

# Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from [http://www.ramsar.org/ris/key\\_ris\\_index.htm](http://www.ramsar.org/ris/key_ris_index.htm).

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).*

## Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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### 1. Name and address of the compiler of this form:

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Designation date

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Site Reference Number

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### 2. Date this sheet was completed/updated:

1 March 2010

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3. Country: Viet Nam

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4. Name of the Ramsar site: Ba Be (Ba Be National Park)

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### 5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or  
b) Updated information on an existing Ramsar site

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**6. For RIS updates only, changes to the site since its designation or earlier update:**
**a) Site boundary and area**

The Ramsar site boundary and site area are unchanged:

or

**If the site boundary has changed:**

- i) the boundary has been delineated more accurately ; or
- ii) the boundary has been extended ; or
- iii) the boundary has been restricted\*\*

and/or

**If the site area has changed:**

- i) the area has been measured more accurately ; or
- ii) the area has been extended ; or
- iii) the area has been reduced\*\*

\*\* **Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

**b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:**

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**7. Map of site:**

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

**a) A map of the site, with clearly delineated boundaries, is included as:**

- i) a hard copy (required for inclusion of site in the Ramsar List): ;
- ii) an electronic format (e.g. a JPEG or ArcView image) ;
- iii) a GIS file providing geo-referenced site boundary vectors and attribute tables .

**b) Describe briefly the type of boundary delineation applied:**

The boundary of the nominated site is the boundary of Ba Be National Park, as shown on the map.

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**8. Geographical coordinates (latitude/longitude, in degrees and minutes):**

22°24'19"N, 105°36'55"E

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**9. General location:**

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

Ba Be National Park is situated within Ba Be District, Bac Kan Province, in north-eastern Viet Nam. The site is 18 km south-west of Cho Ra Town, the capital of Ba Be District, and 240 km north-west of Hanoi.

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**10. Elevation:** (in metres: average and/or maximum & minimum):150-1,098 meters above sea level

**11. Area:** (in hectares)

The site has a total area of 10,048 hectares, which consists of 3,931 ha of strict-protection zone, 6,083 ha of ecological rehabilitation zone, and 34 ha of administrative and service zone (Bac Kan PPC 2004).

**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Ba Be National Park is centered on Ba Be Lake, at an altitude of 178 m, the only significant natural mountain lake in Vietnam (Scott 1989). The name Ba Be means "three lakes", although the lake is actually one continuous water body, 8 km long and up to 800 m wide, it has numerous small limestone islets.

The average depth varies from 17 m to 23 m, and the maximum depth is 29 m. Ba Be Lake is fed by the Ta Han, Nam Cuong and Cho Leng Rivers, which form the above-ground hydrological system in the southern part of the National Park. The lake drains into the Nang River, which flows through the north of the park. Ba Be National Park is unique amongst Vietnamese protected areas for the diversity of freshwater habitats, which also include numerous small ponds and areas of marshland.

The forest in Ba Be can be classified into two main types: limestone forest and lowland evergreen forest. The limestone forest is distributed on steep limestone slopes with shallow soil, and covers a large proportion of the national park (Bac Kan PPC 2004).

Ba Be National Park is of highest importance among Vietnam's Protected Areas system as the only site that protects natural karsts mountainous lake ecosystems. The Biodiversity Action Plan for Viet Nam listed Ba Be (together with Na Hang Nature Reserve next by) Conservation Complex among the 12 highest priority sites for biodiversity conservation in the country (Government of SRV/GEF 1994). Ba Be was also listed as one of 68 wetlands of national importance by the Biodiversity Action Plan for Viet Nam (Government of SRV/GEF 1994) and recently was selected by the Vietnam's Ramsar Administrative Authority to be one of the higher priority sites for Ramsar designation in 2008-2010 (Vietnam's Ramsar National Report for COP10, 2008).

**13. Ramsar Criteria:**

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9

**14. Justification for the application of each Criterion listed in 13 above:**

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

**Criterion 1:**

Ba Be National Park includes the only significant natural mountain lake in Viet Nam. The existence of Ba Be Lake, a huge natural fresh water lake in a mountainous karst area is very rare. Coupled with its unique forming mechanism, the lake never loses its water, it is a superlative natural phenomenon by itself<sup>1</sup>. Ba Be National Park is unique amongst Vietnamese protected areas for the diversity of freshwater habitats. The Park is situated in an ancient karst area with a complex of limestone mountains, river valleys, streams, freshwater lakes, small ponds and areas of marshland. The park includes large areas of lowland tropical forest on limestone, typical of north-east Viet Nam, and lowland evergreen forest; these are major habitats in the Northern Indochina Subtropical Forests Ecoregion (see section 15) and the site is an important

<sup>1</sup> Most of freshwater lakes in the karst mountainous area are seasonal, while Ba Be is a permanent one.

representative area of these habitats in this Ecoregion. The Ba Be area is remarkable for the diversity of limestone karst formations, including karst plateaus at high and low elevations, chains of asymmetric karst blocks, karst pediments, riverine canyons and extensive cave systems.

### Criterion 2:

Ba Be supports a number of globally threatened species. Recent biodiversity surveys found that Ba Be supports the globally endangered flowering plant *Burretiodendron tonkinense* (Tiliaceae).

Also present are several rare conifers which include the vulnerable *Amentotaxus* cf. *argotaenia*, the near threatened *Nageia fleuryi*, *Pinus kwangtungensis* and *Dacrydium elatum*.

Scientific name	Common name/Family name	IUCN Status	CITES status
<b>Mammals</b>			
<i>Manis pentadactyla</i>	Chinese Pangolin	Endangered	-
<i>Trachypithecus francoisi</i>	Francois' Langur	Endangered	-
<i>Nycticebus coucang</i>	Slow Loris	Vulnerable	-
<i>Macaca arctoides</i>	Stump-tailed Macaque	Vulnerable	-
<i>Ursus thibetanus</i>	Asiatic Black Bear/ Himalayan Black Bear	Vulnerable	I
<i>Chrotogale onstoni</i>	Owston's Civet	Vulnerable	-
<i>Naemorhedus sumatraensis</i>	Southern Serow	Vulnerable	-
<i>Miniopterus schreibersii</i>	Schreiber's Long-fingered Bat	Near Threatened	-
<i>Nycticebus coucang</i>	Slow Loris	Vulnerable	-
<i>Macaca arctoides</i>	Bear Macaque/Stump-tailed Macaque	Vulnerable	-
<i>Arctonyx collaris</i>	Hog Badger	Near Threatened	-
<i>Lutra lutra</i>	Eurasian Otter	Near Threatened	I
<i>Viverra zibetha</i>	Large Indian Civet	Near Threatened	-
<i>Pardofelis temminckii</i>	Golden Cat	Near Threatened	-
<i>Rusa unicolor</i> / <i>Cervus unicolor</i>	Sambar	Near Threatened	-
<i>Capricornis sumatraensis</i>	Southern Serow	Vulnerable	I
<i>Ratufa bicolor</i>	Black Giant Squirrel	Near Threatened	-
<b>Birds</b>			
<i>Gorsachius magnificus</i>	White-eared Night Heron	Endangered	-
<i>Buceros bicornis</i>	Great Hornbill	Near Threatened	I
<i>Ichthyophaga ichthyaetus</i>	Grey-headed Fish Eagle	Near Threatened	-
<b>Reptiles</b>			
<i>Platysternon megacephalum</i>	Big-headed Turtle	Endangered	II
<i>Geoemyda spengleri</i>	Black-breasted Leaf Turtle	Endangered	-
<i>Pyxisidea (Cuora) mouhotii</i>	Keeled Box Turtle	Endangered	-
<i>Pelodiscus sinensis</i>	Chinese Soft-shelled Turtle	Vulnerable	-
<i>Python molurus</i>	Indian python	Near Threatened	I
<b>Amphibians</b>			
<i>Paramesotriton deloustali</i>	Vietnamese Salamander	Vulnerable	-
<i>Rana sauteri</i>	Sauter's Brown Frog	Endangered	-
<b>Plants</b>			
<i>Burretiodendron tonkinense</i>	Tiliaceae	Endangered	-
<i>Amentotaxus</i> cf. <i>argotaenia</i>	Taxaceae	Vulnerable	-
<i>Nageia fleuryi</i>	Podocarpaceae	Near Threatened	-

### Criterion 3:

Ba Be has been recognised as an Important Bird Area (and a Key Biodiversity Area) by BirdLife International because of its importance for globally threatened species (see above), and restricted-range species (White-eared Night Heron, in the South-east Chinese Mountains Endemic Bird Area). This species is restricted to the Sino-Himalayan Subtropical Forest and Indochinese Tropical Moist Forest Biomes (as defined in BirdLife International 2004). The White-eared Night Heron is a congregatory waterbird (Tordoff 2002). Several species of the Sino-Himalayan Subtropical Forests and Indochinese Tropical Moist Forests Biomes have populations at Ba Be, but are known from few other sites in Viet Nam, including Eared Pitta (*Pitta phayrei*), Collared Treepie (*Dendrocitta frontalis*), Purple Cochoa (*Cochoa purpurea*), Limestone Wren Babbler (*Napothera crispifrons*) and Greater Rufous-headed Parrotbill (*Paradoxornis ruficeps*).

The vulnerable Vietnamese Salamander (*Paramesotriton deloustali*) is endemic to Vietnam and was recorded at Ba Be during recent surveys (Le Trong Trai *et al.* 2004). Endemic fish such as *Acheilognathus longibarbatulus* and *Ancherythroculter daovantieni* are also found here. In addition, a new amphibian species (new to science), *Rana bacboensis*, was collected at Ba Be in 1995 (Bain *et al.* 2003).

Ba Be supports populations of a number of animal species that are important for maintaining the biological diversity of the biogeographic region (see section 15). Forests surrounding the Ba Be National Park (Ba Be/Na Hang Forest Complex) is the only site in Viet Nam that still supports a population of the restricted-range François's Langur (*Trachypithecus francoisi*). Although it is highly unlikely that the Tonkin Snub-nosed Monkey (*Rhinopithecus avunculus*) survives at Ba Be, there are recent confirmed records from nearby Na Hang and Sinh Long, Ba Be National Park provides important buffer habitat for this critically endangered species (BirdLife International and MARD 2004).

#### Criterion 6:

Ba Be regularly supports more than 1% of the global population of White-eared Night Heron. BirdLife International (2009) estimated the global population of this species to be 250-999 individuals. Pilgrim *et al.* (2009) located at least two pairs of White-eared Night Heron at Ba Be in 2009, including a pair that raised two or more young, and they received reports from local hunters that several others had recently been captured or observed in the area. Recent monitoring carried out by the Ba Be staff confirmed at least four nests of this species in the area around Ba Be Lake (Monitoring Report, Ba Be National Park).

#### 15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

##### a) biogeographic region:

Ba Be is located in north-east Viet Nam and according to the classification of Wikramanayake *et al.* (1997) it is situated in the "Northern Indochina Subtropical Forests Ecoregion", which includes a small area of north-east Thailand and large areas of southern China, northern Burma, northern Laos and northern Viet Nam (north of 19°). According to the classification of MacKinnon (1997), it is situated in "Sub-unit 6a (Tropical Southern China)", which includes all of north-east Viet Nam and parts of southern China.

##### b) biogeographic regionalisation scheme (include reference citation):

MacKinnon, J. R. (1997) Protected areas systems review of the Indo-Malayan Realm. Canterbury, U.K.: The Asian Bureau for Conservation and the World Conservation Monitoring Centre.

Wikramanayake, E., Dinerstein, E., Hedao, P. and Olson, D. (1997) *A Conservation Assessment of Terrestrial Ecoregions of the Indo-Pacific Region*. Washington D.C.: WWF-US Conservation Science Programme. (see [www.nationalgeographic.com/wildworld/profiles/terrestrial\\_im.html](http://www.nationalgeographic.com/wildworld/profiles/terrestrial_im.html))

#### 16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

**Geomorphology and geography:** The geology of the area is predominantly limestone, with numerous rugged peaks and deep, steep-sided river valleys. The limestone karst landscape contains many caves, the largest being the 300 metre-long Phuong Cave, through which the Nang River passes. Ba Be National Park has a steep to very steep topography and includes lakes, rivers and streams and many cave systems. Ba Be Lake is bounded by mountain ranges, including Lung Nham (689-829 m) and the An Ranges in the north, the Khau Vay Ranges (600-799 m) in the east, the Pu Noc Chap and Pu Che Ranges (677-1,043 m) in the west, and the Quang Khe and Phia Bjooc Mountains in the south and southeast that include a number of high peaks such as Phia Bjooc (1,502 m) and Hoa Son (1,517 m).

The rocks in the Ba Be-Cho Ra and Cho Don-Cho Dien areas are Givet Limestone (Middle Devonian) and to the south of the Nang River they lie adjacent to the Phia Bjooc granite block; the granitization around this block transformed the limestones to create the well-known Ba Be Granites. This granitization happened during the Late Cretaceous meaning that these blocks was located in a continental region for a period of about 200 million years (Dao Trong Nang 1979). This also accounts for the ancient karst topography and the formation of Ba Be Lake. In the Cho Ra area, there are a number of inter-connected karst valleys and plains. The average altitude of the karst ranges is 800-900 m. The Nang and Cho Leng Rivers have cut a number of deep gorges, especially where they pass through the Lung Nham and Bo Lu Mountains, with underground rivers and streams that extend for 300-800 m and are up to 10 m in width. In places, the river beds are on Proterozoic schists, forming a number of waterfalls and rapids such as at Dau Dang and Na Phoong (Anon. 1992).

**Hydrology:** Ba Be Lake is fed by the Ta Han, Bo Lu and Cho Leng Rivers, which form the above-ground hydrological system in the southern part of the national park. The total catchment area of these three rivers is calculated to 420 km<sup>2</sup> (comprising Cho Len: 194 km<sup>2</sup>, Bo Lu: 137 km<sup>2</sup> and Ta Han: 89 km<sup>2</sup>). The lake drains into the Nang River, which flows north of the park. The Nang River then flows southwards, eventually meeting the Lo River in southern Tuyen Quang Province, before joining the Red River west of Hanoi. The total area of the Nang River catchment is 1,420 km<sup>2</sup>.

In the flood season, water from the Nang River flows back into Ba Be Lake, which, together with the inflow from the other three rivers, causes the water level in the lake to rise by 2-3 m. In the dry season, the water from Ba Be Lake continuously flows into the Nang River. Hence, Ba Be Lake plays an important role in regulating the flood level in the Nang, Gam and Lo Rivers. The maximum storage capacity of Ba Be Lake is estimated to be 80-90 million cubic metres (Anon. 1992). The average depth of the lake varies from 17 m to 23 m, with a maximum depth of 29 m.

**Climate:** As a result of the topography, the climate at Ba Be is temperate in character and pleasant all year round. The average annual temperate is 22°C with monthly averages ranging from 14.1°C in January to 27.5°C in July. The average rainfall ranges from 18.2 mm in January to 249.4 mm in July and the annual total is 1,343 mm. The annual humidity ranges from 81 to 85 % (Anon. 1992).

#### 17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

Ba Be Lake drains into the Nang River, which flows into the Gam River before joining the Lo River. The site is therefore situated in the Lo River catchment, which comprises the catchments of the Lo, Gam, Chay and Pho Day Rivers. The total area of the Lo River catchment is 37,878 m<sup>2</sup>, including 15,249 km<sup>2</sup> in China and 22,629 km<sup>2</sup> in the Vietnamese provinces of Ha Giang, Tuyen Quang, and parts of Lao Cai, Cao Bang, Yen Bai, Bac Kan, Phu Tho and Vinh Phuc.

The Lo River catchment is bounded by the Ngam and Ngan Son Mountains and the Tam Dao Range in the south-east, and the Con Voi Range in the west. The average altitude of the catchment is 500 to 1,000 m, and the general direction of the gradient is north-east to south-west. The Lo River valley is often narrow, only 4-5 km wide in places; there are a number of waterfalls and rapids on its upper reaches, but downstream the gradient gradually decreases and the valley becomes wider.

**Soil:** situated in north-east Viet Nam, the Lo River Basin comprises mainly of Proterozoic and Lower Cambrian sediments, with areas of gently-folded Middle Devonian limestone. Along some faults there are Cretaceous troughs and Cenozoic depressions. Precambrian metamorphic rocks are exposed in the Song Chay uplifted dome together with the granite of the Song Chay Complex, the gneissoid plagiogranite of the Ca Vinh Complex, while Mesozoic intrusions are developed in the eastern and south-western margins (Dien Bien, Ban Xang and Phan Xi Pan Complexes).

**Climate:** This area is typified by a hot tropical monsoon climate, and has a number of high rainfall areas where the annual precipitation reaches up to 4,000 mm per annum (e.g. Bac Quang in Bac Giang Province) (Pham Ngoc Toan and Phan Tat Dac 1993).

### 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Ba Be Lake is fed from the south by three main rivers, the Cho Leng, Bo Lu and Ta Han. The combined catchment area of these three rivers is 420 km<sup>2</sup>, the length of their main courses is 19–27 km, and their total current flow is 840 m<sup>3</sup>/s. Ba Be Lake feeds the Nang River in the north via Dau Dang Waterfall. The Nang River has a total catchment area of 1,420 km<sup>2</sup>, and the current flow is 980 m<sup>3</sup>/s in the flood season and 80 m<sup>3</sup>/s in the dry season.

Ba Be Lake is of considerable importance for local communities as it regulates water supply to the entire region. It has a huge capacity that can regulate over 40,000,000 m<sup>3</sup> of water for the Nang and Gam Rivers and their large catchments. The lake helps to mitigate the damage caused by floods in four rivers with a total catchment area of ca.2,000 km<sup>2</sup>. In the dry season, the lake provides water for irrigation schemes in the Nang River that support food production and the livelihoods of the large downstream population.

### 19. Wetland Types

#### a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar “Classification System for Wetland Type” present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

**Marine/coastal:** A • B • C • D • E • F • G • H • I • J • K • Zk(a)

**Inland:** L • M • N • Q • P • Q • R • Sp • Ss • Tp • Ts • U • Va •  
Vt • W • Xf • Xp • Y • Zg • Zk(b)

**Human-made:** 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

#### b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

O – M – ZK(b) – Tp – Ts – 3 – 4 – 1 – 2

### 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The Ba Be area supports a mosaic of natural habitats and man-modified landscapes including primary forests, secondary vegetation and patches of both permanent and shifting cultivation. The most prominent landscape feature is Ba Be Lake and the topography of the area is characterised by steep limestone mountains.

The forests at Ba Be can be classified into two main types: lowland tropical forest on limestone and lowland evergreen forest. The forest on limestone is distributed on steep slopes with shallow soil, and covers a large proportion of the national park. This forest type is dominated by *Burretiodendron tonkinense* and *Streblus tonkinensis*. The lowland evergreen forest is distributed on shallow slopes with deeper soils, and

has higher tree species diversity and a richer ground flora than the forest on limestone. At altitudes of approximately 700 m and above, some lower montane forest formations occur, which differ from lowland forest formations in their relatively simple canopy structure (compared to the complex, multilayered canopies of lower altitudes), lower canopy height, and the scarcity of climbers.

The site provides important habitats for communities of a number of species of conservation concerns, including primates and especially the endangered and restricted-range White-eared Night Heron (see section 14 and 22).

Dominated by forestry and agroforestry, upland terraces with Ba Be Lake, the site's landscapes provide important environmental services for : watershed function, carbon sequestration, landscape beauty and biodiversity conservation. The site supports a large lake and hundreds of streams and rivers, and forms the watershed for some rivers, including Nang River (with Na Hang Hydropower Plant, 342 Mw/h) and Len River (with Ta Lang Hydropower Plant, 4.5 Mw/h)<sup>2</sup> (and see Section 18 above for more information on the hydrological values of the site). In addition, the site was gazetted as a protected area and is a well-known tourism site. Therefore, there is a high potential for establishment of a Payment for Environmental Services (PES) scheme for all four services as mentioned above (Hoang Minh Ha *et al.* 2008).

### 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Recent biodiversity surveys have found that the Ba Be area has a high floral diversity. Anon. (2006) recorded 1,268 vascular plant species for Ba Be National Park (Annex 1E). Noteworthy species include the globally endangered *Burretiodendron tonkinense*, which is relatively common and one of the dominant species in the karst areas around Ba Be Lake; this restricted-range species is confined to the limestone areas of northern Viet Nam and southern China. Mixed coniferous and broadleaf forests are found on the main ridge tops, the rare coniferous species (see section 14) can also be found here.

### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Le Trong Trai *et al.* (2004) reported that 64 mammal species (including 26 bat species) have been recorded in Ba Be National Park (Annex 1A), including seven species that are listed as globally threatened on the 2008 IUCN Red List of Threatened Species (see section 14); three species that are listed as near threatened, i.e. Eurasian Otter (*Lutra lutra*), Golden Cat (*Pardofelis temminckii*) and Schreiber's Bent-winged Bat (*Miniopterus schreibersii*), and one species listed as Data Deficient: Hairy-footed Flying Squirrel (*Belomys pearsonii*).

