei</i> (Schindl.) Ohashi					X
333	Đậu biếc hance	<i>Clitoria hanceana</i> Hemsl.					X
334	Thóc lép	<i>Codariocalyx motorius</i> (Houtt.) Ohashi					X
335	Lục lạc trung quốc	<i>Crotalaria chinensis</i> L.				+	X
336	Lục lạc lá hẹp	<i>Crotalaria montana</i> Heyne ex Roth				+	X
337	Lục lạc năm lá	<i>Crotalaria quinquefolia</i> L.				+	X
338	Trắc một hạt	<i>Dalbergia candenatensis</i> (Dennst.) Prain		+		+	X
339	Ba chẽ mũi	<i>Dendrolobium rostratum</i> (Schindl.) Schindl.				+	X
340	Ba chẽ tán	<i>Dendrolobium umbellatum</i> (L.) Benth.				+	X
341	Cóc kèn	<i>Derris trifoliata</i> Lour.	+	+	X	+	X
342	Vảy rồng	<i>Desmodium styracifolium</i> (Osbeck) Merr.		+	X	+	X
343	Thóc lép ba hoa	<i>Desmodium triflorum</i> (L.) DC.		+	X	+	X
344	Vông nem	<i>Erytrina variegata</i> L.			X	+	X
345	Tóp mỡ bông tròn	<i>Flemingia strobilifera</i> (L.) Ait. f.				+	X
346	Chàm quả nhọn	<i>Indigofera galeoides</i> DC.				+	X
347	Chàm bò	<i>Indigofera spicata</i> Forssk.		+		+	X
348	Thần mát gân có lông	<i>Millettia pubinervis</i> Kurz				+	X
349	Dáng hương	<i>Pterocarpus macrocarpus</i> Kurz.					
350	Đậu ma	<i>Pueraria phaseoloides</i> (Roxb.) Benth.				+	X
351	So đũa	<i>Sesbania grandiflora</i> (L.) Pers.		+	X	+	X
352	Đậu giải hoa	<i>Sesbania paludosa</i> (Roxb.) Prain				+	X
353		<i>Sesbania javanica</i> Miq.	+				
354		<i>Sesbania sesban</i> (L.) Merr.	+				

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			TL1	TL2	08/09	TL3	08/09
355	Hoè lông	<i>Sophora tomentosa</i> L.				+	X
356	Dây kim luồng	<i>Spatholobus parviflorus</i> (Roxb. ex DC.) Kuntze					
357	Cốt khí nhuộm	<i>Tephrosia tinctoria</i> (L.) Pers.				+	X
358	Đậu dài hoa có tuyến	<i>Vigna adenantha</i> (F. G. Mey.) Mar.	+				X
359	Điền dài hoa vàng	<i>Vigna luteola</i> (Jacq.) Benth.	+		X		X
	67. HỌ DẼ	67. FAGACEAE					
360	Dẻ cam bột	<i>Lithocarpus cambodiensis</i> A. Camus				+	X
361	Dẻ cát	<i>Lithocarpus concentricus</i> (Lour.) Hjelmq.				+	X
	68. HỌ MỪNG QUẢN	68. FLACOURTIACEAE					
362	Nuốt lá có ke	<i>Casearia grewiaefolia</i> Vent.				+	
363	Mừng quân trắng	<i>Flacourtia jangomas</i> (Lour.) Raeusch.				+	X
364	Đại phong tử	<i>Hydnocarpus anthelminthica</i> Pierre ex Gagnep.				+	X
365	Nang trứng	<i>Hydnocarpus ilicifolia</i> King				+	
366	Bôm ba	<i>Scolopia macrophylla</i> (Wight & Arn.) Clos		+		+	X
	69. HỌ TAI VOI	69. GESNERIACEAE					
367	Cây ri ta mốc	<i>Chirita hamosa</i> R. Br.				+	X
368	Cây ri ta tổng bao	<i>Chirita involucrata</i> Craib				+	X
369	Thượng tiên	<i>Epithema brunonis</i> Blume				+	X
370	Song bể nam bộ	<i>Paraboea cochinchinensis</i> (C.B. Clarke) Burt				+	X
371	Ngạc cự đài	<i>Paraboea sinensis</i> (Oliv.) Burt				+	X
	70. HỌ HÉP	70. GOOGENIACEAE					
372	Hép	<i>Scaevola taccada</i> (Gaertn.) Roxb.				+	X
	71. HỌ THƯỜNG SƠN	71. HYDRANGEACEAE					
373	Thường sơn	<i>Dichroa febrifuga</i> Lour.		+			X
	72. HỌ BAN	72. HYPERICACEAE					
374	Thành ngạnh nam	<i>Cratoxylum cochinchinense</i> (Lour.) Blume				+	X
375	Thành ngạnh đẹp	<i>Cratoxylum formosum</i> (Jack) Benth.					X
376	Đỏ ngọn	<i>Cratoxylum pruniflorum</i> (Kurz) Kurz				+	X
	73. HỌ HÀ NU	73. IXONANTHACEAE					
377	Kơ nia	<i>Irvingia malayana</i> Oliv.				+	X
	74. HỌ HOA MÔI	74. LAMIACEAE					
378	Thiên thảo	<i>Anisomeles indica</i> (L.) Kuntze				+	X
379	é sa	<i>Basilicum polystachyon</i> (L.) Moench		+		+	X
380	Kinh giới rừng	<i>Elsholtzia blanda</i> (Benth.)					X

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			TL1	TL2	08/09	TL3	08/09
		Benth.					
381	é hình thoi	<i>Hyptis rhomboidea</i> Mart. & Gal.	+	+	X	+	X
382	é thơm	<i>Hyptis suaveolens</i> (L.) Poit.				+	X
383	Sử nhĩ	<i>Leonotis nepetifolia</i> (L.) R. Br.	+			+	X
384	ích mẫu	<i>Leonurus japonicus</i> Houtt.					X
385	Mè đất nhám	<i>Leucas aspera</i> (Willd.) Link				+	X
386	Bạch thiệt	<i>Leucas zeylanica</i> (L.) R. Br.				+	X
387	Bạc hà	<i>Mentha arvensis</i> L.				+	X
388	Húng	<i>Ocimum basilicum</i> L.		+	X	+	X
389	Hương nhu tía	<i>Ocimum tenuiflorum</i> L.				+	X
390	Húng chanh	<i>Plectranthus amboinicus</i> (Lour.) Spreng.					X
391	Tu hùg tai	<i>Pogostemon auricularius</i> (L.) Hassk.				+	X
	75. HỌ LONG NÃO	75. LAURACEAE					
392	Tơ xanh	<i>Cassytha filiformis</i> L.	+	+	X	+	X
393	Re cuống dài	<i>Cinnamomum longepetiolatum</i> Kosterm.				+	X
394	Màng tang	<i>Litsea cubeba</i> (Lour.) Pers				+	X
395	Bời lời nhót	<i>Litsea glutinosa</i> (Lour.) C. B. Robins.					X
396	Bời lời bao hoa đơn	<i>Litsea monopetala</i> (Roxb.) Pers.				+	X
397	Bời lời đấng	<i>Litsea umbellata</i> (Lour.) Merr.				+	X
398	Bơ	<i>Persea americana</i> Mill.					X
399	Re trắng lá hình nôm	<i>Phoebe cuneata</i> Blume				+	X
	76. HỌ LỘC VỪNG	76. LECYTHIDACEAE					
400	Lộc vừng	<i>Barringtonia acutangula</i> (L.) Gaertn.	+	+	X	+	X
401		<i>Barringtonia racemosa</i> L.			X		X
402	Lộc vừng hoa nhỏ	<i>Barringtonia micrantha</i> Gagnep.				+	X
403	Vừng	<i>Careya sphaerica</i> Roxb.				+	
	77. HỌ GỐI HẠC	77. LEEACEAE					
404	Củ rối đen	<i>Leea indica</i> (Burm. f.) Merr.				+	X
405	Gối hạc tía	<i>Leea rubra</i> Blume ex Spreng.		+	X	+	X
	78. HỌ RONG LI	78. LENTIBULARIACEAE					
406	Nhĩ cán vàng	<i>Utricularia aurea</i> Lour.	+		X		X
407	Nhĩ cán chế hai	<i>Utricularia bifida</i> L.				+	X
408		<i>Utricularia gibba</i> L.	+		X		X
409	Nhĩ cán tím	<i>Utricularia punctata</i> Wall. ex A. DC	+		X		X
	79. HỌ MÃ TIỀN	79. LOGANIACEAE					
410	Trai	<i>Fagraea fragrans</i> L.					X
411	Củ chi	<i>Strychnos angustiflora</i> Benth.				+	X
412	Mã tiền gai	<i>Strychnos axillaris</i> Colebr.					X
413	Mã tiền	<i>Strychnos nux-vomica</i> L.				+	X
414	Mã tiền thorel	<i>Strychnos thorelii</i> Pierre ex Dop					X
	80. HỌ TÂM GỬI	80. LORANTHACEAE					

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
415	Mộc ký năm nhị	<i>Dendrophthoe pentandra</i> (L.) Blume	+	+	X	+	X
416	Chùm gửi	<i>Helixanthera parasitica</i> Lour.				+	X
417	Ghi đông phương	<i>Viscum ovalifolium</i> Wall.		+		+	X
	81. HỌ TỬ VI	81. LYTHRACEAE					
418	Bằng lăng nước	<i>Lagerstroemia speciosa</i> (L.) Pers.					X
419	Bằng lăng lán	<i>Lagerstroemia duperreana</i> Pierre ex Gagnep.				+	X
	82. HỌ NGỌC LAN	82. MAGNOLIACEAE					
420	Ngọc lan trắng	<i>Michelia alba</i> DC.					X
	83. HỌ MĂNG RỖ	83. MALPIGHIACEAE					
421	Tơ mảnh	<i>Hiptage benghalensis</i> (L.) Kurz				+	X
422	Dùi đục trắng	<i>Hiptage candicans</i> Hook. f.				+	X
423	Dùi đục ba gai	<i>Hiptage triacantha</i> Pierre				+	X
	84. HỌ BÔNG	84. MALVACEAE					
424	Bụp bắp	<i>Abelmoschus esculentus</i> (L.) Moench		+	X	+	X
425	Bụp vang	<i>Abelmoschus moschatus</i> Medik.	+		X	+	X
426	Cối xay	<i>Abutilon indicum</i> (L.) Sweet				+	X
427	Đùi gà	<i>Decaschistia parviflora</i> Kurz				+	X
428		<i>Hibiscus sabdariffa</i> L.	+		X		X
429	Tra làm chiếu	<i>Hibiscus tiliaceus</i> L.	+	+	X	+	X
430	Ké hoa vàng	<i>Sida rhombifolia</i> L.		+	X	+	X
431	Tra bồ đề	<i>Thespesia populnea</i> (L.) Soland. ex Correa	+	+	X	+	X
432	Ké hoa đào	<i>Urena lobata</i> L.	+	+	X	+	X
	85. HỌ MUA	85. MELASTOMATACEAE					
433	Mua thường	<i>Melastoma affine</i> D. Don	+		X	+	X
434	Mua an bích	<i>Melastoma osbeckioides</i> Guillaum.					X
435	Mua lông	<i>Melastoma saigonense</i> (Kuntze) Merr.				+	X
436	Sâm bù	<i>Memecylon edule</i> Roxb.				+	X
437	Sâm bụi	<i>Memecylon fruticosum</i> King				+	X
	86. HỌ XOAN	86. MELIACEAE					
438	Gội mồm	<i>Aglaia cucullata</i> (Roxb.) Pell.		+		+	X
439	Gội lawi	<i>Aglaia lawii</i> (Wight) Sald. ex Ram.				+	X
440	Ngâu	<i>Aglaia odorata</i> Lour.				+	X
441	Sầu đâu	<i>Azadirachta indica</i> A. Juss.				+	X
442	Xương cá cừu long	<i>Carapa mekongensis</i> (Pierre) Pell.				+	X
443	Lát	<i>Chukrasia tabularis</i> var. <i>dongnaiensis</i> Pierre					?
444	Chắc khế nam bộ	<i>Dysoxylum cochinchinense</i>				+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
		Pierre					
445	Chắc khế gân đỏ	<i>Dysoxylum rubrocostatum</i> Pierre				+	X
446	Xà cừ	<i>Khaya senegalensis</i> (Desr.) A. Juss.			X	+	X
447	Xoan	<i>Melia azedarach</i> L.					X
448	Lòng tong mạnh	<i>Walsura robusta</i> Roxb.				+	X
449	Sú ổi	<i>Xylocarpus granatum</i> Koenig		+	X	+	X
450	Sú rùng	<i>Xylocarpus moluccensis</i> (Lamk.) M. Roem.				+	X
	87. HỌ TRANG	87. MENYANTHACEAE					
451	Trang ấn độ	<i>Nymphoides indicum</i> (L.) Kuntze	+	+	X	+	X
	88. HỌ TIẾT DẺ	88. MENISPERMACEAE					
452	Dây đồng cầu	<i>Anamirta cocculus</i> (L.) Wight & Arn.				+	X
453	Vàng đắng	<i>Coscinium fenestratum</i> (Gaertn.) Colebr.					X
454	Hoàng đằng	<i>Fibraurea tinctoria</i> Lour.					X
455	Củ dỏm	<i>Stephania dielsiana</i> Y. C. Wu				+	X
456	Dây mối	<i>Stephania japonica</i> (Thunb.) Miers				+	X
457	Bình vôi trắng	<i>Stephania pierrei</i> Diels				+	X
458	Bình vôi	<i>Stephania rotunda</i> Lour.				+	X
	89. HỌ TRINH NỮ	89. MIMOSACEAE					
459	Keo bông vàng	<i>Acacia auriculiformis</i> A. Cunn. ex Benth.			X	+	X
460	Keo ta	<i>Acacia farnesiana</i> (L.) Willd.			X		X
461	Keo tai tượng	<i>Acacia magium</i> Willd.			X		X
462	Cườm rắn	<i>Adenanthera pavonina</i> L.		+		+	X
463	Bản xe thơm	<i>Albizia odoratissima</i> (L. f.) Benth.				+	X
464	Mán đĩa	<i>Archidendron clypearia</i> (Jack) I. Nielsen		+			X
465	Mán đĩa phú quốc	<i>Archidendron quocense</i> (Pierre) I. Nielsen				+	X
466	Bàm bám nam	<i>Entada rheedii</i> Spreng.				+	X
467	Bọ chết	<i>Leucaena leucocephala</i> (Lamk.) De Wit		+		+	X
468	Trinh nữ nhọn	<i>Mimosa pigra</i> L.	+	+	X	+	X
469	Trinh nữ	<i>Mimosa pudica</i> L.	+	+	X	+	X
470	Me keo	<i>Pithecellobium dulce</i> (Roxb.) Benth.		+	X		X
471	Còng	<i>Samanea saman</i> (Jacq.) Merr.				+	X
472	Cắm xe	<i>Xylia xylocarpa</i> (Roxb.) Taub.					?
	90. HỌ CỎ BỤNG CU	90. MOLLUGINACEAE					
473	Rau đắng đất	<i>Glinus oppositifolius</i> (L.) DC.		+	X	+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
474	Rau đắng lông	<i>Glinus lotoides</i> L.		+	X	+	X
	91. HỌ DẦU TÂM	91. MORACEAE					
475	Xa kê	<i>Artocarpus communis</i> Forst. & Forst. f.		+	X	+	X
476	Mít	<i>Artocarpus heterophyllus</i> Lamk.			X	+	X
477	Mít chua	<i>Artocarpus nitidus</i> ssp. <i>griffithii</i> (King) Jarr.			X	+	X
478	Mít rừng	<i>Artocarpus rigidus</i> ssp. <i>asperulus</i> (Gagnep.) Jarr.			X	+	X
479	Dương	<i>Broussonetia papyrifera</i> (L.) LOHeór. ex Vent.					X
480	Vả	<i>Ficus auriculata</i> Lour.					X
481	Si	<i>Ficus benjamina</i> L.			X	+	X
482	Gù	<i>Ficus callosa</i> Willd.				+	X
483	Đa búp đỏ	<i>Ficus elastica</i> Roxb. ex Horn.				+	X
484	Ngái vàng	<i>Ficus fulva</i> Reinw. ex Blume				+	X
485	Đa nhãn	<i>Ficus glaberrima</i> Blume				+	X
486	Vú bò	<i>Ficus heterophylla</i> L. f.				+	X
487	Ngái lông	<i>Ficus hirta</i> Vahl				+	X
488	Si quả nhỏ	<i>Ficus microcarpa</i> L. f.	+		X	+	X
489	Đa bắp bè	<i>Ficus nervosa</i> Heyne ex Roth				+	X
490	Sung	<i>Ficus racemosa</i> L.				+	X
491	Đa bồ đề	<i>Ficus religiosa</i> L.				+	X
492	Đa bồ đề	<i>Ficus rumphii</i> Blume	+		X	+	X
493	Sung kiều	<i>Ficus superba</i> (Miq.) Miq.				+	X
494	Đa talbo	<i>Ficus talbotii</i> King				+	X
495	Mỏ quạ thorel	<i>Maclura thorelii</i> (Gagnep.) Corn.				+	X
496	Dâu bầu	<i>Morus cathayana</i> Hemsl.				+	X
497	Ruổi	<i>Streblus asper</i> Lour.			X	+	X
498	Ruổi ô rô	<i>Streblus ilicifolius</i> (Vidal) Corn.				+	X
	92. HỌ CHÙM NGÂY	92. MORINGIACEAE					
499	Chùm ngây	<i>Moringa oleifera</i> Lamk.				+	X
	93. HỌ MÁU CHÓ	93. MYRISTICACEAE					
500	Săng máu rạch	<i>Horsfieldia irya</i> (Gaertn.) Warb.		+	X	+	X
501	Máu chó thorel	<i>Horsfieldia thorelii</i> Lecomte				+	X
	94. HỌ ĐƠN NEM	94. MYRSINACEAE					
502	Sú	<i>Aegiceras corniculatum</i> (L.) Blanco				+	X
503	Khù neo	<i>Ardisia expansa</i> Pitard				+	X
504	Cơm nguội nhỏ	<i>Ardisia humilis</i> Vahl		+	X	+	X
505	Cơm nguội dài to	<i>Ardisia macrosepala</i> Pitard				+	X
506	Cơm nguội cà	<i>Ardisia solanacea</i> Roxb.				+	X
507	Vón vén	<i>Embelia ribes</i> Burm. f.				+	X

