CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

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Nineteenth meeting of the Plants Committee
Geneva (Switzerland), 18-21 April 2011

Review of Significant Trade in specimens of Appendix-II species

SELECTION OF SPECIES FOR TRADE REVIEWS FOLLOWING COP15

1. This document has been prepared by the Secretariat.

2. In Resolution Conf. 12.8 (Rev. CoP13) on *Review of Significant Trade in specimens of Appendix-II species*, the Conference of the Parties:

   > *DIRECTS the Animals and Plants Committees, in cooperation with the Secretariat and experts, and in consultation with range States, to review the biological, trade and other relevant information on Appendix-II species subject to significant levels of trade, to identify problems and solutions concerning the implementation of Article IV, paragraphs 2 (a), 3 and 6 (a)...*

3. In accordance with paragraph a) of that Resolution under *Regarding conduct of the Review of Significant Trade*, the Secretariat requested UNEP-WCMC to produce a summary from the CITES Trade Database of annual report statistics showing the recorded net level of exports for Appendix-II species over the five most recent years. Its report is attached as Annex 1 (English only) to the present document. The raw data used to prepare this summary are available in document PC19 Inf. 2.

4. Paragraph b) of the same section directs the Plants Committee, on the basis of recorded trade levels and information available to it, the Secretariat, Parties or other relevant experts, to select species of priority concern for review (whether or not such species have been the subject of a previous review).

5. In order to assist the Committee with this selection, and based on a similar analysis undertaken for the Animals Committee in 2008, UNEP-WCMC has developed a process, based on an extended analysis of trade, for identifying candidate species for review. This process is described in Annex 2 (English only) of the present document, which also contains a summary of the extended trade analysis and a list of possible candidate species thus identified.

6. The Committee is invited to select species of priority concern for review.

Recorded Net Exports of Appendix-II Flora 2004-2008

To comply with the specifications of Resolution Conf. 12.8 (Rev. CoP13), an initial data output was produced comprising net exports of Appendix-II species over the most recent five-year period for which near-complete data are available (2004-2008). Data from 2009 were excluded because at the time of the data extraction (1 December 2010), less than half of annual reports had been received (76 out of the 175 Parties to CITES). This output only contains direct trade reported as wild-collected ('W'), ranched – which has been applied to plants in the past ('R'), unknown ('U') or without a source reported. A full list of "terms" ((i.e. types of specimens in trade) traded is available in the CITES Trade Database interpretation guide, see: www.unep-wcmc.org/citestrade/docs/CITESTradeDatabaseGuide_v7.pdf. Specimens traded at levels averaging less than one item over the five-year period have been excluded from the output. Quantities recorded have been rounded to the nearest decimal place, when applicable.

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
AMARYLLIDACEAE								
Galanthus alpinus	LIV					20		4
Galanthus elwesii	LIV		5700000	5700000	5600000	5700000	5104120	5560824
Galanthus lagodechianus	LIV					10		2
Galanthus nivalis	LIV			750				150
Galanthus spp.	LIV			1250				250
Galanthus woronowii	LIV		4005775	18000000	18000000	15000020	14950767	13991312.4
APOCYNACEAE								
Hoodia gordonii	DER				21057	360		4283.4
Hoodia gordonii	DER	flasks				6	12	3.6
Hoodia gordonii	DER	kg		124	1248	66.1	298.8	347.4
Hoodia gordonii	DPL				1065			213
Hoodia gordonii	DPL	kg		993.5	4335.4	354.3	32790.8	7694.8
Hoodia gordonii	EXT	kg		745	2427	140	250	712.4
Hoodia gordonii	LIV			20		5		5
Hoodia gordonii	LIV	kg		70	20.2			18.0
Hoodia gordonii	LVS	kg		4291.5	1500	30		1164.3
Hoodia gordonii	POW	kg		14711.7	55869.2	23384.5	32529.9	25299.1
Hoodia gordonii	ROO	kg				60		12
Hoodia gordonii	SEE					30010000	30000000	12002000
Hoodia gordonii	STE	kg		1489	880			473.8
Hoodia lugardi	CHP	kg		45				9
Hoodia pilifera	DER	kg		300				60
Hoodia pilifera	LIV					20		4
Pachypodium bispinosum	LIV		3053	1640		1640		1266.6
Pachypodium brevicaule	LIV		1876	1263	1528	658	1499	1364.8
Pachypodium brevicaule	SEE				100			20
Pachypodium densiflorum	LIV		1148	1805	1083	1275	380	1138.2
Pachypodium densiflorum	SEE				100			20
Pachypodium geayi	LIV			10	2			2.4
Pachypodium horombense	LIV		475	749	653	158	247	456.4
Pachypodium horombense	SEE				100			20

