# WE ARE ECOLOGIST

Coalition for Research on Ecology and Wildlife Limite

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Kwan On Construction Company Limited

# **Baseline Vegetation Survey Report – August 2019**

CEDD Contract No. GE/2018/01 Landslip Prevention and Mitigation Programme, 2017, Package K, Landslip Prevention and Mitigation Works—

Detailed Baseline Vegetation Survey before Commencement of Works at Study Area 11NE-B/SA3, Razor Hill, Clear Water Bay Road

4<sup>th</sup> September 2019



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(IEC)

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#### 1. INTRODUCTION

Coalition for Research on Ecology and Wildlife Ltd. (CREW) was appointed by Kwan On Construction Company Limited to conduct a detailed baseline vegetation survey before commencement of works at the designated Works Area of natural terrain Study Area 11NE-B/SA3, Razor Hill, Clear Water Bay Road.

This report aims at providing up-to-date baseline information on habitat and vegetation, especially on the quantity, location & condition of all recorded plant species of conservation importance as per previous approved Project Profile (registered number PP-565/2018); as well as any new plant species of conservation importance within the Works Area. Such information helps formulating any necessary environmental mitigation measures when finalizing the design of slope upgrading works. Information presented by a tree survey report/ schedule is out of the scope of this report.

#### 2. METHODOLOGY

Field survey was conducted on 15<sup>th</sup> August 2019 within same provided survey extent, which was defined as Works Area A, B and C, as per the Project Profile (**Figure 1**). All plants including ferns, gymnosperms and angiosperms found in the feature were recorded by direct observation. Plant individuals which were hard to approach were identified using a pair of 10 x 42 binoculars.

Since the natural terrain was surveyed before commencement of any construction activities, plant composition should remain similar condition as before. Survey efforts are agreed to focus on previously reported plant species of conservation importance, as well as any new plant species of conservation importance.

A plant list including growth form is produced, with the relative abundance of each plant species within the survey extent being estimated. Nomenclature for plant species follows AFCD's Hong Kong Herbarium Database. For all the plant species recorded, their local commonness in Hong Kong follows Corlett et al. (2000) and Hong Kong Plant Database managed by the Hong Kong Herbarium. Actual abundance was counted and their

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locations were recorded for species of conservation importance identified and encountered. Their conservation status follows AFCD (2003), IUCN Red List (2019) and relevant legislations, including Forests and Countryside Ordinance (Cap. 96) and Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586).

### 2.1 Previously Recorded Plant Species of Conservation Importance

A total of about 19 Aquilaria sinensis were previously recorded in Works Area C; two saplings of Pavetta hongkongensis at Works Area B; at least 63 Cibotium barometz mainly at Works Area A and marginally outside Works Area B and C. Another small patch of Cibotium barometz was found within Works Area B and two patches among the Aquilaria sinensis at Works C. Another two species with conservation importance were detected in Works C too, i.e. one Gnetum luofuense and one Ania hongkongensis (Figure 1).

#### 3. RESULTS

#### 3.1 Habitat

The Works Area is a secondary forest dominated by *Symplocos glauca* and *Machilus chekiangensis*, with the understory occupied by some dominant local shrub and herbaceous species, e.g. *Sarcandra glabra*, *Cyclosorus parasiticus*, *Cibotium barometz* and *Psychotria asiatica* (general view in **Cover photo**). The canopy cover of the woodland is moderately dense and reaches about 10 meters in average.

#### 3.2 Flora Composition

A total of 112 plant species were recorded. They include 31 tree species, 25 shrubs, 19 herbaceous species, 36 climbers and one parasitic species. Relative abundance, composition of all recorded plant species are tabulated in **Table 1**. Almost all (99%) of the recorded species are native. Most recorded species is either very common or common in Hong Kong (Corlett et al., 2000; Hong Kong Herbarium, 2019).

## 3.3 Species of Conservation Importance

Four out of five plant species of conservation importance (i.e. Aquilaria sinensis, Pavetta hongkongensis, Gnetum luofuense and Cibotium barometz) could be located at corresponding locations indicated by previously submitted Project Profile (Plate 1). Current results are summarized in Table 2.