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			TL1	TL2	08/09	TL3	08/09
508	Đơn nem	<i>Maesa perlarius</i> (Lour.) Merr.				+	X
509	Xây có nam bộ	<i>Myrsine cochinchinensis</i> A. DC.				+	X
510	Xây hẹp	<i>Myrsine linearis</i> (Lour.) S. Moore				+	
	95. HỌ SIM	95. MYRTACEAE					
511	Tràm	<i>Melaleuca cajaputi</i> Powel	+	+	X	+	X
512	Ồi	<i>Psidium guajava</i> L.		+	x	+	X
513	Sim rừng	<i>Rhodamnia dumetorum</i> (Poir.) Merr. & Perry				+	X
514	Sim	<i>Rhodomyrtus tomentosa</i> (Ait.) Hassk.				+	X
515		<i>Syzygium cinereum</i> Wall. ex Merr. & Perry	+				
516	Trâm mốc	<i>Syzygium cuminii</i> (L.) Skells	+	+	X	+	X
517	Trâm đại	<i>Syzygium grande</i> (Wight) Walp.				+	X
518	Trâm hoa dài	<i>Syzygium lineatum</i> (DC.) Merr. & Perry				+	X
519	Trâm rộng	<i>Syzygium oblatum</i> (Roxb.) Wall.		+	X	+	X
520	Sắn thuyền	<i>Syzygium polyanthum</i> (Wight) Walp.	+		X	+	X
	96. HỌ SEN	96. NELUMBONACEAE					
521	Sen	<i>Nelumbo nucifera</i> Gaertn.		+	X	+	X
	97. HỌ NẮP ẨM	97. NEPENTHACEAE					
522	Nắp ẩm	<i>Nepenthes mirabilis</i> (Lour.) Druce	+	+	X	+	X
	98. HỌ HOA PHẤN	98. NYCTAGINACEAE					
523	Nam sâm bò	<i>Boerhavia diffusa</i> L.				+	X
	99. HỌ SÚNG	99. NYMPHAEACEAE					
524		<i>Nymphaea lotus</i> L.	+		X		X
525	Súng lam	<i>Nymphaea nouchali</i> Burm. f.	+	+	X	+	X
526	Súng trắng	<i>Nymphaea pubescens</i> Willd.			X	+	X
527		<i>Nymphaea tetragona</i> George.	+				
	100. HỌ HOÀNG MAI	100. OCHNACEAE					
528	Mai cánh lõm	<i>Gomphia serrata</i> (Gaertn.) Kanis				+	X
529	Mai vàng	<i>Ochna integerrima</i> (Lour.) Merr.				+	X
	101. HỌ RAU DỪA	101. ONAGRACEAE					
530	Rau dừa nước	<i>Ludwigia adscendens</i> (L.) Hara		+	X	+	X
531	Rau mương thon	<i>Ludwigia hyssopifolia</i> (G. Don) Exell		+	X	+	X
532	Rau mương đứng	<i>Ludwigia octovalvis</i> (Jacq.) Raven		+	X	+	X
		OPILLIACEAE					
533	Rau sắng	<i>Melientha suavis</i> Pierre					X
	102. HỌ CHUA ME ĐẤT	102. OXALIDACEAE					
534	Khế	<i>Averrhoa carambola</i> L.		+	X	+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
535	Chua me lá me	<i>Biophytum sensitivum</i> (L.) DC.				+	X
536	Chua me đất hoa vàng	<i>Oxalis corniculata</i> L.			X	+	X
	103. HỌ LẠC TIÊN	103. PASSIFLORACEAE					
537	Dây phục linh	<i>Adenia parviflora</i> (Blanco) Cusset				+	X
538	Quạ quạ	<i>Adenia viridiflora</i> Craib					X
539	Lạc tiên	<i>Passiflora foetida</i> L.		+	X	+	X
	104. HỌ TRẦU KHÔNG	104. PIPERACEAE					
540	Rau càng cua	<i>Peperomia pellucida</i> (L.) H.B.K.		+	X	+	X
541	Tiêu châu đốc	<i>Piper chaudiocanum</i> C. DC.				+	X
542	Hồ tiêu	<i>Piper nigrum</i> L.				+	X
	105. HỌ RAU RẪM	105. POLYGONACEAE					
543		<i>Polygonum barbatum</i> L.			X		X
544	Nghê nhẵn	<i>Polygonum glabrum</i> Willd.		+	X	+	X
545	Nghê rậm	<i>Polygonum hydropiper</i> L.		+	X	+	X
546	Nghê lông dày	<i>Polygonum tomentosum</i> Willd.		+	X	+	X
547	Rau rậm	<i>Polygonum odoratum</i> Lour.		+	X	+	X
548	Nghê lá đào	<i>Polygonum persicaria</i> L.		+			X
	106. HỌ RAU SAM	106. PORTULACACEAE					
549	Rau sam	<i>Portulaca oleracea</i> L.	+	+	X	+	X
	107.	107. POTALIACEAE					
550	Bàng nước	<i>Fagraea crenulata</i> C.B. Clarke				+	X
	108. HỌ TÁO	108. RHAMNACEAE					
551	Núc áo	<i>Colubrina asiatica</i> (L.) Brongn.				+	X
552	Gỗ an java	<i>Gouania javanica</i> Miq.				+	X
553	Dây thiêu trâu	<i>Ventilago cristata</i> Pierre				+	X
554	Táo rừng	<i>Ziziphus oenoplia</i> (L.) Mill.				+	X
	109. HỌ ĐUỐC	109. RHIZOPHORACEAE					
555	Vẹt trụ	<i>Bruguiera cylindrica</i> (L.) Blume			X	+	X
556	Vẹt dù	<i>Bruguiera gymnorhiza</i> (L.) Savigny			X	+	X
557	Vẹt tách	<i>Bruguiera parviflora</i> (Roxb.) Wight & Arn. ex Griff.			X	+	X
558	Vẹt đen	<i>Bruguiera sexangula</i> (Lour.) Poir.			X	+	X
559	Xăng mả nguyên	<i>Carallia brachiata</i> (Lour.) Merr.				+	X
560	Xăng mả trâm	<i>Carallia eugenoides</i> King					X
561	Xăng mả thon	<i>Carallia lanceaefolia</i> Roxb.					X
562	Dà đen, Đà quánh	<i>Ceriops decandra</i> (Griff.) Ding Hou			X	+	X
563	Vỏ đà, Đà vôi	<i>Ceriops tagal</i> (Perr.) C. B. Robins.			X	+	X
564	Trang	<i>Kandelia candel</i> (L.) Druce			X	+	X
565	Đước đôi	<i>Rhizophora apiculata</i> Blume			X	+	X
566	Đưng	<i>Rhizophora mucronata</i> Poir.			X	+	X
	110. HỌ HOA HỒNG	110. ROSACEAE					
567	Xoan đào lông	<i>Prunus arborea</i> (Blume) Kalkm.				+	X
568	Đũm gân râu	<i>Rubus blepharoneurus</i> Card.					X

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			TL1	TL2	08/09	TL3	08/09
569	Ngầy trâu	<i>Rubus leucanthus</i> Hance					X
	111. HỌ CÀ PHÊ	111. RUBIACEAE					
570	Găng núi	<i>Aidia oxyodonta</i> (Drake) Yamaz.					X
571	Găng nam bộ	<i>Canthium cochinchinense</i> Pierre ex Pitard					X
572	Xương cá nhẵn	<i>Canthium glabrum</i> Blume		+	X	+	X
573	Đơn tướng quân	<i>Chasallia curviflora</i> Wall. ex Roxb.				+	X
574	Lâm bông	<i>Guettarda speciosa</i> L.				+	X
575	Vỏ voi	<i>Gynochthodes proboscidea</i> Pierre ex Pitard	+			+	X
576	An điền hai hoa	<i>Hedyotis biflora</i> (L.) Lamk.				+	X
577	Cóc mẩn	<i>Hedyotis corymbosa</i> (L.) Lamk.	+	+	X	+	X
578		<i>Hedyotis difusa</i> Will.	+				
579	An điền lá xoan	<i>Hedyotis ovatifolia</i> Cav.				+	X
580	An điền hoa nhỏ	<i>Hedyotis tenelliflora</i> Blume				+	X
581	An điền có áo	<i>Hedyotis vestita</i> R. Br. ex G. Don				+	X
582	Kỳ nam kiến	<i>Hydnophytum formicarum</i> Jack		+		+	X
583	Sứa	<i>Hypobathrum racemosum</i> (Roxb.) Kurz				+	X
584	Trang son	<i>Ixora coccinea</i> L.					X
585	Trang vàng vàng	<i>Ixora flavescens</i> Pierre ex Pit.				+	X
586	Đơn trắng	<i>Ixora nigricans</i> R. Br.				+	X
587	Xú hương vòng	<i>Lasianthus verticillatus</i> (Lour.) Merr.				+	X
588	Nhàu lá chanh	<i>Morinda citrifolia</i> L.				+	X
589	Nhàu nước	<i>Morinda persicaefolia</i> Buch.-Ham.			X		
590	Song nhàu	<i>Morindopsis capillaris</i> (Kurz) Kurz				+	X
591	Gáo vàng	<i>Nauclea orientalis</i> (L.) L.			X	+	X
592	Rau mợ	<i>Paederia consimilis</i> Pierre ex Pitard	+	+	X	+	X
593	Rau mợ lông	<i>Paederia lanuginosa</i> Wall.			X	+	X
594	Mợ leo	<i>Paederia scandens</i> (Lour.) Merr.		+	X	+	X
595	Dọt sành ấn độ	<i>Pavetta indica</i> L.				+	X
596	Lấu bò	<i>Psychotria serpens</i> L.		+	X	+	X
597	Găng nhung	<i>Randia dasycarpa</i> (Kurz) Bakh. f.				+	X
598	Côi	<i>Scyphiphora hydrophyllacea</i> Gaertn. f.				+	X
599	Trên á châu	<i>Tarenna asiatica</i> (L.) Kuntze			X		X
600	Câu đăng	<i>Uncaria acida</i> (Hunt.) Roxb.		+		+	X
601	Câu đăng lá hình trứng	<i>Uncaria ovalifolia</i> Roxb.				+	X
602	Hắc quang	<i>Wendlandia paniculata</i> (Roxb.)					X

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			TL1	TL2	08/09	TL3	08/09
		DC.					
603	Xuân tôn phú quốc	<i>Xantonnea quocensis</i> Pierre ex Pitard				+	X
	112. HỌ CAM	112. RUTACEAE					
604	Bưởi bung	<i>Acronychia pedunculata</i> (L.) Miq.	+	+	X	+	X
605	Chanh rừng	<i>Atalantia citroides</i> Pierre ex Guill.					X
606	Quýt rừng	<i>Atalantia roxburghiana</i> Hook. f.					X
607	Cam chua	<i>Citrus aurantium</i> L.					X
608	Tráp	<i>Citrus hystrix</i> DC.					X
609	Hồng bì đại	<i>Clausena excavata</i> Burm. f.					X
610	Dấu dầu lá hẹp	<i>Euodia callophylla</i> Guill.					X
611	Ba chạc	<i>Euodia leptota</i> (Spreng.) Merr.	+	+	X	+	X
612	Cơm rượu trứng	<i>Glycosmis ovoidea</i> Pierre				+	X
613	Cơm rượu	<i>Glycosmis pentaphylla</i> (Retz.) Correa					X
614	Thần xạ hương	<i>Luvunga scandens</i> (Roxb.) Buch.-Ham.				+	X
615	Kim sương	<i>Micromelum minutum</i> (Forst. f.) Wight & Arn.					X
616	Vương tùng	<i>Murraya glabra</i> (Guill.) Guill.					?
617	Nguyệt quế	<i>Murraya paniculata</i> (L.) Jack				+	X
618	Đa từ	<i>Pleiospermium annamense</i> Guill.			X		
619	Kim quất	<i>Triphasia trifolia</i> (Burm. f.) P. Wils.					X
620	Xuyên tiêu	<i>Zanthoxylum nitidum</i> (Roxb.) DC.				+	X
	113. HỌ THỨ MẶT	113. SALVADORACEAE					
621	Chùm lé	<i>Azima sarmentosa</i> (Blume) Benth. & Hook. f.				+	X
	114. HỌ BÒ HÒN	114. SAPINDACEAE					
622	Tầm phong	<i>Cardiospermum halicacabum</i> L.			X	+	X
623	Nhãn malai	<i>Dimocarpus longan</i> var. <i>malesianus</i> Leenh.				+	X
624	Nhãn tro	<i>Dimocarpus longan</i> var. <i>obtusus</i> (Pierre) Leenh				+	X
625	Chành rành	<i>Dodonaea viscosa</i> (L.) Jacq.				+	X
626	Gùi da cánh	<i>Guioa pleuropteris</i> (Blume) Radlk.				+	X
627	Lân hùng sê nê gal	<i>Lepisanthes senegalensis</i> (Poir.) Leenh.				+	X
628	Nây năm cánh	<i>Mischocarpus pentapetalus</i> (Roxb.) Radlk.				+	X
629	Cọ phèn	<i>Schleichera oleosa</i> (Lour.) Oken				+	X
630	Vải guốc	<i>Xerospermum noronhianum</i> (Blume) Blume				+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
	115. HỌ HỒNG XIÊM	115. SAPOTACEAE					
631	Sơn xã	<i>Donella lanceolata</i> (Blume) Aubr.				+	X
632	Găng mỡ	<i>Manilkara hexandra</i> (Roxb.) Dubard				+	X
633	Viết	<i>Manilkara kauki</i> (L.) Dubard			X	+	X
634	Sến cát	<i>Mimusops elengi</i> L.				+	X
635	Mộc, Chọi	<i>Planchonella obovata</i> (R. Br.) Pierre				+	X
	116. HỌ GIÁP CÁ	116. SAURURACEAE					
636	Giáp cá	<i>Houttuynia cordata</i> Thunb.		+	X	+	X
	117. HỌ HOA MŨM CHÓ	117. SCROPHULARIACEAE					
637	Rau đắng biển	<i>Bacopa monnieri</i> (L.) Wettst.	+	+	X	+	X
638	Rau om	<i>Limnophila chinensis</i> (Osbeck.) Merr.		+	X	+	X
639	Ngõ nước	<i>Limnophila heterophylla</i> (Roxb.) Benth.					X
640	Lữ đằng cong	<i>Lindernia anagallis</i> (Burm. f.) Penn.				+	X
641	Màn đất	<i>Lindernia antipoda</i> (L.) Alst.	+	+	X	+	X
642	Lữ đằng cần	<i>Lindernia crustacea</i> (L.) F. Muell.	+	+	X	+	X
643	Lữ đằng chín	<i>Lindernia viscosa</i> (Hornem.) Bold.		+	X	+	X
644	Cam thảo nam	<i>Scoparia dulcis</i> L.		+	X	+	X
645	Tô liên thorel	<i>Torenia thorelii</i> Bonati			X	+	X
	118. HỌ THANH THẮT	118. SIMAROUBACEAE					
646	Thanh thất	<i>Ailanthus triphysa</i> (Dennst.) Alston					X
647	Sầu đầu cứt chuột	<i>Bucea javanica</i> (L.) Merr.				+	X
648	Bá bệnh	<i>Eurycoma longifolia</i> Jack				+	X
649	Hải sơn	<i>Harrisonia perforata</i> (Blanco) Merr.				+	X
650	Thần lãn ấn	<i>Quassia indica</i> (Gaertn.) Noot.					X
	119. HỌ CÀ	119. SOLANACEAE					
651	Ớt	<i>Capsicum frutescens</i> L.		+	X	+	X
652	Cà độc dược	<i>Datura metel</i> L.		+	X	+	X
653	Cà ngủ	<i>Lycianthes biflora</i> (Lour.) Bitter				+	X
654	Tầm bóp	<i>Physalis angulata</i> L.		+	X	+	X
655		<i>Solanum americanum</i> Mill	+				
656	Cà hung	<i>Solanum lasiocarpum</i> Dun.				+	X
657	Lu lu đực	<i>Solanum nigrum</i> L.			X	+	X
658	Cà nong	<i>Solanum torvum</i> Sw.		+	X		X
659	Cà trái vàng	<i>Solanum viarum</i> Dun.					X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
660	Cà đại hoa tím	<i>Solanum violaceum</i> Ortega		+		+	X
	120. HỌ BÀN	120. SONNERATIACEAE					
661	Phay	<i>Duabanga grandiflora</i> (Roxb. ex DC.) Walp.				+	X
662	Bàn trắng	<i>Sonneratia alba</i> Smith		+	X	+	X
663	Bàn chua	<i>Sonneratia caseolaris</i> (L.) Engl.	+		X	+	X
664	Bàn ổi	<i>Sonneratia ovata</i> Back.				+	X
	121. HỌ XÀ BÔNG	121. SPHENOCLEACEAE					
665	Xà bông	<i>Sphenoclea zeylanica</i> Gaertn.	+	+		+	X
	123. HỌ TRÔM	123. STERCULIACEAE					
666	Bích nữ nhon	<i>Byttneria aspera</i> Colebr.				+	X
667	Chưng sao	<i>Commersonia bartramia</i> (L.) Merr.				+	
668	Bông bại	<i>Eriolaena candollei</i> Wall.					
669	Thấu kén lá hẹp	<i>Helicteres angustifolia</i> L.				+	X
670	Thấu kén tròn	<i>Helicteres isora</i> L.				+	X
671	Cui biển	<i>Heritiera littoralis</i> Dryand.		+	X	+	X
672	Cui lá to	<i>Heritiera macrophylla</i> Wall. ex Kurz					X
673	Trứng cua lá bồ	<i>Melochia corchorifolia</i> L.				+	X
674	Lòng mang xê	<i>Pterospermum diversifolium</i> Blume					X
675	Lòng mang lá cò ke	<i>Pterospermum grewiaefolium</i> Pierre				+	X
676	Lười ươi	<i>Scaphium macropodium</i> (Miq.) Heyne				+	X
677	Bảy thưa sét	<i>Sterculia rubiginosa</i> Vent.				+	X
678	Huỳnh	<i>Tarrietia javanica</i> Blume				+	X
	124. HỌ BỒ ĐỀ	124. STYRACACEAE					
679	Bồ đề	<i>Styrax agrestis</i> (Lour.) G. Don				+	X
	125. HỌ DUNG	125. SYMPLOCACEAE					
680	Dung nam bộ	<i>Symplocos cochinchinensis</i> (Lour.) S. Moore				+	X
681	Dung lá trà	<i>Symplocos laurina</i> (Retz) Wall.				+	X
682	Dung láng	<i>Symplocos lucida</i> (Thunb.) Sieb. & Zucc.				+	X
683	Mu ếch	<i>Symplocos racemosa</i> Roxb.				+	
	126. HỌ CHÈ	126. THEACEAE					
684	Linh	<i>Eurya japonica</i> Thunb.				+	X
685	Gỗ hà	<i>Schima wallichii</i> (DC.) Korth.				+	X
686	Huỳnh nương	<i>Ternstroemia penangiana</i> Choisy				+	X
	127. HỌ ĐAY	127. TILIACEAE					
687	Bố đại	<i>Corchorus olitorius</i> L.				+	X
688	Cò ke trung bộ	<i>Grewia annamica</i> Gagnep.				+	X