* *The geographical designations employed in this Annex do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Pachypodium lamerei	LIV		332	18	40	800		238
Pachypodium makayense	LIV						62	12.4
Pachypodium rosulatum	LIV		787	1724	569	1172	167	883.8
Pachypodium rutenbergianum	LIV		115	35		10		32
Pachypodium rutenbergianum var. sofiense	LIV		10	21	160			38.2
Pachypodium spp.	LIV		1929	1558	1159	899	813	1271.6
Pachypodium spp.	SEE				200		52000	10440
Pachypodium succulentum	LIV		362	40		40		88.4
Rauvolfia serpentina	LIV	kg			3000			600
Rauvolfia serpentina	ROO	kg	6050	3030	2100	4900	1000	3416
ARALIACEAE								
Panax quinquefolius	ROO			4	1			1
Panax quinquefolius	ROO	kg	29034.5	24950.2	28319.4	25256.1	12993.5	24110.7
ASCLEPIADACEAE								
Ceropegia dimorpha	LIV		10					2
BROMELIACEAE								
Tillandsia spp.	LIV		30	4				6.8
CACTACEAE								
Astrophytum myriostigma	LIV			51	1			10.4
Astrophytum myriostigma	SEE	kg				200		40
Astrophytum spp.	LIV			50				10
Blossfeldia liliputana	LIV					40		8
Cactaceae spp.	DPL			2690	8	298	2	599.6
Cactaceae spp.	LIV		50				10	12
Cactaceae spp.	STE		280		1750			406
Carnegiea gigantea	TIM		28900			2		5780.4
Carnegiea gigantea	TIP				80000	40000		24000
Carnegiea gigantea	TIP	m^3	98.1	49.1	49.1			39.3
Cereus hildmannianus	DPL		3	5				1.6
Cereus hildmannianus	SPE			5				1
Cereus spp.	LIV				5			1
Cereus validus	LIV			50				10
Cleistocactus spp.	DPL				24			4.8
Copiapoa cinerascens	STE						5	1
Copiapoa cinerea	STE						5	1
Copiapoa montana	LIV		500	1000				300
Copiapoa spp.	DPL		53					10.6
Corryocactus brevispinus	STE			70				14
Corryocactus brevistylus	CAR					1568		313.6
Corryocactus brevistylus	STE		1826	5649	2148	5208	1650	3296.2
Corryocactus brevistylus ssp. puquiensis	STE				500			100
Corryocactus pulquinensis	STE			300		750	400	290
Coryphantha radians	SEE	kg				200		40
Disocactus aurantiacus	LIV						5	1
Disocactus spp.	DPL				5			1
Echinocactus platyacanthus	SEE	kg				200		40
Echinopsis chiloensis	CAR			742			13299	2808.2
Echinopsis chiloensis	DPL		1				900	180.2