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The tiny Ania hongkongensis was not detected during the current survey; while five more Aquilaria sinensis; 10 more Pavetta hongkongensis, one more Gnetum luofuense and an extension of a known patch of Cibotium barometz were observed. They were detected mainly in Works Area A (Figure 2). Among the 11 Aquilaria sinensis, three of them are marginally outside the Works Area B behind the Air House. However, they shall receive same protection measures as recommended in Section 4 in case temporary access/ works boundary may change in real practice.

Natural succession and dispersal of new generation of plant species of conservation importance was detected in present survey. The small patch of *Cibotium barometz* previously recorded at Works Area B was replaced by rapid occupation of *Cyclosorus parasiticus*; while another plant species of conservation importance, *Diospyros vaccinioides*, was newly recorded. A total of five individuals were observed at Works Area A (**Figure 2**).

#### 4. RECOMMENDATIONS

All recorded individuals of plant species with conservation importance should be retained *in-situ* and fenced off either in group (for plants grow closely together) or individually to prevent from being damaged or disturbed during any construction work. Nets, fence or wire mesh of at least 1.5m high are recommended to be used to surround the robust fenced area as plant protection zone (PPZ). The PPZ shall be at least 1.5m setback from stems for trees and 1m radius for seedlings, shrubs, herbs or climber in concern.

Plant protection zone is especially for *Aquilaria sinensis*, which has been targeted for illegal harvest at this site (**Plate 2**), some effective example of PPZ against *Aquilaria sinensis* are illustrated in **Plate 3**. Retained and preserved plants should be monitored regularly by a plant specialist to ensure their condition throughout the construction phase.

No working platform, equipment, waste or soil should be placed or dumped near PPZ. Vegetation clearance and access should be avoid in these areas too. Vegetation clearance and access shall be minimised for building temporary access path and proposed construction works.

All construction works, and setting of temporary steel ladder access and working platform shall be restricted to Works Site boundary (**Figure 1**). Alignment of access shall be confirmed by the Engineer on site to avoid any avoidable disturbance to vegetation.

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Vegetation clearance should preserve native canopy and sub-canopy layer as far as practical to maintain shading and soil moisture at this secondary woodland. Open space makes the site receive more heat and loss in soil moisture, and consequently more susceptible to invasion of exotic or undesirable weed species, such as *Bidens alba* (白花 鬼針草), *Lantana camara* (馬纓丹), *Leucaena leucocephala* (銀合歡) and *Mikania micrantha* (薇甘菊).

In case renewal of landscape softwork would be conducted, native ground covering species should be considered over any exotic and invasive species such as *Wedelia trilobata* (三裂葉蟛蜞菊). Despite high tolerance to various site conditions with even poor soil, *Wedelia trilobata* is one of the 100 most invasive species listed by IUCN Invasive Species Specialist Group (ISSG). It may quickly invade adjacent areas when the site is disturbed (e.g. hazard mitigation works) and therefore is not recommend to be used within Country Park area (GEO, 2011).

One section of the flexible barriers would align across the natural section of the ephemeral drainage line at Works Area A (Figure 1). Temporary access for manual delivery of equipment and construction of flexible barrier will be bridged over the ephemeral drainage line to maintain its drainage condition.

Structure and appearance of all natural watercourse and its riparian vegetation zone (1.5m at least) shall be maintained. Orange net will be erected with a minimum clearance of 1.5m from both sides of the ephemeral drainage line as warning purpose. Anchor locations will be selected to avoid drilling at the ephemeral drainage line.

Good site practice of runoff control shall be implemented to maintain water quality of the nature watercourse/ ephemeral drainage line.

Any relevant ecological protection and preservation measures for existing vegetation/wildlife stated in the Project Profile (registered number PP-565/2018); as well as those Works Plans/ Construction Drawings submitted by the Engineer shall be strictly followed.

With proper implementation the above-recommended mitigation measure, adverse ecological impact is not anticipated for the proposed works.