Ba Be is of particular importance for the presence of the vulnerable Owston's Civet (*Chrotogale owstoni*) and François's Langur (*Trachypithecus francoisi*) although it appears that only one group of 7 to 13 François's Langur remains (Grieser Johns and Potess *in litt.* 2004). According to information from Ba Be National Park staff, the critically endangered Tonkin Snub-nosed Monkey (*Rhinopithecus avunculus*) may have occurred in the north-west of the national park as recently as 1997 (N. Lormée verbally 2000), but surveys by Birdlife International and Fauna & Flora International in 2002 and 2003 found no evidence that the species survives at Ba Be (A. Grieser Johns and F. Potess *in litt.* 2004).

<sup>2</sup> Figure provided by Vietnam Electricity – Power Engineering Consulting Joint Stock Company I



Two-hundred and thirty-five bird species have been recorded at Ba Be (Le Trong Trai *et al.* 2004, Pilgrim *et al.* 2009, Annex 1B). According to current knowledge, Ba Be is the most important site in Viet Nam for the conservation of White-eared Night Heron.

Sixty-nine reptile and amphibian species have been recorded at Ba Be according to Le Trong Trai *et al.* (2004), including five species that are listed as globally threatened on the 2008 IUCN Red List of Threatened Species (see section 14); and one species that is listed as near threatened: Indian Python/Burmese Python (*Python molurus*) (Annex 1C).

The lake and other wetlands at Ba Be support the most diverse freshwater ichthyofauna in Viet Nam. Nguyen Trong Hiep and Nguyen Huu Duc (2003) reported that 87 fish species have been found in Ba Be Lake, and additional species reported from the rivers and streams take the total for the Ba Be area to 106 freshwater fish species. Several of these fish species appear to be endemic to this region, but more work needs to be conducted to confirm this (Annex 1D).

During surveys in 1997 and 1998, a total of 332 butterfly species were recorded in Ba Be National Park, of which 22 were new records for Viet Nam (Monastyrskii *et al.* 1998).

### 23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

#### Ethnicity and population

The indigenous people in the Ba Be area belong to the Tay Tribe, who inhabit the river banks and make up 44% of the total population. The H'Mong Tribe, inhabit the upland areas and make up 54% of the population, and the Dzaio, Nung and Kinh people make up the other 2%. Each ethnic group has its own traditions, customs and farming methods. The Tay people live in stilt houses made of wood, plant rice in rain-fed paddyfields, fish in the rivers and streams, and weave their traditional Indigo Dress. The H'Mong people live in one-floor houses, hunt wildlife and practice shifting cultivation.

Ba Be National Park is inhabited by a total of 25,332 people, including 22,728 who live in the buffer zone and 2,604 who live in the core zone (Ba Be District Statistic Office, 2009). There are 12 villages inside the park boundary, including 8 in Nam Mau Commune, two in Quang Khe Commune and two in Khang Ninh Commune. The H'Mong people are concentrated in the Dan May, Nam Dai and Khau Qua villages in Nam Mau Commune, and the Tay people live in Pac Ngoi, Ban Cam, Bo Lu and Coc Toc villages in Nam Mau Commune, and villages in Quang Khe and Khang Ninh Communes.

#### Culture and social

Ba Be National Park and Ba Be Lake have inspired a great number of ancient and contemporary songs, poems and legends. Legend of how the lake was formed together with a big flood is somehow similar to geographical and historical formation of the lake. There are numerous historical places in the middle of the lake which are associated with legends and history such as Po Gia Mai (Widow Island related to Ba Be Lake myths), Ma An Temple (where ethnical groups held Long Tong festival) and relics of the Mac Dynasty's castle on top of the Phuong Cave.

Traditional and ethnic groups living in Ba Be National Park have their customs to use natural resources in a sustainable manner. Cultural diversity and adaptation have brought unique cultural characteristics for Ba Be. One of remarkable festivals in Ba Be is Long Tong Festival of Tay and Nung groups. This festival celebrates the first day of year when people start cultivating rice. However, this festival now becomes a cultural day for every ethnic group living around Ba Be Lake. On the 10<sup>th</sup> day of Tet (Lunar Calendar New Year), thousands of people will visit Ba Be Lake to take part in this festival and give their offerings which are made from special agricultural products in the local region to pray to gods for good rain and weather. After this, people start cultivating rice for a new year.

Although Ba Be is also noteworthy for its archaeological values, recent investigations indicate that the area has been inhabited by man for at least 20,000 years. Illustrative examples of archaeological evidence uncovered so far includes: Palaeolithic tools dating from the late Pleistocene (15,000-20,000 years ago) have been uncovered at the Dong Puong and Tham Hinh Caves; Neolithic tools of Holocene (10,000 years ago) have been found at Dong Tien Cave on the eastern shores of the lake. To date, these represent the first and only findings concerning the so-called “Hoa Binh Culture” in Bac Kan Province; at other sites such as Na Ca, Na Tem and Khau La, vestiges of the so called “Ha Giang Culture” belonging to the late Neolithic-Early Metal era (4,000-3,000 years ago) have been found; vestiges of the Le-Mac Dynasties (16th century) have been discovered in the Dong Puong and Dong Hua Ma Caves (Anon. 2006).

**b)** Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box  and describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

**24. Land tenure/ownership:**

a) within the Ramsar site:

Ba Be National Park is entirely government owned, and all activities inside the National Park are under the jurisdiction of the park management board.

b) in the surrounding area:

The buffer zone of Ba Be National Park belongs to Cao Tri, Cao Thuong, Nam Mau, Dong Phuc, Hoang Tri, Quang Khe and Khang Ninh communes in Ba Be District, and Nam Cuong and Xuan Lac communes in Cho Don District. The communes and People’s Committees of these two districts have jurisdiction over land management in the buffer zone. The land tenure for agricultural and urban areas in the surroundings is privately owned by individual farmers.

**25. Current land (including water) use:**

a) within the Ramsar site:

**Biodiversity conservation:** Ba Be National Park is a state-owned protected area that is designated for biodiversity conservation and ecotourism. According to the zonation in the park investment plan, it has a total area of 10,048 ha which includes 3,931 ha of strict-protection zone, 6,083 ha of ecological rehabilitation zone and 34 ha of administrative and service zone.

**Agricultural production:** The major production includes wet-rice and upland field cultivation. The average annual income (measured as rice) is 553 kg/person (Ba Be District Statistic Office, 2009). There are 448 ha of paddyfield in the core zone (0.73 ha/household or 0.12ha/person on average), which mostly produces one crop per year, and small patches of other crops in the emergent alluvial areas along the river banks and lake shore. The productivity of most of the land is low because of sand deposits. There is small-scale, low investment animal rearing in the area, mostly of cows, buffalo, goats, pigs and chickens. The animals are free-range, mostly of domestic breeds, veterinary support is not yet developed, and the livestock that are raised are currently mostly for domestic use.

**Forestry production:** The settlements in the core zone and the buffer zone of Ba Be National Park put substantial pressure on the park's natural resources. To help address this, the park authorities are implementing a series of socio-economic initiatives to support the local communities, such as forest protection contracts for the households in Nam Mau, Khang Ninh, Cao Tri, Quang Khue and Nam Cuong Communes. From 1994 to 2001, the park authorities agreed contracts with 592 households for the protection of about 3,000 ha of forest land and for forestry plantations in the ecological rehabilitation zone of the park. From 2001 to 2010, more than 5,000ha of forest land was contracted with 766 households for forest protection and rehabilitation. This initiative provides an alternative source of income for the local communities, and also helps to raise awareness of the need to conserve natural resources and to protect the environment, and hence reduces the pressure on the core zone of the park.

**Tourism and trade services:** Ba Be Lake is a popular tourist destination, and the national park provides accommodation and facilities for visitors and has worked with the local authorities to establish community-based ecotourism (see section 31). Together with the river network, the lake is an important means of transportation for local communities, and the roadheads on its eastern and western shores are linked by ferry, although the construction of the new road around the lake has reduced the need for a ferry.

b) in the surroundings/catchment:

Most of the land in the buffer zone around Ba Be National Park is used for agriculture, including both permanent crops and shifting cultivation, and for forestry, including both forested and unforested land.

**26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:**

a) within the Ramsar site:

Factors inside Ba Be National Park that are affecting the ecology of the site include:

- **Infrastructure development:** The development of new roads and tourism facilities in the park is in danger of causing disturbance, particularly around Ba Be Lake which has become a focus for tourism activities. A new road is planned along the Nang River that would bisect the park in the north and could be a source of negative impacts (Grieser-Johns *in litt.* 2004).
- **Pollution and sedimentation:** In the recent past, poisons and dynamite were used for fishing in Ba Be Lake, but this destructive fishing method is now mostly controlled. However, tourist boats are now a source of solid waste and fuel pollution in the lake. Another problem is alluvium accumulation in the lake caused by agricultural activities in the watersheds of its three main tributaries.
- **Hunting:** Hunting takes place inside the park for both domestic consumption and for trade, and is likely to have the greatest impact on larger birds such as pheasants and hornbills (Hill 2000). Several local hunters reported to Pilgrim *et al.* (2009) that they had recently killed the endangered White-eared Night Heron.
- **Over-exploitation of non-timber forest products:** Few areas of undisturbed forest remain in the park because of the extraction of timber and NTFPs (Non-timber Forest Products) in the past. Le Trong Trai *et al.* (2004) found that the illegal collection of NTFPs was still widespread in the park and saw that many different kinds of NTFPs had been confiscated by park rangers.
- **Clearance of forest for agriculture:** Several parts of the park were cleared for agriculture in the past. Le Trong Trai *et al.* (2004) found some evidence of recent clearance of forest for shifting cultivation, or new fixed cultivation, and predicted that as the human population in the area grows more forest areas will come under pressure for conversion to agricultural land.
- **Timber extraction:** Few large trees remain at low altitude in the park because of timber extraction in the past, but Le Trong Trai *et al.* (2004) found that timber extraction currently appeared to be at a very low level because of the protection afforded by the park authorities.

- **Livestock grazing:** During their surveys, Le Trong Trai *et al.* (2004) witnessed livestock grazing in the core area of the park on several occasions, which can directly affect the vegetation through defoliation and trampling and cause disturbance to wildlife populations.
- **Incompatible tourism development:** Tourism is one of most important economic activities for the park as well as communities living in and around the park. However, the inappropriate tourism development is posing threats on the conservation efforts. Beside of the negative impacts from infrastructure development as described above, tourism activities are the sources of disturbance and pollutants in term of noises, dusts, liquid and solid wastes. In future, without sufficient plans and controls, the over-number of tourists would create a huge threat on the tinny populations of rare wildlife species of the park.

b) in the surrounding area:

Factors in the wider landscape that are affecting the ecology of the park include:

- **Forest fragmentation:** the Ba Be/Na Hang Forest Complex contains the two protected areas of Ba Be National Park and Na Hang Nature Reserve. These contain within them some of the larger forest blocks, but several others exist outside of the protected areas and currently form near continuous blocks of forest habitat with equivalent areas inside the parks. If protection is not extended to these areas they are likely to become fragmented and lose much of their value to nature conservation, because of clearance of forest for agriculture, over-exploitation of non-timber forest products and timber extraction (Le Trong Trai *et al.* 2004).
- **Hunting:** Hunting in the surrounding area might be affecting the viability of some animal populations inside the park.
- **Damage to wetland hydrology:** The land erosion that follows forest destruction is causing alluvium deposition in Ba Be Lake. Infrastructure development and mining in the watershed are also affecting the hydrology of the lake and rivers.

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## 27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Ba Be was decreed as a 5,000 ha cultural and historical site on 24 January 1977, following Decision No. 41/TTg of the Prime Minister. The status of the site was reiterated by Decision No. 194/CT of the Chairman of the Council of Ministers, dated 9 August 1986. Ba Be was revised from a nature reserve to a national park following Decision No. 83/TTg, dated 10 November 1992, meaning that it receives the highest level of protection under Vietnamese law. A management board has been established for Ba Be National Park.

On 17 and 18 December 2003, the environment ministers of the ASEAN nations amended the ASEAN Declaration on Heritage Parks, and Ba Be National Park was included as one of four ASEAN Heritage Parks in Viet Nam. The Man and Biosphere Committee of Vietnam (MAB Vietnam) is currently supporting the designation of Ba Be as a Biosphere Reserve.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

c) Does an officially approved management plan exist; and is it being implemented?

Following the regulations on forest management (Decision 186/2006/QĐ-TTg of 14 August 2006), “*protected area management boards shall draw up periodical (5 or 10 year term) investment plans and submit them to competent authorities for approval. And based on the approved investment plans, prepare investment projects to submit the competent authorities for approval and execution*”.

The first investment plan for Ba Be National Park was prepared in 1992 and was approved by government Decision No. 83/TTg, dated 10 November 1992 of the Prime Minister. The second one was prepared in 2000 and approved by Decision No. 2111/QĐ/BNN-XDCB, dated 8 June 2000, of the Ministry of Agriculture and Rural Development. The later plan was for the investment period of 2000. In 2003, when the management jurisdiction over Ba Be National Park was handed over to Bac Kan PPC, to adapt with new conditions, the Bac Kan PPC issued Decision No. 1888/QĐ-UB, dated 11 September 2003 to allow Ba Be National Park management board to review and prepare a new Investment Plan. In 2004, a five-year Investment Plan for the period 2005-2010 was prepared by Ba Be management board and officially approved by Bac Kan PPC (Decision No. 2766/QĐ-UBND dated 26 November 2004). This Investment Plan is now being implemented (Bac Kan PPC 2004).

**d)** Describe any other current management practices:

Following the approval of the current Investment Plan, the park will receive an investment of about VND 100 billion (USD 5.5 million) during the 2005-2010 period for five main programmes (components) namely: Protection Management and Ecological Rehabilitation, Scientific Research, Population Stabilisation and Socio-economic Development, Infrastructure Development and Provision of Equipment, and Ecotourism Development Programmes.

Recently, the park received a grant of VND 951.3 million (USD 53,000) from the Viet Nam Conservation Fund (VCF)-to fund the ‘*Strengthening community-based management systems in Ba Be National Park*’ project. The project aims to build capacity for the park management board, raise awareness and involve the local communities in the park management and protection work.

## **28. Conservation measures proposed but not yet implemented:**

e.g. management plan in preparation; official proposal as a legally protected area, etc.

The Biodiversity Action Plan for Viet Nam (Government of SRV/GEF 1994) included a proposal to extend Ba Be National Park to 50,000 ha. Wege *et al.* (1999) recommended that Na Hang and Ba Be would benefit from being amalgamated into a single conservation management unit, and included the combined site on a list of proposed priority areas for conservation. Le Trong Trai *et al.* (2004) also recommended an expansion of the protected area network in the Ba Be/Na Hang Forest Complex, to link together the existing protected areas and to include the forest areas of Ban Thi-Xuan Lac, Dong Phuc and Sinh Long.

Le Trong Trai *et al.* (2004) made detailed recommendations for measures to address the various threats detected at Ba Be during the PARC Project (see section 29). The BirdLife International Indochina Programme plans to develop a site-species action plan for the endangered White-eared Night-heron at Ba Be (Pilgrim *et al.* 2009).

## **29. Current scientific research and facilities:**

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Several research projects have been conducted in Ba Be National Park since its establishment in 1963 (see Annex 2). The most notable of these was the PARC Project, a series of comprehensive biological surveys conducted from 2001 to 2004, which has provided the most up-to-date information about the park (Le Trong Trai *et al.* 2004).

The park has a fully staffed technical department that is responsible for monitoring the resources within the park and the impacts of management actions. The staff are well equipped and are trained to monitor bird populations, water quality, soil quality, water levels, vegetation, and fire parameters. The technical department collaborates with many national and international research institutions to undertake scientific research in the park.

**30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:**

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Ba Be National Park has a program in operation to raise the awareness of the local communities about the importance of wetland and forest conservation. During the PARC Project in 2000-2004, a number of conservation awareness and education activities were designed and implemented, many of which are being continued by the park management board using their annual budget from the state. These include:

- Organisation of mobile campaigns about the natural environment and forest protection in a number of villages in Khang Ninh and Nam Mau communes and Da Vi Commune.
- Preparation of a conservation awareness and education programme with materials targeted at visitors, local school children, and local people.
- Training for 50 teachers from the local schools in environmental education, for them to teach to their 3,141 students.
- An art competition about forest protection and the environment that has attracted participation by about 600 school children.

A visitor centre and some tourism trails have been constructed, and signboards, leaflets and posters have been produced to educate visitors about the natural environment in the park.

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**31. Current recreation and tourism:**

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Ba Be National Park is a well-known tourism destination in northern Viet Nam because of its unique and beautiful landscapes. One of the most interesting features of the Ba Be area is its complex karst cave system, which is beautiful and is linked to a number of local legends. The number of visitors to Ba Be has increased gradually in the last few years: there were about 2,200 visitors in 1995, but about 26,000 in 2002, a tenfold increase over a seven year period.

Ba Be National Park Management Board has worked with the local authorities to establish an effective community-based ecotourism model. An inventory has been compiled of 21 sites for tourists to visit, of which Ba Be Lake and the caves are the most important, and plans have been developed for tourism routes.

Tourism service cooperatives have been set up to facilitate local community participation in ecotourism activities. For example, with support from the national park, Pac Ngoi and Bo Lu Villages in the core zone have established a tourism boat cooperative, home-stay service in the Tay minority stilt houses, traditional art performance team, handicraft production and sale, etc. The ecotourism provides local communities with an additional source of income, and is also an incentive to protect the natural environment. However, only a small number of local households have participated in the ecotourism to date, which needs to be strengthened and expanded.

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**32. Jurisdiction:**

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Prior to 2002, Ba Be National Park was under the direct management of the Ministry of Agriculture and Rural Development (MARD). However, on 17 April 2002, management responsibility for the national park was transferred from MARD to Bac Kan Provincial People's Committee, following Decision No. 51/TTg of the Prime Minister.

The National Park is state-owned. The central government has assigned management authority to Bac Kan Provincial People's Committee. Day-to-day management of the Park is the responsibility of Ba Be National Park Management Board. The government authority with territorial jurisdiction over the

wetland is Bac Kan Provincial People's Committee (Address: Ward 1A, Phung Chi Kien Commune, Bac Kan Town, Bac Kan Province); The direct reporting agency of the park management board concerning to conservation purposes is Department of Nature Conservation, Forestry Administration of MARD (Address: No. 2, Ngoc Ha St., Hanoi).

### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

**The Provincial People's Committee of Bac Kan Province**, Ward 1A, Phung Chi Kien Commune, Bac Kan Town, Bac Kan Province, Viet Nam

Contact person: **Mr. Nong The Dien**, Director of Ba Be National Park, Ba Be District, Bac Kan Province, Viet nam.

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Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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**Annex 1: Lists of species recorded for Ba Be National Park**

**Notes:** Mammals follows Le Trong Trai *et al.* (2004). Fish list follows Mai Dinh Yen (eds.) (2007) and plant list follows Anon. (2006).