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Echinopsis chiloensis	STE		57011	35312	36665	28180	3225	32078.6
Echinopsis chiloensis	STE	m				15093	13703	5759.2
Echinopsis hertrichiana	LIV					10		2
Echinopsis mamillosa	LIV			1		10		2.2
Echinopsis marsoneri	LIV					10		2
Echinopsis pachanoi	BAR	kg					70	14
Echinopsis pachanoi	POW	kg		2.0		136.9		27.8
Echinopsis pachanoi	STE		1110	830		1350	400	738
Echinopsis pachanoi	STE	kg				125		25
Echinopsis pachanoi	TIM	kg					25	5
Echinopsis peruviana	CAR		1730			850		516
Echinopsis peruviana	LIV						40	8
Echinopsis peruviana	STE			750	950		110	362
Echinopsis peruviana ssp. puquiensis	STE		1045	3460		1536	2000	1608.2
Echinopsis spachiana	DPL	kg	33500	10000				8700
Echinopsis spp.	DPL		28		18			9.2
Echinopsis spp.	DPL	kg	5000					1000
Echinopsis spp.	STE		450	654		110		242.8
Echinopsis tegeleriana	LIV					10		2
Eriosyce chilensis	LIV		5					1
Eriosyce islayensis	LIV					20		4
Eulychnia acida	CAR			2204			23163	5073.4
Eulychnia acida	DER					160	695	171
Eulychnia acida	STE		144050	97628	105426	72911	12101	86423.2
Eulychnia acida	STE	m				44612.0	38662	16654.8
Eulychnia breviflora	STE						16	3.2
Eulychnia spp.	DPL		71					14.2
Ferocactus histrix	SEE	kg				200		40
Ferocactus latispinus	SEE				1350000	1350000		540000
Ferocactus spp.	LIV			70				14
Harrisia nashii	DPL						50	10
Hylocereus undatus	LIV		600					120
Mammillaria bocasana	SEE	kg				200		40
Mammillaria spp.	LIV			150	5			31
Matucana formosa	LIV					10		2
Matucana krahnii	LIV					10		2
Matucana paucicostata	LIV					10		2
Melocactus macracanthos	LIV		15					3
Melocactus spp.	DPL						50	10
Myrtillocactus geometrizans	SEE				450000	450000		180000
Myrtillocactus geometrizans	SEE	kg				200		40
Myrtillocactus schenckii	SEE	kg				200		40
Obregonia denegrii	SEE	kg				200		40
Opuntia atacamensis	LIV		6					1.2
Opuntia boliviana	DPL		5					1
Opuntia boliviana	LIV		7					1.4
Opuntia caribaea	DPL						50	10
Opuntia cholla	DPL	kg	1900					380
Opuntia cholla	TIP	kg	1900					380

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Opuntia conoidea	LIV		11					2.2
Opuntia dillenii	SPE				18			3.6
Opuntia echios	DER						195	39
Opuntia echios	SPE						195	39
Opuntia engelmannii	FRU					60		12
Opuntia ficus-indica	DPL	kg	3000	3000		2000	2000	2000
Opuntia ficus-indica	FLO	kg	3000	7020	9000	2000	10040	6212
Opuntia ficus-indica	LIV	kg		1020				204
Opuntia fulgida	SPE					15		3
Opuntia galapageia	DER						12	2.4
Opuntia galapageia	SPE						12	2.4
Opuntia imbricata	TIP	kg	13736	7815	10903	8797		8250.2
Opuntia insularis	DER						10	2
Opuntia insularis	SPE						10	2
Opuntia leucotricha	LIV		2230					446
Opuntia megasperma	DER						5	1
Opuntia megasperma	SPE						5	1
Opuntia moniliformis	DPL						50	10
Opuntia robusta	FRU	kg			1292.4			258.5
Opuntia robusta	POW	flasks			6960			1392
Opuntia sphaerica	LIV		5					1
Opuntia spp.	DER					7080		1416
Opuntia spp.	DER	flasks					6960	1392
Opuntia spp.	DPL		82	1				16.6
Opuntia spp.	LIV		23	50				14.6
Opuntia spp.	SPE				46			9.2
Opuntia spp.	STE						4800	960
Opuntia spp.	STE	kg					30000	6000
Opuntia spp.	TIM	kg		10723		54727		13090
Opuntia spp.	TIP	kg	5000	13552	82100	75000		35130.4
Opuntia streptacantha	DPL	kg	7		300		300	121.4
Opuntia streptacantha	EXT	kg			300			60
Opuntia streptacantha	STE	kg					300	60
Opuntia streptacantha	TIP	kg	7					1.4
Opuntia subulata	STE		15356	1400				3351.2
Oreocereus spp.	DPL		13		2			3
Oroya peruviana	LIV					20		4
Pachycereus schottii	STE					10	3	2.6
Parodia concinna	DPL		5	1				1.2
Parodia erinacea	DPL		2	3				1
Parodia erinacea	LIV					20		4
Parodia mammulosa	DPL		10	10				4
Parodia ottonis	DPL		11	13				4.8
Parodia scopa	DPL		3	2				1
Parodia sellowii	DPL		8	8				3.2
Parodia spp.	DPL		10	6	2			3.6
Pelecyphora strobiliformis	SEE	kg				200		40
Pilosocereus spp.	LIV			50				10
Polaskia chende	SEE	kg				200		40