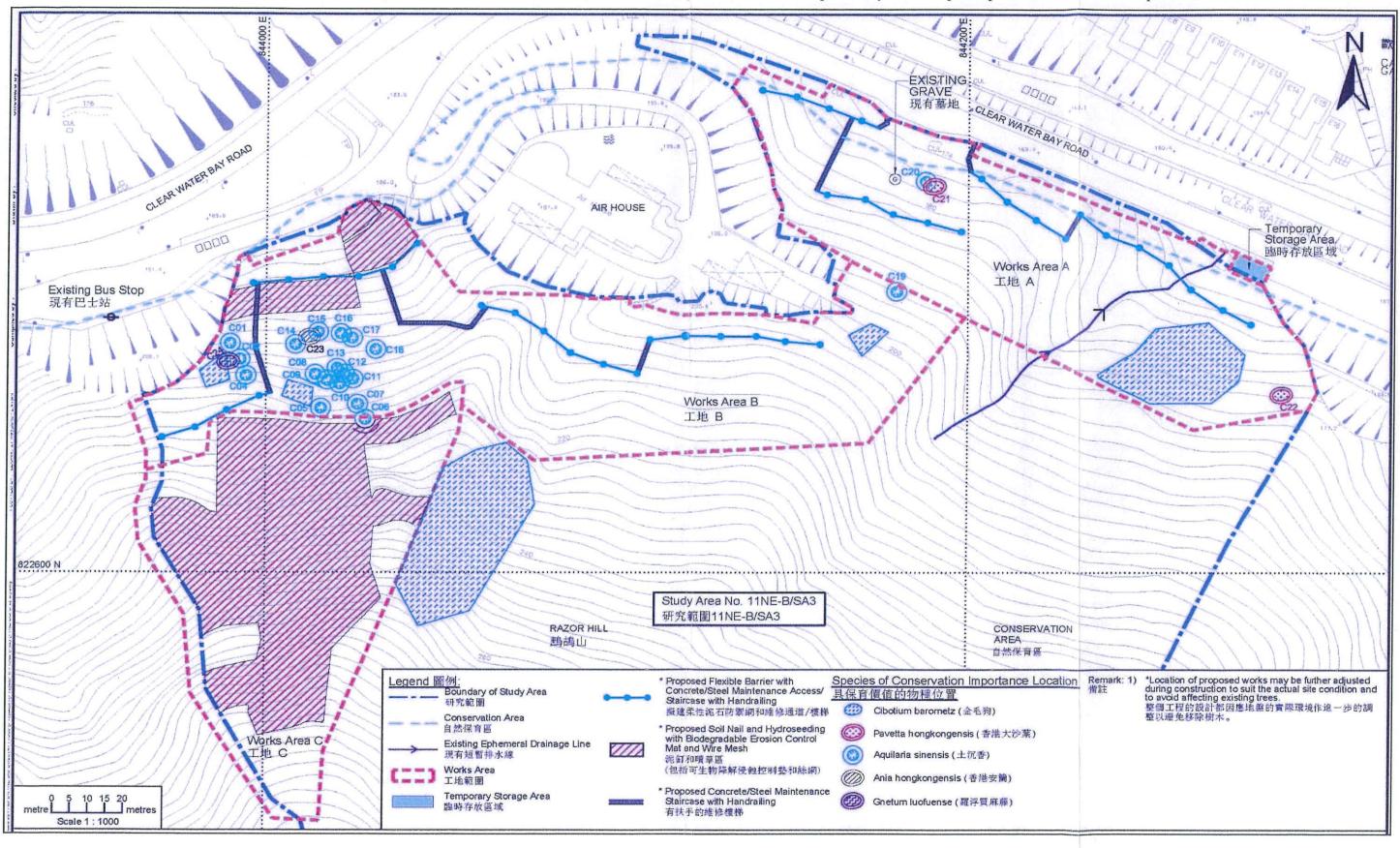
#### REFERENCES

- AFCD (2003) Rare and Precious Plants of Hong Kong. AFCD, Friends of the Country Parks and Cosmos Books Ltd. Hong Kong.
- AFCD (2019) Hong Kong Biodiversity Database.

  http://www.afcd.gov.hk/english/conservation/hkbiodiversity/database/search.asp?lang=en.

  Accessed on 30<sup>th</sup> August 2019.
- Corlett, R.T., Xing, F.W., Ng, S.C., Chau, L.K.C. & Wong, L.M.Y. (2000) Hong Kong vascular plants: Distribution and status. Memoirs of the Hong Kong Natural History Society, 23, 1-157.
- GEO (2011) Technical Guidelines on Landscape Treatment for Slopes Publication No. 1/2011. HKSAR. Hong Kong
- IUCN (2019) The IUCN Red List of Threatened Species. http://www.iucnredlist.org/ Accessed on 30<sup>th</sup> August 2019.