**Status:** follows IUCN (2009); CR: Critical Endangered, EN: Endangered; VU: Vulnerable; DD: Data Deficient; and NT: Near-Threatened, LC: Least Concern

**A. Mammals**

No	Common name	Scientific name	IUCN Status
1	Chinese Pangolin	<i>Manis pentadactyla</i>	EN
2	Eastern Mole	<i>Talpa micrura</i>	LC
3	House Shrew	<i>Suncus murinus</i>	LC
4	Northern Tree Shrew	<i>Tupaia belangeri</i>	LC
5	Leschenault's Rousette	<i>Rousettus leschenaultii</i>	LC
6	Geoffroy's Rousette	<i>Rousettus amplexicaudatus</i>	LC
7	Lesser Dog-faced Fruit Bat	<i>Cynopterus brachyotis</i>	LC
8	Greater Short-nosed Fruit Bat	<i>Cynopterus sphinx</i>	LC
9	Common Dawn Bat	<i>Eonycteris spelaea</i>	LC
10	Hill Long-tongued Fruit Bat	<i>Macroglossus sobrinus</i>	LC
11	Black-bearded Tomb Bat	<i>Taphozous melanopogon</i>	LC
12	Greater False Vampire	<i>Megaderma lyra</i>	LC
13	Pearson's Horseshoe Bat	<i>Rhinolophus pearsonii</i>	LC
14	Least Horseshoe Bat	<i>Rhinolophus pusillus</i>	LC
15	Intermediate Horseshoe Bat	<i>Rhinolophus affinis</i>	LC
16	Andersen's Leaf-nosed Bat	<i>Hipposideros pomona</i>	LC
17	Great Himalayan Leaf-nosed Bat	<i>Hipposideros armiger</i>	LC
18	Horsfield's Leaf-nosed Bat	<i>Hipposideros larvatus</i>	LC
19	Diadem Leaf-nosed Bat	<i>Hipposideros diadema</i> *	LC
20	Stoliczka's Asian Trident Bat	<i>Aselliscus stoliczkanus</i>	LC
21	Large Myotis	<i>Myotis chinensis</i>	LC
22	Himalayan Whiskered Myotis	<i>Myotis siligorensis</i>	LC
23	Daubenton's Myotis	<i>Myotis daubentonii</i>	LC
24	Lesser Asiatic Yellow House Bat	<i>Scotophilus kublii</i>	LC
25	Great Evening Bat	<i>Ia io</i>	LC
26	Javan Pipistrelle	<i>Pipistrellus javanicus</i>	LC
27	Least Pipistrelle	<i>Pipistrellus tenuis</i>	LC
28	Chinese Pipistrelle	<i>Pipistrellus pulveratus</i>	LC
29	Schreiber's Long-fingered Bat	<i>Miniopterus schreibersii</i>	NT
30	Lesser Hairy-winged Bat	<i>Harpiocephalus harpia</i>	LC
31	Slow Loris	<i>Nycticebus coucang</i>	VU
32	Rhesus Macaque	<i>Macaca mulatta</i>	LC
33	Bear Macaque/Stump-tailed Macaque	<i>Macaca arctoides</i>	VU
34	Francois' Langur	<i>Trachypithecus francoisi</i>	EN
35	Raccoon Dog	<i>Nyctereutes procyonoides</i>	LC
36	Asiatic Black Bear/ Himalayan Black Bear	<i>Ursus thibetanus</i>	VU
37	Yellow-throated Marten	<i>Martes flavigula</i>	LC
38	Hog Badger	<i>Arctonyx collaris</i>	NT
39	Small-toothed Ferret-Badger	<i>Melogale moschata</i>	LC
40	Eurasian Otter	<i>Lutra lutra</i>	NT

No	Common name	Scientific name	IUCN Status
41	Large Indian Civet	<i>Viverra zibetha</i>	NT
42	Small Indian Civet	<i>Viverricula indica</i>	LC
43	Spotted Linsang	<i>Prionodon pardicolor</i>	LC
44	Common Palm Civet	<i>Paradoxurus hermaphroditus</i>	LC
45	Masked Palm Civet	<i>Paguma larvata</i>	LC
46	Owston's Civet	<i>Chrotogale owstoni</i>	VU
47	Crab-eating Mongoose	<i>Herpestes urva</i>	LC
48	Leopard Cat	<i>Prionailurus bengalensis</i>	LC
49	Golden Cat	<i>Pardofelis temminckii</i>	NT
50	Wild Pig	<i>Sus scrofa</i>	LC
51	Sambar	<i>Rusa unicolor</i> / <i>Cervus unicolor</i>	VU
52	Barking Deer/ Southern Red Muntjac	<i>Muntiacus muntjak</i>	LC
53	Southern Serow	<i>Capricornis sumatraensis</i>	VU
54	Black Giant Squirrel	<i>Ratufa bicolor</i>	NT
55	Pallas's Squirrel	<i>Callosciurus erythraeus</i>	LC
56	Himalayan Striped Squirrel	<i>Tamiops maccllellandi</i>	LC
57	Striped Squirrel	<i>Tamiops maritimus</i>	LC
58	Red Checked Squirrel	<i>Dremomys rufigenis</i>	LC
59	Large Brown Flying Squirrel	<i>Petaurista philippensis</i>	LC
60	Hairy Footed Flying Squirrel	<i>Belomys pearsonii</i>	DD
61	House Rat	<i>Rattus rattus</i>	LC
62	Hoary Bamboo Rat	<i>Rhizomys pruinosus</i>	LC
63	Asiatic Brush-tailed Porcupine	<i>Atherurus macrourus</i>	LC
64	Malayan Porcupine	<i>Hystrix brachyura</i>	LC

**B. Birds**

No.	Common name	Scientific name	IUCN Status
1	Chinese Francolin	<i>Francolinus pintadeanus</i>	LC
2	Red Junglefowl	<i>Gallus gallus</i>	LC
3	Silver Pheasant	<i>Lophura nycthemera</i>	LC
4	Grey Peacock Pheasant	<i>Polyplectron bicalcaratum</i>	LC
5	White-browed Piculet	<i>Sasia ochracea</i>	LC
6	Grey-capped Pygmy Woodpecker	<i>Dendrocopos canicapillus</i>	LC
7	Stripe-breasted Woodpecker	<i>Dendrocopos atratus</i>	LC
8	Rufous-bellied Woodpecker	<i>Dendrocopos hyperythrus</i>	LC
9	Rufous Woodpecker	<i>Celeus brachyurus</i>	LC
10	Lesser Yellownape	<i>Picus chlorolophus</i>	LC
11	Greater Yellownape	<i>P. flavinucha</i>	LC
12	Grey-headed Woodpecker	<i>P. canus</i>	LC
13	Common Flameback	<i>Dinopium javanense</i>	LC
14	Greater Flameback	<i>Chrysocolaptes lucidus</i>	LC
15	Bay Woodpecker	<i>Blythipicus pyrrhotis</i>	LC
16	Black-and-buff Woodpecker	<i>Meiglyptes jugularis</i>	LC
17	Great Barbet	<i>Megalaima virens</i>	LC
18	Red-vented Barbet	<i>M. lagrandieri</i>	LC
19	Green-eared Barbet	<i>M. faiostrica</i>	LC
20	Lineated Barbet	<i>Megalaima lineata</i>	LC
21	Blue-throated Barbet	<i>M. asiatica</i>	LC
22	Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>	LC
23	Great Hornbill	<i>Buceros bicornis</i>	NT
24	Common Hoopoe	<i>Upupa epops</i>	LC
25	Red-headed Trogon	<i>Harpactes erythrocephalus</i>	LC
26	Indian Roller	<i>Coracias benghalensis</i>	LC
27	Dollarbird	<i>Eurystomus orientalis</i>	LC
28	Common Kingfisher	<i>Alcedo atthis</i>	LC
29	Oriental Kingfisher	<i>Ceyx erithacus</i>	LC
30	Ruddy Kingfisher	<i>Halcyon coromanda</i>	LC
31	White-throated Kingfisher	<i>H. smyrnensis</i>	LC
32	Crested Kingfisher	<i>Megaceryle lugubris</i>	LC
33	Pied Kingfisher	<i>Ceryle rudis</i>	LC
34	Blue-bearded Bee-eater	<i>Nyctornis atbertoni</i>	LC
35	Chestnut-winged Cuckoo	<i>Clamator coromandus</i>	LC
36	Large Hawk Cuckoo	<i>Hierococcyx sparverioides</i>	LC
37	Indian Cuckoo	<i>Cuculus micropterus</i>	LC
38	Himalayan Cuckoo	<i>C. saturatus</i>	LC
39	Plaintive Cuckoo	<i>C. merulinus</i>	LC
40	Violet Cuckoo	<i>Chrysococcyx xanthorhynchus</i>	LC
41	Drongo Cuckoo	<i>Surniculus lugubris</i>	LC
42	Asian Koel	<i>Eudynamis scolopacea</i>	LC
43	Green-billed Malkoha	<i>Phaenicophaeus tristis</i>	LC
44	Greater Coucal	<i>Centropus sinensis</i>	LC
45	Red-breasted Parakeet	<i>Psittacula alexandri</i>	LC
46	Silver-backed Needletail	<i>Hirundapus cochinchinensis</i>	LC
47	Brown-backed Needletail	<i>H. giganteus</i>	LC
48	Asian Palm Swift	<i>Cypsiurus balasiensis</i>	LC
49	Fork-tailed Swift	<i>Apus pacificus</i>	LC

No.	Common name	Scientific name	IUCN Status
50	House Swift/ Little Swift	<i>A. affinis</i>	LC
51	Mountain Scops Owl	<i>Otus spilocephalus</i>	LC
52	Oriental Scops Owl	<i>O. sunia</i>	LC
53	Collared Scops Owl	<i>O. bakamoena</i>	LC
54	Brown Fish Owl	<i>Ketupa zeylonensis</i>	LC
55	Tawny Fish Owl	<i>K. flavipes</i>	LC
56	Collared Owlet	<i>Glaucidium brodiei</i>	LC
57	Asian Barred Owlet	<i>G. cuculoides</i>	LC
58	Brown Hawk Owl	<i>Ninox scutulata</i>	LC
59	Large-tailed Nightjar	<i>C. macrurus</i>	LC
60	Spotted Dove	<i>Streptopelia chinensis</i>	LC
61	Red Collared Dove	<i>S. tranquebarica</i>	LC
62	Emerald Dove	<i>Chalcophaps indica</i>	LC
63	Thick-billed Green Pigeon	<i>Treron curvirostra</i>	LC
64	Green Imperial Pigeon	<i>Ducula aenea</i>	LC
65	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC
66	Common Moorhen	<i>Gallinula chloropus</i>	LC
67	Common Coot	<i>Fulica atra</i>	LC
68	Green Sandpiper	<i>Tringa ochropus</i>	LC
69	Common Sandpiper	<i>Actitis hypoleucos</i>	LC
70	Black-winged Stilt	<i>Himantopus himantopus</i>	LC
71	Little Ringed Plover	<i>Charadrius dubius</i>	LC
72	Kentish Plover	<i>C. alexandrinus</i>	LC
73	River Lapwing	<i>Vanellus duvaucelii</i>	LC
74	Grey-headed Lapwing	<i>V. cinereus</i>	LC
75	Grey-headed Fish Eagle	<i>Ichthyophaga ichthyaetus</i>	NT
76	Crested Serpent Eagle	<i>Spilornis cheela</i>	LC
77	Crested Goshawk	<i>Accipiter trivirgatus</i>	LC
78	Shikra	<i>A. badius</i>	LC
79	Besra	<i>A. virgatus</i>	LC
80	Northern Goshawk	<i>A. gentiles</i>	LC
81	Oriental Honey Buzzard	<i>Pernis ptilorhynchus</i>	LC
82	Black Eagle	<i>Ictinaetus malayensis</i>	LC
83	Mountain Hawk Eagle	<i>Nisaetus nipalensis</i> / <i>Spizaetus nipalensis</i>	LC
84	Pied Falconet	<i>Microhierax melanoleucos</i>	LC
85	Common Kestrel	<i>Falco tinnunculus</i>	LC
86	Oriental Hobby	<i>F. severus</i>	LC
87	Peregrine Falcon	<i>F. peregrinus</i>	LC
88	Little Grebe	<i>Tachybaptus ruficollis</i>	LC
89	Little Egret	<i>Egretta garzetta</i>	LC
90	Great Egret	<i>Casmerodius albus</i>	LC
91	Chinese Pond Heron	<i>Ardeola bacchus</i>	LC
92	Little Heron	<i>Butorides striatus</i>	LC
93	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	LC
94	White-eared Night Heron	<i>Gorsachius magnificus</i>	EN
95	Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>	LC
96	Eared Pitta	<i>Pitta phayrei</i>	LC
97	Blue-rumped Pitta	<i>P. soror</i>	LC
98	Bar-bellied Pitta	<i>P. elliotii</i>	LC

No.	Common name	Scientific name	IUCN Status
99	Silver-breasted Broadbill	<i>Serilophus lunatus</i>	LC
100	Long-tailed Broadbill	<i>Psarisomus dalhousiae</i>	LC
101	Asian Fairy Bluebird	<i>Irena puella</i>	LC
102	Blue-winged Leafbird	<i>Chloropsis cochinchinensis</i>	LC
103	Orange-bellied Leafbird	<i>C. hardwickii</i>	LC
104	Tiger Shrike	<i>Lanius tigrinus</i>	LC
105	Brown Shrike	<i>L. cristatus</i>	LC
106	Burmese Shrike	<i>L. colluriooides</i>	LC
107	Grey-backed Shrike	<i>L. tephronotus</i>	LC
108	White-winged Magpie	<i>Urocissa. whiteheadi</i>	LC
109	Common Green Magpie	<i>Cissa chinensis</i>	LC
110	Ratchet-tailed Treepie	<i>Temnurus temnurus</i>	LC
111	Black-billed Magpie	<i>Pica pica</i>	LC
112	Large-billed Crow	<i>Corvus macrorhynchos</i>	LC
113	Ashy Woodswallow	<i>Artamus fuscus</i>	LC
114	Black-naped Oriole	<i>Oriolus chinensis</i>	LC
115	Black-hooded Oriole	<i>O. xanthornus</i>	LC
116	Maroon Oriole	<i>O. traillii</i>	LC
117	Large Cuckooshrike	<i>Coracina macei</i>	LC
118	Black-winged Cuckooshrike	<i>C. melaschistos</i>	LC
119	Short-billed Minivet	<i>P. brevirostris</i>	LC
120	Scarlet Minivet	<i>P. flammeus</i>	LC
121	Bar-winged Flycatcher-shrike	<i>Hemipus picatus</i>	LC
122	White-throated Fantail	<i>Rhipidura albicollis</i>	LC
123	Black Drongo	<i>Dicrurus macrocercus</i>	LC
124	Ashy Drongo	<i>D. leucophaeus</i>	LC
125	Crow-billed Drongo	<i>D. annectans</i>	LC
126	Bronzed Drongo	<i>D. aeneus</i>	LC
127	Lesser Racket-tailed Drongo	<i>D. remifer</i>	LC
128	Spangled Drongo	<i>D. hottentottus</i>	LC
129	Greater Racket-tailed Drongo	<i>D. paradiseus</i>	LC
130	Black-naped Monarch	<i>Hypothymis azurea</i>	LC
131	Asian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	LC
132	Common Iora	<i>Aegintha tibia</i>	LC
133	Great Iora	<i>A. lafresnaye</i>	LC
134	Large Woodshrike	<i>Tephrodornis gularis</i>	LC
135	Blue Rock Thrush	<i>Monticola solitarius</i>	LC
136	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	LC
137	Orange-headed Thrush	<i>Zosterops citrina</i>	LC
138	Siberian Thrush	<i>Z. sibirica</i>	LC
139	Scaly Thrush	<i>Z. dauma</i>	LC
140	Black-breasted Thrush	<i>Turdus dissimilis</i>	LC
141	Eurasian Blackbird	<i>T. merula</i>	LC
142	Eyebrowed Thrush	<i>T. obscurus</i>	LC
143	Asian Brown Flycatcher	<i>Muscicapa dauurica</i>	LC
144	Ferruginous Flycatcher	<i>M. ferruginea</i>	LC
145	White-gorgeted Flycatcher	<i>Ficedula monileger</i>	LC
146	Little Pied Flycatcher	<i>F. westermanni</i>	LC
147	Verditer Flycatcher	<i>Eumyias thalassina</i>	LC
148	Large Niltava	<i>Niltava grandis</i>	LC

No.	Common name	Scientific name	IUCN Status
149	Small Niltava	<i>N. macgrigoriae</i>	LC
150	Fujian Niltava	<i>N. davidi</i>	LC
151	White-tailed Flycatcher	<i>Cyornis concretus</i>	LC
152	Hainan Blue Flycatcher	<i>C. hainanus</i>	LC
153	Hill Blue Flycatcher	<i>C. banyumas</i>	LC
154	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	LC
155	Orange-flanked Bush Robin	<i>Tarsiger cyanurus</i>	LC
156	Oriental Magpie Robin	<i>Copsychus saularis</i>	LC
157	White-rumped Shama	<i>C. malabaricus</i>	LC
158	Plumbeous Water Redstart	<i>Rhyacornis fuliginosus</i>	LC
159	White-tailed Robin	<i>Cinclidium leucurum</i>	LC
160	White-crowned Forktail	<i>Enicurus leschenaulti</i>	LC
161	Common Stonechat	<i>Saxicola torquata</i>	LC
162	Grey Bushchat	<i>Saxicola ferreus</i>	LC
163	Black-collared Starling	<i>Sturnus nigricollis</i>	LC
164	Crested Myna	<i>Acridotheres cristatellus</i>	LC
165	Hill Myna	<i>Gracula religiosa</i>	LC
166	Velvet-fronted Nuthatch	<i>Sitta frontalis</i>	LC
167	Great Tit	<i>Parus major</i>	LC
168	Sultan Tit	<i>Melanochlora sultanea</i>	LC
169	Black-headed Bulbul	<i>Pycnonotus atriceps</i>	LC
170	Black-crested Bulbul	<i>P. melanicterus</i>	LC
171	Red-whiskered Bulbul	<i>P. jocosus</i>	LC
172	Sooty-headed Bulbul	<i>P. aurigaster</i>	LC
173	Stripe-throated Bulbul	<i>P. finlaysoni</i>	LC
174	Flavescent Bulbul	<i>P. flavesces</i>	LC
175	Puff-throated Bulbul	<i>Alophoixus pallidus</i>	LC
176	Grey-eyed Bulbul	<i>Iole propinqua</i>	LC
177	Black Bulbul	<i>Hypsipetes leucocephalus</i>	LC
178	Rufescent Prinia	<i>Rufescent Prinia</i>	LC
179	Plain Prinia	<i>Prinia. inornata</i>	LC
180	Slaty-bellied Tesia	<i>Tesia olivea</i>	LC
181	Asian Stubtail	<i>Urosphena squameiceps</i>	LC
182	Spotted Bush Warbler	<i>Bradypterus thoracicus</i>	LC
183	Common Tailorbird	<i>Orthotomus sutorius</i>	LC
184	Dark-necked Tailorbird	<i>Orthotomus atrogularis</i>	LC
185	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	LC
186	Yellow-streaked Warbler	<i>P. armandii</i>	LC
187	Pallas's Leaf Warbler	<i>P. proregulus</i>	LC
188	Yellow-browed Warbler	<i>P. inornatus</i>	LC
189	Arctic Warbler	<i>P. borealis</i>	LC
190	Greenish Warbler	<i>P. trochiloides</i>	LC
191	Pale-legged Leaf Warbler	<i>P. tenellipes</i>	LC
192	Eastern Crowned Warbler	<i>P. coronatus</i>	LC
193	Sulphur-breasted Warbler	<i>P. ricketti</i>	LC
194	Golden-spectacled Warbler	<i>Seiurus burkii</i>	LC
195	Grey-cheeked Warbler	<i>S. poliogenys</i>	LC
196	Chestnut-crowned Warbler	<i>S. castaneiceps</i>	LC
197	Yellow-bellied Warbler	<i>Abroscopus superciliosus</i>	LC
198	Black-throated Laughingthrush	<i>G. chinensis</i>	LC

No.	Common name	Scientific name	IUCN Status
199	Hwamei	<i>G. canorus</i>	LC
200	Buff-breasted Babbler	<i>Trichastoma tickelli</i>	LC
201	Puff-throated Babbler	<i>Pellorneum ruficeps</i>	LC
202	Large Scimitar babbler	<i>Pomatorhinus hypoleucos</i>	LC
203	Red-billed Scimitar Babbler	<i>Pomatorhinus ochraceiceps</i>	LC
204	Limestone Wren Babbler	<i>Gypsophila crispifrons</i> / <i>Napothera crispifrons</i>	LC
205	Streaked Wren Babbler	<i>Napothera brevicaudata</i>	LC
206	Pygmy Wren Babbler	<i>Pnoepyga pusilla</i>	LC
207	Golden Babbler	<i>Stachyris chrysaea</i>	LC
208	Grey-throated Babbler	<i>S. nigriceps</i>	LC
209	Spot-necked Babbler	<i>S. striolata</i>	LC
210	Striped Tit Babbler	<i>Macronous gularis</i>	LC
211	Silver-eared Mesia	<i>Leiothrix argentauris</i>	LC
212	White-browed Shrike Babbler	<i>Pteruthius flaviscapis</i>	LC
213	Rufous-throated Fulvetta	<i>Alcippe rufogularis</i>	LC
214	Brown-cheeked Fulvetta	<i>A. poioicephala</i>	LC
215	Grey-cheeked Fulvetta	<i>A. morrisonia</i>	LC
216	Striated Yuhina	<i>Yuhina castaniceps</i>	
217	White-bellied Yuhina	<i>Y. zantholeuca</i> / <i>Erpornis zantholeuca</i>	LC
218	Greater Rufous-headed Parrotbill	<i>Paradoxorins. ruficeps</i>	LC
219	Yellow-vented Flowerpecker	<i>Dicaeum chrysorrheum</i>	LC
220	Plain Flowerpecker	<i>Dicaeum concolor</i>	LC
221	Fire-breasted Flowerpecker	<i>D. ignipectus</i>	LC
222	Purple-throated Sunbird	<i>Nectarinia sperata</i>	LC
223	Olive-backed Sunbird	<i>N. jugularis</i>	LC
224	Fork-tailed Sunbird	<i>Aethopyga christinae</i>	LC
225	Black-throated Sunbird	<i>Aethopyga saturata</i>	LC
226	Crimson Sunbird	<i>A. siparaja</i>	LC
227	Little Spiderhunter	<i>Arachnothera longirostra</i>	LC
228	Streaked Spiderhunter	<i>A. magna</i>	LC
229	Eurasian Tree Sparrow	<i>Passer montanus</i>	LC
230	Forest Wagtail	<i>Dendronanthus indicus</i>	LC
231	White Wagtail	<i>Motacilla alba</i>	LC
232	Grey Wagtail	<i>M. cinerea</i>	LC
233	Olive-backed Pipit	<i>Anthus bodgsoni</i>	LC
234	White-rumped Munia	<i>Lonchura striata</i>	LC
235	Little Bunting	<i>Emberiza pusilla</i>	LC