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Polaskia chichipe	SEE	kg				200		40
Rebutia albopectinata	LIV					10		2
Rebutia mentosa	LIV					10		2
Rebutia spp.	LIV			100				20
Rhipsalis baccifera	DPL			3	1	5		1.8
Rhipsalis spp.	DPL			5	5	3		2.6
Rhipsalis spp.	SPE				5			1
Schlumbergera spp.	LIV			4			6	2
Sclerocactus spp.	LIV			20			5	5
Selenicereus grandiflorus	DPL	kg	1200	4000				1040
Selenicereus grandiflorus	FLO	kg	4000					800
Stenocereus alamosensis	STE					20	13	6.6
Stenocereus gummosus	STE					20	10	6
Stenocereus thurberi	STE					5	10	3
CYATHEACEAE								
Alsophila spp.	DPL		14					2.8
Cyathea alata	DPL				12			2.4
Cyathea albida	LVS			12				2.4
Cyathea appendiculata	LVS			10				2
Cyathea arborea	DPL	m^3	139.0			26		33.0
Cyathea australis	LIV		377	194	345	341	320	315.4
Cyathea bellisquamata	LVS			8				1.6
Cyathea boivini	LVS			6				1.2
Cyathea borbonica	LVS			6				1.2
Cyathea borinquena	LIV				40			8
Cyathea brownii	LIV		10			10		4
Cyathea caracasana	DPL		2	3				1
Cyathea concinna	DPL	kg	23200					4640
Cyathea contaminans	CHP	kg					56700	11340
Cyathea contaminans	DER					1250		250
Cyathea contaminans	DPL					42700		8540
Cyathea contaminans	DPL	kg	53500		69986	77150		40127.2
Cyathea contaminans	TIM	kg	400000			505141.6	299549.8	240938.3
Cyathea cooperi	DPL			14	5			3.8
Cyathea cooperi	LIV		440	1251	1284			595
Cyathea cunninghamii	LIV		1194	10	25	1773		600.4
Cyathea dealbata	LIV		760	287	99	2560	350	811.2
Cyathea decrescens	LVS			22				4.4
Cyathea dregei	LIV					20		4
Cyathea lepifera	CHP					2072		414.4
Cyathea lepifera	DPL		5	20852				4171.4
Cyathea lepifera	LIV					620		124
Cyathea lepifera	POW					57		11.4
Cyathea lepifera	TIM					1100		220
Cyathea lunulata	DPL		10					2
Cyathea madagascarica	LVS			6				1.2
Cyathea medullaris	DPL	kg					1000	200
Cyathea medullaris	LIV		611	294	178	3294	425	960.4
Cyathea medullaris	POW	kg					2000	400