Figure 1. Ecological survey extent and Works Area for Study Area 11NE-B/SA3, Razor Hill, Clear Water Bay Road, marked with previously recorded plant species of conservation importance.



**Figure 2.** Additional plant species of conservation importance recorded during present vegetation baseline survey. Colour chosen for each species was the same as Figure 1 for easy reference. One dot may represent more than one individual when a few are growing closely. Note that the tiny *Ania hongkongensis* were not detected; while a new species in concern, *Diospyros vaccinioides*, were observed (red dot). *Cibotium barometz* previously recorded at Works Area B was replaced by rapid occupation of *Cyclosorus parasiticus*, which is not in conservation concern.

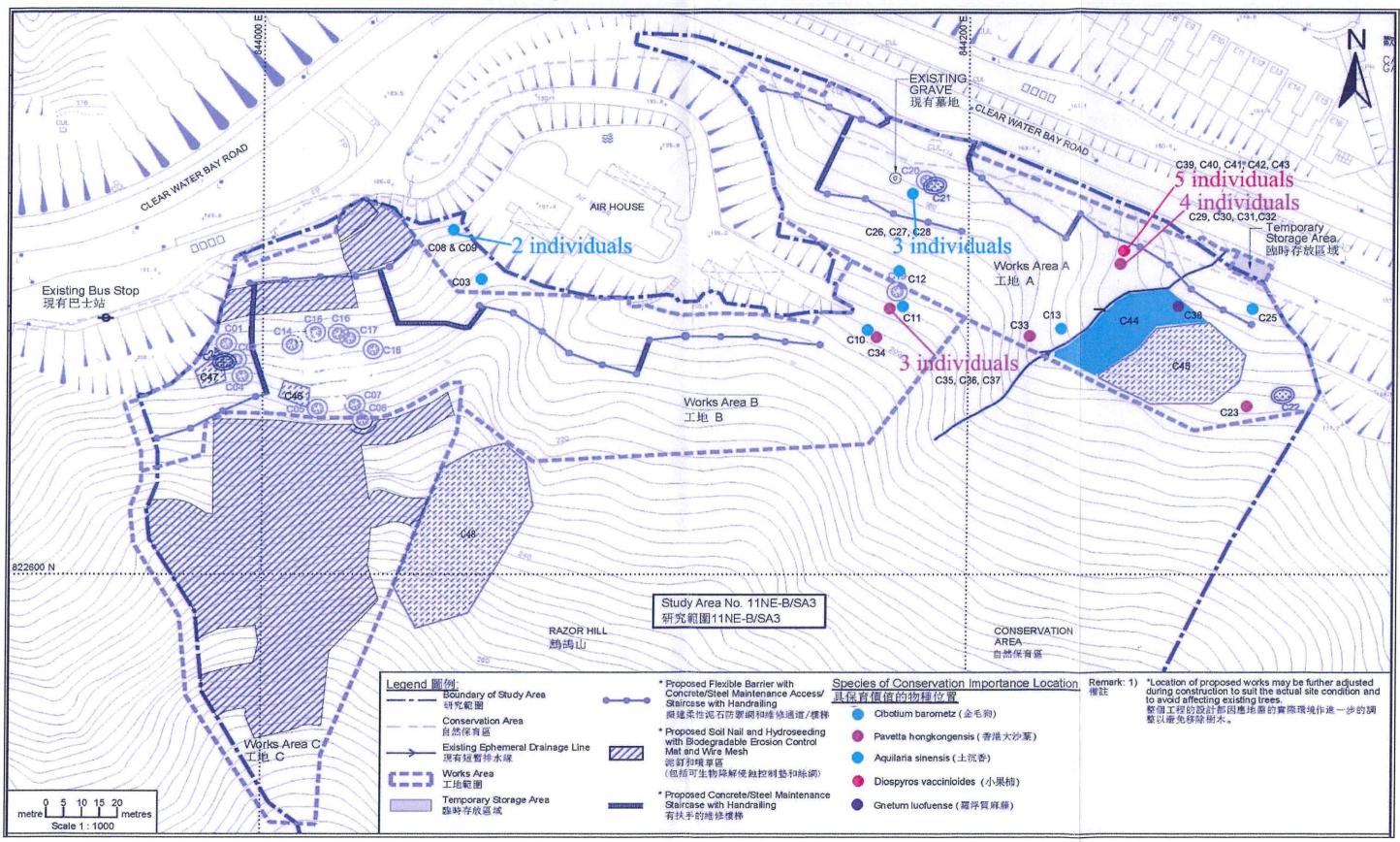


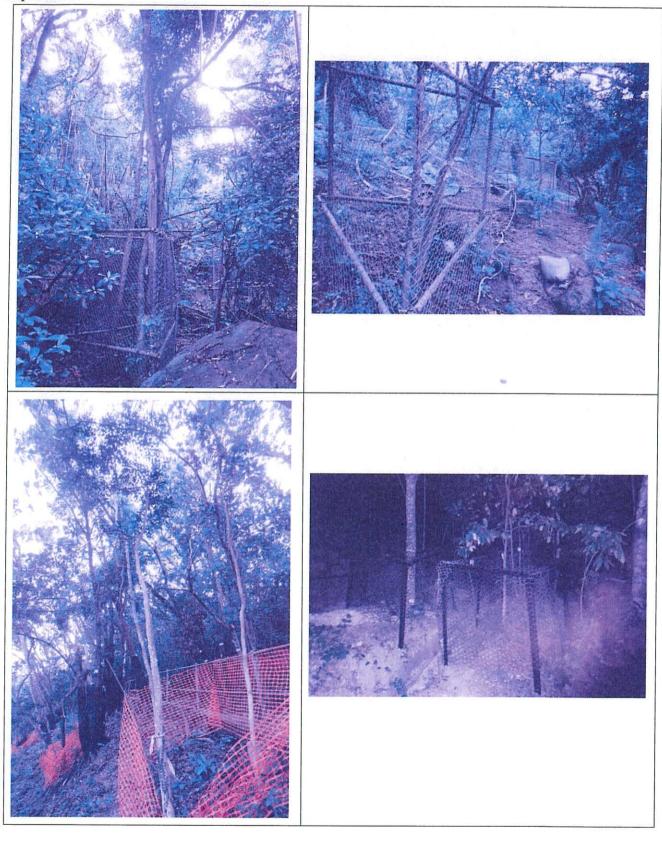
Plate 1. Photographic records of the five plant species of conservation importance recorded during present vegetation survey.



Plate 2. Signs of illegal harvest of Aquilaria sinensis at the Works Area.



Plate 3. Examples of robust plant protection zone (PPZ) for *Aquilaria sinensis* against illegal harvest (top & bottom right); and general PPZ with eye-catching fence for other plant species of conservation importance.



**Table 1.** List of all plant species recorded at Study Area 11NE-B/SA3, Razor Hill, Clear Water Bay Road. Plant species of conservation importance was highlighted in yellow.

Species name	Chinese name	Exotic	Growth	Conservation &	Relative