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			TL1	TL2	08/09	TL3	08/09
689	Cò ke lá đẹp	<i>Grewia callophylla</i> Kurz					X
690	Giam	<i>Grewia eriocarpa</i> Juss.				+	X
691	Cò ke lá lồm	<i>Grewia paniculata</i> Roxb.		+	X	+	X
692	Trứng cá	<i>Muntingia calabura</i> L.		+	X	+	X
693	Gai đầu là tròn	<i>Triumfetta rotundifolia</i> Lamk.				+	X
	128. HỌ TRÂM	128. THYMELAEACEAE					
694	Trâm	<i>Aquilaria crassna</i> Pierre ex Lecomte				+	X
695	Niệt dó hoa dài	<i>Wikstroemia dolichantha</i> Diels				+	X
	129. HỌ DU	129. ULMACEAE					
696	Ngát vàng	<i>Gironniera subaequalis</i> Planch.				+	X
697	Hu đay	<i>Trema orientalis</i> (L.) Blume			X	+	X
698	Hu đay lông	<i>Trema politoria</i> (Planch.) Blume					X
	130. HỌ GAI	130. URTICACEAE					
699	Gai tuyết	<i>Boehmeria nivea</i> (L.) Gaudich.				+	X
700	Han	<i>Laportea interrupta</i> (L.) Chew				+	X
701	Gai rập	<i>Maoutia puya</i> (Hook. f.) Wedd.				+	X
702	Tai đá	<i>Pellionia repens</i> (Lour.) Merr.				+	X
703	Dái khí	<i>Poikilospermum suaveolens</i> (Blume) Merr.				+	X
704	Thuốc vôi tai	<i>Pouzolzia auriculata</i> Wight	+	+	X	+	X
705	Bọ mắt	<i>Pouzolzia zeylanica</i> (L.) Benn.	+	+	X	+	X
	131. HỌ CỎ ROİ NGỰA	131. VERBENACEAE					
706	Mắm trắng	<i>Avicennia alba</i> Blume			X	+	X
707	Mắm vàng	<i>Avicennia marina</i> (Forsk.) Vierh.			X	+	X
708	Mắm đen	<i>Avicennia officinalis</i> L.			X	+	X
709		<i>Avicennia rumphiana</i> L.			X		X
710	Tử châu lá dài	<i>Callicarpa longifolia</i> Lamk.				+	X
711	Ngọc nữ thơm	<i>Clerodendrum chinense</i> (Osbeck) Mabb.				+	X
712	Ngọc nữ nam bộ	<i>Clerodendrum cochinchinense</i> Dop				+	X
713	Bọ mảy	<i>Clerodendrum cyrtophyllum</i> Turcz				+	X
714	Ngọc nữ godefroy	<i>Clerodendrum godefroyi</i> Kuntze				+	X
715	Ngọc nữ biển	<i>Clerodendrum inerme</i> (L.) Gaertn.		+	X	+	X
716	Ngọc nữ chân vịt	<i>Clerodendrum palmatolobatum</i> Dop		+	X	+	X
717	Ngọc nữ răng	<i>Clerodendrum serratum</i> (L.) Moon				+	X
718	Ngọc nữ wallich	<i>Clerodendrum wallichii</i> Merr.				+	X
719	Tu hú	<i>Gmelina asiatica</i> L.		+	X		X
720	Ngũ sắc	<i>Lantana camara</i> L.		+	X	+	X
721	Dây lức	<i>Phyla nodiflora</i> (L.) Greene		+	X	+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
722	Cách biển	<i>Premna corymbosa</i> (Burm. f.) Rottb.		+	X	+	X
723		<i>Premna seratifolia</i> L.	+				
724	Đuôi chuột	<i>Stachytarpheta jamaicensis</i> (L.) Vahl			X	+	X
725	Tếch	<i>Tectona grandis</i> L. f.					X
726	Cỏ roi ngựa	<i>Verbena officinalis</i> L.			X	+	X
727	Đền lông	<i>Vitex canescens</i> Kurz				+	X
728	Ngũ châu	<i>Vitex negundo</i> L.	+		X	+	X
729	Bình linh lông	<i>Vitex pinnata</i> L.		+		+	X
730	Bình linh xoan	<i>Vitex rotundifolia</i> L. f.		+		+	X
731	Quan âm	<i>Vitex trifolia</i> L.		+	X	+	X
	133. HỌ NHO	133. VITACEAE					
732	Hồ nho nhẵn	<i>Ampelocissus arachnoidea</i> Planch.				+	X
733		<i>Ampelocissus humulifolia</i> Gagnep.				+	X
734	Sàn sặt	<i>Cayratia trifolia</i> (L.) Domino.		+	X	+	X
735	Hồ đăng java	<i>Cissus javana</i> DC.				+	X
736	Dây chìa vôi	<i>Cissus modeccoides</i> Blume					X
737	Dây nho	<i>Cissus rosea</i> Royle		+	X	+	X
738	Chìa vôi	<i>Cissus triloba</i> (Lour.) Merr.		+	X	+	X
739	Trình đẳng lan đức	<i>Parthenocissus heterophylla</i> (Blume) Merr.				+	X
740	Tứ thủ xoan	<i>Tetrastigma oliviforme</i> Planch.				+	X
741	Dây quai bị	<i>Tetrastigma strumarium</i> Gagn.				+	X
742	Nho cong queo	<i>Vitis flexuosa</i> Thunb.				+	X
	B. LILIOPSIDA	B. LỚP MỘT LÁ MẦM					
	134. HỌ THỦY XƯƠNG BÒ	134. ACORACEAE					
743	Thủy xương bò	<i>Acorus calamus</i> L.		+	X	+	X
	135. HỌ NÁNG	135. AMARYLLIDACEAE					
744	Náng	<i>Crinum asiaticum</i> L.		+	X	+	X
745	Náng lá kiếm	<i>Crinum defixum</i> Ker-Gawl.		+			X
746		<i>Crinum ensifolium</i> Roxb.	+		X		X
	136. HỌ RÁY	136. ARACEAE					
747	Mái chèo	<i>Aglaodorum griffithii</i> (Schott) Schott		+	X	+	X
748	Ráy tai lá dài	<i>Alocasia longiloba</i> Miq.				+	X
749	Độc mùng	<i>Alocasia odora</i> (Roxb.) C. Koch			X	+	X
750	Khoai môn	<i>Colocasia esculenta</i> (L.) Schott		+	X	+	X
751	Mái dầm	<i>Cryptocoryne ciliata</i> (Roxb.) Fisch ex Schott		+	X	+	X
752	Thiên niên kiện nam bộ	<i>Homalomena cochinchinensis</i> Engler.				+	X
753	Thiên niên kiện	<i>Homalomena occulta</i> (Lour.) Schott.				+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
754	Chóc gai	<i>Lasia spinosa</i> (L.) Thwaites		+		+	X
755	Bèo cái	<i>Pistia stratiotes</i> L.		+	X	+	X
756	Ráy leo trung quốc	<i>Pothos chinensis</i> (Raf.) Merr.		+			
757	Ráy leo	<i>Pothos repens</i> (Lour.) Druce.					X
758	Ráy leo lá hẹp	<i>Pothos scandens</i> L.				+	X
759	Đuôi phượng hồng không	<i>Rhaphidophora hongkongensis</i> Schott				+	X
760	Dây bá	<i>Scindapsus officinalis</i> (Roxb.) Schott				+	X
	137. HỌ RAU DỪA	137. ARECACEAE					
761	Cau rừng	<i>Areca triandra</i> Roxb.				+	X
762	Búng báng	<i>Arenga pinnata</i> (Wurmb) Merr.				+	X
763	Mây đá	<i>Calamus rudentum</i> Lour.					X
764	Mây nếp	<i>Calamus tetradactylus</i> Hance					X
765	Mây dẻo	<i>Calamus viminalis</i> Willd.				+	X
766	Đùng đình	<i>Caryota mitis</i> Lour.	+			+	X
767	Đùng đình bông đơn	<i>Caryota monostachya</i> Becc.				+	X
768	Dừa	<i>Cocos nucifera</i> L.		+	X	+	X
769	Mật cật gai	<i>Licuala spinosa</i> Thunb.	+		X	+	X
770	Kè, Kè nam	<i>Livistonia saribus</i> (Lour.) Merr. ex A. Chev.			X	+	
771	Dừa nước	<i>Nypa fructicans</i> Wurmb.	+	+	X	+	X
772	Nhum	<i>Oncosperma tigillarum</i> (Jack) Ridl.		+		+	X
773	Chà là biển	<i>Phoenix paludosa</i> Roxb.				+	X
774	Cau chuột nam bộ	<i>Pinanga sylvestris</i> (Lour.) Becc.				+	X
775	Mật cật nam bộ	<i>Rhapis cochinchinensis</i> (Lour.) Mart.				+	X
	138. HỌ DỨA	138. BROMELIACEAE					
776	Dứa, Thơm	<i>Ananas comosus</i> (L.) Merr.		+	X	+	X
	139. HỌ THÀI LÀI	139. COMMELINACEAE					
777	Rau thài lài	<i>Aclisia secundiflora</i> (Blume) Bakh. f.			X	+	X
778	Trái thương	<i>Commelina communis</i> L.		+	X	+	X
779	Thài lài trắng	<i>Commelina diffusa</i> Burm. f.	+	+	X		X
780	Trái nước	<i>Commelina obliqua</i> Buch.-Ham. ex D. Don	+			+	X
781		<i>Commelina paludosa</i> Bl.	+				X
782	Thài lài trâu	<i>Cyanotis axillaris</i> (L.) D. Don			X	+	X
783	Rau trái lông	<i>Cyanotis cristata</i> (L.) D. Don			X	+	X
784	Cỏ đầu riu	<i>Floscopa scandens</i> Lour.			X	+	X
785	Lỗ trai bao	<i>Murdannia vaginata</i> (L.) Bruckn.		+	X	+	X
	140. HỌ MÍA DÒ	140. COSTACEAE					
786	Mía dò	<i>Costus speciosus</i> (Koenig) Smith		+	X	+	X
	141. HỌ CỎI	141. CYPERACEAE					
787	Cói chát lông	<i>Bulbostylis puberula</i> (Poir.) C. B.	+	+	X		X

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			TL1	TL2	08/09	TL3	08/09
		Clarke					
788	Cói túi ấn	<i>Carex indica</i> L.				+	X
789	Cói ba ba kan	<i>Cyperus babakan</i> Steud.	+	+	X	+	X
790	Cói hoa giẹp	<i>Cyperus compressus</i> L.	+	+	X	+	X
791	Cói hoa xèo	<i>Cyperus diffusus</i> Vahl				+	X
792	Cói bàn tay	<i>Cyperus digitatus</i> Roxb.					X
793	Cói bông cách	<i>Cyperus distans</i> L. f.	+	+			X
794	U du	<i>Cyperus elatus</i> L.	+	+	X	+	X
795	Cói u du cao	<i>Cyperus exaltatus</i> Retz.			X		X
796	Cói đất chua	<i>Cyperus halpan</i> L.	+	+			X
797	Cói bông hẹp	<i>Cyperus imbricatus</i> Retz.	+	+	x		X
798	Cói trắng	<i>Cyperus leucocephalus</i> Retz.				+	X
799	Cói nước	<i>Cyperus malaccensis</i> Lamk.	+	+		+	X
800	Củ gấu	<i>Cyperus rotundus</i> L.	+	+	X		X
801	Cói gấu biển	<i>Cyperus stoloniferus</i> Retz.	+	+	X	+	X
802	Cói ba cạnh	<i>Cyperus trialatus</i> (Boeck) J. Kern	+	+	X	+	X
803	Củ năn	<i>Eleocharis dulcis</i> (Burm. f.) Hensch	+	+	X	+	X
804	Năn ni	<i>Eleocharis ochrostachys</i> Steud.	+	+	X	+	X
805	Năn cong	<i>Eleocharis retroflexa</i> (Poir.) Urb.	+	+	X		X
806	Năn xoắn	<i>Eleocharis spiralis</i> (Rottb.) Roem. & Schult.	+	+	x		X
807	Cói quăn nhọn	<i>Fimbristylis acuminata</i> Vahl	+	+	X		X
808	Cói quăn xim	<i>Fimbristylis cymosa</i> R. Br.	+	+	X	+	X
809	Cói quăn phân đôi	<i>Fimbristylis dichotoma</i> (L.) Vahl	+	+	X		X
810	Cói quăn lững lẹ	<i>Fimbristylis disticha</i> Boeck	+	+	X	+	X
811	Cói quăn dạng ấn	<i>Fimbristylis fuscoides</i> C.B. Clarke	+	+	X	+	X
812	Cói quăn tò te	<i>Fimbristylis miliacea</i> (L.) Vahl	+	+	X	+	X
813	Cói quăn lông bò	<i>Fimbristylis pauciflora</i> R. Br.	+	+	X	+	X
814	Cói quăn lông tơ	<i>Fimbristylis sericea</i> R. Br.	+	+	X	+	X
815	Cỏ đấng tán	<i>Fuirena umbellata</i> Rottb.	+	+	X	+	X
816	Ha si rừng	<i>Hypolytrum nemorum</i> (Vahl) Spreng.	+	+	X	+	X
817	Cói bạc phân cát	<i>Juncellus alopecuroides</i> (Rottb.) C.B. Clarke				+	X
818	Cói bạc thân lùn	<i>Juncellus limosus</i> (Maxim.) C.B. Clarke	+	+	X	+	X
819	Cói bàng	<i>Lepironia articulata</i> (Retz.) Domin	+	+	X	+	X
820	Cói bông đầu nhỏ	<i>Lipocarpa microcephala</i> (R. Br.) Kunth	+	+	X	+	X
821	Cói tương gié rần	<i>Mariscus compactus</i> (Retz.) Druce	+	+	X	+	X
822	Cói tương java	<i>Mariscus javanicus</i> (Houtt.) Merr. & Metc.	+	+	X	+	X
823	Cói trục dài hoa cầu	<i>Pycneus globosus</i> (All.) Reichb.	+	+	X	+	X
824	Cói trục dài nhiều bông	<i>Pycneus polystachyus</i> (Rottb.) Beauv.				+	X
825	Cói trục dai lùn	<i>Pycneus pumilus</i> Nees ex C.B.				+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
		Clarke					
826	Chùy tử tán	<i>Rhynchospora corymbosa</i> (L.) Britt.	+	+	X	+	X
827	Chùy tử gió	<i>Rhynchospora rubra</i> (Lour.) Makino				+	X
828	Cói dùi thô	<i>Scirpus grossus</i> L. f.				+	X
829	Cói giúi biển	<i>Scirpus litoralis</i> Schrad.				+	X
830	Cói giúi mũi	<i>Scirpus mucronatus</i> L.				+	X
831	Đưng xim co	<i>Scleria caricina</i> (R. Br.) Benth.	+	+	X	+	X
832	Đưng lông	<i>Scleria ciliaris</i> Nees	+	+	X	+	X
833	Đưng xây lan	<i>Scleria neesii</i> Kunth				+	X
834	Đưng đồng tháp	<i>Scleria poaeformis</i> Retz.	+	+	X	+	X
835	Đưng đỏ	<i>Scleria purpurascens</i> Steud.				+	X
836	Đưng đất	<i>Scleria terrestris</i> (L.) Fass.	+			+	X
	142. HỌ CỬ NẬU	142. DIOSCOREACEAE					
837	Từ cam bột	<i>Dioscorea cambodiana</i> Prain & Burk.				+	X
838	Củ từ	<i>Dioscorea esculenta</i> (Lour.) Burk.	+	+	X	+	X
839	Khoai rang	<i>Dioscorea glabra</i> Roxb.		+	X	+	X
840	Mài lông	<i>Dioscorea hispida</i> Dennst.				+	X
841	Từ mỏng	<i>Dioscorea membranacea</i> Pierre				+	X
842	Từ năm lá	<i>Dioscorea pentaphylla</i> L.					X
843	Củ mài	<i>Dioscorea persimilis</i> Prain & Burk.				+	X
844	Khoai dại	<i>Dioscorea trinervia</i> Roxb.	+	+	X		X
845	Từ gừng	<i>Dioscorea zingiberensis</i> C. H. Wright				+	X
	143. HỌ HUYẾT GIÁC	143. DRACAENACEAE					
846	Huyết giác	<i>Dracaena cambodiana</i> Pierre ex Gagnep.				+	X
847	Huyết giác nam bộ	<i>Dracaena cochinchinensis</i> (Lour.) S.C. Chen				+	X
	144. HỌ CỎ DÙI TRỐNG	144. ERIOCAULACEAE					
848	Dùi trống lào	<i>Eriocaulon basscense</i> Mold.		+	X	+	X
849	Dùi trống trung bình	<i>Eriocaulon intermedium</i> Koern.		+	X	+	X
850	Dùi trống oè	<i>Eriocaulon nautiliforme</i> Lecomte				+	X
	145. HỌ MÂY NƯỚC	145. FLAGELLARIACEAE					
851	Mây nước	<i>Flagellaria indica</i> L.	+	+	X	+	X
	147. HỌ MỎ KẾT	147. HELICONIACEAE					
852	Mỏ phượng	<i>Heliconia bihai</i> (L.) L.					X
853	Mỏ kết	<i>Heliconia psittacorum</i> L. f.					X
	148. HỌ LÁ SẼN	148. HYDROCHARITACEAE					
854	Ái chiêm becarì	<i>Halophila beccarii</i> Aschers.				+	X
855		<i>Hydrilla verticillata</i> (L. f.) Royle	+				X
856	Rong mái chèo	<i>Vallisneria spiralis</i> (Lour.) Hara		+	X	+	X
	149. HỌ LA ĐƠN	149. IRIDACEAE					
857	Rẻ quạt	<i>Belamcanda chinensis</i> (L.) DC.				+	X
	150. HỌ BÈO TẮM	150. LEMNACEAE					
858	Bèo tấm	<i>Lemna perpusilla</i> Torr.		+	X		X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
859		<i>Lemna aequinoctialis</i> Welwitsch.	+				
860		<i>Lemna tenera</i> Kurz.	+				
861		<i>Spirodela punctata</i> (G.F.W. Meyer) Thomson	+				
862	Bèo tấm	<i>Lemna minor</i> L.					X
	151. HỌ MỄ THẢO	151. LIMNOCHARACEAE					
863	Nê thảo	<i>Limnocharis flava</i> (L.) Buch.		+	X		X
	152. HỌ HOÀNG TINH	152. MARANTACEAE					
864	Lùn nước	<i>Schumannianthus dichotomus</i> Gagnep.					X
	153. HỌ NGOẮT NGHÈO	153. MELANTHIACEAE					
865	Ngoắt nghèo	<i>Gloriosa superba</i> L.					X
	154. HỌ CHUỐI	154. MUSACEAE					
866	Chuối hoang nhọn	<i>Musa acuminata</i> Colla				+	X
867	Chuối già lùn	<i>Musa nana</i> Lour.					X
868	Bách bộ	<i>Musa paradisiaca</i> L.				+	X
	155. HỌ LAN	155. ORCHIDACEAE					
869	Dàng hương	<i>Aerides</i> sp.				+	
870	Lan kiếm	<i>Cymbidium aloifolium</i> (L.) Sw.				+	X
871	Móng rồng	<i>Dendrobium aloifolium</i> (Blume) Reichb. f.				+	X
872	Tuyết mai	<i>Dendrobium crumenatum</i> Sw.		+	X	+	X
873	Kim điệp	<i>Dendrobium fimbriatum</i> Hook.		+	X		X
874	Ý thảo	<i>Dendrobium gratiosissimum</i> Reichb. f.				+	X
875	Thái bình	<i>Dendrobium moschatum</i> (Buch.-Ham.) Sw.					X
876	Hoàng thảo nhiều hoa	<i>Dendrobium polyanthum</i> Lindl.				+	X
877	Luân lan éo	<i>Eulophia graminea</i> Lindl.	+	+	X	+	X
878	Móng rùa gramil	<i>Oberonia gammiei</i> King & Pantl.				+	X
879	Lan sấp	<i>Polystachya concreta</i> (Jacq.) Garay & Sweet				+	X
880		<i>Spiranthes sinensis</i> (Pers.)	+				
	156. HỌ DỨA DẠI	156. PANDANACEAE					
881		<i>Pandanus amaryllifolius</i> Roxb	+				
882	Dứa núi	<i>Pandanus humilis</i> Lour.				+	X
883	Dứa dại	<i>Pandanus kaida</i> Kurz	+			+	X
884	Dứa dại	<i>Pandanus odoratissimus</i> L. f.		+	X	+	X
	157. HỌ CỎ ĐUÔI LƯƠN	157. PHILYDRACEAE					
885	Cỏ đuôi lươn	<i>Philydrum lanuginosum</i> Banks & Gaertn.	+	+	X	+	X
	158. HỌ HOÀ THẢO	158. POACEAE					
886	Tre gai	<i>Bambusa blumeana</i> Schult.				+	X
887		<i>Brachiaria eruciformis</i> (J.E. Sm.) Griseb.	+		X		X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
888		<i>Brachiaria mutica</i> (Forssk.) Stapf.	+		X		X
889	Cỏ may	<i>Chrysopogon aciculatus</i> (Retz.) Trin.	+	+	X	+	X
890	Nga	<i>Coix aquatica</i> Roxb.				+	X
891		<i>Coix gigantea</i> Koenig ex Roxb.	+		X		X
892		<i>Coix lacryma-jobi</i> L. var <i>lacryma-jobi</i>	+		X		X
893	Cỏ gà	<i>Cynodon dactylon</i> (L.) Pers.	+	+	X	+	X
894	Túc hình tơ	<i>Digitaria setigera</i> Roth ex Roem.	+			+	X
895		<i>Digitaria petelotii</i> Henry.	+		X		X
896	Cỏ lồng vực cạn	<i>Echinochloa colona</i> (L.) Link	+	+	X	+	X
897	Cỏ lồng vực nước	<i>Echinochloa crus-galli</i> (L.) Beauv.	+	+	X	+	X
898		<i>Echinochloa crus-pavonis</i> (H.B.K.) Schult.	+		X		X
899		<i>Echinochloa pyramidalis</i> (Lam.) Hitchc.	+				
900		<i>Echinochloa stagnina</i> (Retz.) P. Beauv.	+		X		X
901	Cỏ màn trâu	<i>Eleusine indica</i> (L.) Gaertn.	+	+	X	+	X
902	Cỏ lông công	<i>Eragrostis diplachnoides</i> Steud.				+	X
903	Xuân thảo malai	<i>Eragrostis malayana</i> Stapf				+	X
904	Mao tái	<i>Eriachne chinensis</i> (Retz.) Hance				+	X
905	Lau	<i>Erianthus arundinaceus</i> (Retz.) Jeswiell. ex Heyne				+	X
906	Cỏ mật to	<i>Eriochloa polystachya</i> H.B.K.				+	X
907	Cỏ mật	<i>Eriochloa procera</i> (Retz.) C. Hubb.	+	+	X	+	X
908	Cát vĩ	<i>Eulalia leschenaultiana</i> (Decne.) Ohwi		+	X	+	X
909	Cỏ dày hoa dài	<i>Hemarthria longiflora</i> (Hook. f.) A. Camus	+	+	X	+	X
910		<i>Hygroryza aristata</i> (Retz.) Nees. ex W. & Arn.	+		X		X
911	Bấc nhọn	<i>Hymenachne acutigluma</i> (Steud.) Gilliland	+	+	X		X
912	Cỏ tranh	<i>Imperata cylindrica</i> (L.) Beauv.	+	+	X	+	X
913	Đẳng hoa kê	<i>Isachne miliacea</i> Roth ex Roem.	+	+	X	+	X
914	Nồm râu	<i>Ischaemum barbatum</i> Retz.	+	+	X	+	X
915	Mồm u	<i>Ischaemum rugosum</i> Salisb.	+				X
916	Lúa dại 6 nhị	<i>Leersia hexandra</i> Sw.	+	+	X	+	X
917		<i>Leptochloa chinensis</i> (L.) Nees.	+		X		X
918		<i>Leptochloa filiformis</i> (Lam.) Beauv.	+		X		X
919	Lô trung quốc	<i>Miscanthus sinensis</i> Anders.				+	X
920	Lúa ma nhỏ	<i>Oryza minuta</i> J. & C. Presl				+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
921	Lúa hoang	<i>Oryza rufipogon</i> Griff.	+	+	X	+	X
922	Kê nhỏ	<i>Panicum antidotale</i> Retz.					X
923	Cỏ gừng	<i>Panicum repens</i> L.	+	+	X	+	X
924		<i>Paspalidium geminatum</i> (Forsk sk.) Stapf.	+		X		X
925		<i>Paspalum conjugatum</i> Berg.	+		X		X
926		<i>Paspalum scrobiculatum</i> L.	+		X		X
927	San cát	<i>Paspalum vaginatum</i> Sw.	+	+	X	+	X
928	Sậy núi	<i>Phragmites karka</i> (Retz.) Steud.				+	X
929		<i>Phragmites vallisoria</i> (L.) Veldk.	+				X
930	Cỏ bờm ngựa	<i>Pogonatherum crinitum</i> (Thunb.) Kunth				+	X
931	Cỏ lông sừng	<i>Polytrias indica</i> (Houtt.) Veldk.				+	X
932	Cỏ nhân tre	<i>Pseudoraphis brunoniana</i> Griff.		+	X		X
933		<i>Pseudoraphis spinescens</i> (R. Br.) Vickery	+		X		X
934	Lách	<i>Saccharum spontaneum</i> L.	+	+	X	+	X
935	Bắc gián đoạn	<i>Sacciolepis interrupta</i> (Willd.) Stapf	+	+	X		X
936	Bắc đuôi chuột	<i>Sacciolepis myosuroides</i> (R. Br.) A. Camus	+	+	X	+	X
937	Cỏ bắc	<i>Sacciolepis myuros</i> (Lamk.) Chase	+	+	X		X
938		<i>Sclerostachya milroyi</i> Bor.	+		X		X
939		<i>Setaria pallide-fusca</i> (Schum.) Stapf. & Hubb.	+		X		X
940	Xạ tử trắng	<i>Sporobolus humilis</i> Presl		+	X	+	X
941		<i>Sporopolus virginicus</i> (L.) Kunth.	+		X		X
942	Cỏ chít	<i>Thysanolaena maxima</i> (Roxb.) Kuntze				+	X
943	Hương lau	<i>Vetiveria zizanioides</i> (L.) Nash				+	X
	159. HỌ LỤC BÌNH	159. PONTERIACEAE					
944	Lục bình	<i>Eichhornia crassipes</i> (Mart.) Solms.	+	+	X	+	X
945	Rau má thon	<i>Monochoria hastata</i> (L.) Solms.	+	+	X	+	X
946	Mau má bao	<i>Monochoria vaginalis</i> (Burm. f.) Presl.	+	+	X	+	X
	160. HỌ KHÚC KHẮC	160. SMILACACEAE					
947	Cậm kênh	<i>Smilax bracteata</i> Presl				+	X
948	Kim cang cam bột	<i>Smilax cambodiana</i> Gagnep.					X
949	Kim cang lá to	<i>Smilax ovalifolia</i> Roxb.				+	X
	161. HỌ BÁCH BỘ	161. STEMONACEAE					
950	Bách bộ	<i>Stemona tuberosa</i> Lour.				+	X
	162. HỌ HOA MẶT CỘP	162. TACCACEAE					
951	Bạch tinh	<i>Tacca leontopetaloides</i> (L.)				+	X