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Cyathea sechellarum	SPE					11		2.2
Cyathea similis	LVS			6				1.2
Cyathea smithii	LIV		603	211	153	1750	95	562.4
Cyathea spp.	CHP	kg		161375	38950			40065
Cyathea spp.	DPL		335	44	128	399	25039	5189
Cyathea spp.	DPL	kg	11400	6720	33573.5	14308	5990	14398.3
Cyathea spp.	DPL	m^3		96.9		123.8	230.4	90.2
Cyathea spp.	LIV		8	8166		260		1686.8
Cyathea spp.	LVS			38				7.6
Cyathea spp.	SPE						64	12.8
Cyathea spp.	TIM					150		30
Cyathea spp.	TIM	kg		990816.7				198163.3
Cyathea tomentosissima	LIV				25			5
Cyatheaceae spp.	DPL		4832	426	480	600	16	1270.8
Cyatheaceae spp.	LIV					143	3	29.2
Cyatheaceae spp.	SPE				19	19		7.6
CYCADACEAE								
Cycadaceae spp.	DPL					5		1
Cycadaceae spp.	SEE						15000	3000
Cycas angulata	LIV		8	3				2.2
Cycas media	LIV		250					50
Cycas pectinata	LIV			1016				203.2
Cycas revoluta	LIV						295	59
Cycas rumphii	SEE			500				100
Cycas spp.	DPL					70		14
Cycas spp.	LIV		4	3000				600.8
Cycas spp.	SEE				160			32
Cycas thouarsii	LIV		2001	3070		150	1	1044.4
Cycas thouarsii	SEE	kg		315				63
DICKSONIACEAE								
Calochlaena spp.	DPL			12				2.4
Calochlaena straminea	DPL				12			2.4
Cibotium barometz	DER	kg	1217.8	44.9				252.5
Cibotium barometz	LIV				6			1.2
Cibotium barometz	ROO	kg	69600	136000	79021.5	61000	69450	83014.3
Cibotium barometz	TIP	kg				500		100
Dicksonia antarctica	LIV					456		91.2
Dicksonia spp.	DPL		3	12	6	7	5	6.6
Dicksonia spp.	LIV			5	350			71
Dicksoniaceae spp.	DPL					24		4.8
Dicksoniaceae spp.	LIV				350			70
DIDIEREACEAE								
Alluaudia ascendens	LIV		7	106	2	720		167
Alluaudia comosa	LIV		4	89	40			26.6
Alluaudia dumosa	LIV		1		2	40		8.6
Alluaudia montagnacii	LIV		4	6				2
Alluaudia procera	LIV		2	2	2	27		6.6
Alluaudiopsis fiherenensis	LIV		2	10	215			45.4
Alluaudiopsis marnieriana	LIV		2		3			1

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Decaryia madagascariensis	LIV		3	2				1
Didierea madagascariensis	LIV		103	29				26.4
Didierea trollii	LIV		8	24		60		18.4
EUPHORBIACEAE								
Euphorbia abyssinica	LIV		84330	100500				36966
Euphorbia albipollinifera	LIV					25		5
Euphorbia alfredii	LIV				165			33
Euphorbia analalavensis	CUL			8				1.6
Euphorbia ankarensis	LIV		159	275	95	82		122.2
Euphorbia antisyphilitica	DPL	kg					15000	3000
Euphorbia antisyphilitica	EXT	kg			19500			3900
Euphorbia antisyphilitica	WAX	kg	417151	430525	393525	689200	1005865	587253.2
Euphorbia antso	LIV			20	20	5		9
Euphorbia astrophora	LIV					25		5
Euphorbia aureoviridiflora	LIV		4	103	5		100	42.4
Euphorbia banae	LIV		65	3	6			14.8
Euphorbia beharensis	LIV			100	3			20.6
Euphorbia berorohae	LIV			100	60			32
Euphorbia biaculeata	LIV		27					5.4
Euphorbia bongolavensis	LIV		282	165	155	10		122.4
Euphorbia braunsii	LIV					15		3
Euphorbia bulbispina	LIV		100	2	71			34.6
Euphorbia bupleurifolia	LIV					5		1
Euphorbia canariensis	LIV			49000				9800
Euphorbia capmanambatoensis	LIV			101	25	5		26.2
Euphorbia clavarioides	LIV			10				2
Euphorbia colliculina	LIV					62		12.4
Euphorbia crassipes	LIV					25		5
Euphorbia croizatii	LIV		3	50	102	200		71
Euphorbia denisiana	LIV			63	3			13.2
Euphorbia didiereoides	LIV			5	3			1.6
Euphorbia duranii	LIV		24	118	36			35.6
Euphorbia elliotii	LIV		13					2.6
Euphorbia famatamboay	LIV			50	50			20
Euphorbia fianarantsoae	LIV		7	145	21			34.6
Euphorbia fusca	LIV					60		12
Euphorbia genoudiana	LIV		13					2.6
Euphorbia geroldii	LIV				7	2120		425.4
Euphorbia gorgonis	LIV					15		3
Euphorbia gottlebei	LIV			10				2
Euphorbia gracilicaulis	LIV						100	20
Euphorbia guillauminiana	LIV		739	188	118	218	120	276.6
Euphorbia hedyotoides	LIV		179	234	99	75	60	129.4
Euphorbia herman-schwartzii	LIV			100	163			52.6
Euphorbia hofstaetteri	LIV		200	5	102	14		64.2
Euphorbia horombensis	LIV		39	60	126			45
Euphorbia iharanae	LIV			15		200		43
Euphorbia ingens	LIV			400				80
Euphorbia itremensis	LIV			535	225	290	125	235