		Species	form	Protection Status <sup>12</sup>	abundance <sup>3</sup>
Acronychia pedunculata	山油柑	Native	Tree		+
Actinidia latifolia	闊葉獼猴桃	Native	Climber	-	+
Adiantum flabellulatum	扇葉鐵線蕨	Native	Herb	-	++
Aidia canthioides	香楠	Native	Tree	-	+
Alangium chinense	八角楓	Native	Shrub	~	+
Alchornea trewioides	紅背山麻桿	Native	Shrub		+
Alpinia hainanensis	草豆蔻	Native	Herb	<u>~</u>	+
Alyxia sinensis	念珠藤	Native	Climber	-	+
Ania hongkongensis	香港安蘭	Native	Herb	Cap.96; Cap.586; locally very common	+
				Cap.586; AFCD (2003);	
				VU in IUCN; NT in	
quilaria sinensis	土沉香	Native	Tree	China; Cat. II; CPRDB;	++
				locally common	
rchidendron lucidum	亮葉猴耳環	Native	Tree	-	+
rdisia crenata	朱砂根	Native	Shrub	-	++
rdisia quinquegona	羅傘樹	Native	Tree	. <del></del>	++
auhinia championii	龍鬚藤	Native	Climber		+
idens alba	白花鬼針草	Exotic	Herb	_	+
ischofia javanica	秋楓	Native	Tree	-	+
lechnum orientale	烏毛蕨	Native	Herb		++
reynia fruticosa	黑面神	Native	Shrub	-	+
roussonetia kaempferi var. ustralis	藤構	Native	Climber	-:	+
yttneria aspera	刺果藤	Native	Climber	-	+
allicarpa kochiana	枇杷葉紫珠	Native	Shrub	-	+
ayratia corniculata	角花烏蘞莓	Native	Climber	_ ×	+
elastrus monospermus	獨子藤	Native	Climber	₩	++
,				Cap.586; AFCD (2003);	
botium barometz	金毛狗	Native	Herb	VU in China; Cat. II;	++
				locally very common	
nnamomum camphora	樟	Native	Tree	-	++
nnamomum parthenoxylon	黃樟	Native	Tree	÷	++
ratoxylum cochinchinense	黃牛木	Native	Tree	-	+
yclosorus parasiticus	華南毛蕨	Native	Herb	÷	+++