No.	Vietnamese name	Scientific name	UMT-AB-AM			KL-KH	
			TL1	TL2	08/09	TL3	08/09
		Kuntze					
	163. HỌ CỎ NÊN	163. TYPHACEAE					
952	Bồn bồn	<i>Typha angustifolia</i> L.		+	X	+	
953		<i>Typha domingensis</i> Persoon	+				
954	Bồn bồn java	<i>Typha javanica</i> Schnitzl ex Zoll.		+	X	+	
	164. HỌ HOÀNG ĐẦU	164. XYRIDACEAE					
955	Hoàng đầu	<i>Xyris indica</i> L.	+	+	X	+	X
956	Cỏ vàng hoa thưa	<i>Xyris pauciflora</i> Willd.		+	X		X
	165. HỌ GỪNG	165. ZINGIBERACEAE					
957	Riềng riềng	<i>Alpinia conchigera</i> Griff.					X
958	Riềng nếp	<i>Alpinia galanga</i> (L.) Willd.				+	X
959	Riềng núi	<i>Alpinia oxymitra</i> K. Schum.				+	X
960		<i>Amomum thyrsoideum</i> Gaertn.	+				X
961		<i>Costus speciosus</i> (Koenig) Smith	+				X
962	Lô ba nhỏ	<i>Globba parva</i> Gagnep.				+	X
963	Lô ba schomburg	<i>Globba aff. schomburgkii</i> Hook. f.				+	X
964	Địa liền	<i>Kaempferia galanga</i> L.				+	X
965	Ngải máu	<i>Kaempferia rotunda</i> L.					X
966	Gừng lúa	<i>Zingiber gramineum</i> Noronha					X
967	Gừng	<i>Zingiber officinale</i> Rosc.		+	X	+	X
968	Gừng gió	<i>Zingiber zerumbet</i> (L.) Smith				+	X

Notes: TL1 – A list of plant species in UMT NP, Tran Triet, 2000.

TL2 – A list of plant species in UMT NP, IEBR, 2006

T08/09 – Results of this survey August 2009 by Ha Van Tue

TL3 – A list of plant species in Kien Luong – Kien Hai – Ha Tien area, IEBR 2006

ANNEX 4: DATA FROM STANDARD QUADRAT

Quadrat 1

Vegetation type: Secondary forest

Quadrat size: 10 x 20 m

Site: Bac Lo stream, Phu Quoc NP, coordinates 0445704; 1147800; altitude: 29m

Date: 3 August 2009. Investigators: Ha Van Tue, Nguyen Van Son

No	Vietnamese name	Scientific name	Family	Circumference	D1,3 (cm)	Height (m)	Note
1	Bứa lá nhỏ	Garcinia sp	Clusiaceae	27	8.60	6	
2	Xương cá	Vitex sp	Verbenaceae	16	5.10	6	
3	Sàng đen thị	Diospyros sp	Ebenaceae	16	5.10	6	
4	Xương cá	Vitex sp	Verbenaceae	40	12.74	8	
5	Thị	Diospyros sp	Ebenaceae	22	7.01	4	
6	Chòi mò	Antidesma sp	Euphorbiaceae	25	7.96	6	
7	Re	Cinnamomum sp	Lauraceae	46	14.65	10	
8	Viết	Marilkara kanki (L.) Dub.	Sapotaceae	26	8.28	8	
9	Viết	Marilkara kanki (L.) Dub.	Sapotaceae	23	7.32	6	
10	Xương cá	Vitex sp	Verbenaceae	26	8.28	5	
11	Gò đồng ổi chi tấu			27	8.60	6	
12	Trông đũa	Ardisia sp	Myrsinaceae	23	7.32	8	
13	Trai	Fagrea fragrans Roxb.	Loganiaceae	24	7.64	3	
14	Trâm	Syzygium sp	Myrtaceae	70	22.29	10	
15	Trâm	Syzygium sp	Myrtaceae	59	18.79	10	
16	Trâm	Syzygium sp	Myrtaceae	21	6.69	4	
17	Trâm	Syzygium sp	Myrtaceae	21	6.69	3	
18	Dền trắng	Xylopia sp	Annonaceae	38	12.10	10	
19	Trâm	Syzygium sp	Myrtaceae	25	7.96	2	
20	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	26	8.28	4	
21	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	40	12.74	7	
22	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	30	9.55	8	
23	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	23	7.32	4	
24	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	24	7.64	4	
25	Bứa	Garcinia sp	Clusiaceae	25	7.96	5	
26	Ba gạc lá vòng	Rauvolfia sp	Apocynaceae	26	8.28	7	
27	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	27	8.60	7	
28	Thị	Diospyros sp	Ebenaceae	22	7.01	5	
29	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	32	10.19	10	
30	Trai	Fagrea fragrans Roxb.	Loganiaceae	40	12.74	4	
31	Trai	Fagrea fragrans Roxb.	Loganiaceae	41	13.06	8	
32	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	28	8.92	5	
33	Trai	Fagrea fragrans Roxb.	Loganiaceae	52	16.56	10	
34	Trai	Fagrea fragrans Roxb.	Loganiaceae	23	7.32	4	
35	Trâm	Malaleuca cajuputi	Myrtaceae	65	20.70	12	
36	Bứa	Garcinia sp	Clusiaceae	33	10.51	7	

No	Vietnamese name	Scientific name	Family	Circumference	D1,3 (cm)	Height (m)	Note
37	Cám	Parinari annamensis Hance	Rosaceae	36	11.46	7	
38	Trai	Fagrea fragrans Roxb.	Loganiaceae	37	11.78	8	
39	Trai	Fagrea fragrans Roxb.	Loganiaceae	41	13.06	9	
40	Trai	Fagrea fragrans Roxb.	Loganiaceae	49	15.61	10	
41	Trai	Fagrea fragrans Roxb.	Loganiaceae	58	18.47	10	
42	Tràm	Malaleuca cajuputi	Myrtaceae	20	6.37	6	
43	Chò sọt	Schima wallichiana (DC.) Korth.	Theaceae	42	13.38	9	
44	Trai	Fagrea fragrans Roxb.	Loganiaceae	64	20.38	9	
45	Chò sọt	Schima wallichiana (DC.) Korth.	Theaceae	31	9.87	10	
45	Total			1510	480.89	310	
	Average			32.83	10.45	6.74	

Quadrat 2

Vegetation type: Secondary forest

Quadrat size: 10 x 20 m

Site: Army road Phu Quoc NP, coordinates 0442865; 1141952; altitude: 31m

Date: 3 August 2009. Investigators: Ha Van Tue, Nguyen Van Son

No.	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
1	Huỳnh	Helitiera cochinchinensis (Pierre) Kort	Sterculiaceae	19	6.05	8
2	Cồng may	Callophyll sp	Clusiaceae	86	27.39	12
3	Mang	Sterculia sp	Sterculiaceae	77	24.52	12
4	Bưởi bung	Acronychia paniculata (L.) Miq.	Rutaceae	31	9.87	6
5	Sữa lá lớn	Alstonia macrophylla Wall.ex G.Don	Apocynaceae	61	19.43	12
6	Ngái	Ficus sp	Moraceae	19	6.05	4
7	Xăng mã	Carallia sp	Rhizophoraceae	23	7.32	7
8	Lòng mang	Sterculia sp	Sterculiaceae	52	16.56	8
9	Ngái lông	Ficus sp	Moraceae	27	8.60	5
10	Chiêu liêu	Terminaria sp	Combretaceae	25	7.96	8
11	Chiêu liêu	Terminaria sp	Combretaceae	24	7.64	8
12	Huỳnh	Helitiera cochinchinensis (Pierre) Kort	Sterculiaceae	26	8.28	7
13	Bưởi bung	Acronychia paniculata (L.) Miq.	Rutaceae	26	8.28	8
14	Ngát trơn	Gironniera sp	Ulmaceae	52	16.56	5
15	Xăng mã	Carallia sp	Rhizophoraceae	30	9.55	4
16	Sỗ	Dillenia sp	Dilleniaceae	26	8.28	5
17	Sỗ	Dillenia sp	Dilleniaceae	28	8.92	4
18	Ngái	Ficus sp	Moraceae	20	6.37	3
19	Sữa	Alstonia macrophylla Wall.ex G.Don	Apocynaceae	20	6.37	8
20	Sữa	Alstonia macrophylla Wall.ex G.Don	Apocynaceae	45	14.33	8
21	Sữa	Alstonia macrophylla Wall.ex G.Don	Apocynaceae	30	9.55	9
22	Lòng mang	Sterculia sp	Sterculiaceae	17	5.41	6
23	Chiêu liêu	Terminaria sp	Combretaceae	60	19.11	12

No.	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
24	Chiêu liêu	Terminaria sp	Combretaceae	41	13.06	12
25	Lòng mang	Sterculia sp	Sterculiaceae	31	9.87	5
26	Lòng mang	Sterculia sp	Sterculiaceae	30	9.55	5
27	Sữa	Alstonia macrophylla Wall.ex G.Don	Apocynaceae	21	6.69	6
28	Sữa	Alstonia macrophylla Wall.ex G.Don	Apocynaceae	18	5.73	6
29	Thàu tấu hai nam	Aporusa sp	Euphorbiaceae	24	7.64	4
30	Chòi mòi	Antidesma sp	Euphorbiaceae	22	7.01	4
31	Lòng mang	Sterculia sp	Sterculiaceae	35	11.15	7
32	Lòng mang	Sterculia sp	Sterculiaceae	45	14.33	7
33	Huỳnh	Helitiera cochinchinensis (Pierre) Kort	Sterculiaceae	17	5.41	5
34	Lòng mang	Sterculia sp	Sterculiaceae	24	7.64	4
35	Ngái lông	Ficus sp	Moraceae	27	8.60	4
36	Lòng mang	Sterculia sp	Sterculiaceae	44	14.01	9
37	Lòng mang	Sterculia sp	Sterculiaceae	32	10.19	4
38	Lòng mang	Sterculia sp	Sterculiaceae	26	8.28	4
39	Lòng mang	Sterculia sp	Sterculiaceae	24	7.64	3
40	Lòng mang	Sterculia sp	Sterculiaceae	32	10.19	6
41	Ngái lông	Ficus sp	Moraceae	30	9.55	4
42	Lòng mang	Sterculia sp	Sterculiaceae	42	13.38	8
43	Lòng mang	Sterculia sp	Sterculiaceae	25	7.96	4
43	Total			1414	450.32	280
	Mean			28.86	9.19	5.71

Quadrat 3

Vegetation type: Mountain forest

Quadrat size: 10 x 20 m

Site: Phu Quoc NP, coordinates 0450090; 1146707; altitude: 431m

Date: 4 August 2009. Investigators: Ha Van Tue, Nguyen Van Son

No.	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
1	Trâm (Cồng)	Callophyllum sp	Clusiaceae	20	6.37	5
2	Trà bông	Camellia sp	Theaceae	32	10.19	8
3	Theaceae	Camellia sp	Theaceae	20	6.37	6
4	Ổi, gò đồng	Godonia sp	Theaceae	22	7.01	5
5	Bứa	Garcinia sp	Clusiaceae	28	8.92	6
6	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	47	14.97	12
7	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	20	6.37	5
8	Gò đồng, ổi	Godonia sp	Theaceae	36	11.46	10
9	Trâm (cồng)	Callophyllum sp	Clusiaceae	16	5.10	4
10	Theaceae	Camellia sp	Theaceae	17	5.41	5
11	Theaceae	Camellia sp	Theaceae	19	6.05	5
12	Cồng	Callophyllum sp	Clusiaceae	18	5.73	4
13	Cồng	Callophyllum sp	Clusiaceae	17	5.41	4
14	Cù đèn phú quốc	Croton sp	Euphorbiaceae	17	5.41	2
15	Ổi	Godonia sp	Theaceae	32	10.19	10
16	Cù đèn phú quốc	Croton sp	Euphorbiaceae	20	6.37	4
17	Cồng	Callophyllum sp	Clusiaceae	23	7.32	4

No.	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
18	Trâm	Syzygium sp	Myrtaceae	50	15.92	12
19	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	35	11.15	12
20	Ồi	Godonia sp	Theaceae	27	8.60	8
21	Ồi	Godonia sp	Theaceae	42	13.38	12
22	Trâm	Syzygium sp	Myrtaceae	31	9.87	10
23	Búra lá nhỏ	Garcinia sp	Clusiaceae	27	8.60	6
24	Búra lá nhỏ	Garcinia sp	Clusiaceae	26	8.28	6
25	Trâm	Syzygium sp	Myrtaceae	20	6.37	6
26	Ồi rừng chè gò đồng	Godonia sp	Theaceae	26	8.28	10
27	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	50	15.92	15
28	Gò đồng, ổi	Godonia sp	Theaceae	23	7.32	10
29	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	27	8.60	8
30	Gò đồng, ổi	Godonia sp	Theaceae	20	6.37	7
31	Còng	Callophyllum sp	Clusiaceae	22	7.01	8
32	Trâm	Syzygium sp	Myrtaceae	59	18.79	14
33	Chò sót	Schima wallichiana (DC.) Korth.	Theaceae	20	6.37	4
34	Ồi	Godonia sp	Theaceae	21	6.69	7
35	Dền	Xylopia sp	Annonaceae	26	8.28	7.5
36	Ồi	Godonia sp	Theaceae	21	6.69	6
37	Búra lá nhỏ	Garcinia sp	Clusiaceae	21	6.69	7
38	Xăng mã	Carallia sp	Rhizophoraceae	20	6.37	4
39	Trường	Nephelium sp	Sapindaceae	25	7.96	8
40	Ồi	Godonia sp	Theaceae	38	12.10	10
41	Búra	Garcinia sp	Clusiaceae	29	9.24	9
42	Ồi	Godonia sp	Theaceae	40	12.74	12
43	Trường	Nephelium sp	Sapindaceae	29	9.24	9
44	Hoắc quang	Whendlandia sp	Rubiaceae	23	7.32	6
45	Búra lá nhỏ	Garcinia sp	Clusiaceae	22	7.01	5
46	Gò đồng, ổi	Godonia sp	Theaceae	18	5.73	5
47	Búra lá nhỏ	Garcinia sp	Clusiaceae	28	8.92	7
48	Dẻ	Lithocarpus sp	Fagaceae	35	11.15	9
49	Thị	Diospyros sp	Ebenaceae	25	7.96	4
50	Thị	Diospyros sp	Ebenaceae	20	6.37	4
51	Thị	Diospyros sp	Ebenaceae	36	11.46	6
52	Còng	Callophyllum sp	Clusiaceae	30	9.55	8
53	Hồng tùng	Darycarpus imbricatus (Bl.) de Laub.	Cupressaceae	127	40.45	15
54	Gò đồng, ổi	Godonia sp	Theaceae	50	15.92	10
55	Trâm	Syzygium sp	Myrtaceae	27	8.60	7
56	Gò đồng, ổi	Godonia sp	Theaceae	23	7.32	6
57	Còng	Callophyllum sp	Clusiaceae	30	9.55	7
58	Gò đồng, ổi	Godonia sp	Theaceae	63	20.06	10
59	Gò đồng, ổi	Godonia sp	Theaceae	32	10.19	6
60	Hồng tùng	Dacrydium elatum (Roxb.) Wall. Ex Hook	Cupressaceae	57	18.15	14
61	Trâm	Syzygium sp	Myrtaceae	23	7.32	4
62	Hồng tùng	Dacrydium elatum (Roxb.) Wall. Ex Hook	Cupressaceae	55	17.52	13

No.	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
63	Gò đồng, ổi	Godonia sp	Theaceae	49	15.61	7
64	Xăng mã	Carallia sp	Rhizophoraceae	23	7.32	5
65	Hồng tùng	Dacrydium elatum (Roxb.) Wall. Ex Hook	Cupressaceae	61	19.43	10
66	Gò đồng, ổi	Godonia sp	Theaceae	42	13.38	4
67	Gò đồng, ổi	Godonia sp	Theaceae	40	12.74	10
68	Chò sói	Schima wallichiana (DC.) Korth.	Theaceae	34	10.83	7
69	Bình linh	Vitex sp	Verbenaceae	30	9.55	4
70	Chò sói	Schima wallichiana (DC.) Korth.	Theaceae	29	9.24	4
70		Total		2211	704.14	524
		Mean		31.59	10.06	7.48