## C. Herptiles

No.	Scientific name	IUCN Status	No.	Scientific name	IUCN Status
1	<i>Gekko gekko</i>	-	36	<i>Ophiophagus hannah</i>	VU
2	<i>G. chinensis</i>	LC	37	<i>Trimerserus stejnegeri</i>	-
3	<i>G. japonicus</i>	LC	38	<i>Platysternon megacephalum</i>	EN
4	<i>Hemidactylus bowringi</i>	-	39	<i>Geoemyda spengleri</i>	EN
5	<i>H. frenatus</i>	LC	40	<i>Pyxidea moubotii</i>	EN
6	<i>Acanthosaura lepidogaster</i>	LC	41	<i>Pelodiscus sinensis</i>	VU
7	<i>Calotes versicolor</i>	-	42	<i>Paramesotriton deloustali</i>	VU
8	<i>C. frubstoferi</i>	-	43	<i>Leptobrachium pelodytoides</i>	LC
9	<i>Draco maculatus</i>	LC	44	<i>Megophrys longipes</i>	-
10	<i>Physignathus cocincinus</i>	-	45	<i>M. major</i>	-
11	<i>Mabuya chapaensis</i>	-	46	<i>Ophryophryne microstoma</i>	LC
12	<i>M. longicaudata</i>	-	47	<i>Bufo melanostictus</i>	LC
13	<i>M. multifasciata</i>	-	48	<i>Occidozyga lima</i>	LC
14	<i>Sphenomorphus</i> sp.	-	49	<i>Amolops ricketti</i>	LC
15	<i>Takydromus sexnileatus</i>	-	50	<i>Hoplobatrachus regulosus</i>	LC
16	<i>Python molurus</i>	NT	51	<i>Limnonectes limnocharis</i>	-
17	<i>Amphiesma stolata</i>	-	52	<i>Rana andersoni</i>	-
18	<i>Ahetualla prasina</i>	-	53	<i>R. guentheri</i>	-
19	<i>Dipsas margaritophorus</i>	-	54	<i>R. kublii</i>	-
20	<i>Elaphe moellendorffi</i>	-	55	<i>R. livida</i>	DD
21	<i>E. prasina</i>	-	56	<i>R. macrodactyla</i>	LC
22	<i>E. radiata</i>	-	57	<i>R. maosonensis</i>	LC
23	<i>Oligodon</i> sp.	-	58	<i>R. microlineata/ Annandia delacouri</i>	DD
24	<i>O. ebehardti</i>	-	59	<i>R. nigrovittata</i>	LC
25	<i>Opisthotropis jacobi</i>	-	60	<i>R. sauteri</i>	ED
26	<i>Psammodynastes pulverulentus</i>	-	61	<i>Quasipaa verrucospinosa / Paa verrucospinosa</i>	NT
27	<i>Pseudoxenodon bambusicola</i>	-	62	<i>Rana</i> sp.	-
28	<i>Ptyas korros</i>	-	63	<i>Polypedates leucomystax</i>	LC
29	<i>Rhabdophis subminiatus</i>	-	64	<i>Rhacophorus cavirostris</i>	-
30	<i>Sinonatrix percarinata</i>	-	65	<i>R. verrucosus</i>	LC
31	<i>Xenochrophis piscator</i>	-	66	<i>Philautus gryllus</i>	DD
32	<i>Enhydryis plumbea</i>	LC	67	<i>Microhyala beymonsi</i>	LC
33	<i>Bungarus fasciatus</i>	LC	68	<i>M. ornata</i>	LC
34	<i>B. multicinctus</i>	-	69	<i>M. pulchra</i>	LC
35	<i>Naja naja</i>	-			



## D. Fishes

No	Scientific name
	I. CYPRINIFORMES
	<b>1. Cyprinidae</b>
1	<i>Acheilognathus longibarbus</i> (Mai)
2	<i>Acheilognathus tonkinensis</i> (Vaillant)
3	<i>Acrossocheilus iridescens</i> (N.& P.)
4	<i>Ancherythroculter daovantieni</i> (Banarescu) endemic to vietnam
5	<i>Aristichthys nobilis</i> (Richardson)
6	<i>Balantiocheilus macracanthus</i> (Pell.& Chev.)
7	<i>Carassius auratus</i> (L.)
8	<i>Capoeta semifasciolatus</i> (Gunther)
9	<i>Cirrhina molitorella</i> (C.& V.)
10	<i>Cirrhinus mrigala</i> (Hamilton)
11	<i>Ctenopharyngodon idellus</i> (C.& V.)
12	<i>Cyprinus carpio</i> (L.)
13	<i>Cyprinus exophthalmus</i> (Mai)
14	<i>Cyprinus multitaeniata</i> (Pell.& Chev.)
15	<i>Elopichthys bambusa</i> (Rich.)
16	<i>Epalzeorhynchus mutabilis</i> (Lin)
17	<i>Garra bourreti</i> (Nichols)
18	<i>Garra caudofasciata</i> (Pell.& Chev.)
19	<i>Garra pingi</i> (Tchang)
20	<i>Hainania serrata</i> (Koller)
21	<i>Hemibarbus macracanthus</i> (Lo, Yao & Chen)
22	<i>Hemibarbus medius</i> (Yue)
23	<i>Hemiculter leucisculus</i> (Basilewsky)
24	<i>Hemiculter leucisculus</i> (Basilewsky)
25	<i>Hypophthalmichthys barmandi</i> (Sauvage)
26	<i>Hypophthalmichthys molitrix</i> (Valenciennes)
27	<i>Labeo rohita</i> (Hamilton)
28	<i>Lissochilus macrosquamatus</i> (Mai)
29	<i>Megalobrama terminalis</i> (Richardson)
30	<i>Metzia formosae</i> (Oshima)
31	<i>Microphysogobius labeoides</i> (N.& P.)
32	<i>Mylopharyngodon piceus</i> (Richardson)
33	<i>Onychostoma elongatum</i> (Pel.& Chev.)
34	<i>Onychostoma gerlachi</i> (Peters)
35	<i>Onychostoma laticeps</i> (Gunther)
36	<i>Onychostoma (Varicorhinus) lepturus</i> (Boulenger)
37	<i>Onychostoma ovalis</i> (Tang)
38	<i>Onychostoma simum</i> (Sauvage & Dabry)
39	<i>Opsarichthys bidens</i> (Gunther)
40	<i>Osteochilus salsburyi</i> (N.& P.)
41	<i>Pararbodeus elongatus</i> (Mai)
42	<i>Pararbodeus kyphus</i> (Mai)
43	<i>Parazacco babeensis</i> (Hao and Dai, 2000)
44	<i>Parazacco spilurus</i> (Koller)
45	<i>Parazacco vinhi</i> (Hao and Dai, 2000)
46	<i>Placocheilus gracilis</i> Pell.& Chev.
47	<i>Poropuntius krempfi</i> (Pell. & Chev.)
48	<i>Pseudohemiculter dispar</i> (Peters)

No	Scientific name
49	<i>Puntius ocellatus</i> (Mai)
50	<i>Rasborinus lineatus</i> (Pellegrin)
51	<i>Rasbora steineri</i> (N.& P.)
52	<i>Rhodeus ocellatus</i> (Oshima)
53	<i>Rhodeus spinalis</i> (Oshima)
54	<i>Semilabeo notabilis</i> (Peters)
55	<i>Sinilabeo tonkinensis</i> (Pell.& Chev.)
56	<i>Sinibrama melrosei</i> (N.& P.)
57	<i>Squalidus atromaculatus</i> (N.& P.)
58	<i>Squaliobarbus curriculus</i> (Rich.)
59	<i>Spinibarbichthys denticulatus</i> (Oshima)
60	<i>Spinibarbus hollandi</i> (Oshima)
61	<i>Spinibarbus sinensis</i> (Bleeker)
62	<i>Spinibarbus sp.</i>
63	<i>Toxabramis houdemeri</i> (Pellegrin)
64	<i>Zacco platypus</i> (T.& S.)
	<b>2. Balitoridae</b>
65	<i>Liniparhomaloptera disparis</i> (Lin)
66	<i>Schistura caudofurca</i> (Mai)
67	<i>Schistura fasciolata</i> (N.& P.)
68	<i>Schistura incerta</i> (Nichols)
69	<i>Schistura chapaensis</i> (Rendahl)
70	<i>Sinogastromyzon tonkinensis</i> (Vaillant)
71	<i>Vanmanenia sp.</i>
	<b>3. Cobitidae</b>
72	<i>Misgurnus anguillicaudatus</i> (Cantor)
73	<i>Nemacheilus pulcher</i> (Nichols)
74	<i>Botia elongata</i> (Mai)
	II. SILURIFORMES
	<b>4. Bagridae</b>
75	<i>Hemibagrus elongatus</i> (Gunther)
76	<i>Hemibagrus (Mystus) vietnamicus</i> (Mai)
77	<i>Mystus guttatus</i> (Lacepede)
78	<i>Mystus pluriradiatus</i> (Vaillant)
79	<i>Pelteobagrus fulvidraco</i> (Rich.)
	<b>5. Claridae</b>
80	<i>Clarias fuscus</i> (Lac.)
	<b>6. Cranogranidae</b>
81	<i>Cranoglanis sinensis</i> (Peters)
	<b>7. Siluridae</b>
82	<i>Silurus asotus</i>
83	<i>Silurus cochinchinensis</i> (Cuv.& Val.)
	<b>8. Sisoridae</b>
84	<i>Bagarius honghensis</i> (Li)
85	<i>Bagarius yarrelli</i> (Sykes)
86	<i>Glyptothorax hainanensis</i> (Mai)
87	<i>Glyptothorax pollozonum</i> (Lin)
	III. CYPRINODONTIFORMES
	<b>9. Adrianichthyidae</b>
88	<i>Oryzias sinensis</i> (Chen, Uwa & Chu)
	IV. SYNBRANCHIFORMES
	<b>10. Monopteridae (Flutidae)</b>

No	Scientific name
89	<i>Monopterus albus</i> (Zuiew)
	<b>11. Mastacembelidae</b>
90	<i>Mastacembelus armatus</i> (Lac.)
91	<i>Mastacembelus aculeatus</i> (Basilewsky)
	V. PERCIFORMES
	<b>12. Anabantidae</b>
92	<i>Anabas testudineus</i> (Bloch)
	<b>13. Cichlidae</b>
93	<i>Oreochromis mosambicus</i> (Peters)
	<b>14. Channidae</b>
94	<i>Channa asiatica</i> (L.)
95	<i>Channa gachua</i> (Hamilton & Buchanan)
96	<i>Channa maculata</i> (Lac.)
97	<i>Channa striata</i> (Bloch)

No	Scientific name
	<b>15. Eleotridae</b>
98	<i>Eleotris fusca</i> (Bloch & Schneider)
99	<i>Micropercops hotayensis</i> (Mai)
100	<i>Philypnus chalmersi</i> (N.& P.)
	<b>16. Gobiidae</b>
101	<i>Ctenogobius brunneus</i> (T.& S)
102	<i>Glossogobius giuris</i> (Hamilton)
103	<i>Rhinogobius giurinus</i> (Rutter)
	<b>17. Osphronemidae</b>
104	<i>Macropodus opercularis</i> (Linneaus)
	<b>18. Percichthyidae</b>
105	<i>Siniperca chuatsi</i> (Basilewsky)
106	<i>Siniperca scherzeri</i> (Fang & Chong)
107	<i>Siniperca whiteheadi</i> (Boulenger)

## E. Vascular plants

No	Scientific name
	<b>LYCOPODIOPHYTA</b>
	<b>1. Lycopodiaceae</b>
1	<i>Huperzia serrata</i> (Thunb.) Trevis.
2	<i>Huperzia squarrosa</i> (G. Fost.) Trevis.
3	<i>Lycopodiella cernuum</i> (L.) Pic. Serm.
4	<i>Lycopodium clavatum</i> (L.)
5	<i>Lycopodium complanatum</i> (L.)
	<b>2. Selaginellaceae</b>
6	<i>Selaginella biformis</i> (A. Br. ex Kuhn)
7	<i>Selaginella delicatula</i> (Desv.) Alston
8	<i>Selaginella dolichoclada</i> (Alston)
9	<i>Selaginella frondosa</i> (Warb)
10	<i>Selaginella helferi</i> (Warb)
11	<i>Selaginella involvens</i> (Sw.) Spring
12	<i>Selaginella picta</i> (A. Br. ex Baker)
13	<i>Selaginella pseudopaleifera</i> (Hand- Mazz)
	<b>EQUISETOPHYTA</b>
	<b>3. Equisetaceae</b>
14	<i>Equisetum ramosissimum</i> Desf.
	<b>POLYPODIOPHYTA</b>
	<b>4. Adiantaceae</b>
15	<i>Adiantum capillus-veneris</i> (L.)
16	<i>Adiantum caudatum</i> (L.)
17	<i>Adiantum flabellatum</i> (L.)
18	<i>Cheilanthes tenuifolia</i> (Burm. f.) (Sw)
19	<i>Coniogramme petelotii</i> (Tardieu)
	<b>5. Aspleniaceae</b>
20	<i>Asplenium antrophyoides</i> (H. Christ)
21	<i>Asplenium colaniae</i> (Tardieu)
22	<i>Asplenium ensiforme</i> (Wall. ex hook. & Grev)
23	<i>Asplenium griffithianum</i> (Hook.)
24	<i>Asplenium interjectum</i> (C. Christ)
25	<i>Asplenium nidus</i> (L.)
26	<i>Asplenium normale</i> (D. Don)
27	<i>Asplenium polyodon</i> (G. Forst)
28	<i>Asplenium unilaterale</i> (Lam)
29	<i>Asplenium wrightii</i> (Eaton ex Hook)
30	<i>Asplenium yoshinaga</i> (Makino)
	<b>6. Azollaceae</b>
31	<i>Azolla pinata</i> (R. Br)
	<b>7. Blechnaceae</b>
32	<i>Blechnum orientale</i> (L.)
	<b>8. Cyatheaceae</b>
33	<i>Cyathea contaminans</i> (Wall. ex Hook.) (Cop)
34	<i>Cyathea gigantea</i> (Hook.) (Holltt)
35	<i>Cyathea podophylla</i> (Hook.) Cop.
	<b>9. Dennstaedtiaceae</b>
36	<i>Lindsaea orbiculata</i> (Lam.) (Mett. ex Kuhn)
37	<i>Microlepia hookeriana</i> (Wall. ex Hook.) (C. Presl)
38	<i>Microlepia marginata</i> (Panzer) (C. Chr)
39	<i>Pteridium aquilinum</i> (L.) (Kunh)

No	Scientific name
	<b>10. Dicksoniaceae</b>
40	<i>Cibotium barometz</i> (L.) (J. Sm)
	<b>11. Dryopteridaceae</b>
41	<i>Arachniodes henryi</i> (C. Ch.) Ching
42	<i>Cyrtomium caryotideum</i> (Wall. ex Hook. et Grev.) (C. Presl)
43	<i>Cyrtomium fortunei</i> (J. Sm)
44	<i>Dryopteris scottii</i> (Bedd.) (Ching)
45	<i>Dryopteris subtriangularis</i> (Hope) (C. Chr)
46	<i>Heterogonium gurupahense</i> (C. Chr. ex Kjellb. & C. Chr.) (Holttum)
47	<i>Polystichum acutidens</i> (C. Chr)
48	<i>Tectaria brachiata</i> (Z. et M.) (Morton)
49	<i>Tectaria decurrens</i> (C. Presl.) (Copel)
50	<i>Tectaria devexa</i> (Mett.) (Copel)
51	<i>Tectaria polymorpha</i> (Wall. ex Hook.) (Copel)
52	<i>Tectaria simonsii</i> (Baker) (Ching)
53	<i>Tectaria zeylanica</i> (Houtt.) (Sledge)
54	<i>Tectaria fuscipes</i> (Bedd.) (C. Chr)
55	<i>Tectaria subtriphyllo</i> (Hook. et Arn.) (Copel)
	<b>12. Gleicheniaceae</b>
56	<i>Dicranopteris linearis</i> (Burm. f.) (Undew)
	<b>13. Lomariopsidaceae</b>
57	<i>Bolbitis appendiculata</i> (Willd.) (K. Iwats)
58	<i>Bolbitis heteroclite</i> (C. Presl) (Ching ex C. Chr)
	<b>14. Marsileaceae</b>
59	<i>Marsilea minuta</i> (L)
60	<i>Marsilea quadrifolia</i> (L)
	<b>15. Oleandraceae</b>
61	<i>Nephrolepis biserrata</i> (Sw.) (Schott)
62	<i>Nephrolepis cordifolia</i> (L.) (C. Presl)
	<b>16. Polypodiaceae</b>
63	<i>Colysis digitata</i> (Baker) (Ching)
64	<i>Colysis elliptica</i> (Thunb.) (Ching)
65	<i>Colysis hemionitidea</i> (Wall.) (J. Presl)
66	<i>Colysis insignis</i> (Blume) (J. Sm)
67	<i>Drynaria bonii</i> (Chr)
68	<i>Drynaria fortunei</i> (Kuntze.) (J. Sm)
69	<i>Lemmaphyllum microphyllum</i> (C. Presl)
70	<i>Lepisorus contortus</i> (Ching) Ching`
71	<i>Lepisorus megasorus</i> (Ching) Ching
72	<i>Microsorium punctatum</i> (L.) (Copel)
73	<i>Neocheiropteris normalis</i> (D. Don) (Tagawa)
74	<i>Phymatosorus scolopendria</i> (Burn) (Picci-Ser)
75	<i>Pyrrosia lanceolata</i> (L.) (Farw)
76	<i>Pyrrosia lingua</i> (Thunb.) (Farwell)
77	<i>Pyrrosia piloselloides</i> (L.) (M. G. Price)
78	<i>Pyrrosia porosa</i> (C. Persl.) Hovenkamp var. <i>tonkinensis</i> (Giesenh.) Hovenkamp
79	<i>Pyrrosia subfuracea</i> (Hook.) Ching
	<b>17. Pteridaceae</b>
80	<i>Pteris ensiformis</i> (Burm. f)
81	<i>Pteris fauriei</i> (Hieron)
82	<i>Pteris khasyana</i> Hieron.
83	<i>Pteris plumbea</i> (C) (Chr)
84	<i>Pteris tokioi</i> (Masan)

No	Scientific name
85	<i>Pteris finoti</i> (Chri)
86	<i>Pteris linearis</i> (Poir)
87	<i>Pteris multifida</i> (Poir)
88	<i>Pteris semipinnata</i> (L)
89	<i>Pteris vittata</i> (L)
	<b>18. Salviniaceae</b>
90	<i>Alvinia natans</i> (L.) (All)
	<b>19. Schizaeaceae</b>
91	<i>Lygodium conforme</i> (C) (Chr)
92	<i>Lygodium digitatum</i> (Presl)
93	<i>Lygodium flexuosum</i> (L.) (Sw)
94	<i>Lygodium japonicum</i> (Thunb.) (Sw)
95	<i>Lygodium polystachyum</i> (Wall. ex Morre)
96	<i>Lygodium scandens</i> (L.) (Sw)
	<b>20. Thelypteridaceae</b>
97	<i>Amphineuron tonkinense</i> (C Chr.) (Holttum)
98	<i>Christella acuminata</i> (Houtt.) (H. Lév)
99	<i>Christella arida</i> (D. Don) (Holttum)
100	<i>Christella cylindrotrix</i> (Rosenst.) (Holttum)
101	<i>Christella parasitica</i> (L.) (H) (Lév)
102	<i>Christella subpubescens</i> (Blume) (Holttum)
103	<i>Macrothelypteris torresiana</i> (Gaudich.) (Ching)
104	<i>Pneumatopteris truncata</i> (Poir.) (Holttum)
105	<i>Pronephrium triphyllum</i> (Sw.) (Holttum)
106	<i>Pronephrium asperum</i> (C. Persl) (Holttum)
107	<i>Pronephrium cuspidatum</i> (Blume) (Holttum)
108	<i>Pronephrium pcerishii</i> (Bedd.) (Hottum)
109	<i>Pronephrium simplex</i> (Hook.) (Holttum)
110	<i>Thelypteris papyraceus</i> (Bedd.) (C. F. Reed)
	<b>21. Vittariaceae</b>
111	<i>Antrophyum callifolium</i> (Blume)
	<b>22. Woodsiaceae</b>
112	<i>Diplazium dilatatum</i> (Blume)
113	<i>Diplazium esculentum</i> (Retz.) (Sw)
	<b>GYMNOSPERMAE</b>
	<b>23. Cephalotaxaceae</b>
114	<i>Cephalotaxus mannii</i> (Hook. F)
	<b>24. Cycadaceae</b>
115	<i>Cycas balansae</i> (Warb)
	<b>25. Cupressaceae</b>
116	<i>Calocedrus macrolepis</i> (Kurz)
117	<i>Fokienia hodginsii</i> (Dunn) (A. Henry & H. H. Thomas)
	<b>26. Gnetaceae</b>
118	<i>Gnetum montanum</i> (Markgr)
	<b>27. Pinaceae</b>
119	<i>Keteleeria fortunei</i> (A. Murray) (Carriere)
120	<i>Pinus kwangtungensis</i> (Chun ex Tsiang)
121	<i>Pinus merkusii</i> (Jungh. et Vriese)
122	<i>Pseudotsuga brevifolia</i> (W. C. Cheng & L. K. Fu)
	<b>28. Podocarpaceae</b>
123	<i>Dacrydium elatum</i> (Roxb.) (Wall. ex Hook).
124	<i>Dacrydium imbricatum</i>
125	<i>Nageia fleuryi</i> (Hickel) (de Laub)