Species name	Chinese name	Exotic	Growth	Conservation &	Relative
opecies name	Crimese name	Species	form	Protection Status <sup>12</sup>	abundance <sup>3</sup>
Daemonorops jenkinsiana	真白藤	Native	Climber		+
Dalbergia benthamii	兩廣黃檀	Native	Climber	<u>.</u>	+
Daphniphyllum pentandrum	虎皮楠	Native	Tree	2.8	+
Dendrotrophe frutescens	寄生藤	Native	Climber	-	+++
Desmos chinensis	假鷹爪	Native	Shrub	-	+
Dicranopteris pedata	芒萁	Native	Herb	- × 1	++
Diospyros eriantha	烏柿	Native	Tree	•	+
Diospyros morrisiana	羅浮柿	Native	Tree	-	+
Diospyros vaccinioides	小果柿	Native	Shrub	CR in IUCN; locally common	+
Diplospora dubia	狗骨柴	Native	Shrub		+
laeagnus loureirii	羅氏胡頹子	Native	Climber	-	+
laeocarpus chinensis	華杜英	Native	Tree	_	+
laeocarpus sylvestris	山杜英	Native	Tree	-	+
mbelia laeta	酸藤子	Native	Climber	<b>-</b> 0	+
mbelia ribes	白花酸藤子	Native	Climber	<b>-</b> 0	+
ndospermum chinense	黃桐	Native	Tree	% -	+
urya nitida	細齒葉柃	Native	Shrub	÷	++
icus fistulosa	水同木	Native	Tree		+
icus hirta	粗葉榕	Native	Shrub	-	+
cus variegata	青果榕	Native	Tree	12	+
cus variolosa	變葉榕	Native	Shrub	÷	+
ahnia tristis	黑莎草	Native	Herb	3	+
arcinia oblongifolia	黃牙果	Native	Tree	œ	+
lochidion eriocarpum	毛果算盤子	Native	Shrub	<sub>G</sub>	++
lochidion wrightii	白背算盤子	Native	Shrub	~	+
netum luofuense	羅浮買麻藤	Native	Climber	NT in IUCN; locally very common	+
raphistemma pictum	天星藤	Native	Climber	<u>-</u>	+
edyotis acutangula	方骨草	Native	Herb	-	++
elicia cochinchinensis	越南山龍眼	Native	Tree	*	+
x asprella	梅葉冬青	Native	Shrub	-	+
x pubescens	毛冬青	Native	Shrub	-	+
x viridis	綠冬青	Native	Shrub	<b>3</b>	+
minum lanceolarium	清香藤	Native	Climber	<b>⊕</b> s	+
riope spicata		Native	Herb	<b>*</b> 0	+
sea rotundifolia		Native	Shrub	•	+
och rothingotth					