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Euphorbia kondoi	LIV		386		110	15	10	104.2
Euphorbia labatii	LIV			295	268	150		142.6
Euphorbia lactea	LIV		20750	2000				4550
Euphorbia leandriana	LIV			500				100
Euphorbia leucodendron	LIV		4	1				1
Euphorbia leuconeura	LIV		100		55			31
Euphorbia lophogona	LIV		2	5605	20	750		1275.4
Euphorbia mahabobokensis	LIV		9	157	83		50	59.8
Euphorbia mainty	LIV						100	20
Euphorbia mangokyensis	LIV			10	16			5.2
Euphorbia milii	LIV		307	162	58	10		107.4
Euphorbia milii var. roseana	LIV		6					1.2
Euphorbia millotii	LIV						100	20
Euphorbia monteiri	LIV				5			1
Euphorbia multiceps	LIV					81		16.2
Euphorbia multifolia	LIV					129		25.8
Euphorbia neobosseri	LIV			50	49			19.8
Euphorbia neohumbertii	LIV		5	195	20			44
Euphorbia pachypodioides	LIV		31	333	205	65		126.8
Euphorbia paulianii	LIV		1		50			10.2
Euphorbia pedilanthoides	LIV		255	108	225	35		124.6
Euphorbia perrieri	LIV		5	10	150	20		37
Euphorbia poissonii	DPL			100				20
Euphorbia poissonii	LIV		200	100				60
Euphorbia primulifolia	LIV		3322	1478	386	292	694	1234.4
Euphorbia primulifolia var. begardii	LIV		25			200		45
Euphorbia razafindratsirae	LIV		147	10	8	43	10	43.6
Euphorbia razafinjohanii	LIV				5			1
Euphorbia resinifera	EXT	kg	12		25			7.4
Euphorbia robivelonae	LIV				11			2.2
Euphorbia rossii	LIV		250		21			54.2
Euphorbia sakarahaensis	LIV		160	170	18	24		74.4
Euphorbia schoenlandii	LIV				7	75		16.4
Euphorbia silenifolia	LIV		150					30
Euphorbia spp.	CUL			20				4
Euphorbia spp.	DPL		14	17	142	69	22	52.8
Euphorbia spp.	LIV		1957	3759	265	325	22	1265.6
Euphorbia spp.	SEE						600	120
Euphorbia spp.	SPE						68	13.6
Euphorbia stellata	LIV		1080					216
Euphorbia stellispina	LIV					65		13
Euphorbia susannae	LIV			170		40		42
Euphorbia suzannae-marnierae	LIV		81	809	53	30	30	200.6
Euphorbia tirucalli	LIV		108		5005			1022.6
Euphorbia trichadenia	LIV				6			1.2
Euphorbia trigona	LIV		12000	7350				3870
Euphorbia venenifica	DPL			150				30
Euphorbia venenifica	LIV		200	150				70
Euphorbia viguieri	LIV		8	12	10	300		66