No	Scientific name
126	<i>Podocarpus neriifolius</i> (D. Don)
	<b>29. Taxaceae</b>
127	<i>Amentotaxus argotaenia</i> (Hance) (Pilger)
128	<i>Taxus chinensis</i> (Pilg.) (Rehder)
	<b>ANGIOSPERMAE</b>
	<b>MAGNOLIOPSIDA</b>
	<b>30. Acanthaceae</b>
129	<i>Clinacanthus nutans</i> (Burm. f.) (Lindau)
130	<i>Dicliptera chinensis</i> (L.) (Nees)
131	<i>Hygrophila salicifolia</i> (Vahl.) (Nees)
132	<i>Justicia gendarussa</i> (Burm. F)
133	<i>Justicia procumbens</i> (L)
134	<i>Lepidagathis mendax</i> (Benoist)
135	<i>Peristrophe bivalvis</i> (L.) (Merr)
136	<i>Phlogacanthus pyramydalis</i> (Benoist) Benoist
137	<i>Rhinacanthus nasutus</i> (L.) (Kurz)
138	<i>Strobilanthes cusia</i> (Nees.) (Kuntze)
139	<i>Thunbergia alata</i> (Bojer ex Sims)
140	<i>Thunbergia eberhardtii</i> (Benoist)
141	<i>Thunbergia grandiflora</i> (Roxb. ex Rottl.) (Roxb)
	<b>31. Aceraceae</b>
142	<i>Acer laurinum</i> (Hassk)
143	<i>Acer oblongum</i> (Wall. ex DC)
144	<i>Acer tonkinense</i> (Lecomte)
	<b>32. Actinidiaceae</b>
145	<i>Saurauja napaulensis</i> (DC)
146	<i>Saurauja tristyla</i> (DC)
	<b>33. Alangiaceae</b>
147	<i>Alangium chinense</i> (Lour.) (Harms)
148	<i>Alangium kurzii</i> (Craib)
	<b>34. Amaranthaceae</b>
149	<i>Achyranthes aspera</i> (L)
150	<i>Aerva sanguinolenta</i> (L.) (Blume)
151	<i>Alternanthera sessilis</i> (L.) (DC)
152	<i>Amaranthus lividus</i> (L)
153	<i>Amaranthus spinosus</i> (L)
154	<i>Celosia argentea</i> (L)
155	<i>Cyathula prostrata</i> (L.) (Blume)
	<b>35. Anacardiaceae</b>
156	<i>Allospondias lakonensis</i> (Pierre) (Stapf)
157	<i>Choerospondias axillaris</i> (Roxb) (Burt. & Hill)
158	<i>Dracontomelon duperreanum</i> (Pierre)
159	<i>Garuga pinnata</i> (Roxb)
160	<i>Mangifera foetida</i> (Lour)
161	<i>Rhus chinensis</i> (Muell)
162	<i>Semecarpus myriocarpa</i> (Evrard & Tardieu)
163	<i>Toxicodendron succedanea</i> (L.) (Mold)
	<b>36. Annonaceae</b>
164	<i>Alphonsea boniana</i> (Fin & Gagnep)
165	<i>Alphonsea tonkinensis</i> (DC)
166	<i>Artabotrys hongkoensis</i> (Hance)
167	<i>Dasymachalon rostratum</i> (Merr. & Chun)
168	<i>Dasymachalon rostratum</i> (Merr. & Chun var glaucum) (Merr. & Chun) (Ban)

No	Scientific name
169	<i>Desmos chinensis</i> (Lour)
170	<i>Desmos cochinchinensis</i> (Lour)
171	<i>Desmos pedunculatus</i> (A. DC.) (Ban var. <i>tonkinensis</i> Ban)
172	<i>Fissistigma latifolium</i> (Dun.) (Merr)
173	<i>Fissistigma pallens</i> (Fin. & Gagnep.) (Merr)
174	<i>Fissistigma polyanthoides</i> (DC.) (Merr)
175	<i>Fissistigma rufinerve</i> (Hook. f. & Thom.) (Merr)
176	<i>Goniothalamus gabriacianus</i> (Bill.) (Ast)
177	<i>Goniothalamus macrocalyx</i> (Ban)
178	<i>Milusa balansae</i> (Fin. & Gagnep)
179	<i>Mitrephora calcarea</i> (Diels ex Ast)
180	<i>Mitrephora calcarea</i> (Diels ex Ast var. <i>intermedia</i> Ban)
181	<i>Mitrephora thorelii</i> (Pierre var. <i>bousigoniana</i> (Pierre) (Fin. & Gagnep)
182	<i>Polyalthia cerasoides</i> (Benth. & Hook.f)
183	<i>Polyalthia lanii</i> (Merr)
184	<i>Polyalthia nemoralis</i> (DC)
185	<i>Unaria microcarpa</i> (Champ. ex Benth)
186	<i>Xylophia vielana</i> (Pierre)
	<b>37. Apiaceae</b>
187	<i>Centella asiatica</i> (L.) (Urb)
188	<i>Cnidium monnieri</i> (L.) (Cusson)
189	<i>Cryptotaenia japonica</i> (Hassk)
190	<i>Hydrocotyle nepalensis</i> (Hook)
	<b>38. Apocynaceae</b>
191	<i>Aganonerion polymorphum</i> (Pierre ex Spire)
192	<i>Alstonia scholaris</i> (L.) (R) (Br)
193	<i>Beaumontia pitardii</i> (Tsiang)
194	<i>Bousigonia mekongensis</i> (Pierre)
195	<i>Ecdysanthera rosea</i> (Hook. & Arn)
196	<i>Holarrhena pubescens</i> (Wall.ex G.Don)
197	<i>Parameria laevigata</i> (Juss.) (Mold)
198	<i>Rauwolfia verticillata</i> (Lour) (Baill)
199	<i>Tabernaemontana bovina</i> (Lour)
200	<i>Tabernaemontana bufalina</i> (Lour)
201	<i>Wrightia annamensis</i> (Eberh. & Dub)
202	<i>Wrightia laevis</i> (Hook. f.)
203	<i>Wrightia pubescens</i> (R). (Br)
204	<i>Xylinabariopsis napeensis</i> (Quint) (Metc)
	<b>39. Aquifoliaceae</b>
205	<i>Ilex cinerea</i> Champ. ex Benth.
206	<i>Ilex ficoidea</i> Hemsl. ex Forbes & Hemsl.
207	<i>Ilex umbellulata</i> (Wall.) (Loes)
	<b>40. Araliaceae</b>
208	<i>Acanthopanax gracilistylus</i> W. W. Sm.
209	<i>Aralia armata</i> (Wall. ex G. Don) (Seem)
210	<i>Aralia chinensis</i> (L)
211	<i>Heteropanax fragrans</i> (Roxb.) (Seem)
212	<i>Schefflera heptaphylla</i> (L.) (Frodin)
213	<i>Schefflera pes-avis</i> R. Vig.
214	<i>Tetrapanax papyriferus</i> (Hook.) C. Koch.
215	<i>Trevesia palmata</i> (Roxb. ex. Lind.) (Visan)
216	<i>Trevesia sphaerocarpa</i> (Grushv. & N. Skvorts)

No	Scientific name
	<b>41. Aristolochiaceae</b>
217	<i>Asarum sp.</i>
	<b>42. Asclepiadaceae</b>
218	<i>Dischidia chinensis</i> Champ. ex Benth.
219	<i>Dischidia esquirolli</i> (Lévl.) Tsiang
220	<i>Gymnema tingens</i> (Roxb.) Spreng.
221	<i>Hoya carnos</i> a R. Br.
222	<i>Hoya multiflora</i> Blume
223	<i>Streptocaulon juvenas</i> (Lour.) Merr.
	<b>43. Asteraceae</b>
224	<i>Adenostemma lavenia</i> (L.) Kuntze
225	<i>Ageratum conyzoides</i>
226	<i>Ainsliaea latifolia</i> (D. Don) Sch.-Bip.
227	<i>Artemisia japonica</i> Thunb.
228	<i>Artemisia vulgaris</i> L.
229	<i>Bidens bipinnata</i> L.
230	<i>Bidens pilosa</i> L.
231	<i>Blumea balsamifera</i> (L.) DC.
232	<i>Blumea barbata</i> DC.
233	<i>Blumea chinensis</i> (L.) DC.
234	<i>Blumea gardneri</i> (Hook. f.) Gagnep.
235	<i>Blumea lacera</i> (Burm. f.) DC.
236	<i>Blumea lanceolaria</i> (Roxb.) Druce
237	<i>Blumea mollis</i> (D. Don) Merr.
238	<i>Blumea sinuata</i> (Lour.) Merr.
239	<i>Centipeda minima</i> (L.) A. Br. & Aschers.
240	<i>Chrysanthemum indicum</i> L.
241	<i>Cirsium lineare</i> (Thunb.) sch.- Bip.
242	<i>Conyza canadensis</i> (L.) Cronq.
243	<i>Cotula anthemoides</i> L.
244	<i>Crassocephalum crepidioides</i> (Benth.) Moore.
245	<i>Eclipta prostrata</i> (L.) L.
246	<i>Elephantopus mollis</i> H. B. K.
247	<i>Elephantopus scaber</i> L.
248	<i>Emilia prenanthoidea</i> DC.
249	<i>Emilia sonchifolia</i> (L.) DC. in Wight
250	<i>Erechtites valerianaefolia</i> (Wolf.) DC.
251	<i>Eupatorium fortunei</i> Turcz.
252	<i>Eupatorium odoratum</i> L.
253	<i>Galinsonga parviflora</i> Cav.
254	<i>Gebera piloselloides</i> (L.) Cass.
255	<i>Gnaphalium affine</i> D. Don
256	<i>Gnaphalium polycaulon</i> Pers.
257	<i>Gynura nitida</i> DC.
258	<i>Helianthus annuus</i> L.
259	<i>Hemisteptia lyrata</i> (Bunge) Bunge
260	<i>Ixeris versicolor</i> (Fish. ex Link) Kitam.
261	<i>Parthenium hysterophorus</i> L.
262	<i>Pentanema indicum</i> (L.) Ling
263	<i>Pluchea indica</i> (L.) Less.
264	<i>Senecio scandens</i> Buch.- Ham. ex D. Don
265	<i>Senecio walkeri</i> Arn.
266	<i>Sigesbeckia orientalis</i> L.



No	Scientific name
267	<i>Sigesbeckia pubescens</i> Makino
268	<i>Sphaeranthus indicus</i> L.
269	<i>Spilanthus paniculata</i> Wall. ex DC.
270	<i>Synedrella nodiflora</i> (L.) Gaertn.
271	<i>Titbonia diversifolia</i> (Hemsl.) A. Gray
272	<i>Tridax procumbens</i> L.
273	<i>Vernonia arborea</i> Buch.- Ham.
274	<i>Vernonia cinerea</i> (L.) Less.
275	<i>Vernonia cumingiana</i> Beth.
276	<i>Vernonia scandens</i> DC.
277	<i>Vernonia villosa</i> (Blume) W. Wight
278	<i>Xanthium strumarium</i> L.
279	<i>Youngia japonica</i> (L.) DC.
	<b>44. Balanophoraceae</b>
280	<i>Balanophora laxiflora</i> Hemsl.
	<b>45. Balsaminaceae</b>
281	<i>Impatiens chinensis</i> L.
	<b>46. Begoniaceae</b>
282	<i>Begonia balansaeana</i> Gagnep.
283	<i>Begonia grandes</i> Dryand. var. <i>chinensis</i> Irmsch.
284	<i>Begonia tonkinensis</i> Gagnep.
	<b>47. Berberidaceae</b>
285	<i>Mahonia nepalensis</i> DC.
	<b>48. Bignoniaceae</b>
286	<i>Markhamia stipulata</i> (Wall) Seem. ex Schum. var. <i>kanzi</i> Sprague
287	<i>Oroxylum indicum</i> (L.) Vent.
288	<i>Pauldopia ghorta</i> (G. Don) Steen
289	<i>Radermachera ignea</i> (Kurz) Steen.
290	<i>Stereospermum neuranthum</i> Kurz
	<b>49. Bombacaceae</b>
291	<i>Bombax ceiba</i> L.
292	<i>Bombax malabaricum</i> DC.
293	<i>Ceiba pentandra</i> (L.) Gaertn.
	<b>50. Boraginaceae</b>
294	<i>Heliotropium indicum</i> L.
295	<i>Rotula aquatica</i> Lour.
296	<i>Tournefortia sarmentosa</i> Lamk.
	<b>51. Buddlejaceae</b>
297	<i>Buddleja asiatica</i> Lour.
	<b>52. Burseraceae</b>
298	<i>Canarium album</i> (Lour.) Raeusch.
299	<i>Canarium tramdenum</i> Dai & Yakovl.
	<b>53. Caesalpinaceae</b>
300	<i>Bauhinia championii</i> (Benth.) Benth.
301	<i>Bauhinia coccinea</i> (Lour.) DC. ssp. <i>tonkinensis</i> (Gagnep.) K. & S. Larsen
302	<i>Bauhinia touranensis</i> Gagnep.
303	<i>Caesalpinia cucullata</i> Roxb.
304	<i>Caesalpinia minax</i> Hance
305	<i>Caesalpinia sappan</i> L.
306	<i>Chamaecrista mimosoides</i> (L.) Greene
307	<i>Gymnocladus angustifolius</i> (Gagnep.) J. E. Vidal
308	<i>Lysidice rhodostegia</i> Hance
309	<i>Peltophorum dasyrrhachis</i> (Miq.) Kurz

No	Scientific name
310	<i>Peltophorum dasyrrhachis</i> var. <i>tonkinensis</i> (Pierre) K. & S. Larsen
311	<i>Saraca dives</i> Pierre
312	<i>Senna tora</i> (L.) Roxb.
313	<i>Zenia insignis</i> Chun
	<b>54. Campanulaceae</b>
314	<i>Codonopsis javanica</i> (Blume) Hook. f.
315	<i>Pentaphragma sinensis</i> Hemsl. & Wils.
	<b>55. Cannabaceae</b>
316	<i>Cannabis sativa</i> L.
	<b>56. Capparacea</b>
317	<i>Capparis micracantha</i> DC.
318	<i>Capparis tonkinensis</i> Gagnep.
319	<i>Cratava religiosa</i> Forst. f.
320	<i>Cratava roxburhii</i> R. Br.
321	<i>Styxis fasciculata</i> (King) Gagnep.
322	<i>Styxis suaveolens</i> (Roxb.) Pierre
	<b>57. Caprifoliaceae</b>
323	<i>Lonicera dasystyla</i> Rehd.
324	<i>Lonicera japonica</i> Thunb.
325	<i>Lonicera macrantha</i> (D. Don) Spreng
326	<i>Sambucus javanica</i> Reinw. ex Blume
327	<i>Viburnum lutescens</i> Blume
328	<i>Viburnum mullaba</i> Buch.- Ham ex D. Don
	<b>58. Caricaceae</b>
329	<i>Carica papaya</i> L.
	<b>59. Celastraceae</b>
330	<i>Celastrus bindsii</i> Benth.
331	<i>Celastrus monospermus</i> Roxb.
332	<i>Enonymus forbesiranus</i> Loesn
	<b>60. Chenopodiaceae</b>
333	<i>Chenopodium ambrosioides</i> L.
334	<i>Chenopodium ficifolium</i> Smith
	<b>61. Clusiacea</b>
335	<i>Cratoxylum cochinchinensis</i> (Lour.) Blume
336	<i>Cratoxylum prunifolium</i> (Kurz) Kurz
337	<i>Garcinia cova</i> Roxb.
338	<i>Garcinia fragraeoides</i> A. Chev.
339	<i>Garcinia mutiflora</i> Cham. ex Benth.
340	<i>Garcinia oblongifolia</i> Champ. ex Benth.
341	<i>Garcinia tinctoria</i> (DC.) W. Wight
	<b>62. Combretaceae</b>
342	<i>Quisqualis indica</i> L.
343	<i>Terminalia catappa</i> L.
344	<i>Terminalia myriocarpa</i> Heurck & Muell. Arg.
	<b>63. Connaraceae</b>
345	<i>Connarus cochinchinensis</i> (Baill.) Pierre
346	<i>Connarus paniculatus</i> Roxb.
347	<i>Rourea minor</i> (Gaertn.) Alaston ssp. <i>microphylla</i> (Hook. & Arn.) J. E. Vidal
	<b>64. Convolvulaceae</b>
348	<i>Argyreia acuta</i> Lour.
349	<i>Ipomoea digitata</i> L.
350	<i>Ipomoea obscura</i> (L.) Ker.- Gawl.
351	<i>Merremia gemella</i> (Burm. f.) Hallier f.

No	Scientific name
	<b>65. Cucurbitaceae</b>
352	<i>Gymnopetalum cochinchinense</i> (Lour.) Kurz
353	<i>Gymnopetalum integrifolium</i> (Roxb.) Kurz
354	<i>Hodgsonia macrocarpa</i> (Blume) Cogn.
355	<i>Solena amplexicaulis</i> (Lamk.) Gandhi
356	<i>Trichosanthes tricuspidata</i> Lour.
357	<i>Zehneria indica</i> (Lour.) Keraudren
358	<i>Zehneria maysorensis</i> (Wight & Arn.) Arn.
	<b>66. Datisceae</b>
359	<i>Tetrameles nudiflora</i> R. Br.
	<b>67. Dilleniaceae</b>
360	<i>Dillenia indica</i> L.
361	<i>Dillenia pentagyna</i> Roxb.
362	<i>Dillenia turbinata</i> Fin. & Gagnep.
363	<i>Tetracera scandens</i> (L.) Merr.
	<b>68. Dipterocarpaceae</b>
364	<i>Dipterocarpus retusus</i> Blume
365	<i>Parashorea chinensis</i> Hwang
366	<i>Vatica odorata</i> (Griff.) Symingt. subsp. <i>brevipetiolata</i> Phamh.
367	<i>Vatica subglabra</i> Merr.
	<b>69. Ebenaceae</b>
368	<i>Diospyros eriantha</i> Champ. ex Benth.
369	<i>Diospyros pilosula</i> (A. DC.) Wall.
	<b>70. Elaeagnaceae</b>
370	<i>Elaeagnus bonii</i> Lecomte
	<b>71. Elaeocarpaceae</b>
371	<i>Elaeocarpus apiculatus</i> Mast.
372	<i>Elaeocarpus griffithii</i> (Wight) A. Gray
373	<i>Elaeocarpus japonicus</i> Sieb. & Zucc.
374	<i>Elaeocarpus limitaneus</i> Hand.- Mazz.
375	<i>Elaeocarpus petiolatus</i> (Jack.) Wall.
376	<i>Elaeocarpus stipularis</i> Blume
377	<i>Sloanea sinensis</i> (Hance) Hemsl.
	<b>72. Erythropalaceae</b>
378	<i>Erythropalum scandens</i> Blume
	<b>73. Euphorbiaceae</b>
379	<i>Acalypha australis</i> L.
380	<i>Alchornea rugosa</i> (Lour.) Muell.-Arg.
381	<i>Alchornea tiliifolia</i> (Benth.) Muell.-Arg.
382	<i>Alchornea treviioides</i> (Benth.) Muell.-Arg.
383	<i>Antidesma acidum</i> Retz.
384	<i>Antidesma bunius</i> (L.) Spreng
385	<i>Antidesma chonmon</i> Gagnep.
386	<i>Antidesma fordii</i> Hemsl.
387	<i>Antidesma ghaesembilla</i> Gaertn.
388	<i>Antidesma gracile</i> Hemsl.
389	<i>Antidesma hainanense</i> Merr.
390	<i>Antidesma paxii</i> Mect.
391	<i>Aporosa dioica</i> (Roxb.) Muell.- Arg.
392	<i>Aporosa sphaerosperma</i> Gagnep.
393	<i>Aporosa yunnanensis</i> (Pax & Hoffm.) Metc.
394	<i>Baccaurea ramiflora</i> Lour.
395	<i>Bischofia javanica</i> Blume

No	Scientific name
396	<i>Breynia fruticosa</i> (L.) Hook. f.
397	<i>Breynia glauca</i> Craib
398	<i>Bridelia balansae</i> Tutcher
399	<i>Bridelia monoica</i> (Lour.) Merr
400	<i>Bridelia ovata</i> Decne
401	<i>Bridelia penangiana</i> Hook. f.
402	<i>Claoxylon bainanense</i> Pax & Hoffm.
403	<i>Claoxylon indicum</i>
404	<i>Claoxylon longifolium</i> (Blume) Endl. ex Hassk.
405	<i>Cleidion brevipetiolatum</i> Pax & Hoffm.
406	<i>Cleistanthus myrianthus</i> (Hassk.) Kurz.
407	<i>Cleistanthus sumatranus</i> (Miq.) Muell.- Arg.
408	<i>Cleistanthus tonkinensis</i> Jabl.
409	<i>Cnemosia javanica</i> Blume
410	<i>Croton tiglium</i> L
411	<i>Croton tonkinense</i> Gagnep.
412	<i>Deutzianthus tonkinensis</i> Gagnep.
413	<i>Drypetes boaensis</i> Gagnep.
414	<i>Drypetes perreticulata</i> Gagnep.
415	<i>Endospermum chinense</i> Benth.
416	<i>Euphorbia hirta</i> L
417	<i>Euphorbia hypericifolia</i> L.
418	<i>Euphorbia parviflora</i> L.
419	<i>Euphorbia thymifolia</i> L.
420	<i>Excoecaria cochinchinensis</i> Lour.
421	<i>Flueggea virosa</i> (Roxb. ex Willd.) Voigt.
422	<i>Glochidion hirsutum</i> (Roxb.) Voigt
423	<i>Glochidion lanceolarium</i> (Roxb.) Voigt.
424	<i>Glochidion lutescens</i> Blume
425	<i>Glochidion zeylanicum</i> A. Juss.
426	<i>Homonoia riparia</i> Lour.
427	<i>Jatropha curcas</i> L.
428	<i>Jatropha multifida</i> L.
429	<i>Macaranga auriculata</i> (Merr.) Airy.- Shaw
430	<i>Macaranga balansae</i> Gagnep.
431	<i>Macaranga denticulata</i> (Blume) Muell.-Arg.
432	<i>Mallotus apelta</i> (Lour.) Muell.-Arg.
433	<i>Mallotus barbatus</i> Muell.-Arg.
434	<i>Mallotus contubernalis</i> Hance
435	<i>Mallotus hookerianus</i> (Seem.) Muell.- Arg
436	<i>Mallotus mollissimus</i> (Geisel.) Airy- Shaw
437	<i>Mallotus paniculatus</i> (Lamk.) Muell.-Arg.
438	<i>Mallotus philippinensis</i> (Lamk.) Muell.- Arg.
439	<i>Phyllanthus amarus</i> Schum
440	<i>Phyllanthus emblica</i> L.
441	<i>Phyllanthus lativenius</i> (Croiz.) Thin
442	<i>Phyllanthus petelotii</i> Croiz.
443	<i>Phyllanthus reticulatus</i> Poir.
444	<i>Phyllanthus urinaria</i> L.
445	<i>Phyllanthus virgatus</i> Forst. & Forst. f.
446	<i>Ricinus communis</i> L.
447	<i>Sapium baccatum</i> Roxb.
448	<i>Sapium discolor</i> (Champ. ex Benth.) Muell.-Arg.