Species name	Chinese name	Exotic	Growth	Conservation &	Relative
Species name	Climese nam	Species	form	Protection Status <sup>12</sup>	abundance³
Lophatherum gracile	淡竹葉	Native	Herb		++
Lygodium japonicum	海金沙	Native	Herb	ă.	++
Machilus chekiangensis	浙江潤楠	Native	Tree	-	+++
Machilus pauhoi	刨花潤楠	Native	Tree	-	+
Mallotus paniculatus	白楸	Native	Tree	ie.	+
Melastoma malabathricum	野牡丹	Native	Shrub		+
Melicope pteleifolia	三椏苦	Native	Tree	-	+
Meliosma rigida	筆羅子	Native	Tree	-	+
Melodinus suaveolens	山橙	Native	Climber	-	++
Millettia dielsiana	香花崖豆藤	Native	Climber	-	+
Millettia speciosa	美麗崖豆藤	Native	Climber	-	+
Miscanthus sinensis	芒	Native	Herb	*	++
Miscanthus floridulus	五節芒	Native	Herb	-2	++
Mussaenda pubescens	玉葉金花	Native	Climber	₩1	+
Pavetta hongkongensis	香港大沙葉	Native	Shrub	Cap. 96; locally common	++
Pericampylus glaucus	細圓藤	Native	Climber	=	#
Pittosporum glabratum	光葉海桐	Native	Shrub	τν <del>-</del>	+
Psychotria asiatica	山大刀	Native	Shrub	-	+++
Psychotria serpens	蔓九節	Native	Climber	-	++
Pteris dispar	刺齒半邊旗	Native	Herb	-	+
Pteris vittata	蜈蚣草	Native	Herb	-	+
Pueraria lobata var. montana	葛麻姆	Native	Climber	-	++
Rhodomyrtus tomentosa	崗稔	Native	Shrub		++
Rourea microphylla	小葉紅葉藤	Native	Climber	2	+
Rourea minor	牛栓藤	Native	Climber	-	+
Rubus reflexus	蛇泡簕	Native	Climber	-	+
Sarcandra glabra	草珊瑚	Native	Shrub	-	+++
Schefflera heptaphylla	鵝掌柴	Native	Tree	-	++
Scleria ciliaris	緣毛珍珠茅	Native	Herb	,	+
Scolopia saeva	廣東刺柊	Native	Tree	-	+
Selaginella doederleinii	深綠卷柏	Native	Herb	<b>2</b>	+
milax hypoglauca	粉背菝葜	Native	Climber	-	+
milax lanceifolia	暗色菝葜	Native	Climber	-:	+
trophanthus divaricatus	羊角拗	Native	Climber	=	+
ymplocos cochinchinensis var.	#: 4L tan L+1	N.T. 51	m		
urina	黃牛奶樹	Native	Tree	<u> </u>	+
ymplocos glauca	羊舌樹	Native	Tree		+++
yzygium buxifolium	赤楠	Native	Shrub	<b>-</b> 0	+

Caratianana	CIL	Exotic	Growth	Conservation &	Relative
Species name	Chinese name	Species	form	Protection Status <sup>12</sup>	abundance³
Syzygium levinei	山蒲桃	Native	Tree		++
Taxillus chinensis	廣寄生	Native	Parasitic	-	+
Tetracera asiatica	錫葉藤	Native	Climber	-	+
Tetrastigma hemsleyanum	三葉青	Native	Climber	-	+
Turpinia montana	山香圓	Native	Tree	-	+
Tylophora ovata	娃兒藤	Native	Climber	-	+
Uvaria macrophylla	紫玉盤	Native	Climber		+
Nikstroemia nutans	細軸蕘花	Native	Shrub	-	+
Zanthoxylum avicennae	簕櫄花椒	Native	Tree	-	++
Zanthoxylum nitidum	兩面針	Native	Climber	=	+
Zanthoxylum scandens	花椒簕	Native	Climber	-0	+

Notes: TOTAL SPECIES 112

<sup>1.</sup> Commonness follows Corlett et al. (2000) Hong Kong Vascular Plants: Distribution and Status; Hong Kong Plant Database

<sup>2.</sup> Cap. 96: Forestry Regulations under the Forests and Countryside Ordinance; Cap. 586: Protection of Endangered Species of Animals and Plants Ordinance; AFCD (2003) Rare and Precious Plants of Hong Kong; CR = Critically Endangered; VU = Vulnerable; NT = Near Threatened; IUCN = IUCN Red List; CPRDB = China Plant Red Data Book; Cat. II = State Protection Category II

<sup>3.</sup> Relative abundance: +++ = common/ abundant, ++ = uncommon and + = scarce

Table 2. Condition of all plant species of conservation importance recorded in present surveys.