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Euphorbia waringiae	LIV			274	33	3860	10	835.4
HAEMODORACEAE								
Anigozanthos rufus	DPL					375		75
LEGUMINOSAE								
Pericopsis elata	CAR					15		3
Pericopsis elata	TIM						140.4	28.1
Pericopsis elata	TIM	m^2			4098.8	3953.4		1610.4
Pericopsis elata	TIM	m^3	13533.7	17380.5	21846.5	28661.1	23300.3	20944.4
Pterocarpus santalinus	LOG	kg				25000	177490	40498
Pterocarpus santalinus	TIM	m^3			2933.2			586.6
LILIACEAE								
Aloe acutissima	LIV			14		4		3.6
Aloe antandroi	LIV		17					3.4
Aloe arborescens	EXT	kg	13400	6000			10600	6000
Aloe arborescens	LIV			3000		200		640
Aloe aristata	LIV			10				2
Aloe barbertoniae	LIV		7		3006	1		602.8
Aloe capitata	LIV		8	16				4.8
Aloe castanea	LIV			20	5		1	5.2
Aloe ciliaris	LIV			1		200		40.2
Aloe conifera	LIV		2	62	2			13.2
Aloe deltoideodonta	LIV		6	4800	5	510		1064.2
Aloe divaricata	LIV		20	12	2			6.8
Aloe ecklonis	LIV			10				2
Aloe erythrophylla	LIV		5	15				4
Aloe ferox	DPL		20735	1500				4447
Aloe ferox	EXT		17098	24165	55375	17352	23214.4	27440.9
Aloe ferox	EXT	flasks	489					97.8
Aloe ferox	EXT	kg	381136.7	447771.4	618116.8	423025.7	439103.3	461830.8
Aloe ferox	EXT	l	121500.4	102641.1	55883.6	85253.1	51050	83265.6
Aloe ferox	EXT	shipments		40	2			8.4
Aloe ferox	FIB	kg	200	1				40.2
Aloe ferox	LIV			25		202	1	45.6
Aloe ferox	LVS		90590	74856	71900	108190	69625	83032.2
Aloe ferox	LVS	kg		3000	6881.7	24043	33115.1	13408.0
Aloe ferox	STE			3692				738.4
Aloe ferox	TIP		107383	83309	92908			56720
Aloe ferox	TIP	kg	7500					1500
Aloe fleurentinorum	LIV					200		40
Aloe fragilis	LIV					300		60
Aloe guillaumetii	LIV			22				4.4
Aloe humbertii	LIV		15	7				4.4
Aloe ibitiensis	LIV		2	10				2.4
Aloe imalotensis	LIV		6	10				3.2
Aloe itremensis	DPL						7	1.4
Aloe macroclada	LIV			4	1	4		1.8
Aloe perrieri	LIV					250		50
Aloe plicatilis	LIV				500			100
Aloe polyphylla	LIV			30				6

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Aloe pratensis	LIV			10				2
Aloe pretoriensis	LIV			18			1	3.8
Aloe prostrata	LIV			6				1.2
Aloe spp.	DPL		7	56	1		6	14
Aloe spp.	LIV		406	96	230	384	130	249.2
Aloe spp.	SEE						1300	260
Aloe suarezensis	LIV		5	6				2.2
Aloe trachyticola	LIV		23	20				8.6
Aloe vanbalenii	LIV				9			1.8
Aloe vaombe	LIV			5	2			1.4
MELIACEAE								
Swietenia humilis	TIM	m^3				121.1	401.0	104.4
Swietenia macrophylla	CAR		50	2	1			10.6
Swietenia macrophylla	LVS		101					20.2
Swietenia macrophylla	PLY	m^3				14.9		3.0
Swietenia macrophylla	TIM		54.4	9				12.7
Swietenia macrophylla	TIM	m^2				14900	5340	4048
Swietenia macrophylla	TIM	m^3	352313.5	48535.9	40319.4	32898.3	48975.2	104608.5
NEPENTHACEAE								
Nepenthes albo-marginata	DPL				12			2.4
Nepenthes ampullaria	DPL				20	4		4.8
Nepenthes ampullaria	LIV				10	35		9
Nepenthes bellii	LIV			1		4		1
Nepenthes bicalcarata	DPL		7	110	167			56.8
Nepenthes bicalcarata	LIV			21		5		5.2
Nepenthes gracilis	DPL				22	3		5
Nepenthes hirsuta	LIV					15		3
Nepenthes maxima	LIV			1		18		3.8
Nepenthes mirabilis	DPL				13			2.6
Nepenthes mirabilis	LIV		82			12		18.8
Nepenthes mirabilis	SPE			1000				200
Nepenthes rafflesiana	DPL			5	49	7		12.2
Nepenthes rafflesiana	LIV					34		6.8
Nepenthes spp.	LIV					47	704	150.2
Nepenthes sumatrana	LIV			2		10		2.4
Nepenthes truncata	LIV			1		20		4.2
Nepenthes veitchii	LIV			1		10		2.2
Nepenthes ventricosa	LIV					14		2.8
ORCHIDACEAE								
Aa spp.	DPL					7	2	1.8
Acampe pachyglossa	LIV				30			6
Acriopsis spp.	LIV						6	1.2
Acrolophia spp.	LIV		5					1
Ada spp.	DPL					4	2	1.2
Aerangis articulata	LIV			30	5		30	13
Aerangis citrata	FRU				15			3
Aerangis citrata	LIV		3	150	57		2	42.4
Aerangis cryptodon	LIV		5	61		23		17.8
Aerangis curnowiana	LIV		5	110	17	23		31