No	Scientific name
449	<i>Sapium rotundifolium</i> Hemsl.
450	<i>Sapium sebiferum</i> (L.) Roxb.
451	<i>Sauropus andrognus</i> (L.) Merr.
452	<i>Strophoblachia fimbriicalyx</i> Boerl.
453	<i>Strophoblachia fimbriicalyx</i> Boerl. var. <i>glandusa</i> (Pax) Thin & Duc
454	<i>Trewia nudiflora</i> L.
455	<i>Trigonostemon thyrsoides</i> Stapf
456	<i>Vernicia montana</i> Lour.
	<b>74. Fabaceae</b>
457	<i>Crotalaria chinensis</i> L.
458	<i>Crotalaria ferruginea</i> Grah. ex Benth.
459	<i>Crotalaria juncea</i> L.
460	<i>Dalbergia assamica</i> Benth.
461	<i>Dalbergia rimosa</i> Roxb.
462	<i>Dalbergia stipulacea</i> Roxb.
463	<i>Dendrolobium triangulare</i> (Retz.) Schindl.
464	<i>Derris marginata</i> (Roxb.) Benth.
465	<i>Derris tonkinensis</i> Gagnep.
466	<i>Desmodium gangeticum</i> (L.) DC.
467	<i>Desmodium heterocarpon</i> (L.) DC.
468	<i>Desmodium heterocarpon</i> (L.) DC. var. <i>strigosum</i> Meeuwen
469	<i>Desmodium heterocarpon</i> (L.) DC. var. <i>ovalifolium</i> (Prain) Ohashi
470	<i>Desmodium heterophyllum</i> (Willd.) DC.
471	<i>Desmodium styracifolium</i> (Osbeck) Merr.
472	<i>Desmodium trifolium</i> (L.) DC.
473	<i>Desmodium velutinum</i> (Willd.) DC.
474	<i>Erythrina stricta</i> Roxb.
475	<i>Flemingia macrophylla</i> (Willd.) Prain
476	<i>Indigofera galeoides</i> DC.
477	<i>Indigofera hirsuta</i> L.
478	<i>Indigofera tinctoria</i> L.
479	<i>Millettia ichthyochtona</i> Drake
480	<i>Millettia pachyloba</i> Drake
481	<i>Millettia pulchra</i> (Colebr. ex Benth.) Kurz
482	<i>Mucuna hainanensis</i> Hayata
483	<i>Ormosia balansae</i> Drake
484	<i>Ormosia fordiana</i> Oliv.
485	<i>Ormosia pinnata</i> (Lour.) Merr.
486	<i>Pueraria montana</i> (Lour.) Merr.
487	<i>Pueraria phaseoloides</i> (Roxb.) Benth.
488	<i>Pycnospora lutescens</i> (Poir.) Schindl.
489	<i>Uraria crinita</i> (L.) Desv.
490	<i>Uraria lagopodioides</i> (L.) Desv.
	<b>75. Fagaceae</b>
491	<i>Castanopsis fissooides</i> Chun & Huang
492	<i>Castanopsis indica</i> (Roxb.) A. DC.
493	<i>Castanopsis tonkinensis</i> Seem.
494	<i>Lithocarpus bacciangensis</i>
495	<i>Lithocarpus balansae</i> (Drake) A. Camus
496	<i>Lithocarpus bonnetii</i> (Hickel & A. Camus) A. Camus
497	<i>Lithocarpus magneinii</i> (Hickel & A. Camus) A. Camus
498	<i>Lithocarpus pseudosundaicus</i> (Hickel & A. Camus) A. Camus
499	<i>Lithocarpus tubulosus</i> (Hickel & A. Camus) A. Camus

No	Scientific name
500	<i>Quercus glauca</i> Thunb.
501	<i>Quercus helferiana</i> A. DC.
	<b>76. Flacourtiaceae</b>
502	<i>Flacourtia indica</i> (Burm. f.) Merr.
503	<i>Flacourtia rukam</i> Zoll. & Mor
504	<i>Homalium ceylanicum</i> (Gardn.) Benth.
505	<i>Homalium cochinchinensis</i> (Lour.) Druke
506	<i>Hydnocarpus hainanensis</i> (Merr.) Sleum
507	<i>Scolopia chinensis</i> (Lour.) Clos
	<b>77. Gesneriaceae</b>
508	<i>Beccarinda tonkinensis</i> (Pell.) Burtt
509	<i>Chirita colaniae</i> Pell.
510	<i>Chirita corniculata</i> Pell.
511	<i>Chirita ebenhardtii</i> Pellegr.
512	<i>Loxostigma griffithii</i> (Wight) C. B. Clarke
513	<i>Losionotus serratus</i> D. Don
514	<i>Paraboea martinii</i> (Levl.) Burtt
	<b>78. Haloragaceae</b>
515	<i>Myriophyllum tetradrum</i> Roxb.
	<b>79. Hernandiaceae</b>
516	<i>Illigera celebrica</i> Miq.
517	<i>Illigera parviflora</i> Dunn
	<b>80. Hippocastanaceae</b>
518	<i>Aesculus assamica</i> Griff.
	<b>81. Icacinaceae</b>
519	<i>Gomphandra mollis</i> Merr.
520	<i>Gomphandra tetrandra</i> (Wall.) Slem
521	<i>Ioides cirrhosa</i> Turcz.
522	<i>Ioides vitiginea</i> (Hance) Hemsl.
523	<i>Nothapodytes minutiflora</i> J. Villier
524	<i>Platea latifolia</i> Blume
	<b>82. Illiciaceae</b>
525	<i>Illicium difengpi</i> B. N. Chang
526	<i>Illicium macranthum</i> A. C. Smith
	<b>83. Iteaceae</b>
527	<i>Itea chinensis</i> Hook. & Arn.
	<b>84. Juglandaceae</b>
528	<i>Annamocarya sinensis</i> (Dode) Leroy
529	<i>Carya tonkinensis</i> Lecomte
530	<i>Engelhardtia roxburghiana</i> Wall.
531	<i>Engelhardtia spicata</i> Lesch. ex Blume
532	<i>Platycarya strobilacea</i> Sieb. & Zucc.
533	<i>Pterocarya stenoptera</i> C. DC
534	<i>Pterocarya stenoptera</i> C. DC var. <i>tonkinensis</i> Franch.
	<b>85. Lamiaceae</b>
535	<i>Agastache rugosa</i> (Fisch. et May.) Kuntze
536	<i>Ajuga macrosperma</i> Wall.
537	<i>Anisomeles indica</i> (L.) Kuntze
538	<i>Basilicum polystachyon</i> (L.) Moench
539	<i>Clinopodium gracile</i> (Benth.) Matsum.
540	<i>Elsholtzia blanda</i> (Benth.) Benth.
541	<i>Isodon walkeri</i> (Arn.) Hara
542	<i>Leunurus japonicus</i> Hoult.

No	Scientific name
543	<i>Mosla cavalierei</i> Levl.
544	<i>Ocimum basilicum</i> L.
545	<i>Ocimum gratissimum</i> L.
546	<i>Orthosiphon marmoritis</i> (Hance) Dunn
547	<i>Perilla frutescens</i> (L.) Britt
548	<i>Pogostemon auricularius</i> (L.) Hassk.
549	<i>Salvia plebeia</i> R. Br.
550	<i>Stachys oblongifolia</i> Wall.
551	<i>Teucrium viscidum</i> Blume
	<b>86. Lauraceae</b>
552	<i>Actinodaphne pilosa</i> (Lour.) Merr.
553	<i>Beilschmiedia balansae</i> Lecomte
554	<i>Beilschmiedia intermedia</i> Allen
555	<i>Caryodaphnopsis tonkinensis</i> (Lecomte) Aity-Show
556	<i>Cassytha filiformis</i> L.
557	<i>Cinnadenia paniculata</i> (Hook. f.) Kosterm.
558	<i>Cinnamomum bejolghota</i> (Buch.-Ham. ex Nees) Sweet
559	<i>Cinnamomum camphora</i> (L.) Presl.
560	<i>Cinnamomum iners</i> Reinw. ex Blume
561	<i>Cinnamomum parthenoxylon</i> (Jack.) Meisn
562	<i>Cryptocarya caesia</i> Blume
563	<i>Lindera metcalfiana</i> Allen
564	<i>Lindera tonkinensis</i> Lecomte
565	<i>Litsea baviensis</i> Lecomte
566	<i>Litsea cubeba</i> (Lour.) Pers.
567	<i>Litsea glutinosa</i> (Lour.) C. B. Robins.
568	<i>Litsea monopetala</i> (Roxb.) Pers.
569	<i>Litsea rotundifolia</i> (Wall. ex Nees) Hemsl.
570	<i>Machilus odoratissima</i> Nees
571	<i>Neolitsea confertifolia</i> (Hemsl.) Merr.
572	<i>Phoebe cuneata</i> Blume
573	<i>Phoebe lanceolata</i> (Wall. ex Nees) Nees
574	<i>Phoebe tavoyana</i> (Meisn.) Hook. f.
	<b>87. Leeaceae</b>
575	<i>Leea indica</i> (Burm. f.) Merr
	<b>88. Lentibulariaceae</b>
576	<i>Utricularia aurea</i> Lour.
	<b>89. Loganiaceae</b>
577	<i>Gelsemium elegans</i> (Gardn. & Champ.) Benth
578	<i>Strychnos ignatii</i> Berg.
579	<i>Strychnos umbellata</i> (Lour.) Merr.
580	<i>Strychnos wallichiana</i> Gagnep.
	<b>90. Loranthaceae</b>
581	<i>Helixanthera parasitica</i> Lour.
582	<i>Macrosolen cochinchinensis</i> (Lour.) Blume
	<b>91. Lythraceae</b>
583	<i>Lagerstroemia venusta</i> Wall. ex C. B. Clarke
584	<i>Lagerstroemia indica</i> L.
585	<i>Lawsonia inermis</i> L.
586	<i>Rotala rosea</i> (Poir.) Cook
	<b>92. Magnoliaceae</b>
587	<i>Magnolia coco</i> (Lour.) DC.
588	<i>Manglietia conifera</i> Dandy

No	Scientific name
589	<i>Manglietia dandyi</i> (Gagnep.) Dandy
590	<i>Manglietia fordiana</i> Oliv
591	<i>Michelia balansae</i> (A. DC.) Dandy
592	<i>Paramichelia baillonii</i> (Pierre) Hu
	<b>93. Malvaceae</b>
593	<i>Abelmoschus moschatus</i> Medik.
594	<i>Abutilon indicum</i> (L.) Sweet
595	<i>Gossypium barbadense</i> L.
596	<i>Hibiscus mutabilis</i> L.
597	<i>Hibiscus rosa-sinensis</i> L.
598	<i>Kydia calycina</i> Roxb.
599	<i>Sida acuta</i> Burm. f.
600	<i>Sida rhombifolia</i> L.
601	<i>Urena lobata</i> L.
	<b>94. Melastomataceae</b>
602	<i>Blastus cochinchinensis</i> Lour.
603	<i>Medinilla assamica</i> (C. B. Clarke) C. Chen
604	<i>Melastoma candidum</i> D. Don, 1832
605	<i>Memecylon edule</i> Roxb.
606	<i>Memecylon scutellatum</i> (Lour.) Naud.
607	<i>Osbeckia chinensis</i> L.
608	<i>Osbeckia chinensis</i> L. var. <i>angustifolia</i> (D. Don) C. Y. Wu & Chen
609	<i>Pseudodissochaeta assamica</i> (C. B. Clarke) Nayar
	<b>95. Meliaceae</b>
610	<i>Aglaiia perviridis</i> Hiern
611	<i>Aglaiia spectabilis</i> (Miq.) Jain. & Bennet.
612	<i>Aphanamixis grandiflora</i> Blume
613	<i>Chisocheton paniculatus</i> Hiern.
614	<i>Chukrasia tabularis</i> A. Juss.
615	<i>Cipadessa baccifera</i> (Roth.) Miq.
616	<i>Dysoxylum hainanensis</i> Merr.
617	<i>Melia azedarach</i> L.
618	<i>Toona surenii</i> (Blume) Merr
619	<i>Trichilia connaroides</i> (Wingt & Arn.) Benth
620	<i>Walsura cochinchinensis</i> (Baill.) Harms
621	<i>Walsura robusta</i> Roxb.
	<b>96. Menispermaceae</b>
622	<i>Cissampelos pareira</i> L. var. <i>hirsuta</i> (Buch.- Ham. ex DC.) Forman
623	<i>Cyclea tonkinensis</i> Gagnep.
624	<i>Pericampylus glaucus</i> (Lamk.) Merr.
625	<i>Stephania brachyandra</i> Diels.
626	<i>Stephania cepharantha</i> Hayata
627	<i>Stephania dielsiana</i> Y. C. Wu
628	<i>Stephania hernandifolia</i> Spreng
629	<i>Stephania rotunda</i> Lour.
630	<i>Tinospora crispa</i> (L.) Miers
	<b>97. Mimosaceae</b>
631	<i>Acacia caesia</i> (L.) Willd. var. <i>subnuda</i> (Craib.) I. Nielsen
632	<i>Acacia farnesiana</i> (L.) Willd.
633	<i>Acacia pennata</i> (L.) Willd. ssp. <i>hainanensis</i> (hayata) I. Nielsen
634	<i>Adenanthera microsperma</i> Teysm. & Binn.
635	<i>Albizia chinensis</i> (Osb.) Benth.
636	<i>Albizia lebbekoides</i> (DC.) Benth.



No	Scientific name
637	<i>Albizia lucidior</i> (Steud.) Niel.
638	<i>Archidendron chypearia</i> (Jack) I. Nielsen
639	<i>Archidendron lucidum</i> (Benth.) I. Nielsen
	<b>98. Moraceae</b>
640	<i>Antiaris toxicaria</i> (Pers.) Lesch.
641	<i>Artocarpus heterophyllus</i> Lamk.
642	<i>Artocarpus tonkinensis</i> A. Chev. ex Gagnep.
643	<i>Broussonettia kakinoki</i> Sieb.
644	<i>Broussonettia papyrifera</i> (L.) Vent.
645	<i>Ficus altissima</i> Bl.
646	<i>Ficus annulata</i> Blume
647	<i>Ficus auriculata</i> Lour.
648	<i>Ficus callosa</i> Willd.
649	<i>Ficus fulva</i> Reinw. ex Blume
650	<i>Ficus fulva</i> Reinw. ex Blume var. <i>minor</i> King
651	<i>Ficus glaberima</i> Blume
652	<i>Ficus glandulifera</i> Wall.
653	<i>Ficus heterophylla</i> L.
654	<i>Ficus hirta</i> Vahl.
655	<i>Ficus hispida</i> L. f.
656	<i>Ficus lacor</i> Buch.- Ham.
657	<i>Ficus lamponga</i> Miq.
658	<i>Ficus langkongensis</i> Drake
659	<i>Ficus obscura</i> Blume
660	<i>Ficus microcarpa</i> L. f.
661	<i>Ficus racemosa</i> L.
662	<i>Ficus tinctoria</i> Forst. f.
663	<i>Ficus vasculosa</i> Wall. ex Miq.
664	<i>Maclura cochinchinensis</i> (Lour.) Corn.
665	<i>Streblus asper</i> Lour.
666	<i>Streblus illicifolius</i> (Vidal) Corn.
667	<i>Streblus macrophyllus</i> Blume
668	<i>Streblus tonkinensis</i> (Dub. & Eberh.) Corn
	<b>99. Myristicaceae</b>
669	<i>Horsfieldia amygdalina</i> (Wall.) Warb.
670	<i>Knema globularia</i> (Lamk.) Warb.
671	<i>Knema tonkinensis</i> (Warb.) De Wilde
	<b>100. Myrsinaceae</b>
672	<i>Ardisia gigantifolia</i> Stapf.
673	<i>Ardisia nerrifolia</i> Pitard.
674	<i>Ardisia obtusa</i> Mez
675	<i>Ardisia quinqueгона</i> Blume
676	<i>Ardisia silvestris</i> Pitard.
677	<i>Ardisia virens</i> Kurz.
678	<i>Embelia laeta</i> (L.) Mez.
679	<i>Embelia ribes</i> Burm. f.
680	<i>Maesa balansae</i> Mez
681	<i>Maesa tomentella</i> Mez
682	<i>Myrsine seguinii</i> Levl.
	<b>101. Myrtaceae</b>
683	<i>Baeckea frutescens</i> L.
684	<i>Cleistocalyx operculatus</i> (Roxb.) Merr. & Perry
685	<i>Decaspermum parviflorum</i> (Lamk.) J. Scott.

No	Scientific name
686	<i>Melaleuca leucadendra</i> L.
687	<i>Psidium guajava</i> L.
688	<i>Rhodomyrtus tomentosa</i> (Ait) Hassk.
689	<i>Syzygium buxiflorum</i> Hook. et Arn.
690	<i>Syzygium cuminii</i> (L.) Skells
691	<i>Syzygium odoratum</i> (Lour.) DC.
	<b>102. Oleaceae</b>
692	<i>Fraxinus griffithii</i> C. B. Clarke
693	<i>Jasminum adenophyllum</i> Wall. ex A. DC.
694	<i>Jasminum coarctatum</i> Roxb.
695	<i>Jasminum nervosum</i> Lour.
696	<i>Jasminum subtriplinerve</i> Blume
697	<i>Olea dentata</i> Wall.
	<b>103. Onagraceae</b>
698	<i>Ludwigia adscendens</i> (L.) Hara
699	<i>Ludwigia octovalvis</i> (Jacq.) Raven
	<b>104. Opiliaceae</b>
700	<i>Melientha suavis</i> Pierre
	<b>105. Oxalidaceae</b>
701	<i>Averrhoa carambola</i> L.
702	<i>Biophytum sensitivum</i> (L.) DC
703	<i>Oxalis corniculata</i> L.
	<b>106. Passifloraceae</b>
704	<i>Adenia heterophylla</i> (Blume) Kood.
705	<i>Passiflora foetida</i> L.
	<b>107. Piperaceae</b>
706	<i>Peperomia pellucida</i> (L.) H.B.K.
707	<i>Piper betle</i> L.
708	<i>Piper bonii</i> A. DC.
709	<i>Piper hainanense</i> Hemsl.
710	<i>Piper lolot</i> C. DC.
	<b>108. Plantaginaceae</b>
711	<i>Plantago major</i> L.
	<b>109. Plantanaceae</b>
712	<i>Platanus kerrii</i> Gagnep.
	<b>110. Polygonaceae</b>
713	<i>Fallopia multiflora</i> (Thunb.) Haraldson
714	<i>Polygonum alatum</i> Buch.- Ham. ex D. Don
715	<i>Polygonum barbatum</i> L.
716	<i>Polygonum chinense</i> L.
717	<i>Polygonum hydropiper</i> L.
718	<i>Polygonum lapathifolium</i> L.
719	<i>Polygonum minus</i> Huds
720	<i>Polygonum perfoliatum</i> L.
721	<i>Polygonum tinctorium</i> Ait.
722	<i>Renoutria javanica</i> Houltt.
723	<i>Rumex wallichii</i> Meisn.
	<b>111. Potaliaceae</b>
724	<i>Fagraea ceilanica</i> Thunb.
725	<i>Fagraea fragrans</i> Roxb.
	<b>112. Portulacaceae</b>
726	<i>Portulaca oleracea</i> L.