Quadrat 4

Vegetation type: Primary forest of dipterocarp trees

Quadrat size: 10 x 20 m

Site: Army road, Phu Quoc NP, coordinates 0448123; 1141561; Altitude: 57m

Date: 4 August 2009. Investigators: Ha Van Tue, Nguyen Van Son

No	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
1	Dầu song nạng	Dipterocarpus dyeri Pierre	Dipterocarpaceae	257	81.85	35
2	Dầu nước	D. altus Roxb.	Dipterocarpaceae	23	7.32	30
3	Dầu song nạng	Dipterocarpus dyeri Pierre	Dipterocarpaceae	58	18.47	16
4	Dâu da	Bacaurea sp	Euphorbiaceae	46	14.65	7
5	Dầu song nạng	Dipterocarpus dyeri Pierre	Dipterocarpaceae	73	23.25	25
6	Roi lá nhỏ	Syzygium sp	Myrtaceae	35	11.15	15
7	Kiền kiền	Hopea siamensis Heim.	Dipterocarpaceae	30	9.55	14
8	Gội nếp	Aglaia sp	Meliaceae	45	14.33	12
9	Dền lá lớn	Xylopia sp	Annonaceae	25	7.96	8
10	Xăng mã	Carallia sp	Rhizophoraceae	25	7.96	12
11	Xăng mã	Carallia sp	Rhizophoraceae	37	11.78	4
12	Gội lá nhỏ	Aglaia sp	Meliaceae	56	17.83	18
13	Gội lá lớn	Aglaia sp	Meliaceae	67	21.34	18
14	Trường mật	Nephelium sp	Sapindaceae	24	7.64	9
15	Xăng mã	Carallia sp	Rhizophoraceae	46	14.65	12
16	Gội lá nhỏ	Aglaia sp	Meliaceae	67	21.34	12
17	Xăng mã	Carallia sp	Rhizophoraceae	24	7.64	8
18	Gội lá nhỏ	Aglaia sp	Meliaceae	34	10.83	12
19	mã tiền	Strychnos sp	Loganiaceae	40	12.74	12
20	mã tiền	Strychnos sp	Loganiaceae	26	8.28	12
21	Gội lá nhỏ	Aglaia sp	Meliaceae	21	6.69	9
22	Kiền kiền	Hopea siamensis Heim.	Dipterocarpaceae	20	6.37	8

No	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
23	Gội lá nhỏ	Aglaia sp	Meliaceae	65	20.70	14
24	Kiền kiền	Hopea siamensis Heim.	Dipterocarpaceae	34	10.83	12
25	Mã tiền	Strychnos sp	Loganiaceae	47	14.97	13
26	Dầu song nạng	Dipterocarpus dyeri Pierre	Dipterocarpaceae	78	24.84	23
27	Dầu song nạng	Dipterocarpus dyeri Pierre	Dipterocarpaceae	88	28.03	23
28	Huỳnh	Helitiera cochinchinensis (Pierre) Kort	Sterculiaceae	19	6.05	3
29	Kiền kiền	Hopea siamensis Heim.	Dipterocarpaceae	39	12.42	15
30	Kiền kiền	Hopea siamensis Heim.	Dipterocarpaceae	41	13.06	17
31	Bứa	Garcinia sp	Clusiaceae	123	39.17	25
32	Thị	Diospyros sp	Ebenaceae	58	18.47	12
33	Kiền kiền	Hopea siamensis Heim.	Dipterocarpaceae	45	14.33	18
34	Trâm lá lớn	Syzygium sp	Myrtaceae	64	20.38	13
35	Dầu song nạng	Dipterocarpus dyeri Pierre	Dipterocarpaceae	254	80.89	40
36	Bứa	Garcinia sp	Clusiaceae	23	7.32	8
37	Bứa	Garcinia sp	Clusiaceae	24	7.64	8
37	Total			2081	662.74	552
	Mean			56.24	17.91	14.92

Quadrat 5

Vegetation type: Natural mangrove forest

Quadrat size: 10 x 20 m

Site: Ta Xang village, Duong Hoa Commune, Kien Luong District, Kien Giang coordinates 0498857; 114349; altitude: 4m

Date: 13 August 2009. Investigators: Ha Van Tue, Le Thi Kim Anh

No.	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
1	Mắm	Avicennia sp	Verbenaceae	84	26.75	7
2	Mắm	Avicennia sp	Verbenaceae	93	29.62	7
3	Đước	Rhizophora sp	Rhizophoraceae	24	7.64	4
4	Mắm	Avicennia sp	Verbenaceae	67	21.34	7
5	Mắm	Avicennia sp	Verbenaceae	58	18.47	7
6	Già	Excoecaria agallocha L.	Euphorbiaceae	24	7.64	4
7	Mắm	Avicennia sp	Verbenaceae	26	8.28	4
8	Mắm	Avicennia sp	Verbenaceae	59	18.79	7
9	Mắm	Avicennia sp	Verbenaceae	67	21.34	7
10	Mắm	Avicennia sp	Verbenaceae	32	10.19	5
11	Bần	Sonneratia sp	Sonneratiaceae	31	9.87	4
12	Mắm	Avicennia sp	Verbenaceae	29	9.24	5
13	Mắm	Avicennia sp	Verbenaceae	78	24.84	8

No.	Vietnames name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
14	Mắm	Avicennia sp	Verbenaceae	66	21.02	8
15	Mắm	Avicennia sp	Verbenaceae	27	8.60	4
16	Mắm	Avicennia sp	Verbenaceae	44	14.01	7
17	Mắm	Avicennia sp	Verbenaceae	18	5.73	4
18	Mắm	Avicennia sp	Verbenaceae	17	5.41	4
19	Mắm	Avicennia sp	Verbenaceae	66	21.02	8
20	Mắm	Avicennia sp	Verbenaceae	70	22.29	6
21	Mắm	Avicennia sp	Verbenaceae	25	7.96	4
22	Mắm	Avicennia sp	Verbenaceae	53	16.88	7
23	Già	Excoecaria agallocha L.	Euphorbiaceae	15	4.78	4
24	Bần	Sonneratia sp	Sonneratiaceae	41	13.06	5
25	Mắm	Avicennia sp	Verbenaceae	71	22.61	8
26	Đước	Rhizophora sp	Rhizophoraceae	18	5.73	5
27	Mắm	Avicennia sp	Verbenaceae	51	16.24	7
28	Bần	Sonneratia sp	Sonneratiaceae	18	5.73	4
29	Bần	Sonneratia sp	Sonneratiaceae	18	5.73	4
30	Mắm	Avicennia sp	Verbenaceae	56	17.83	6
31	Mắm	Avicennia sp	Verbenaceae	64	20.38	7
32	Mắm	Avicennia sp	Verbenaceae	66	21.02	7
33	Mắm	Avicennia sp	Verbenaceae	74	23.57	7
34	Vẹt	Bruguiera sp	Rhizophoraceae	12	3.82	3
35	Đước	Rhizophora sp	Rhizophoraceae	24	7.64	5
36	Mắm	Avicennia sp	Verbenaceae	44	14.01	4
36		Total		1630	519.11	204
		Mean		45.28	14.42	5.67

Quadrat 6

Vegetation type: Secondary forest

Quadrat size: 10 x 20 m

Site: Hon Chong mountain, Kien Luong District, Kien Giang
coordinates 0513835; 1122425; altitude: 50m

Date: 15 August 2009. Investigators: Ha Van Tue, Le Thi Kim Anh

No	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
1	Thị	Diospyros sp	Ebenaceae	16	5.10	5
2	Thần mát	Milletia sp	Fabaceae	60	19.11	6
3	Trường	Nephelium sp	Sapindaceae	21	6.69	5
4	Cù đèn	Croton sp	Euphorbiaceae	25	7.96	3
5	Cồng	Calophyllum sp	Clusiaceae	27	8.60	8
7	Bùi	Ilex sp	Aquifoliaceae	45	14.33	8

No	Vietnamese name	Scientific name	Family	Circumference	D1.3 (cm)	Height (m)
8	Kháo trắng	Machilus sp	Lauraceae	34	10.83	7
9	Máu chó	Knema sp	Myristicaceae	99	31.53	12
10	Bời lời	Litsea sp	Lauraceae	22	7.01	8
11	Trường	Nephelium sp	Sapindaceae	28	8.92	6
12	Nhãn rừng	Nephelium sp	Sapindaceae	29	9.24	7
13	Chòi mò	Antidesma sp	Euphorbiaceae	24	7.64	6
14	Chòi mò	Antidesma sp	Euphorbiaceae	3.8	1.21	4
15	Búra	Garcinia sp	Clusiaceae	62	19.75	12
16	Chòi mò	Antidesma sp	Euphorbiaceae	20	6.37	5
17	Trường	Nephelium sp	Sapindaceae	100	31.85	13
18	Huỳnh	Helitiera cochinchinensis (Pierre) Kort	Sterculiaceae	38	12.10	7
19	Cà phê rừng	Coffea sp	Rubiaceae	20	6.37	6
20	Sung rừng	Ficus sp	Moraceae	49	15.61	8
21	Thần mát	Milletia sp	Fabaceae	37	11.78	6
22	Thần mát	Milletia sp	Fabaceae	32	10.19	6
23	Búra	Garcinia sp	Clusiaceae	28	8.92	5
24	Kháo trắng	Machilus sp	Lauraceae	26	8.28	6
25	Máu chó	Knema sp	Myristicaceae	56	17.83	13
26	Máu chó	Knema sp	Myristicaceae	51	16.24	13
27	Máu chó	Knema sp	Myristicaceae	73	23.25	13
28	Kháo trắng	Machilus sp	Lauraceae	23	7.32	4
29	Vãi rừng	Nephelium sp	Sapindaceae	38	12.10	5
30	Vãi rừng	Nephelium sp	Sapindaceae	24	7.64	5
31	Quéo	Mangifera sp	Anacardiaceae	21	6.69	5
32	Nhãn rừng	Nephelium sp	Sapindaceae	18	5.73	4
33	Vãi rừng	Nephelium sp	Sapindaceae	18	5.73	4
34	De	Cinnamomum sp	Lauraceae	21	6.69	6
35	Kháo trắng	Machilus sp	Lauraceae	19	6.05	5
36	Búra	Garcinia sp	Clusiaceae	65	20.70	7
37	Sung rừng	Ficus sp	Moraceae	45	14.33	11
38	Dền trắng	Xylophia sp	Annonaceae	45	14.33	12
39	Máu chó	Knema sp	Myristicaceae	59	18.79	8
40	Máu chó	Knema sp	Myristicaceae	65	20.70	8
41	Chòi mò	Antidesma sp	Euphorbiaceae	23	7.32	5
41	Total			1510	480.83	287
	Mean			36.82	11.73	7.00

ANNEX 5. A LIST OF MAMMAL SPECIES RECORDED IN KGBSR

No	Vietnamese name	Scientific name	Distribution			Cons. status	
			Phu Quoc	UMT – AB-AM	KL-KH	RDB VN 2007	IUCN RI 2009
	I. BỘ NHIỀU RĂNG	SCANDENTIA Wagner, 1855					
	1. Họ Đồi	Tupaiaidae Gray, 1825					
15.	Đồi	<i>Tupaia belangeri</i> (Wagner, 1841)	*	*	*		
	II. BỘ LINH TRƯỞNG	PRIMATES Linnaeus, 1758					
	2. Họ Cu li	Lorisidae Gray, 1821					
16.	Cu li lớn	<i>Nycticebus bengalensis</i> (Lacépède, 1800)	+			VU	VU
17.	Cu li nhỏ	<i>Nycticebus pygmaeus</i> Bonhote, 1907	+			VU	VU
	3. Họ Khỉ	Cercopithecidae Gray, 1821					
18.	Khỉ mặt đỏ	<i>Macaca arctoides</i> (I. Geoffroy, 1831)	*			VU	VU
19.	Khỉ đuôi dài	<i>Macaca fascicularis</i> (Raffles, 1821)	*	*	*	LR	
20.	Voọc bạc nam bộ	<i>Trachypithecus germaini</i> (Elliot, 1909)	*		*	VU	EN
	III. BỘ CHUỘT CHÙ	SORICOMORPHA Gregory, 1910					
	4. Họ Chuột chù	Soricidae G. Fischer, 1814					
21.	Chuột chù đuôi trắng	<i>Crocidura fuliginosa</i> (Blyth, 1855)		+	@		
22.	Chuột chù phú quốc	<i>Crocidura phuquocensis</i> Abramov et al. 2008	+			New	New
23.	Chuột chù nhà	<i>Suncus murinus</i> (Linnaeus, 1766)	*	+	*		
	IV. BỘ DƠI	CHIROPTERA Blumbach, 1779					
	5. Họ Dơi quạ	Pteropodidae Gray, 1821					
24.	Dơi ngựa bé	<i>Pteropus hypomelanus</i> Temminck, 1853	+				
25.	Dơi ngựa thái lan	<i>Pteropus lylei</i> K. Andersen, 1908	*	*			VU
26.	Dơi ngựa lớn	<i>Pteropus vampyrus</i> (Linnaeus, 1758)	*	*			NT
27.	Dơi chó cánh ngắn	<i>Cynopterus brachyotis</i> (Müller, 1838)	+	*		VU	
28.	Dơi chó cánh dài	<i>Cynopterus sphinx</i> (Vahl, 1797)	+	+			
29.	Dơi cáo nâu	<i>Rousettus leschenaulti</i> (Desmarest, 1820)	@		@		
30.	Dơi ăn mật hoa lớn	<i>Macroglossus sobrinus</i> K. Andersen, 1911	+	+			
	6. Họ Dơi lá mũi	Rhinolophidae Gray, 1825					
31.	Dơi lá sa-đen	<i>Rhinolophus borneensis</i> Peter, 1861	+				

No	Vietnamese name	Scientific name	Distribution			Cons. status	
			Phu Quoc	UMT – AB-AM	KL-KH	RDB VN 2007	IUCN RI 2009
32.	Đơi lá mũi ô-gút	<i>Rhinolophus lepidus</i> Blyth, 1844	+				
33.	Đơi lá mũi phẳng	<i>Rhinolophus malayanus</i> Bonhote, 1903	*				
34.	Đơi lá péc-xôn	<i>Rhinolophus pearsonii</i> Horsfield, 1851	+				
35.	Đơi lá mũi nhỏ	<i>Rhinolophus pusillus</i> Temminck, 1834	*				
36.	Đơi lá rút	<i>Rhinolophus rouxii</i> Temminck, 1835					
37.	Đơi lá mũi sa-men	<i>Rhinolophus shameli</i> Tate, 1943	@				
	7. Họ Đơi nếp mũi	Hipposideridae Lydekker, 1891					
38.	Đơi nếp mũi quạ	<i>Hipposideros armiger</i> (Hodgson, 1835)	+				
39.	Đơi nếp mũi tro	<i>Hipposideros ater</i> Templeton, 1848	+				
40.	Đơi nếp mũi hai màu	<i>Hipposideros bicolor</i> (Temminck, 1834)	@				
41.	Đơi nếp mũi lông đen	<i>Hipposideros cineraceus</i> Blyth, 1853	*				
42.	Đơi nếp mũi lớn	<i>Hipposideros fulvus</i> Gray, 1838	+				
43.	Đơi nếp mũi xám	<i>Hipposideros larvatus</i> (Horsfield, 1823)	*				
44.	Đơi nếp mũi xinh	<i>Hipposideros pomona</i> K. Andersen, 1918	+				
	8. Họ Đơi ma	Megadermatidae H. Allen, 1864					
45.	Đơi ma nam	<i>Megaderma spasma</i> (Linnaeus, 1758)	+				
	9. Họ Đơi bao đuôi	Emballonuridae Gervais, 1855					
46.	Đơi bao đuôi răng lớn	<i>Saccolaimus saccolaimus</i> (Temminck, 1838)	@				
47.	Đơi bao đuôi nâu đen	<i>Taphozous melanopogon</i> Temminck, 1841	+		@		
48.	Đơi bao đuôi đen	<i>Taphozous theobaldi</i> Dobson, 1872	+				
	10. Họ Đơi muỗi	Vespertilionidae Gray, 1821					
49.	Đơi răng cửa nhỏ	<i>Hesperoptenus blanfordi</i> (Dobson, 1877)	@				
50.	Đơi nghệ lớn	<i>Scotophilus heathii</i> (Horsfield, 1831)	+				
51.	Đơi nghệ nhỏ	<i>Scotophilus kuhlii</i> Leach, 1821	+	+	@		
52.	Đơi muỗi xám	<i>Pipistrellus javanicus</i> (Gray, 1838)	+		@		
53.	Đơi mũi nhọn đốm vàng	<i>Kerivoula picta</i> (Pallas, 1767)		+			
	V. BỘ TÊ TÊ	PHOLIDOTA Weber, 1904					
	11. Họ Tê tê	Manidae Gray, 1821					
54.	Tê tê gia va	<i>Manis javanica</i> Desmarest, 1822		+	+	EN	LRnt

No	Vietnamese name	Scientific name	Distribution			Cons. status	
			Phu Quoc	UMT – AB-AM	KL-KH	RDB VN 2007	IUCN RI 2009
	VI. BỘ ĂN THỊT	CARNIVORA Bowdich, 1821					
	12. Họ Mèo	Felidae Fischer de Waldheim, 1817					
55.	Mèo ri	<i>Felis chaus</i> Schreber, 1777	+			DD	
56.	Mèo rừng	<i>Prionailurus bengalensis</i> (Kerr, 1792)	*	*	+		
57.	Mèo cá	<i>Prionailurus viverrinus</i> (Bennett, 1833)		+		EN	EN
	13. Họ Cây	Viverridae Gray, 1821					
58.	Cây vòi đốm	<i>Paradoxurus hermaphroditus</i> (Pallas, 1777)	*	*	*		
59.	Cây giông sọc	<i>Viverra megaspila</i> Blyth, 1862		+		VU	VU
60.	Cây giông	<i>Viverra zibetha</i> Linnaeus, 1758		*			
61.	Cây hương	<i>Viverricula indica</i> (Geoffroy Saint-Hilaire, 1803)	*	+	+		
	14. Họ Cây lòn	Herpestidae Bonaparte, 1845					
62.	Cây lòn tranh	<i>Herpestes javanicus</i> (Geoffroy Saint-Hilaire, 1818)		*	@		
63.	Cây móc cua	<i>Herpestes urva</i> (Hogdson, 1836)		*	@		
	15. Họ Chồn	Mustelidae Fischer, 1817					
64.	Rái cá vuốt bé	<i>Aonyx cinerea</i> (Illiger, 1815)	*	*	@	VU	VU
65.	Rái cá lông mũi	<i>Lutra sumatrana</i> (Gray, 1865)		*		EN	EN
66.	Chồn vàng	<i>Martes flavigula</i> (Boddaert, 1785)	+		@		
	VII. BỘ MÓNG GUỐC NGÓN CHẤM	ARTIODACTYLA Owen, 1848					
	16. Họ Lợn	Suidae Gray, 1821					
67.	Lợn rừng	<i>Sus scrofa</i> Linnaeus, 1758	*	*	*		
	17. Họ Cheo cheo	Tragulidae Milne Edwards, 1864					
68.	Cheo cheo nhỏ	<i>Tragulus kanchil</i> (Raffles, 1821)			*	VU	
	18. Họ Hươu nai	Cervidae Goldfuss, 1820					
69.	Mang thường, hoẵng	<i>Muntiacus muntjak</i> (Zimmermann, 1780)	*		+		
70.	Nai đen	<i>Rusa unicolor</i> (Kerr, 1792)	+			VU	VU
	VIII. BỘ GẠM NHĂM	RODENTIA Bowdich, 1821					
	19. Họ Sóc	Sciuridae Fischer de Waldheim, 1817					
71.	Sóc đen côn đảo	<i>Ratufa bicolor condorensis</i> (Kloss, 1920)	*				

No	Vietnamese name	Scientific name	Distribution			Cons. status	
			Phu Quoc	UMT – AB-AM	KL-KH	RDB VN 2007	IUCN RI 2009
72.	Sóc bay đen trắng	<i>Hylopetes alboniger</i> (Hodgson, 1836)	+			VU	
73.	Sóc bay côn đảo	<i>Hylopetes lepidus</i> (Hosfield, 1822)	+			VU	DD
74.	Sóc bay bé	<i>Hylopetes spadiceus</i> (Blyth, 1847)	+		@		
75.	Sóc chân vàng	<i>Callosciurus erythraeus flavimanus</i> (Geofroy, 1831)	*		@		
76.	Sóc đỏ	<i>Callosciurus finlaysonii</i> (Horsfield, 1823)	*	*	*	LR	
77.	Sóc vằn lưng	<i>Menetes berdmorei</i> (Blyth, 1849)	*		*		
78.	Sóc đuôi ngựa	<i>Sundasciurus hippurus</i> (l. Geoffroy, 1831)		+			NT
79.	Sóc chuột lửa	<i>Tamiops rodolphii</i> (Milne-Edwards, 1867)	*		*		
	20. Họ Chuột	Muridae Illiger, 1811					
80.	Chuột đất lớn	<i>Bandicota indica</i> (Bechstein, 1800)		+			
81.	Chuột mốc bé	<i>Berylmys berdmorei</i> (Blyth, 1851)	*				
82.	Chuột mốc lớn	<i>Berylmys bowersi</i> (Anderson, 1879)	+				
83.	Chuột xu-ri	<i>Maxomys surifer</i> (Miller, 1900)	*				
84.	Chuột hương bé	<i>Niviventer fulvescens</i> (Gray, 1847)	+				
85.	Chuột rừng đông dương	<i>Rattus andamanensis</i> (Blyth, 1860)	*	+	@		
86.	Chuột bụng bạc	<i>Rattus argentiventer</i> (Robinson et Kloss, 1916)		+			
87.	Chuột lắt	<i>Rattus exulans</i> (Peale, 1848)	*	*			
88.	Chuột bóng	<i>Rattus nitidus</i> (Hodgson, 1845)		+			
89.	Chuột cống	<i>Rattus norvegicus</i> (Berkenhout, 1769)	+		+		
90.	Chuột thường	<i>Rattus rattus</i> (Linnaeus, 1758)		*			
91.	Chuột nhà	<i>Rattus tanezumi</i> Temminck, 1844	*		*		

Note: Phu Quoc – Phu Quoc area; UMT-AB-AM – UMT- An Bien – An Minh area , KL-KH – Kien Luong – Kien Hai area. RDB VN (2007) – Red Data Book of Vietnam, 2007. IUCN RL (2009) – 2009 IUCN Red List of threatened species

CR: critically endangered; **EN:** endangered; **VU:** vulnerable; **LR:** low risk; **NT:** nearly threatened; **DD:** Data deficient.