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Species name	Chinese name	No.	Height (m)	Crown (m)	DBH (mm)	Re-sprout2	Health	Form & Structure	Remarks
Aquilaria sinensis	土沉香	C01	4	1.5	80	No	Good	Fair	
Aquilaria sinensis	土沉香	C02	2.5	1	200	Yes	Poor	Poor	Topped
Aquilaria sinensis	土沉香	C03	N/A	N/A	150	No	Poor	Poor	Topped
Aquilaria sinensis	土沉香	C04	1.5	N/A	110	Yes	Poor	Poor	Topped
Aquilaria sinensis	土沉香	C05	1.7	1	30	No	Fair	Fair	
Aquilaria sinensis	土沉香	90D	3	1.5	30	No	Good	Good	
Aquilaria sinensis	土沉香	C07	2.5	1	25	No	Good	Good	
Aquilaria sinensis	土沉香	C08	IJ	2	80	No	Fair	Fair	Wound at trunk
Aquilaria sinensis	土沉香	C09	3	0.5	100	Yes	Fair	Poor	Topped; wound at tree base
Aquilaria sinensis	土沉香	C10	4	1	20	No	Good	Good	
Aquilaria sinensis	土沉香	C11	0.5	N/A	N/A	No	Good	Good	
Aquilaria sinensis	土沉香	C12	0.5	N/A	N/A	No	Good	Good	
Aquilaria sinensis	土沉香	C13	1	N/A	150	Yes	Fair	Poor	Topped
Aquilaria sinensis	土沉香	C14	3.5	2	22	No	Fair	Poor	
Aquilaria sinensis	土沉香	C15	2.5	1.5	20	No	Good	Good	
Aquilaria sinensis	土沉香	C16	1.5	N/A	200	Yes	Poor	Poor	Topped
Aquilaria sinensis	土沉香	C17	1.5	N/A	15	No	Good	Good	
Aquilaria sinensis	土沉香	C18	2	8.0	10	No	Good	Good	
Aquilaria sinensis	土沉香	C19	1.2	N/A	100	Yes	Poor	Poor	Topped/Harvested
Aquilaria sinensis	土沉香	C21	4	0.5	20	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C20	1.7	N/A	10	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C22	0.5	N/A	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C23	0.3	N/A	N/A	No	Good	Good	
Gnetum luofuense	羅浮買麻藤	C24	N/A	N/A	N/A	No	Fair	Fair	
Aquilaria sinensis	土沉香	C25	1.2	N/A	N/A	No	Good	Good	

Species name	Chinoso namo	NIA	Height	Crown	рвн	•		Form &	
			(m)	(m)	(mm)1	we-sprout-	Health	Structure	Remarks
Aquilaria sinensis	土沉香	C26	0.4	N/A	N/A	No	Good	Good	
Aquilaria sinensis	土沉香	C27	0.4	N/A	N/A	No	Good	Good	
Aquilaria sinensis	土沉香	C28	8	1.5	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C29	1.5	1	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C30	1.5	Н	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C31	2	Н	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C32	1	0.5	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C33	2	1	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C34	3.5	3	20	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C35	2	1	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C36	2	1.5	N/A	No	Good	Good	
Pavetta hongkongensis	香港大沙葉	C37	3	1.5	N/A	No	Good	Good	
Gnetum luofuense	羅浮買麻藤	C38	N/A	N/A	N/A	No	Fair	Fair	
Diospyros vaccinioides	小果柿	C39	0.5	N/A	N/A	No	Good	Good	
Diospyros vaccinioides	小果柿	C40	0.5	N/A	N/A	No	Good	Good	
Diospyros vaccinioides	小果柿	C41	0.5	N/A	N/A	No	Good	Good	
Diospyros vaccinioides	小果柿	C42	1	N/A	N/A	No	Good	Good	
Diospyros vaccinioides	小果柿	C43	1.5	N/A	N/A	No	Good	Good	
Cibotium barometz	金毛狗	C44	N/A	N/A	N/A	N/A	Good	Good	In patch; extension of C45
Cibotium barometz	金毛狗	C45	N/A	N/A	N/A	N/A	Good	Good	In patch
Cibotium barometz	金毛狗	C46	N/A	N/A	N/A	N/A	Good	Good	In patch
Cibotium barometz	金毛狗	C47	N/A	N/A	N/A	N/A	Good	Good	In patch
Cibotium barometz	金毛狗	C48	N/A	N/A	N/A	N/A	Good	Good	In patch
Notes:									

1. Presence of re-sprout was generally resulted from heavy trunk damage, e.g. topping, from illegal logging activities.

DBH (diameter at breast height) were measured for each sizeable individual. Base diameter of the main stem was measured instead if the trunk was seriously damaged. DBH & crown are not applicable seedlings or saplings. 7