No	Scientific name
	<b>113. Proteaceae</b>
727	<i>Helicia cochinchinensis</i> Lour.
728	<i>Helicia formosana</i> Hemsl.
729	<i>Heliciopsis lobata</i> (Merr.) Sleum
	<b>114. Ranunculaceae</b>
730	<i>Clematis armandi</i> Franch.
731	<i>Clematis granulata</i> (Fin. & Gagnep.) Ohwi
732	<i>Clematis smilacifolia</i> Wall.
733	<i>Ranunculus diffusus</i> DC.
	<b>115. Rhamnaceae</b>
734	<i>Alphitonia philippinensis</i> Braid
735	<i>Berchemia lineata</i> DC.
736	<i>Gouania javanica</i> Miq.
737	<i>Gouania leptostachya</i> DC.
738	<i>Paliurus ramosissimus</i> Poir.
739	<i>Rhamnus crenata</i> Sieb. & Zucc. var. <i>cambodiana</i> (Pierre ex Pitard) Tardieu
740	<i>Rhamnus longipes</i> Merr. & Chun
741	<i>Sageretia theezans</i> Brongn.
742	<i>Ventilago calyculata</i> Tul.
743	<i>Ventilago pauciflora</i> Pitard
744	<i>Ziziphus oneoplia</i> (L.) Mill.
	<b>116. Rhizophoraceae</b>
745	<i>Carallia lanceaefolia</i> Roxb.
746	<i>Carallia diplopetala</i> Hand.-Mazz.
	<b>117. Rosaceae</b>
747	<i>Duchesnea indica</i> (Andr.) Focke
748	<i>Eriobotrya bengalensis</i> (Roxb.) Hook. f.
749	<i>Eriobotrya serrata</i> J. E. Vidal
750	<i>Photinia benthamiana</i> Hance
751	<i>Photinia prunifolia</i> (Hook. et Arn.) Lindl.
752	<i>Prunus arborea</i> (Blume) Kalkm.
753	<i>Prunus persica</i> (L.) Batsch.
754	<i>Raphiolepis indica</i> (L.) Lindl.
755	<i>Rubus alcaefolius</i> Poir.
756	<i>Rubus cochinchinensis</i> Tratt.
757	<i>Rubus leucantha</i> Hance
758	<i>Rubus moluccanus</i> L. var. <i>angulosus</i> Kalkm.
759	<i>Rubus parvifolius</i> L.
760	<i>Rubus rugosus</i> Smith
	<b>118. Rubiaceae</b>
761	<i>Adina pilulifera</i> (Lamk.) Franch. ex Drake
762	<i>Borreria hispida</i> (L.) K. Schum.
763	<i>Canthium dicoccum</i> (Gaertn.) Teysm. & B
764	<i>Canthium parvifolium</i> Roxb.
765	<i>Duperrea pavettaefolia</i> (Kurz) Pitard
766	<i>Hedyotis biflora</i> (L.) Lamk.
767	<i>Hedyotis capitellata</i> Wall ex G. Don
768	<i>Hedyotis corymbosa</i> (L.) Lamk.
769	<i>Hedyotis diffusa</i> Willd.
770	<i>Hedyotis simplicissima</i> (Lour.) Merr.
771	<i>Hymenodictyon orixense</i> (Roxb.) Mabb.
772	<i>Ixora chinensis</i> Lamk.
773	<i>Ixora coccinea</i> L.

No	Scientific name
774	<i>Ixora diversifolia</i> Wall. ex Hook. f.
775	<i>Morinda citrifolia</i> L.
776	<i>Morinda officinalis</i> How
777	<i>Mussaenda cambodiana</i> Pierre ex Pitard
778	<i>Mussaenda debiscens</i> Craib
779	<i>Mussaenda frondosa</i> L.
780	<i>Ophiorrhiza cantoniensis</i> Hance
781	<i>Paederia scandens</i> (Lour.) Merr.
782	<i>Pavetta indica</i> L.
783	<i>Psychotria rubra</i> (Lour.) Poir.
784	<i>Randia spinosa</i> (Thunb.) Poir.
785	<i>Uncaria homomala</i> Miq.
786	<i>Uncaria macrophylla</i> Wall. ex Roxb.
787	<i>Uncaria sessilifructus</i> Roxb.
788	<i>Wendlandia glabrata</i> DC.
789	<i>Wendlandia laotica</i> Pitard
790	<i>Wendlandia paniculata</i> (Roxb.) DC.
791	<i>Wendlandia tinctoria</i> (Roxb.) DC.
	<b>119. Rutaceae</b>
792	<i>Acronychia pedunculata</i> (L.) Miq.
793	<i>Clausena anisata</i> (Walld.) Hook. f. ex Benth.
794	<i>Clausena excava</i> Burm.
795	<i>Clausena harmandiana</i> Pierre ex Guillaum
796	<i>Clausena lasinum</i> (Lour.) Skeels
797	<i>Euodia leptota</i> (Spreng.) Merr.
798	<i>Euodia meliaefolia</i> Benth.
799	<i>Glycosmis pentaphylla</i> (Retz.) Correa
800	<i>Micromelum minutum</i> (Forst.) Wight. & Arn.
801	<i>Murraya koenigii</i> (L.) Spreng.
802	<i>Murraya paniculata</i> (L.) Jack
803	<i>Tetradium franxinifolium</i> (Hook.) Hartl.
804	<i>Zanthoxylum avicennae</i> (Lami.) DC.
805	<i>Zanthoxylum nitidum</i> (Roxb.) DC.
	<b>120. Sabiaceae</b>
806	<i>Meliosma dolichobotrys</i> Merr.
807	<i>Meliosma pinnata</i> (Roxb.) Walpers
808	<i>Meliosma simplicifolia</i> (Roxb.) Walp.
	<b>121. Santalaceae</b>
809	<i>Dendrotrophe frutescens</i> (Benth.) Dans.
	<b>122. Sapindaceae</b>
810	<i>Allophylus candatus</i> Radlk.
811	<i>Cardiospermum halicacabum</i> L.
812	<i>Dimocarpus fumatus</i> (Blume) Leenh.
813	<i>Lepisanthes tetraphylla</i> (Vahl) Radlk
814	<i>Nepheleium lappaceum</i> L.
815	<i>Paranepheleium spirei</i> Lecomte
816	<i>Paviesia annamensis</i> Pierre
817	<i>Pometia pinnata</i> Forst. & Forst. f
818	<i>Pometia pinnata</i> Forst. & Forst. f. var. <i>tomentosa</i> (Blume) Jacobs
	<b>123. Sapotaceae</b>
819	<i>Planchonella annamensis</i> Pierre ex Dub.
820	<i>Sarcosperma lauriana</i> (Benth.) Hook. f.

No	Scientific name
	<b>124. Sargentodoxaceae</b>
821	<i>Sargentodoxa cuneata</i> (Oliv.) Rehd. & Wils.
	<b>125. Saururaceae</b>
822	<i>Houttuynia cordata</i> Thunb.
823	<i>Saururus chinensis</i> Baill.
	<b>126. Schisandraceae</b>
824	<i>Kadsura heteroclita</i> (Roxb.) Craib
	<b>127. Scrophulariaceae</b>
825	<i>Adenosma caeruleum</i> R. Br.
826	<i>Limnophila rugosa</i> (Roth) Merr.
827	<i>Lindenbergia philippensis</i> (Champ.) Bruhl
828	<i>Lindernia anagallis</i> (Burm. f.) Penn.
829	<i>Lindernia ciliata</i> (Colsm.) Penn.
830	<i>Lindernia micrantha</i> D. Don
831	<i>Lindernia mollis</i> (Benth.) Wettst.
832	<i>Paulownia fortunei</i> (Seem.) Hemsl.
833	<i>Scoparia dulcis</i> L.
834	<i>Torenia asiatica</i> L.
	<b>128. Simaroubaceae</b>
835	<i>Ailanthus triphysa</i> (Dennst.) Alston
836	<i>Eurycoma longifolia</i> Jack.
837	<i>Picrasma javanica</i> Blume
	<b>129. Solanaceae</b>
838	<i>Capsicum frutescens</i> L.
839	<i>Lycopersicon esculentum</i> Mill.
840	<i>Physalis argulata</i> L.
841	<i>Solanum erianthum</i> D. Don
842	<i>Solanum nigrum</i> L.
843	<i>Solanum torvum</i> Sw.
	<b>130. Sonnetiaceae</b>
844	<i>Duabanga grandiflora</i> (Roxb. ex DC.) Walp.
	<b>131. Staphyleaceae</b>
845	<i>Tapiscia sinensis</i> Oliv.
846	<i>Turpinia cochinchinensis</i> (Lour.) Merr.
847	<i>Turpinia montana</i> (Blume) Kurz
848	<i>Turpinia pomifer</i> (Roxb.) DC.
	<b>132. Sterculiaceae</b>
849	<i>Aboma argusta</i> (L.) L. f.
850	<i>Byttneria aspera</i> Colebr
851	<i>Commersonia platyphylla</i> Andr.
852	<i>Eriolaena candollei</i> Wall.
853	<i>Firmiana simplex</i> (L.) W. Wight.
854	<i>Helicteres angustifolia</i> L.
855	<i>Helicteres hirsuta</i> Lour.
856	<i>Pterospermum heterophyllum</i> Hance
857	<i>Pterospermum lancaefolium</i> Roxb.
858	<i>Pterospermum truncatolobatum</i> Gagnep.
859	<i>Reevesia thyrsoides</i> Lindl.
860	<i>Sterculia coccinea</i> Roxb.
861	<i>Sterculia henryi</i> Hemsl.
862	<i>Sterculia hymenocalyx</i> K. Schum
863	<i>Sterculia lanceolata</i> Cav.
864	<i>Sterculia nobilis</i> Smith

No	Scientific name
865	<i>Sterculia parviflora</i> Roxb
	<b>133. Styracaceae</b>
866	<i>Styrax tonkinensis</i> (Pierre) Crai. ex Hartw
	<b>134. Symplocaceae</b>
867	<i>Symplocos cochinchinensis</i> (Lour.) S. Moore
	<b>135. Theaceae</b>
868	<i>Adinandra megaphylla</i> Hu.
869	<i>Camellia sasanqua</i> Thunb.
870	<i>Eurya cerasifolia</i> (D. Don) Kobuski
871	<i>Eurya japonica</i> Thunb.
872	<i>Schima superba</i> Gard. & Champ.
873	<i>Schima wallichii</i> (DC.) Korth.
	<b>136. Thymelaeaceae</b>
874	<i>Wikstroemia indica</i> (L.) C. A. Meg.
	<b>137. Tiliaceae</b>
875	<i>Colona floribunda</i> (Kurz) Craib.
876	<i>Colona poilanei</i> Gagnep.
877	<i>Corchorus aestuans</i> L.
878	<i>Excentrodendron tonkinense</i> (Gagnep.) Chang & Miao
879	<i>Grewia asiatica</i> L.
880	<i>Grewia eriocarpa</i> Juss.
881	<i>Grewia hirsuta</i> Vahl
882	<i>Grewia paniculata</i> Roxb.
883	<i>Microcos paniculata</i> L.
884	<i>Triumfetta pseudocana</i> Sprague & Craib
885	<i>Triumfetta rhomboidea</i> Jacq.
	<b>138. Trapaceae</b>
886	<i>Trapa bicornis</i> Osbeck var. <i>cochinchinensis</i> (Lour.) Gluck. ex Steen.
	<b>139. Ulmaceae</b>
887	<i>Aphananthe lissophylla</i> Gagnep.
888	<i>Celtis sinensis</i> Pers.
889	<i>Gironniera subaequalis</i> Planch.
890	<i>Trema orientalis</i> (L.) Blume
891	<i>Trema tomentosa</i> (Roxb.) Hara
	<b>140. Urticaceae</b>
892	<i>Boehmeria holosericea</i> Blume
893	<i>Boehmeria nivea</i> (L.) Gaudich.
894	<i>Boehmeria malabarica</i> Wall. ex Wedd.
895	<i>Boehmeria tonkinensis</i> Gagnep.
896	<i>Debregeasia squamata</i> King ex Hook f.
897	<i>Dendrocnide sinuata</i> (Blume) Chew.
898	<i>Dendrocnide stimulans</i> (L. f.) Chew.
899	<i>Dendrocnide urentissima</i> (Gagnep.) Chew.
900	<i>Elatostema rupestre</i> (Buch.-Ham.) Wedd.
901	<i>Laportea interrupta</i> (L.) Chew
902	<i>Laportea violacea</i> Gagnep.
903	<i>Oreocnide tonkinensis</i> (Gagnep.) Merr. & Chun
904	<i>Parietaria micrantha</i> Ledeb.
905	<i>Pellionia backanensis</i> Gagnep.
906	<i>Pellionia repens</i> (Lour.) Merr.
907	<i>Pellionia tonkinensis</i> Gagnep.
908	<i>Petelotiella tonkinensis</i> (Gagnep.) Gagnep.
909	<i>Pilea boniana</i> Gagnep.

No	Scientific name
910	<i>Pilea hookeriana</i> Wedd.
911	<i>Pilea peltata</i> Hance
912	<i>Pouzolzia sanguinea</i> (Blume) Merr.
	<b>141. Verbenaceae</b>
913	<i>Callicarpa arborea</i> Roxb
914	<i>Callicarpa candicans</i> (Burm. f.) Hochr.
915	<i>Callicarpa dichotoma</i> (Lour.) Raeusch.
916	<i>Callicarpa marophylla</i> Vahl
917	<i>Callicarpa nudiflora</i> Hook. et Arn.
918	<i>Clerodendrum cyrtophyllum</i> Turz.
919	<i>Clerodendrum chinense</i> (Osb.) Mabb.
920	<i>Clerodendrum japonicum</i> (Thunb.) Sweet
921	<i>Clerodendrum tonkinense</i> Dop
922	<i>Lantana camara</i> L.
923	<i>Premna corymbosa</i> (Burm. f.) Rottl. & Willd.
924	<i>Stachytarpheta jamaicensis</i> (L.) Vahl
925	<i>Verbena officinalis</i> L.
926	<i>Vitex quinata</i> (Lour.) Williams
927	<i>Vitex trifolia</i> L. f.
	<b>142. Vitaceae</b>
928	<i>Ampelopsis cantoniensis</i> (hook. & Arn.) Planch.
929	<i>Ampelopsis heterophylla</i> (Thunb.) Sieb. & Zucc.
930	<i>Cayratia japonica</i> (Thunb.) Gagnep.
931	<i>Cissus hastata</i> Planch.
932	<i>Cissus triloba</i> (Lour.) Merr.
933	<i>Parthenocissus heterophylla</i> (Blume) Merr.
934	<i>Tetrastigma planicaule</i> (Hook. f.) Gagnep.
935	<i>Tetrastigma retinervium</i> Planch.
936	<i>Tetrastigma tonkinense</i> Gagnep.
937	<i>Vitis balansae</i> Panch.
	LILIOPSIDA
	<b>143. Alismataceae</b>
938	<i>Sagittaria trifolia</i> L. var. <i>angustifolia</i> (Sieb.) Kitagawa
	<b>144. Araceae</b>
939	<i>Acorus calamus</i> L.
940	<i>Acorus gramineus</i> Soland.
941	<i>Alocasia cucullata</i> (Lour.) Schott
942	<i>Amorphophalus Paeoniifolius</i> (Dennst.) Nicolson var. <i>campanulatus</i> (Decne.) Sivadasan
943	<i>Amorphophalus tonkinensis</i> Engl. & Gehr
944	<i>Arisaema balansae</i> Engl.
945	<i>Epipremnum pinnatum</i> (L.) Engl.
946	<i>Homalomena occulta</i> (Lour.) Schott.
947	<i>Pistia stratiotes</i> L.
948	<i>Pothos chinensis</i> (Raf.) Merr.
949	<i>Pothos repens</i> (Lour.) Druce
950	<i>Rhaphidophora decursiva</i> (Roxb.) Schott
951	<i>Rhaphidophora hookeri</i> Schott
952	<i>Typhonium blumei</i> Nicol. & Sivad.
953	<i>Typhonium trilobatum</i> (L.) Schott
	<b>145. Arecaceae</b>
954	<i>Arenga pinnata</i> (Wurmb) Merr.
955	<i>Calamus bonianus</i> Becc
956	<i>Calamus palustris</i> Griff. var. <i>cochinbinensis</i> Becc.

No	Scientific name
957	<i>Calamus platyacanthus</i> Warb. ex Becc.
958	<i>Calamus pseudoscutellaris</i> Conrard.
959	<i>Calamus tetradactylus</i> Hance
960	<i>Caryota bacsonensis</i> Magalon
961	<i>Caryota mitis</i> Lour.
962	<i>Licuala tonkinensis</i> Becc.
963	<i>Pinanga baviensis</i> Becc.
964	<i>Rhapis cochinchinensis</i> (Lour.) Mart.
	<b>146. Commelinaceae</b>
965	<i>Commelina bengalensis</i> L.
966	<i>Commelina communis</i> L.
967	<i>Cyanotis papilionacea</i> Roem. & Schult.
968	<i>Murdannia versicolor</i> (Dalz) Bruckn.
969	<i>Pollia thyrsoiflora</i> (Blume) Endl. ex Hassk.
970	<i>Tradescantia spathacea</i> Sw.
971	<i>Tradescantia zebrina</i> Hort. ex Loud.
	<b>147. Costaceae</b>
972	<i>Costus speciosus</i> (Koenig) Smith
973	<i>Costus tonkinensis</i> Gagnep.
	<b>148. Cyperaceae</b>
974	<i>Bulbostylis barbata</i> (Rottb.) C. B. Clarke
975	<i>Carex alopecurioides</i> D. Don
976	<i>Carex anomocarya</i> Nelmes
977	<i>Carex cruciata</i> Wahlenb.
978	<i>Carex cryptostachys</i> Brongn.
979	<i>Carex filicina</i> Nees
980	<i>Carex indica</i> L.
981	<i>Carex maubertiana</i> Boot.
982	<i>Carex nemostachys</i> Steud.
983	<i>Carex oedorhampfa</i> Nelmes
984	<i>Carex sikokiana</i> Franch. & Sav.
985	<i>Cyperus compressus</i> L.
986	<i>Cyperus cuspidatus</i> H.B.K.
987	<i>Cyperus diffusus</i> Vahl
988	<i>Cyperus halpan</i> L.
989	<i>Cyperus imbricatus</i> Retz.
990	<i>Cyperus iria</i> L.
991	<i>Cyperus pilosus</i> Vahl
992	<i>Cyperus rotundus</i> L.
993	<i>Eleocharis tetraquetra</i> Nees
994	<i>Fimbristylis complanata</i> (Retz.) Link.
995	<i>Fimbristylis dichotoma</i> (L.) Vaht.
996	<i>Fimbristylis globulosa</i> (Retz.) Kunth
997	<i>Fimbristylis miliacea</i> (L.) Vahl
998	<i>Fimbristylis rigidula</i> Nees
999	<i>Fimbristylis squarrosa</i> Vahl
1000	<i>Fuirena ciliaris</i> (L.) Roxb.
1001	<i>Hypolytrum nemorum</i> (Vahl) Spreng.
1002	<i>Kyllinga brevifolia</i> Rottb.
1003	<i>Kyllinga nemoralis</i> (Forst. & Forst. f.) Dandy ex Hutch. & Dalz.
1004	<i>Pycnus globosus</i> (All.) Reichb.
1005	<i>Rhynchospora corymbosa</i> (L.) Britt.
1006	<i>Rhynchospora rubra</i> (Lour.) Makino