+ species recorded by previous studied but not recorded during this survey

* species recorded both previously and during this surveys

@ species additionally recorded during this survey

ANNEX 6 A: A LIST OF BIRD SPECIES RECORDED IN KGBSR

*Note: + species recorded by previous studies (Lê Xuân Cảnh 2006, Lê Mạnh Hùng 2006, Nguyễn Xuân Đặng và cs, 2004, Buckton et al. 2000) but not recorded during this survey; * species recorded in this survey; @ species additionally recorded by this survey*

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL- KH
	I. ANSERIFORMES	BỘ NGŨNG			
	1. Dendrocygnidae	Họ Le			
1	<i>Dendrocygna javanica</i>	Le nâu	*	*	*
	2. Anatidae	Họ Vịt			
2	<i>Anas penelope</i>	Vịt đầu vàng		+	
3	<i>Anas poecilorhyncha</i>	Vịt trời		*	+
4	<i>Anas querquedula</i>	Mòng két mày trắng	+	*	
	3. Turnicidae	Họ Cùn cút			
5	<i>Turnix suscitator</i>	Cùn cút lưng nâu	+		
	II. PICIFORMES	BỘ GỖ KIẾN			
	4. Picidae	Họ Gỗ kiến			
6	<i>Picumnus innominatus</i>	Gỗ kiến lùn đầu vàng	+		
7	<i>Dendrocopos canicapillus</i>	Gỗ kiến nhỏ đầu xám	*		@
8	<i>Picus sp.</i>	Gỗ kiến xanh (?)	+		
9	<i>Chrysocolaptes lucidus</i>	Gỗ kiến vàng lớn	*		
	5. Megalaimidae	Họ Cu róc			
10	<i>Megalaima lineata</i>	Thầy chùa bụng nâu	+		
11	<i>Megalaima faiostricta</i>	Thầy chùa đầu xám	+		@
12	<i>Megalaima australis</i>	Cu róc đầu đen	*		@
	III. BUCEROTIFORMES	BỘ HỒNG HOÀNG			
	6. Bucerotidae	Họ Hồng hoàng			
13	<i>Anthracoseros albirostris</i>	Cao cát bụng trắng	*		
14	<i>Buceros bicornis</i>	Hồng hoàng	*		
	IV. CORACIIFORMES	BỘ SẢ			
	7. Coraciidae	Họ Sả rừng			
15	<i>Coracias benghalensis</i>	Sả rừng	*	@	*
16	<i>Eurystomus orientalis</i>	Yểng quạ	*		
	8. Alcedinidae	Họ Bồng chanh			
17	<i>Alcedo atthis</i>	Bồng chanh	*	+	+
	9. Halcyonidae	Họ Sả			
18	<i>Halcyon capensis</i>	Sả mỏ rộng	*	*	+
19	<i>Halcyon smyrnensis</i>	Sả đầu nâu	*	*	*
20	<i>Halcyon pileata</i>	Sả đầu đen	+	*	@
21	<i>Todiramphus chloris</i>	Sả khoang cổ	*	*	*
	10. Cerylidae	Họ Bói cá			
22	<i>Ceryle rudis</i>	Bói cá nhỏ	+		
	11. Meropidae	Họ Trâu			
23	<i>Merops orientalis</i>	Trâu đầu hung		*	*
24	<i>Merops superciliosus</i>	Trâu ngực nâu	+	*	*
25	<i>Merops leschenaulti</i>	Trâu họng vàng	*		
	V. CUCULIFORMES	BỘ CU CU			

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL- KH
	12. Cuculidae	Họ Cu cu			
26	<i>Hierococcyx sparverioides</i>	Chèo chèo lớn		+	
27	<i>Hierococcyx fugax</i>	Chèo chèo nhỏ		+	
28	<i>Cuculus micropterus</i>	Bắt cô trói cột		*	
29	<i>Cacomantis sonneratii</i>	Tìm vịt vằn		+	
30	<i>Cacomantis merulinus</i>	Tìm vịt	+	+	+
31	<i>Chrysococcyx maculatus</i>	Tìm vịt xanh		+	
32	<i>Chrysococcyx xanthorhynchus</i>	Tìm vịt tím			
33	<i>Eudynamys scolopacea</i>	Tu hú	+	*	
34	<i>Phaenicophaeus tristis</i>	Phướn, Coọc	+	*	@
	13. Centropodidae	Họ Bìm bịp			
35	<i>Centropus sinensis</i>	Bìm bịp lớn	*	*	@
36	<i>Centropus bengalensis</i>	Bìm bịp nhỏ	*	+	+
	VI. APODIFORMES	BỘ YẾN			
	14. Apodidae	Họ Yến			
37	<i>Hirundapus cochinchinensis</i>	Yến đuôi cứng bụng trắng	*		
38	<i>Cypsiurus batesianus</i>	Yến cọ	*	*	+
39	<i>Apus affinis</i>	Yến cằm trắng		+	*
	VII. STRIGIFORMES	BỘ CÚ			
	15. Tytonidae	Họ Cú lợn			
40	<i>Tyto alba</i>	Cú lợn lưng xám	+	+	
41	<i>Tyto capensis</i>	Cú lợn lưng nâu		+	
	16. Strigidae	Họ Cú mèo			
42	<i>Ketupa flavipes</i>	Dù dì hung	+		
	17. Caprimulgidae	Họ Cú muỗi			
43	<i>Caprimulgus macrurus</i>	Cú muỗi đuôi dài	*	*	@
	VIII. COLUMBIFORMES	BỘ BÒ CÂU			
	18. Columbidae	Họ Bò câu			
44	<i>Streptopelia orientalis</i>	Cu sen		*	
45	<i>Streptopelia chinensis</i>	Cu gáy	*	*	*
46	<i>Streptopelia tranquebarica</i>	Cu ngói	*		+
47	<i>Chalcophaps indica</i>	Cu luồng	+		
48	<i>Treron vernans</i>	Cu xanh đầu xám	*	*	*
49	<i>Treron pompadora</i>	Cu xanh đuôi đen	*		@
50	<i>Treron curvirostra</i>	Cu xanh mỏ quặp	+		
51	<i>Ducula aenea</i>	Gấm ghi lưng xanh	+		
	IX. GRUIFORMES	BỘ SẾU			
	19. Gruidae	Họ Sếu			
52	<i>Grus antigone</i>	Sếu cổ trụi, Sếu đầu đỏ			+
	20. Rallidae	Họ Gà nước			
53	<i>Gallirallus striatus</i>	Gà nước vằn	+	+	
54	<i>Amauornis phoenicurus</i>	Cuốc ngực trắng	*	*	@
55	<i>Porzana fusca</i>	Cuốc ngực nâu		+	
56	<i>Porzana cinerea</i>	Gà nước mây trắng		+	
57	<i>Gallixes cinerea</i>	Gà đồng	+	+	+
58	<i>Porphyrio porphyrio</i>	Xít	+	*	*
59	<i>Gallinula chloropus</i>	Kịch		*	+

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL- KH
	X. CICONIIFORMES	BỘ HẠC			
	21. Scolopacidae	Họ Rẽ			
60	<i>Gallinago gallinago</i>	Rẽ giun	+		
61	<i>Limosa limosa</i>	Choắt mỏ thẳng đuôi đen		+	
62	<i>Tringa totanus</i>	Choắt nâu			+
63	<i>Tringa stagnatilis</i>	Choắt đốm đen		+	
64	<i>Tringa nebularia</i>	Choắt lớn		+	+
65	<i>Tringa ochropus</i>	Choắt bụng trắng	*		
66	<i>Tringa glareola</i>	Choắt bụng xám		+	+
67	<i>Actitis hypoleucos</i>	Choắt nhỏ	*	*	*
68	<i>Calidris ferruginea</i>	Rẽ bụng nâu		+	
	22. Jacanidae	Họ Gà lồi nước			
69	<i>Hydrophasianus chirurgus</i>	Gà lồi nước		*	
70	<i>Metopidius indicus</i>	Gà lồi nước ấn độ		*	
	23. Charadriidae	Họ Chòi chòi			
71	<i>Himantopus himantopus</i>	Cà kheo		+	+
72	<i>Pluvialis fulva</i>	Chòi chòi vàng		+	
73	<i>Charadrius dubius</i>	Chòi chòi nhỏ		*	
74	<i>Charadrius alexandrinus</i>	Chòi chòi khoang cổ		*	
75	<i>Charadrius peronii</i>	Chòi chòi lưng đen	+		
76	<i>Vanellus cinereus</i>	Te vàng		+	
77	<i>Vanellus indicus</i>	Te vật	+	*	*
	24. Glareolidae	Họ Dô nách			
78	<i>Glareola maldivarus</i>	Dô nách nâu, Ốc cau		+	+
	25. Laridae	Họ Mòng bể			
79	<i>Sterna sp.</i>	Nhàn?	+		
80	<i>Sterna hirundo</i>	Nhàn			+
81	<i>Chlidonias leucopterus</i>	Nhàn xám		+	
	26. Accipitridae	Họ Ưng			
82	<i>Pandion haliaetus</i>	Ó cá		+	
83	<i>Elanus caeruleus</i>	Diều trắng	*	*	+
84	<i>Milvus migrans</i>	Diều hâu	+	*	@
85	<i>Haliaeetus indus</i>	Diều lửa	*	*	*
86	<i>Haliaeetus leucogaster</i>	Đại bàng biển bụng trắng	*	@	
87	<i>Ichthyophaga humilis</i>	Diều cá bé	+		
88	<i>Ichthyophaga ichthyaetus</i>	Diều cá đầu xám	+	+	
89	<i>Spilornis cheela</i>	Diều hoa miến điện	*		@
90	<i>Circus aeruginosus</i>	Diều đầu trắng	+	+	
91	<i>Circus cyaneus</i>	Diều hen		+	
92	<i>Circus melanoleucos</i>	Diều mướp	+	+	
93	<i>Accipiter trivirgatus</i>	Ưng ấn độ	+		
94	<i>Accipiter badius</i>	Ưng xám	+	+	
95	<i>Accipiter gularis</i>	Ưng nhật bản	+		
96	<i>Accipiter virgatus</i>	Ưng bụng hung	+		
97	<i>Butastur liventer</i>	Diều xám	+		
98	<i>Butastur indicus</i>	Diều ấn độ	+		
99	<i>Aquila clanga</i>	Đại bàng đen		+	
	27. Falconidae	Họ Cắt			
100	<i>Polihierax insignis</i>	Cắt nhỏ họng trắng	+		

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL- KH
101	<i>Falco peregrinus</i>	Cắt lớn			+
	28. Podicipedidae	Họ Chim lặn			
102	<i>Tachybaptus ruficollis</i>	Le hôi		+	
	29. Phaethontidae	Họ Chim nhiệt đới			
103	<i>Phaethon aethereus</i>	Chim nhiệt đới	+		
	30. Sulidae	Họ Chim điên			
104	<i>Sula dactylatra</i>	Chim điên mặt xanh	+		
	31. Anhingidae	Họ Cổ rắn			
105	<i>Anhinga melanogaster</i>	Cổ rắn, Diêng điêng			
	32. Phalarocoridae	Họ Cốc			
106	<i>Phalarocorax niger</i>	Cốc đen		*	*
	33. Ardeidae	Họ Diệc			
107	<i>Egretta garzetta</i>	Cò trắng	*	*	*
108	<i>Egretta sacra</i>	Cò đen	*	*	
109	<i>Ardea cinerea</i>	Diệc xám		*	+
110	<i>Ardea purpurea</i>	Diệc lửa	+	*	+
111	<i>Casmerodius alba</i>	Cò ngà lớn	+	+	*
112	<i>Mesophoyx intermedia</i>	Cò ngà nhỏ		*	@
113	<i>Bubulcus ibis</i>	Cò ruồi		*	*
114	<i>Ardeola bacchus</i>	Cò bợ	*	*	*
115	<i>Ardeola speciosa</i>	Cò bợ java	+	+	+
116	<i>Butorides striatus</i>	Cò xanh	*	*	*
117	<i>Nycticorax nycticorax</i>	Vạc		*	*
118	<i>Gorsachius melanolophus</i>	Cò tôm, Vạc rừng	+		
119	<i>Ixobrychus sinensis</i>	Cò lửa lùn		+	+
120	<i>Ixobrychus cinnamomeus</i>	Cò lửa	*	+	+
121	<i>Ixobrychus flavicollis</i>	Cò hương	+	*	
	34. Threskiornithidae	Họ Cò quăm			
122	<i>Plegadis falcinellus</i>	Quăm đen		+	
123	<i>Threskiornis melanocephalus</i>	Cò quăm đầu đen		*	
	35. Ciconiidae	Họ Hạc			
124	<i>Mycteria leucocephala</i>	Cò lạo án độ		+	+
125	<i>Anastomus oscitans</i>	Cò nhận, Cò ốc		+	
126	<i>Ciconia episcopus</i>	Hạc cổ trắng		+	+
127	<i>Leptoptilos javanicus</i>	Già đầy java		*	
	XI. PASSERIFORMES	BỘ SẾ			
	36. Pardalotidae	Họ Chích bụng vàng			
128	<i>Gerygone sulphurea</i>	Chích bụng vàng		+	
	37. Irenidae	Họ Chim xanh			
129	<i>Irena puella</i>	Chim lam	*		
130	<i>Chloropsis cochinchinensis</i>	Chim xanh nam bộ	*		@
	38. Laniidae	Họ Bách thanh			
131	<i>Lanius cristatus</i>	Bách thanh mây trắng	*	*	*
	39. Corvidae	Họ Quạ			
132	<i>Crypsirina temia</i>	Chim khách	*	*	*
133	<i>Corvus macrorhynchos</i>	Quạ đen	*	+	
134	<i>Oriolus chinensis</i>	Vàng anh trung quốc	+		
135	<i>Coracina polioptera</i>	Phượng chèo xám nhỏ		+	

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL- KH
136	<i>Pericrocotus divaricatus</i>	Phường chèo trắng lớn	+		
137	<i>Pericrocotus cinnamomeus</i>	Phường chèo nhỏ		+	
138	<i>Pericrocotus flammeus</i>	Phường chèo đỏ lớn		*	
139	<i>Hemipus picatus</i>	Phường chèo đen	+	+	
140	<i>Rhipidura albicollis</i>	Rẻ quạt họng trắng	+		
141	<i>Rhipidura javanica</i>	Rẻ quạt java		*	@
142	<i>Dicrurus macrocercus</i>	Chèo bẻo	*	*	*
143	<i>Dicrurus leucophaeus</i>	Chèo bẻo xám	*	+	
144	<i>Dicrurus annectans</i>	Chèo bẻo mỏ quạ	*		@
145	<i>Dicrurus aeneus</i>	Chèo bẻo rừng	+		
146	<i>Dicrurus paradiseus</i>	Chèo bẻo cờ đuôi chẻ	*	*	@
147	<i>Aegithina tiphia</i>	Chim nghệ ngực vàng	+	+	+
148	<i>Tephrodornis gularis</i>	Phường chèo nâu		+	
149	<i>Tephrodornis pondicerianus</i>	Phường chèo nâu mày trắng		+	
	40. Muscicapidae	Họ Đớp ruồi			
150	<i>Monticola gularis</i>	Hoét đá họng trắng	+		
151	<i>Monticola solitarius</i>	Hoét đá	*		
152	<i>Turdus obscurus</i>	Hoét mày trắng	+		
153	<i>Muscicapa dauurica</i>	Đớp ruồi nâu	+		
154	<i>Copsychus saularis</i>	Chích chòe	*	*	*
155	<i>Copsychus malabaricus</i>	Chích chòe lửa	*		
156	<i>Saxicola torquata</i>	Sẻ bụi đầu đen			+
	41. Sturnidae	Họ Sáo			
157	<i>Aplonis panayensis</i>	Sáo xanh	+		
158	<i>Sturnus malabaricus</i>	Sáo đá đuôi hung		+	
159	<i>Sturnus sinensis</i>	Sáo đá trung quốc		*	
160	<i>Sturnus nigricollis</i>	Sáo sậu	*	*	*
161	<i>Acridotheres tristis</i>	Sáo nâu	*	*	*
162	<i>Acridotheres grandis</i>	Sáo mỏ vàng	*		@
163	<i>Acridotheres cristatellus</i>	Sáo đen, Sáo mỏ ngà	*		
164	<i>Gracula religiosa</i>	Yểng, Nhông	*		
	42. Hirundinidae	Họ Nhạn			
165	<i>Riparia riparia</i>	Nhạn nâu xám		+	
166	<i>Hirundo rustica</i>	Nhạn bụng trắng	*	*	*
167	<i>Hirundo tahitica</i>	Nhạn đuôi đen	*		
168	<i>Hirundo daurica</i>	Nhạn bụng xám			*
	43. Pycnonotidae	Họ Chào mào			
169	<i>Pycnonotus melanicterus</i>	Chào mào vàng mào đen	*		@
170	<i>Pycnonotus finlaysoni</i>	Bông lau họng vạch	+		@
171	<i>Pycnonotus goiavier</i>	Bông lau mày trắng	*	*	*
172	<i>Pycnonotus blanfordi</i>	Bông lau tai vắn		*	+
173	<i>Alophoixus pallidus</i>	Cành cạch lớn	+		
174	<i>Alophoixus ochraceus</i>	Cành cạch bụng hung	+		
	44. Cisticolidae	Họ Chiền chiện			
175	<i>Cisticola juncidis</i>	Chiền chiện đồng hung		*	*
176	<i>Cisticola exilis</i>	Chiền chiện đồng vàng		*	
177	<i>Prinia rufescens</i>	Chiền chiện đầu nâu		*	
178	<i>Prinia hodgsonii</i>	Chiền chiện lưng xám		+	
179	<i>Prinia flaviventris</i>	Chiền chiện bụng vàng		+	
180	<i>Prinia subflava</i>	Chiền chiện bụng hung	*	+	

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL- KH
	45. Zosteropidae	Họ Vành khuyên			
181	<i>Zosterops palpebrous</i>	Vành khuyên họng vàng			@
	46. Sylviidae	Họ Chim Chích			
182	<i>Locustella lanceolata</i>	Chích đầm lầy nhỏ		+	
183	<i>Locustella certhiola</i>	Chích đầm lầy lớn		+	
184	<i>Acrocephalus bistrigiceps</i>	Chích đầu nhọn mày đen		+	+
185	<i>Acrocephalus concinens</i>	Chích cánh cụt		+	
186	<i>Acrocephalus orientalis</i>	Chích đầu nhọn phương đông		+	+
187	<i>Orthotomus sutorius</i>	Chích bông đuôi dài	*	*	*
188	<i>Orthotomus atrogularis</i>	Chích bông cánh vàng	+	*	+
189	<i>Orthotomus sepium</i>	Chích bông nâu	*		@
190	<i>Phylloscopus fuscatus</i>	Chim chích nâu		+	
191	<i>Phylloscopus inornatus</i>	Chích mày lớn	+	+	
192	<i>Phylloscopus sp.</i>	Chích?	+		
193	<i>Megalurus palustris</i>	Chiền chiện lớn	+	+	+
194	<i>Malacocincla abbotti</i>	Chuối tiêu mỏ to	+	+	
195	<i>Pellorneum ruficeps</i>	Chuối tiêu ngực đốm	+	+	
196	<i>Pomatorhinus hypoleucos</i>	Hoạ mi đất mỏ dài	+		
197	<i>Macronous gularis</i>	Chích chạch má vàng	*	*	@
198	<i>Timalia pileata</i>	Hoạ mi nhỏ	*	+	
	47. Alaudidae	Họ Sơn ca			
199	<i>Mirafra assamica</i>	Sơn ca thái lan			+
200	<i>Alauda gulgula</i>	Sơn ca		+	+
	48. Nectariniidae	Họ Hút mật			
201	<i>Dicaeum concolor</i>	Chim sâu vàng lục	+		
202	<i>Dicaeum cruentatum</i>	Chim sâu lưng đỏ	*	*	+
203	<i>Anthreptes malacensis</i>	Hút mật họng nâu	+	+	
204	<i>Anthreptes singalensis</i>	Hút mật bụng hung		*	
205	<i>Nectarinia sperata</i>	Hút mật họng hồng	+	+	
206	<i>Nectarinia jugularis</i>	Hút mật họng tím	*	+	+
207	<i>Nectarinia asiatica</i>	Hút mật họng đen	+	*	
208	<i>Aethopiga siparaja</i>	Hút mật đỏ	+		
	49. Passeridae	Họ Sẻ			
209	<i>Passer flaveolus</i>	Sẻ bụi vàng		+	+
210	<i>Passer montanus</i>	Sẻ	*	*	*
211	<i>Motacilla alba</i>	Chìa vôi trắng	+	+	
212	<i>Motacilla flava</i>	Chìa vôi vàng	+	+	@
213	<i>Anthus richardi</i>	Chim manh lớn	+	*	+
214	<i>Anthus cervinus</i>	Chim manh họng đỏ		+	
215	<i>Ploceus manyar</i>	Rồng rộc đen		+	
216	<i>Ploceus philippinus</i>	Rồng rộc		+	
217	<i>Ploceus hypoxanthus</i>	Rồng rộc vàng		+	
218	<i>Lonchura striata</i>	Di cam		*	
219	<i>Lonchura punctulata</i>	Di đá		*	*
220	<i>Lonchura malacca</i>	Di đầu đen		+	+
221	<i>Lonchura maja</i>	Di đầu trắng		+	
	50. Fringillidae	Họ Sẻ đồng			
222	<i>Emberiza aureola</i>	Sẻ đồng ngực vàng		+	

ANNEX 6B : DISTTIBUTION OF BIRDS BY HABITAT TYPES

1 – Mountain preliminary and secondary forest; 2 – Coastal mangrove forest; 3 – Melaleuca forest; 4 – Grassland on dykes; 5 – Openland (open wetland, agriculture land, meadows, etc.)

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL-KH
	I. ANSERIFORMES	BỘ NGŨNG			
	1. Dendrocygnidae	Họ Le			
1	<i>Dendrocygna javanica</i>	Le nâu	2,5	3,5	2,5
	2. Anatidae	Họ Vịt			
2	<i>Anas penelope</i>	Vịt đầu vàng		5	
3	<i>Anas poecilorhyncha</i>	Vịt trời		5	5
4	<i>Anas querquedula</i>	Mòng két mây trắng	2,5	5	
	3. Turnicidae	Họ Cún cút			
5	<i>Turnix suscitator</i>	Cún cút lưng nâu	1		
	II. PICIFORMES	BỘ GỖ KIẾN			
	4. Picidae	Họ Gỗ kiến			
6	<i>Picumnus innominatus</i>	Gỗ kiến lùn đầu vàng	1,3		
7	<i>Dendrocopos canicapillus</i>	Gỗ kiến nhỏ đầu xám	1,3		
8	<i>Picus sp.</i>	Gỗ kiến xanh?	1		
9	<i>Chrysocolaptes lucidus</i>	Gỗ kiến vàng lớn	1		
	5. Megalaimidae	Họ Cu róc			
10	<i>Megalaima lineata</i>	Thầy chùa bụng nâu	1,3		
11	<i>Megalaima faiostricta</i>	Thầy chùa đầu xám	1,3		
12	<i>Megalaima australis</i>	Cu róc đầu đen	1,3		
	III. BUCEROTIFORMES	BỘ HỒNG HOÀNG			
	6. Bucerotidae	Họ Hồng hoàng			
13	<i>Anthracoseros albirostris</i>	Cao cát bụng trắng	1		
14	<i>Buceros bicornis</i>	Hồng hoàng	1		
	IV. CORACIIFORMES	BỘ SẢ			
	7. Coraciidae	Họ Sả rừng			
15	<i>Coracias benghalensis</i>	Sả rừng	1,2,3	2,3,4	1,2
16	<i>Eurystomus orientalis</i>	Yểng quạ	1		
	8. Alcedinidae	Họ Bồng chanh			
17	<i>Alcedo atthis</i>	Bồng chanh	2	3,4,5	2,5
	9. Halcyonidae	Họ Sả			
18	<i>Halcyon capensis</i>	Sả mỏ rộng	2,3,5	2,3,4	2,5
19	<i>Halcyon smyrnensis</i>	Sả đầu nâu	2,3,5	2,3,4	2,5
20	<i>Halcyon pileata</i>	Sả đầu đen	2,5	2,3,5	
21	<i>Todiramphus chloris</i>	Sả khoang cổ	2,3,5	2,3,4,5	2,5
	10. Cerylidae	Họ Bói cá			
?	<i>Ceryle rudis</i>	Bói cá nhỏ	2,5		
	11. Meropidae	Họ Trâu			
23	<i>Merops orientalis</i>	Trâu đầu hung		2,3	2,5
24	<i>Merops superciliosus</i>	Trâu ngực nâu	2,5	2,3,4,5	2,5
25	<i>Merops leschenaulti</i>	Trâu họng vàng	2,5		
	V. CUCULIFORMES	BỘ CU CU			
	12. Cuculidae	Họ Cu cu			
26	<i>Hierococcyx sparveroides</i>	Chèo chèo lớn		3	
27	<i>Hierococcyx fugax</i>	Chèo chèo nhỏ		3	
28	<i>Cuculus micropterus</i>	Bắt cô trói cột		2,3	

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL-KH
29	<i>Cacomantis sonneratii</i>	Tìm vịt vằn		3	
30	<i>Cacomantis merulinus</i>	Tìm vịt	1	3	1
31	<i>Chrysococcyx maculatus</i>	Tìm vịt xanh		3	
32	<i>Chrysococcyx xanthorhynchus</i>	Tìm vịt tím			
33	<i>Eudynamys scolopacea</i>	Tu hú	1	2,3	
34	<i>Phaenicophaeus tristis</i>	Phước, Coọc	1,2	2,3	
	13. Centropodidae	Họ Bìm bịp			
35	<i>Centropus sinensis</i>	Bìm bịp lớn	2,3,5	2,3,4	2,5
36	<i>Centropus bengalensis</i>	Bìm bịp nhỏ	2,3,5	2,3,4	2,5
	VI. APODIFORMES	BỘ YẾN			
	14. Apodidae	Họ Yến			
37	<i>Hirundapus cochinchinensis</i>	Yến đuôi cứng bụng trắng	2,3		
38	<i>Cypsiurus batasiensis</i>	Yến cọ	2,3	2,5	2,5
39	<i>Apus affinis</i>	Yến cằm trắng		2,5	2,5
	VII. STRIGIFORMES	BỘ CÚ			
	15. Tytonidae	Họ Cú lợn			
40	<i>Tyto alba</i>	Cú lợn lưng xám	1	3	
41	<i>Tyto capensis</i>	Cú lợn lưng nâu		3	
	16. Strigidae	Họ Cú mèo			
42	<i>Ketupa flavipes</i>	Dù di hung	1		
	17. Caprimulgidae	Họ Cú muỗi			
43	<i>Caprimulgus macrurus</i>	Cú muỗi đuôi dài	1,2,3	2,3	
	VIII. COLUMBIFORMES	BỘ BÒ CÀU			
	18. Columbidae	Họ Bò câu			
44	<i>Streptopelia orientalis</i>	Cu sen		2,4	
45	<i>Streptopelia chinensis</i>	Cu gáy	1,3	2,3,4,6	1,2
46	<i>Streptopelia tranquebarica</i>	Cu ngói	1,3		1,2
47	<i>Chalcophaps indica</i>	Cu luồng	1		
48	<i>Treron vernans</i>	Cu xanh đầu xám	1,2,3	3	1
49	<i>Treron pompadora</i>	Cu xanh đuôi đen	1,2,3		
59	<i>Treron curvirostra</i>	Cu xanh mỏ quặp	1,2,3		
51	<i>Ducula aenea</i>	Gà ghì lưng xanh	1,2,3		
	IX. GRUIFORMES	BỘ SẾU			
	19. Gruidae	Họ Sếu			
52	<i>Grus antigone</i>	Sếu cổ trụi, Sếu đầu đỏ			5
	20. Rallidae	Họ Gà nước			
53	<i>Gallirallus striatus</i>	Gà nước vằn	2,5	4,5	
54	<i>Amaurornis phoenicurus</i>	Cuốc ngực trắng	2,5	3,5	
55	<i>Porzana fusca</i>	Cuốc ngực nâu		3,5	
56	<i>Porzana cinerea</i>	Gà nước mây trắng		5	
57	<i>Gallicrex cinerea</i>	Gà đồng	5	5	5
58	<i>Porphyrio porphyrio</i>	Xít	5	5	5
59	<i>Gallinula chloropus</i>	Kích		5	5
	X. CICONIIFORMES	BỘ HẠC			
	21. Scolopacidae	Họ Rẽ			
60	<i>Gallinago gallinago</i>	Rẽ giun	2,5		
61	<i>Limosa limosa</i>	Choắt mỏ thẳng đuôi đen		2,5	
62	<i>Tringa totanus</i>	Choắt nâu			2,5
63	<i>Tringa stagnatilis</i>	Choắt đốm đen		5	

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL-KH
64	<i>Tringa nebularia</i>	Choắt lớn		2,5	2,5
65	<i>Tringa ochropus</i>	Choắt bụng trắng	2,5		
66	<i>Tringa glareola</i>	Choắt bụng xám		5	2,5
67	<i>Actitis hypoleucos</i>	Choắt nhỏ	2,5	2,5	2,5
68	<i>Calidris ferruginea</i>	Rẽ bụng nâu		5	
	22. Jacanidae	Họ Gà lồi nước			
69	<i>Hydrophasianus chirurgus</i>	Gà lồi nước		5	
70	<i>Metopidius indicus</i>	Gà lồi nước ấn độ		5	
	23. Charadriidae	Họ Choi choi			
71	<i>Himantopus himantopus</i>	Cà kheo		2,5	2,5
72	<i>Pluvialis fulva</i>	Choi choi vàng		5	
73	<i>Charadrius dubius</i>	Choi choi nhỏ		2,5	
74	<i>Charadrius alexandrinus</i>	Choi choi khoang cổ		2,5	
75	<i>Charadrius peronii</i>	Choi choi lưng đen	2,5		
76	<i>Vanellus cinereus</i>	Te vàng		5	
77	<i>Vanellus indicus</i>	Te vật	2,5	2,5	2
	24. Glareolidae	Họ Dô nách			
78	<i>Glareola maldivarus</i>	Dô nách nâu, Ốc cau		5	2,5
	25. Laridae	Họ Mòng bẽ			
79	<i>Sterna sp.</i>	Nhàn?	2		
80	<i>Sterna hirundo</i>	Nhàn			2
81	<i>Chlidonias leucopterus</i>	Nhàn xám		2	
	26. Accipitridae	Họ Ưng			
82	<i>Pandion haliaetus</i>	Ó cá		2,4	
83	<i>Elanus caeruleus</i>	Diều trắng	1	2,3,4	1
84	<i>Milvus migrans</i>	Diều hâu	1	2,3	1,2
85	<i>Haliaastur indus</i>	Diều lửa	2,3	2,3	2
86	<i>Haliaeetus leucogaster</i>	Đại bàng biển bụng trắng	2	2	
87	<i>Ichthyophaga humilis</i>	Diều cá bé	1,2		
88	<i>Ichthyophaga ichthyaetus</i>	Diều cá đầu xám	1,2	3	
89	<i>Spilornis cheela</i>	Diều hoa miến điện	1,2		1,2
90	<i>Circus aeruginosus</i>	Diều đầu trắng	1,2	4	
91	<i>Circus cyaneus</i>	Diều hen		3,4	
92	<i>Circus melanoleucos</i>	Diều mướp	1	4	
93	<i>Accipiter trivirgatus</i>	Ưng ấn độ	1		
94	<i>Accipiter badius</i>	Ưng xám	1	3	
95	<i>Accipiter gularis</i>	Ưng nhật bản	1		
96	<i>Accipiter virgatus</i>	Ưng bụng hung	1		
97	<i>Butastur liventer</i>	Diều xám	1		
98	<i>Butastur indicus</i>	Diều ấn độ	1		
99	<i>Aquila clanga</i>	Đại bàng đen		3	
	27. Falconidae	Họ Cắt			
100	<i>Polihierax insignis</i>	Cắt nhỏ họng trắng	1		
101	<i>Falco peregrinus</i>	Cắt lớn			1
	28. Podicipedidae	Họ Chim lặn			
102	<i>Tachybaptus ruficollis</i>	Le hôi		2,5	
	29. Phaethontidae	Họ Chim nhiệt đới			
103	<i>Phaethon aethereus</i>	Chim nhiệt đới	2		
	30. Sulidae	Họ Chim diên			
104	<i>Sula dactylatra</i>	Chim diên mặt xanh	2		
	31. Anhingidae	Họ Cỏ rằn			

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL-KH
105	<i>Anhinga melanogaster</i>	Cổ rắn, Đèo đẽng		3,5	
	32. Phalarocoridae	Họ Cốc			
106	<i>Phalarocorax niger</i>	Cốc đen		2,3,5	2,5
	33. Ardeidae	Họ Diệc			
107	<i>Egretta garzetta</i>	Cò trắng	2,5	2,3,4,5	2,5
108	<i>Egretta sacra</i>	Cò đen	2,5	2,3	
109	<i>Ardea cinerea</i>	Diệc xám		3,5	2,5
110	<i>Ardea purpurea</i>	Diệc lửa	2,5	4,5	5
111	<i>Casmerodius alba</i>	Cò ngàng lớn	2,5	3,4,5	2,5
112	<i>Mesophoyx intermedia</i>	Cò ngàng nhỏ		3,4,5	2,5
113	<i>Bubulcus ibis</i>	Cò ruồi		2,3,4,5	2,5
114	<i>Ardeola bacchus</i>	Cò bợ	2,5	2,3,4,5	2,5
115	<i>Ardeola speciosa</i>	Cò bợ java	2,5	2,3,4	2,5
116	<i>Butorides striatus</i>	Cò xanh	2,5	2,3,5	2,5
117	<i>Nycticorax nycticorax</i>	Vạc		2,3,5	2,5
118	<i>Gorsachius melanolophus</i>	Cò tôm, Vạc rừng	1,2		
119	<i>Ixobrychus sinensis</i>	Cò lửa lùn		2,3,4	2,5
120	<i>Ixobrychus cinnamomeus</i>	Cò lửa	2,5	4	2,5
121	<i>Ixobrychus flavicollis</i>	Cò hương	2,5	4,5	
	34. Threskiornithidae	Họ Cò quăm			
122	<i>Plegadis falcinellus</i>	Quăm đen		5	
123	<i>Threskiornis melanocephalus</i>	Cò quăm đầu đen		3,4	
	35. Ciconiidae	Họ Hạc			
124	<i>Mycteria leucocephala</i>	Cò lạo ấn độ		5	5
125	<i>Anastomus oscitans</i>	Cò nhận, Cò ốc		3,5	
126	<i>Ciconia episcopus</i>	Hạc cổ trắng		3,5	5
127	<i>Leptoptilos javanicus</i>	Già đẫy java		3,4,5	
	XI. PASSERIFORMES	XI. BỘ SẾ			
	36. Pardalotidae	Họ Chích bụng vàng			
128	<i>Gerygone sulphurea</i>	Chích bụng vàng		2,3	
	37. Irenidae	Họ Chim xanh			
129	<i>Irena puella</i>	Chim lam	1,2,3		
130	<i>Chloropsis cochinchinensis</i>	Chim xanh nam bộ	1,2,3		
	38. Laniidae	Họ Bách thanh			
131	<i>Lanius cristatus</i>	Bách thanh mây trắng	1,3	2,3,4	1,2
	39. Corvidae	Họ Quạ			
132	<i>Crypsirina temia</i>	Chim khách	1	2,3,4	1,2
133	<i>Corvus macrorhynchos</i>	Quạ đen	2	2	
134	<i>Oriolus chinensis</i>	Vàng anh trung quốc	1		
135	<i>Coracina polioptera</i>	Phượng chèo xám nhỏ		3	
136	<i>Pericrocotus divaricatus</i>	Phượng chèo trắng lớn	1		
137	<i>Pericrocotus cinnamomeus</i>	Phượng chèo nhỏ		3	
138	<i>Pericrocotus flammeus</i>	Phượng chèo đỏ lớn		3	
139	<i>Hemipus picatus</i>	Phượng chèo đen	1	3	
140	<i>Rhipidura albicollis</i>	Rẻ quạt họng trắng	1,2,3		
141	<i>Rhipidura javanica</i>	Rẻ quạt java		2,3,4	1,2
142	<i>Dicrurus macrocercus</i>	Chèo bẻo	1,2	2,3,4	1,2
143	<i>Dicrurus leucophaeus</i>	Chèo bẻo xám	1,2	2,3	
144	<i>Dicrurus annectans</i>	Chèo bẻo mỏ quạ	1		
145	<i>Dicrurus aeneus</i>	Chèo bẻo rừng	1		