No	Scientific name
1007	<i>Scripus squarrosus</i> L.
1008	<i>Scleria ciliaris</i> Nees
1009	<i>Scleria levis</i> Retz.
	<b>149. Dioscoreaceae</b>
1010	<i>Dioscorea alata</i> L.
1011	<i>Dioscorea cirrhosa</i> Prain. & Burk.
1012	<i>Dioscorea collettii</i> Hook. f.
1013	<i>Dioscorea persimilis</i> Prain et Burk.
	<b>150. Eriocaulaceae</b>
1014	<i>Eriocaulon merrillii</i> Ruhl. ex Perkins
1015	<i>Eriocaulon sexangulare</i> L.
	<b>151. Hypoxidaceae</b>
1016	<i>Cucurliigo gracilis</i> Wall.
	<b>152. Liliaceae</b>
1017	<i>Dianella ensifolia</i> (L.) DC.
1018	<i>Disporopsis longifolia</i> Craib.
1019	<i>Ophiopogon latifolius</i> Rodr.
1020	<i>Ophiopogon longifolius</i> Decne
1021	<i>Ophiopogon reptans</i> Hook. f.
1022	<i>Ophiopogon tonkinensis</i> Rodr.
	<b>153. Marantaceae</b>
1023	<i>Marantiba arundinacea</i> L.
1024	<i>Phrynium placentarium</i> (Lour.) Merr.
	<b>154. Musaceae</b>
1025	<i>Musa cocinea</i> Andr.
	<b>155. Orchidaceae</b>
1026	<i>Acampe rigida</i> (Buch.- Ham. ex Smith) P.F. Hunt.
1027	<i>Acanthephippium simplex</i> Aver.
1028	<i>Aerides odorata</i> Lour.
1029	<i>Anoectochilus calcareus</i> Aver.
1030	<i>Anoectochilus chapaensis</i> Gagnep.
1031	<i>Anoectochilus daoensis</i> Gagnep.
1032	<i>Anoectochilus ehvesii</i> (Hook.f.) King et Pantl.
1033	<i>Anoectochilus lanceolatus</i> Lindl.
1034	<i>Anoectochilus roxburghii</i>
1035	<i>Apostasia odorata</i> Blume
1036	<i>Arachnis labrosa</i> (Lindl.) Reichb.f.
1037	<i>Arundina graminifolia</i> (D.Don) Hochr.
1038	<i>Bletilla striata</i> (Thunb.) Reichb.f.
1039	<i>Bulbophyllum ambrosia</i> (Hance) Schltr.
1040	<i>Bulbophyllum concinnum</i> Hook. f.
1041	<i>Bulbophyllum insulsum</i> (Gagnep.) Seidenf.
1042	<i>Bulbophyllum laxiflorum</i> (Blume) Lindl.
1043	<i>Bulbophyllum macranthum</i> Lindl.
1044	<i>Bulbophyllum pectinatum</i> Finet
1045	<i>Bulbophyllum reptans</i> (Lindl.) Lindl.
1046	<i>Bulbophyllum stenobulbon</i> Par. et Reichb.f.
1047	<i>Calanthe aleizetii</i> Gagnep.
1048	<i>Calanthe alismifolia</i> Lindl.
1049	<i>Calanthe angusta</i> Lindl.
1050	<i>Calanthe clavata</i> Lindl.
1051	<i>Calanthe herbacea</i> Lindl.
1052	<i>Calanthe triplicata</i> (Willem.) Ames

No	Scientific name
1053	<i>Callostylis rigida</i> Blume
1054	<i>Ceratostylis himalaica</i> Hook.f.
1055	<i>Ceratostylis siamensis</i> Downie
1056	<i>Ceratostylis tonkinensis</i> (Gagnep.) Aver.
1057	<i>Cheirostylis bipunctata</i> Aver.
1058	<i>Cheirostylis yunnanensis</i>
1059	<i>Cleisostoma aspersum</i> (Reichb.f.) Garay
1060	<i>Cleisostoma chapaense</i> (Guillaum.) Garay
1061	<i>Cleisostoma paniculatum</i> (Ker.-Gawl.) Garay
1062	<i>Cleisostoma rostratum</i> (Lodd.) Seidenf.
1063	<i>Cleisostoma scortechinii</i> (Hook.f.) Garay
1064	<i>Cleisostoma striatum</i> (Reichb. f.) Garay
1065	<i>Cleisostoma williamsonii</i> (Reichb.f.) Garay
1066	<i>Coelogyne fimbriata</i> Lindl.
1067	<i>Coelogyne malipoensis</i> Tsi
1068	<i>Colabium chinense</i> (Rolfe) Tang et F.T.Wang
1069	<i>Corymborkis veratrifolia</i> (Reinw.) Blume
1070	<i>Cymbidium aloifolium</i> (L.) Sw.
1071	<i>Cymbidium cyperifolium</i> Lindl.
1072	<i>Cymbidium ensifolium</i> (L.) Sw.
1073	<i>Cymbidium insigne</i> Rolfe
1074	<i>Cymbidium lancifolium</i> Hook.f.
1075	<i>Cymbidium lowianum</i> (Reichb.f.) Reichb.f.
1076	<i>Cyrtosia javanica</i> Blume
1077	<i>Dendrobium acinaciforme</i> Roxb.
1078	<i>Dendrobium aduncum</i> Wall. ex Lindl.
1079	<i>Dendrobium chrysanthum</i> Lindl.
1080	<i>Dendrobium devonianum</i> Paxt.
1081	<i>Dendrobium farmeri</i> Paxt.
1082	<i>Dendrobium fimbriatum</i> Hook.
1083	<i>Dendrobium gibsonii</i> Lindl.
1084	<i>Dendrobium guangxiense</i> S.J. Chang & C.Z.Tang
1085	<i>Dendrobium hancockii</i> Rolfe
1086	<i>Dendrobium henryi</i> Schltr.
1087	<i>Dendrobium lindleyi</i> Steud.
1088	<i>Dendrobium loddigesii</i> Rolfe
1089	<i>Dendrobium longicornu</i> Lindl.
1090	<i>Dendrobium nobile</i> Lindl.
1091	<i>Dendrobium parishii</i> Reichb.f.
1092	<i>Dendrobium pendulum</i> Roxb.
1093	<i>Dendrobium podagraria</i> Hook.f.
1094	<i>Dendrobium thyrsoiflorum</i> Reichb. f.
1095	<i>Dendrobium tortile</i> Lindl.
1096	<i>Dendrobium virgineum</i> Reichb.f.
1097	<i>Dendrobium wardianum</i> Warner
1098	<i>Diplomeris pulchella</i> D.Don
1099	<i>Diploprora championii</i> (Lindl.) Hook.f.
1100	<i>Dipodium paludosum</i> (Griff.) Reichb.f.
1101	<i>Epigeneium amplum</i> (Lindl.) Summerh.
1102	<i>Epigeneium chapaense</i> Gagnep.
1103	<i>Eria amica</i> Reichb.f.
1104	<i>Eria bambusifolia</i> Lindl.
1105	<i>Eria biflora</i> Griff.

No	Scientific name
1106	<i>Eria bilobulata</i> Seidenf.
1107	<i>Eria clausa</i> King et Pantl.
1108	<i>Eria corneri</i> Reichb.f.
1109	<i>Eria coronaria</i> (Lindl.) Reichb.f.
1110	<i>Eria dacrydium</i> Gagnep.
1111	<i>Eria globulifera</i> Seidenf.
1112	<i>Eria lasiopetala</i> (Willd.) Ormerod
1113	<i>Eria paniculata</i> Lindl.
1114	<i>Eria pannea</i> Lindl.
1115	<i>Eria pusilla</i> (Griff.) Lindl.
1116	<i>Eria siamensis</i> Schltr.
1117	<i>Eria thao</i> Gagnep
1118	<i>Erythrodes blumei</i> (Lindl.) Schltr.
1119	<i>Eulophia spectabilis</i> (Dennst.) Suresh
1120	<i>Flickingeria fimbriata</i> (Blume) Hawkes
1121	<i>Flickingeria ritaeana</i> (King & Pantl.) Hawkes
1122	<i>Gastrochilus minutiflorus</i> Aver.
1123	<i>Gastrochilus pseudodistichus</i> (King et Pantl.) Schltr.
1124	<i>Geodorum densiflorum</i> (Lam.) Schltr.
1125	<i>Goodyera foliosa</i> (Lindl.) C.B. Clarke
1126	<i>Goodyera fumata</i> Thwaites
1127	<i>Goodyera procea</i> (Ker.-Gawl.) Hook.
1128	<i>Habenaria acutifera</i> Lindl.
1129	<i>Habenaria dentata</i> (Sw.) Schltr.
1130	<i>Habenaria thailandica</i> Seidenf.
1131	<i>Habenaria tonkinensis</i> Seidenf.
1132	<i>Hemipilia calophylla</i> Par. et Reichb.f.
1133	<i>Holcoglossum wangii</i> Christenson
1134	<i>Hygrochilus deliciosum</i> (Reichb.f.) Sweet
1135	<i>Liparis acuminata</i> Hook.f.
1136	<i>Liparis balansae</i> Gagnep.
1137	<i>Liparis bootanensis</i> Griff.
1138	<i>Liparis chapaensis</i> Gagnep.
1139	<i>Liparis conopea</i> Aver.
1140	<i>Liparis cordifolia</i> Hook.f.
1141	<i>Liparis delicatula</i> Hook.f.
1142	<i>Liparis dendrochiloides</i> Aver.
1143	<i>Liparis distans</i> C. B. Clarke
1144	<i>Liparis latilabris</i> Rolfe
1145	<i>Liparis mannii</i> Reichb.f.
1146	<i>Liparis nervosa</i> (Thunb.) Lindl.
1147	<i>Liparis petelotii</i> Gagnep.
1148	<i>Liparis petiolata</i> (D.Don) P.F. Hunt & Summerh.
1149	<i>Liparis stricklandiana</i> Reichb.f.
1150	<i>Liparis viridiflora</i> (Blume) Lindl.
1151	<i>Luisia psyche</i> Reichb.f.
1152	<i>Lusida zollingeri</i> Reichb. f.
1153	<i>Monomeria barbata</i> Lindl.
1154	<i>Monomeria dichroma</i> (Rolfe) Schlechter
1155	<i>Nervilia fordii</i> (Hance) Schltr.
1156	<i>Oberonia cavaleriei</i> Finet
1157	<i>Oberonia ensiformis</i> (Smith) Lindl
1158	<i>Otochilus porrectus</i> Lindl.

No	Scientific name
1159	<i>Pachystoma pubescens</i> Blume
1160	<i>Paphiopedilum concolor</i> (Lindl.) Pfitz.
1161	<i>Paphiopedilum helenae</i> Aver.
1162	<i>Paphiopedilum malipoense</i> var. <i>malipoense</i>
1163	<i>Paphiopedilum tranlienianum</i> Gruss & Perner
1164	<i>Pelatantheria insectifera</i> (Reichb.f.) Ridl.
1165	<i>Pelatantheria rivesii</i> (Guillaum.) T. Tang & F. T. Wang
1166	<i>Peristylus chapaensis</i> (Gagnep.) Seidenf.
1167	<i>Phaius tankervilleae</i> (Lher.) Blume
1168	<i>Phalaenopsis gibbosa</i> Sweet
1169	<i>Phalaenopsis mannii</i> Reichb.f.
1170	<i>Phalaenopsis parishii</i> Reichb.f.
1171	<i>Phalaenopsis wilsonii</i> Rolfe
1172	<i>Pholidota articulata</i> Lindl.
1173	<i>Pholidota chinensis</i> Lindl.
1174	<i>Pholidota roseans</i> Schltr.
1175	<i>Pholidota rubra</i> Lindl.
1176	<i>Pholidota yunannensis</i> Rolfe
1177	<i>Podochilus microphyllus</i> Lindl.
1178	<i>Renanthera citrina</i> Aver.
1179	<i>Renanthera coccinea</i> Lour.
1180	<i>Rhynchostylis retusa</i> (L.) Blume
1181	<i>Robiquetia succisa</i> (Lindl.) Seidenf. & Garay
1182	<i>Spiranthes sinensis</i> (Pres.) Ames
1183	<i>Tainia viridifusca</i> (Hook.) Benth. & Hook.f.
1184	<i>Thelasis pygmaea</i> (Griff.) Blume
1185	<i>Thrixspermum calceolus</i> (Lindl.) Reichb.f.
1186	<i>Thrixspermum centipeda</i> Lour.
1187	<i>Thrixspermum fleuryi</i> (Gagnep.) Tang et F.T.Wang
1188	<i>Thunia alba</i> (Lindl.) Reichb.f.
1189	<i>Trichotosia dasiphylla</i> (Par. et Reichb.f.) Kraenzl.
1190	<i>Trichotosia velutina</i> (Lindl.) Kraenzl.
1191	<i>Tropidia curculigoides</i> Lindl.
1192	<i>Vanda concolor</i> Blume
1193	<i>Vanda fuscoviridis</i> Lindl.
1194	<i>Vanda liouvillei</i> Finet
1195	<i>Vanilla annamica</i> Gagnep.
1196	<i>Zeuxine strateumatica</i> (L.) Schltr.
	<b>156. Pandanaceae</b>
1197	<i>Pandanus odoratissimus</i> L. f.
1198	<i>Pandanus tonkinensis</i> Martelli
	<b>157. Poaceae</b>
1199	<i>Ampelocalamus patellaris</i> (Gamble) Stapleton
1200	<i>Ampelocalamus</i> sp.
1201	<i>Apdula mutica</i> L.
1202	<i>Arundinella benganensis</i> (Spreng.) Druce
1203	<i>Bambusa bambos</i> (Lour.) Voss.
1204	<i>Bambusa blumeana</i> Schult. & Schult. f.
1205	<i>Bambusa multiplex</i> (Lour.) Raeusch.
1206	<i>Bambusa vulgaris</i> Schrader
1207	<i>Brachiara reptans</i> (L.) Gardn. ex C. Hubb.
1208	<i>Centosteca latifolia</i> (Osbeck.) Trin
1209	<i>Chimonobambusa gradifolia</i> Hsueh & Yi

No	Scientific name
1210	<i>Chrysopogon aciculatus</i> (Retz.) Trin.
1211	<i>Cynodon dactylon</i> (L.) Pers.
1212	<i>Cyrtococcum patens</i> (L.) A. Camus
1213	<i>Dactyloctenium aegyptium</i> (L.) Beauv.
1214	<i>Dendrocalamus giganteus</i> Munro
1215	<i>Digitaria longiflora</i> (Retz.) Pers.
1216	<i>Digitaria radicata</i> (Presl) Miq.
1217	<i>Echinochloa colona</i> (L.) Link.
1218	<i>Eleusine indica</i> (L.) Gaertn.
1219	<i>Eragrostis cylindrica</i> (Roxb.) Nees.
1220	<i>Eragrostis nigra</i> Nees. ex Steud.
1221	<i>Eragrostis stenophylla</i> Hochst.
1222	<i>Hemarthria altissima</i> (Poir.) Stapf & C. Hubb.
1223	<i>Imperata cylindrica</i> (L.) Beauv.
1224	<i>Indosasa bispida</i> McClure
1225	<i>Leptochloa chinensis</i> (L.) Nees
1226	<i>Leptochloa panicea</i> (Retz.) Ohwi
1227	<i>Miscanthus floridulus</i> (Labill.) Warb. ex K. Schum. & Lauterb.
1228	<i>Oplismenus compositus</i> (L.) Beauv.
1229	<i>Panicum bisulcatum</i> Thunb.
1230	<i>Panicum brevifolium</i> L.
1231	<i>Panicum repens</i> L.
1232	<i>Panicum sarmentosum</i> Roxb.
1233	<i>Paspalum commersonii</i> Lamk.
1234	<i>Paspalum conjugatum</i> Berg.
1235	<i>Paspalum longifolium</i> Roxb.
1236	<i>Paspalum scrobiculatum</i> L.
1237	<i>Phragmites maximum</i> (Forssk.) Chiov.
1238	<i>Phyllostachys bambusoides</i> Sieb. & Zucc.
1239	<i>Phyllostachys pubescens</i> Mazel ex H. de Lehaie
1240	<i>Pogonatherum crinitum</i> (Thunb.) Kunth
1241	<i>Rottboellia cochinchinensis</i> (Lour.) Clayton
1242	<i>Saccharum spontaneum</i> L.
1243	<i>Sacciolepis indica</i> (L.) A. Chase
1244	<i>Setaria glauca</i> (L.) Beauv.
1245	<i>Schizostachyum aciculare</i> Gamble
1246	<i>Schizostachyum aff. chinensis</i> Rendle
1247	<i>Schizostachyum polymorphum</i> (Munro) R. B. Majumdar
1248	<i>Schizostachyum pseudolima</i> McClure
1249	<i>Sinobambusa baccanensis</i> T. Q. Nguyen
1250	<i>Sinocalamus bachtaiensis</i> T. Q. Nguyen
1251	<i>Sinocalamus sang</i> T. Q. Nguyen
1252	<i>Sorghum serratum</i> (Thunb.) Kuntze
1253	<i>Sporolobus indicus</i> (L.) R. Br.
1254	<i>Themeda gigantea</i> (Cav.) Hack. ex Duthie
1255	<i>Thysanolaena maxima</i> (Roxb.) Kuntze
	<b>158. Ponteridaceae</b>
1256	<i>Eichornia crassipes</i> (Mart.) Solms.
	<b>159. Smilacaceae</b>
1257	<i>Smilax glabra</i> Wall. ex Roxb.
1258	<i>Smilax lanceifolia</i> Roxb.
1259	<i>Smilax perfoliata</i> Lour.
1260	<i>Smilax synadra</i> Gagnep.

No	Scientific name
	<b>160. Stemonaceae</b>
1261	<i>Stemona tuberosa</i> Lour.
	<b>161. Taccaceae</b>
1262	<i>Tacca chantrieri</i> Andre
	<b>162. Zingiberaceae</b>
1263	<i>Alpinia chinensis</i> (Koenig in Retz.) Rose
1264	<i>Alpinia tonkinensis</i> Gagepain
1265	<i>Alpinia zerumbet</i> (Pers.) Burr & M. Smith
1266	<i>Amomum villosum</i> Lour.
1267	<i>Amomum xanthioides</i> Wall.
1268	<i>Zingiber zerumbet</i> (R.) Smith

**Annex 2: Selected scientific research projects in Ba Be National Park**

Year	Project name	Authors
1997	Forest flora and vegetations of Ba Be NP	FIPI and Forestry University
1998-2003	Diversity of terrestrial plants in Ba Be NP	La Quang Do – Thai Nguyen University
1998-2000	Conservation and development of the useful plants in Ba Be NP	Centre for Research and Development Of Ethnomedicinal Plants
1997	Bamboosoidea species	Le Mong Chan, Bui Van Nguyen – Forestry University
1997	Floral composition of Pteridophyta	Le Thi Huyen, Do Van Toan - Forestry University
1997	An inventory of animal resources	FIPI and Forestry University
1997	Landuse status inventory	FIPI
2001	Basic scientific study for the conservation and sustainable development of non-timber plants resources	Ninh Khac Ban – IEBR
1999-2000	Characteristics of zooplankton fauna in Ba Be lake	Le Hung Anh, Ho Thanh Hai – IEBR
1996-2002	A survey and inventory in conifer and slipper orchids	Phan Ke Loc, Nguyen Tien Hiep <i>et al.</i> – IEBR
1995-2001	Water quality and microalgal flora	Duong Duc Tien <i>et al.</i> – Hanoi National University
1999-2000	Ecological characteristics of lake environment in Ba Be	Ho Thanh Hai – IEBR, Nguyen Hong Khanh and Ta Dang Toan – Mechanics Institute, Do Hoai Duong – Institute of Meteorology and Hydrology
	An assessment on environmental quality and recommendations for environmental protection of the Ba Be Lake	Bac Kan Department of Science and Technology
1999-2000	Socio-economic and environmental status of Ba Be Lake Region	Phan Minh Chau – Institute of Hidrology, Le Minh Tuan and Tran Thu Huong – Mechanics Institute
2001	Species composition trends of the Ba Be Lake's ichthyofauna.	Nguyen Trong Hiep, Nguyen Huu Duc – Thai Nguyen University, Hanoi National University
1996-1998	Spider research at Ba Be National Park	Pham Dinh Sac – IEBR
1994-2001	Bat fauna at Ba Be National Park	Vu Dinh Thong, Pham Duc Tien, Nguyen Truong Son – IEBR
2001	Herptile surveys in Ba Be National Park	Nguyen Van Sang – IEBR
1996-2001	Diversity of soil invertebrates	Nguyen Tri Tien – IEBR
	Butterfly fauna	Vietnam-Rusian Tropical Centre
1999	Species diversity of hawk-moth fauna	Truong Xuan Lam – IEBR
2004	Ant species composition in Ba Be NP	Bui Tuan Viet – IEBR
1994	Conservation assessment of Ba Be NP	Frontier – IEBR
1996	Conservation assessment of Ba Be NP	Frontier – IEBR
2000-2003	Biodiversity surveys	PARC Project
1995-2000	Field biodiversity surveys at Ba Be NP	Ontario Royal Museum and Toronto University, Canada
	Status of karst environment in Ba Be NP	Institute of Geosciences and Mineral Resources
	Geography and geomorphology of the Ba Be Lake	Nguyen Quang My – Hanoi National University
2003-2005	Survey, collect and pilot plantation of some vegetable, orchard and medicinal plant species in Don Den-Khuoi Luong Area	Nong The Dien, VQG Ba Be
2008-2009	White-eared Night Heron surveys	BirdLife, OBC, VBC