No	Scientific name	Vietnamese name	PQ	UMT-AB-AM	KL-KH
146	<i>Dicrurus paradiseus</i>	Chèo bẻo cò đuôi chẻ	1,2	2,3	1,2
147	<i>Aegithina tiphia</i>	Chim nghệ ngực vàng	1	3	1
148	<i>Tephrodornis gularis</i>	Phường chèo nâu		3	
149	<i>Tephrodornis pondicerianus</i>	Phường chèo nâu mày trắng		3	
	40. Muscicapidae	Họ Đớp ruồi			
150	<i>Monticola gularis</i>	Hoét đá họng trắng	1		
151	<i>Monticola solitarius</i>	Hoét đá	1,2		
152	<i>Turdus obscurus</i>	Hoét mày trắng	1		
153	<i>Muscicapa dauurica</i>	Đớp ruồi nâu	1		
154	<i>Copsychus saularis</i>	Chích chòe	1,2,3	2,3,4	1,2
155	<i>Copsychus malabaricus</i>	Chích chòe lửa	1,2,3		
156	<i>Saxicola torquata</i>	Sẻ bụi đầu đen			1
	41. Sturnidae	Họ Sáo			
157	<i>Aplonis panayensis</i>	Sáo xanh	1		
158	<i>Sturnus malabaricus</i>	Sáo đá đuôi hung		3	
159	<i>Sturnus sinensis</i>	Sáo đá trung quốc		3	
160	<i>Sturnus nigricollis</i>	Sáo sậu	1,2	2,3,4	1,2
161	<i>Acridotheres tristis</i>	Sáo nâu	1,2	2	1,2
162	<i>Acridotheres grandis</i>	Sáo mỏ vàng	1,2		1,2
163	<i>Acridotheres cristatellus</i>	Sáo đen, Sáo mỏ ngà	1,2		
164	<i>Gracula religiosa</i>	Yểng, Nhông	1		
	42. Hirundinidae	Họ Nhạn			
165	<i>Riparia riparia</i>	Nhạn nâu xám		2,4	
166	<i>Hirundo rustica</i>	Nhạn bụng trắng	2,3	2,4	1,2
167	<i>Hirundo tahitica</i>	Nhạn đuôi đen	2,3		
168	<i>Hirundo daurica</i>	Nhạn bụng xám			1,2
	43. Pycnonotidae	Họ Chàو mào			
169	<i>Pycnonotus melanicterus</i>	Chàو mào vàng mào đen	1,2		
170	<i>Pycnonotus finlaysoni</i>	Bông lau họng vạch	1		1
171	<i>Pycnonotus goiavier</i>	Bông lau mày trắng	1,2	2,3,4	1,2
172	<i>Pycnonotus blanfordi</i>	Bông lau tai vắn		2,3	1
173	<i>Alophoixus pallidus</i>	Cành cạch lớn	1		
174	<i>Alophoixus ochraceus</i>	Cành cạch bụng hung	1		
	44. Cisticolidae	Họ Chiền chiện			
175	<i>Cisticola juncidis</i>	Chiền chiện đồng hung		4	2
176	<i>Cisticola exilis</i>	Chiền chiện đồng vàng		4	
177	<i>Prinia rufescens</i>	Chiền chiện đầu nâu		4	
178	<i>Prinia hodgsonii</i>	Chiền chiện lưng xám		4	
178	<i>Prinia flaviventris</i>	Chiền chiện bụng vàng		4	
180	<i>Prinia subflava</i>	Chiền chiện bụng hung	2	3,4	
	45. Zosteropidae	Họ Vành khuyên			
181	<i>Zosterops palpebrous</i>	Vành khuyên họng vàng			1,2,6
	46. Sylviidae	Họ Chim Chích			
182	<i>Locustella lanceolata</i>	Chích đầm lầy nhỏ		2,3,4	
183	<i>Locustella certhiola</i>	Chích đầm lầy lớn		2,3,4	
184	<i>Acrocephalus bistrigiceps</i>	Chích đầu nhọn mày đen		3,4	1
185	<i>Acrocephalus concinens</i>	Chích cánh cụt		2,3,4	
186	<i>Acrocephalus orientalis</i>	Chích đầu nhọn phương đông		2,3,4	1
187	<i>Orthotomus sutorius</i>	Chích bông đuôi dài	1,2,3	2,3,4	1,2

No	Scientific name	Vietnamese name	PQ	UMT- AB-AM	KL -KH
188	<i>Orthotomus atrogularis</i>	Chích bông cánh vàng	1,2,3	2,3	1,2
189	<i>Orthotomus sepium</i>	Chích bông nâu	1,2		1
190	<i>Phylloscopus fuscatus</i>	Chim chích nâu		2,4	
191	<i>Phylloscopus inornatus</i>	Chích mây lớn	1,2	4	
192	<i>Phylloscopus sp.</i>	Chích?	1		
193	<i>Megalurus palustris</i>	Chiền chiện lớn	1,2,3	4	1
194	<i>Malacocincla abbotti</i>	Chuối tiêu mỏ to	1	3	
195	<i>Pellorneum ruficeps</i>	Chuối tiêu ngực đỏm	1	3	
196	<i>Pomatorhinus hypoleucos</i>	Hoạ mi đất mỏ dài	1		
197	<i>Macronous gularis</i>	Chích chạch má vàng	1,2	2,3,4	
198	<i>Timalia pileata</i>	Hoạ mi nhỏ	1	3	
	47. Alaudidae	Họ Sơn ca			
199	<i>Mirafra assamica</i>	Sơn ca thái lan			1
200	<i>Alauda gulgula</i>	Sơn ca		2,3,4	1,2
	48. Nectariniidae	Họ Hút mật			
201	<i>Dicaeum concolor</i>	Chim sâu vàng lục	1		
202	<i>Dicaeum cruentatum</i>	Chim sâu lưng đỏ	1	2,3	1,2
203	<i>Antheptes malacensis</i>	Hút mật họng nâu	1,2	2,3	
204	<i>Antheptes singalensis</i>	Hút mật bụng hung		3	
205	<i>Nectarinia sperata</i>	Hút mật họng hồng	1	3	
206	<i>Nectarinia jugularis</i>	Hút mật họng tím	1	2,3,4	1,2
207	<i>Nectarinia asiatica</i>	Hút mật họng đen	1	3	
208	<i>Aethopiga siparaja</i>	Hút mật đỏ	1,2,3		
	49. Passeridae	Họ Sẻ			
209	<i>Passer flaveolus</i>	Sẻ bụi vàng		4	1
210	<i>Passer montanus</i>	Sẻ	5	4,5	5
211	<i>Motacilla alba</i>	Chìa vôi trắng	1,2,3	2,4	
212	<i>Motacilla flava</i>	Chìa vôi vàng	1,2,3	2	1,2
213	<i>Anthus richardi</i>	Chim manh lớn	1,2	2,4	1,2
214	<i>Anthus cervinus</i>	Chim manh họng đỏ		4	
215	<i>Ploceus manyar</i>	Rồng rộc đen		4	
216	<i>Ploceus philippinus</i>	Rồng rộc		4,5	
217	<i>Ploceus hypoxanthus</i>	Rồng rộc vàng		4,5	
218	<i>Lonchura striata</i>	Di cam		4	
219	<i>Lonchura punctulata</i>	Di đá		4,5	2,5
220	<i>Lonchura malacca</i>	Di đầu đen		4	2
221	<i>Lonchura maja</i>	Di đầu trắng		4	
	50. Fringillidae	Họ Sẻ đồng			
222	<i>Emberiza aureola</i>	Sẻ đồng ngực vàng		4	

**ANNEX 7: A LIST OF AMPHIBIAN AND REPTILE SPECIES RECORDED
IN KGBSR**

No	Vietnamese name	Scientific name	PQ	UMT- AB-AM	KL- KH
	LỚP LƯƠNG CỤ	AMPHIBIA			
	Bộ Không đuôi	I. Anura			
	1. Họ Cóc	1. Bufonidae			
	Cóc nhà	<i>Duttaphrynus melanostictus</i> (SCHNEIDER, 1799)	*	*	*
	2. Họ Nhái bầu	2. Microhylidae			
	Cóc đốm	<i>Kalophrynus interlineatus</i> (BLYTH, 1855)	x		
	Ếnh ương	<i>Kaloula pulchra</i> GRAY, 1831	*		*
	Nhái bầu hây môn	<i>Microhyla heimonsi</i> VOGT, 1911	@		x
	Nhái bầu trơn	<i>Micryletta inornata</i> (BOULENGER, 1890)	*		*
	3. Họ Ếch nhái chính thức	3. Dicroglossidae			
	Ếch cua	<i>Fejervarya cancrivora</i> (GRAVENHORST, 1829)		x	
	Nhái, ngóe	<i>Fejervarya limnocharis</i> (GRAVENHORST, 1829)	*	*	*
	Ếch đồng	<i>Hoplobatrachus rugulosus</i> (WIEGMANN, 1834)	*	*	
	Ếch mụn nam bộ	<i>Limnonectes dabanus</i> (SMITH, 1922)	x		
	Ếch hạt chê	<i>Limnonectes hascheanus</i> (STOLICZKA, 1870)	x		
	Ếch trơn, ếch nhèo	<i>Limnonectes kuhlii</i> (TSCHUDI, 1838)	*		
	Cóc nước sần	<i>Occidozyga lima</i> (GRAVENHORST, 1829)	x	x	x
	Cóc nước mạc ten	<i>Occidozyga martensii</i> (PETERS, 1867)			x
	Cóc nước nhẵn	<i>Occidozyga vittata</i> (ANDERSON, 1942)			x
	4. Họ Ếch nhái	4. Ranidae			
	Chàng xanh	<i>Hylarana erythraea</i> (SCHLEGEL, 1837)		*	
	Chẫu, chẫu chuộc	<i>Hylarana guentheri</i> (BOULENGER, 1882)	*		
	Chàng hiu	<i>Hylarana macrodactyla</i> (GUNTHER, 1858)	*		
	Ếch suối	<i>Hylarana nigrovittata</i> (BLYTH, 1856)	x		
	Chàng đài bắc	<i>Hylarana taipehensis</i> (VAN DENBURGH, 1909)	x		*
	5. Họ Ếch cây	5. Rhacophoridae			
	Nhái cây đô riê	<i>Chiromantis doriae</i> (BOULENGER, 1893)			x
	Ếch cây mép trắng	<i>Polypedates leucomystax</i> (GRAVENHORST, 1829)	*	*	*
	Nhái cây sần tay lo	<i>Theloderma stellatum</i> TAYLOR, 1962	x		x
	II. Bộ Không chân	II. Gymnophiona			
	6. Họ Ếch giun	6. Ichthyophiidae			
	Ếch giun	<i>Ichthyophis bananicus</i> YANG, 1984			x
	LỚP BÒ SÁT	REPTILIA			
	I. Bộ Có vảy	I. Squamata			
	1. Họ Nhông	1. Agamidae			
	Rồng đất	<i>Physignathus cocincinus</i> CUVIER, 1829	*		

No	Vietnamese name	Scientific name	PQ	UMT-AB-AM	KL-KH
	Ô rô vảy	<i>Acanthosaura lepidogaster</i> (CUVIE, 1829)	*		
	Ô rô capra	<i>Acanthosaura capra</i> GUNTHER, 1861	*		
	Nhông xám	<i>Calotes mystaceus</i> DUMERIN & BIBRON, 1837			*
	Nhông xanh	<i>Calotes versicolor</i> (DAUDIN, 1802)	*		*
	Thằn lằn bay đốm	<i>Draco maculatus</i> (GRAY, 1845)	*		X
	Nhông cát ri vờ	<i>Leiolepis reevesii</i> DAREVSKY & KUPRIYANOVA, 1993	*		
	2. Họ Tắc kè	2. Gekkonidae			
	Thạch sùng ngón côn sơn	<i>Cyrtodactylus condorensis</i> (SMITH, 1920)	X		
	Thạch sùng ngón trung gian	<i>Cyrtodactylus intermedius</i> (SMITH, 1917)			X
	Thạch sùng ngón đốm	<i>Cyrtodactylus paradoxus</i> (DAREVSKY & SZCZEBAK, 1997)	X		X
	Thằn lằn chân ngón Eisenmani	<i>Cyrtodactylus eisenmani</i> NGO, 2008			X
	Tắc kè đuôi trắng	<i>Cnemaspis caudanivea</i> GRISMER & NGO, 2007			X
	Tắc kè chân vàng	<i>Cnemaspis aurantiacopes</i> GRISMER & NGO, 2007			X
	Thạch sùng cụt	<i>Gehyra mulata</i> (WIEGMANN, 1834)	X		X
	Tắc kè	<i>Gekko gecko</i> (LINNEAUS, 1758)	*	*	*
	Thạch sùng bau ring	<i>Hemidactylus bowringii</i> (GRAY, 1845)	X		
	Thạch sùng đuôi sần	<i>Hemidactylus frenatus</i> SCHLEGEL, 1836	*	*	*
	Thạch sùng ga nôt	<i>Hemidactylus garnoti</i> DUMERIN & BIBRON, 1836	*	X	*
	Thạch sùng đuôi dẹp	<i>Hemidactylus platyurus</i> SCHNEIDER, 1792	X	X	
	Thạch sùng đuôi thùy	<i>Ptychozoon lionotum</i> ANNADALE, 1905	X		
	Thạch sùng lá	<i>Dixonius sp.</i>			X
	3. Họ Thằn lằn bóng	3. Scincidae			
	Thằn lằn đa si xanh	<i>Dasia olivacea</i> GRAY, 1839	X		
	Thằn lằn bóng sa pa	<i>Eutropis chapaensis</i> (BOURRET, 1937)	X		
	Thằn lằn bóng đốm	<i>Eutropis macularia</i> (BLYTH, 1853)	*		*
	Thằn lằn bóng hoa	<i>Eutropis multifasciata</i> (KUHLE, 1820)	*	X	
	Thằn lằn cổ	<i>Scincella sp.</i>		X	
	Thằn lằn phê nô đốm	<i>Sphenomorphus maculatus</i> (BLYTH, 1853)	X		
	Thằn lằn phê nô	<i>Sphenomorphus sp.</i>	X		
	4. Họ Kỳ đà	4. Varanidae			
	Kỳ đà vân	<i>Varanus nebulosus</i> (GRAY, 1831)	*	*	*
	Kỳ đà hoa	<i>Varanus salvator</i> (LAURENTI, 1786)	*	*	*
	5. Họ Rắn hai đầu	5. Cylindrophidae			
	Rắn hai đầu	<i>Cylindrophis ruffus</i> (LAURENTI, 1768)	X	*	X
	6. Họ Trăn	6. Boidae			

No	Vietnamese name	Scientific name	PQ	UMT-AB-AM	KL-KH
29.	Trăn đất	<i>Python molurus</i> (LINNAEUS, 1758)	x	x	x
30.	Trăn gấm	<i>Python reticulatus</i> (SCHNEIDER, 1801)	x	x	x
	7. Họ Rắn mồng	7. Xenopeltidae			
	Rắn mồng	<i>Xenopeltis unicolor</i> REINWARDT in BOIE, 1827	*	x	
	8. Họ Rắn nước	8. Colubridae			
	Rắn roi mõm nhọn	<i>Ahaetulla nasuta</i> (LACEPEDE, 1789)		x	
	Rắn roi thường	<i>Ahaetulla prasina</i> (REINHARDT, 1827)		x	
	Rắn cườm	<i>Chrysopelea ornata</i> (SHAW, 1802)	x		
	Rắn sọc dưa	<i>Coelognathus radiata</i> (BOIE, 1827)	*	*	x
	Rắn leo cây	<i>Dendrelaphis pictus</i> (GMELIN, 1789)		x	*
	Rắn dẻ	<i>Dryocalamus davisonii</i> (BLANFORD, 1878)	x		
	Rắn khuyết mũ	<i>Lycodon capucinus</i> BOIE in BOIE, 1827	x		
	Rắn khiếm xám	<i>Oligodon cinerius</i> (GUNTHER, 1864)			x
	Rắn khiếm đuôi vòng	<i>Oligodon fasciolatus</i> (GUNTHER, 1864)			x
	Rắn khiếm vạch	<i>Oligodon taeniatus</i> (GUNTHER, 1861)		x	x
	Rắn sọc xanh	<i>Goniosoma prasinum</i> (BLYTH, 1854)	x		
	Rắn ráo	<i>Ptyas korros</i> (SCHLEGEL, 1837)	*	*	
	Rắn ráo trâu	<i>Ptyas mucosus</i> (LINNAEUS, 1858)	*	*	*
	Rắn sec be	<i>Cerberus rhynchops</i> (SCHNEIDER, 1799)			*
	Rắn bông voi	<i>Enhydris bocourti</i> (JAN, 1865)	*	*	
	Rắn bông súng	<i>Enhydris enhydris</i> (SCHNEIDER, 1799)		*	x
	Rắn bông không tên	<i>Enhydris innominata</i> (MORICE, 1875)		*	
	Rắn bông chì	<i>Enhydris plumbea</i> (BOIE, 1827)		x	
	Rắn bù lịch	<i>Enhydris subtaeniata</i> (BOURRET, 1934)		x	x
	Rắn râu	<i>Erpeton tentaculatum</i> LACEPEDE, 1800		*	x
	Rắn ri cá	<i>Homalopsis buccata</i> (LINNAEUS, 1758)		*	
	Rắn hổ đất nâu	<i>Psammodynastes pulverulentus</i> (BOIE, 1827)			x
	Rắn hoa cỏ nhỏ	<i>Rhabdophis subminiatus</i> (SCHLEGEL, 1837)		x	x
	Rắn nước	<i>Xenochrophis flavipunctatus</i> (HALLOWELL, 1861)	*	*	
	Rắn hổ mây ngọc	<i>Pareas margaritophorus</i> (JAN, 1866)		x	
	9. Họ Rắn hổ	9. Elapidae			
	Rắn cạp nia nam	<i>Bungarus candidus</i> (LINNAEUS, 1758)	x	x	
	Rắn cạp nong	<i>Bungarus fasciatus</i> (SCHNEIDER, 1801)	*		x
	Rắn hổ mang kau thia	<i>Naja kaouthia</i> LESSON, 1831		x	
	Rắn hổ mang xiêm	<i>Naja siamensis</i> LAURENTI, 1768	x	x	x
	Rắn hổ chúa	<i>Ophiophagus hannah</i> (CANTOR, 1836)	x	*	*
	Rắn lá khô đốm nhỏ	<i>Calliophis maculiceps</i> (GUNTHER, 1858)			x
	Đền vạch	<i>Aipysurus eydouxii</i> (GRAY, 1849)	x		
	Đền đuôi sọc	<i>Hydrophis ornatus</i> (GRAY, 1842)	x		
	Đền gai	<i>Lapemis hardwickii</i> GRAY, 1835	x		
	Đền đuôi đốm	<i>Pelamis platurus</i> (LINNAEUS, 1766)	x		
	Rắn lục mép trắng	<i>Cryptelythrops albolabris</i> (GRAY, 1842)	*	x	x
	Rắn lục hon son	<i>Cryptelythrops honsonensis</i>			x

No	Vietnamese name	Scientific name	PQ	UMT-AB-AM	KL-KH
		GRISMER, NGO & GRISMER, 2008			
	Rắn lục ma crôp	<i>Cryptelythrops macrops</i> (KRAMER, 1977)	x		
	III. Bộ Rùa	III. Testudinata			
	10. Họ Rùa đằm	10. Geoemydidae			
	Rùa batagu	<i>Batagur basca</i> (GRAY, 1856)		x	x
	Rùa cổ bự	<i>Siebenrockiella crassicollis</i>		*	
	Rùa đất sê pôn	<i>Cyclemys tcheponensis</i> (BOURRET, 1939)	*		
	Rùa hộp lưng đen	<i>Cuora amboinensis</i> (DAUDIN, 1801)		*	*
	Rùa răng	<i>Heosemys annandalii</i> (BOULENGER, 1903)	*	*	x
	Rùa đất lớn	<i>Heosemys grandis</i> (GRAY, 1860)			*
	Rùa ba gờ	<i>Malayemys subtrijuga</i> (SCHLEGEL & MULLER, 1844)	*	x	x
	11. Họ Ba ba	11. Trionychidae			
	Ba ba nam bộ, cua đĩnh	<i>Amysda cartilaginea</i> (BODDAERT, 1770)	x	x	x
	12. Họ Vích	12. Cheloniidae			
	Vích	<i>Chelonia mydas</i> (LINNAEUS, 1758)	x		x
	Đồi mồi	<i>Eresmochelys imbricata</i> (LINNAEUS, 1766)	x		x
	Đồi mồi dứa (quần đồng)	<i>Lepidochelys olivacea</i> (ESCHSCHOLTZ, 1829)	x		x
	13. Họ Rùa da	13. Dermochelyidae			
	Rùa da	<i>Dermochelys coriacea</i> (VANDELLI, 1761)	x		

Note: PQ – Phu Quoc area, UMT-AB-AM – U Minh Thuong – An Bien – An Minh area, KL-KH – Kien Luong – Kien Hai area. + species recorded by previously studies but not recorded during this survey; * species recorded in this survey; @ species additionally recorded by this survey

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- German Technical Cooperation -

Conservation and Development of the Biosphere Reserve
of Kien Giang Province Project,
Department of Science and Technology,
320 Ngo Quyen Street, Rach Gia City,
Kien Giang Province, Vietnam.
T +84 77 3942 937
F +84 77 3942 938
E office.kgpp@gtz-vietnam.com.vn
I www.gtz.de/vietnam