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Aerangis decaryana	LIV			52	12			12.8
Aerangis decaryana	SEE				5			1
Aerangis ellisii	LIV		2	27				5.8
Aerangis fastuosa	LIV		6	217	70	9	2	60.8
Aerangis fastuosa	SEE				5			1
Aerangis fuscata	LIV			46	13	3	10	14.4
Aerangis hyaloides	FRU			15				3
Aerangis hyaloides	LIV			100	39	18	2	31.8
Aerangis hyaloides	SEE				5			1
Aerangis macrocentra	LIV			180	6		2	37.6
Aerangis modesta	LIV		3	19	3		10	7
Aerangis mooreana	SEE				5			1
Aerangis pallidiflora	SEE				5			1
Aerangis punctata	FRU			12				2.4
Aerangis punctata	LIV			7	52			11.8
Aerangis punctata	SEE				5			1
Aerangis spiculata	SEE				5			1
Aerangis spp.	DPL		3			2		1
Aerangis spp.	LIV		119			4		24.6
Aerangis stylosa	LIV			175	61	4		48
Aeranthes arachnitis	LIV			35				7
Aeranthes caudata	LIV			12		5		3.4
Aeranthes dentiens	FRU			5				1
Aeranthes filipes	LIV			52				10.4
Aeranthes grandiflora	LIV		6	40	5	5	13	13.8
Aeranthes henrici	LIV		4	132	56	34	32	51.6
Aeranthes henrici	LVS		8			201		41.8
Aeranthes henrici	SEE				15		27	8.4
Aeranthes henrici	SPE						5	1
Aeranthes longipes	LIV		9	22				6.2
Aeranthes nidus	LIV			26	3			5.8
Aeranthes parvula	LIV				110			22
Aeranthes peyrotii	LIV			10			1	2.2
Aeranthes ramosa	LIV		3	142	22	22	46	47
Aeranthes spp.	DPL			5	1	6		2.4
Aeranthes spp.	FRU				44			8.8
Aeranthes spp.	LIV		8	1				1.8
Aeranthes spp.	SEE	µg		7.5				1.5
Aeranthes tricalcarata	LIV			40	10			10
Aerides falcatum	LIV		30					6
Aerides multiflorum	LIV		76	20				19.2
Aerides odoratum	LIV		40		20			12
Aerides rubescens	LIV		60					12
Agrostophyllum spp.	LIV						55	11
Angraecum ankeranense	LIV				10			2
Angraecum baronii	SEE				8			1.6
Angraecum bicallosum	LIV			30				6
Angraecum breve	FRU			10				2
Angraecum breve	LIV			135	12		10	31.4

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Angraecum calceolus	LIV			5				1
Angraecum chamaeanthus	SEE				10			2
Angraecum compactum	LIV			35	2	20	21	15.6
Angraecum dendrobiopsis	LIV				10			2
Angraecum didieri	LIV			160	3			32.6
Angraecum drouhardii	FRU				10			2
Angraecum drouhardii	LIV			125	41		20	37.2
Angraecum eburneum	LIV		3	14	20	2	2	8.2
Angraecum eburneum ssp. superbum	LIV			6		2	2	2
Angraecum eburneum ssp. superbum var. longicalcar	DPL		3	10				2.6
Angraecum eburneum ssp. superbum var. longicalcar	LIV		2	4	1			1.4
Angraecum elephantinum	FRU				21			4.2
Angraecum elephantinum	LIV			105	7			22.4
Angraecum equitans	LIV		6	10	36		15	13.4
Angraecum filicornu	FRU			15	8			4.6
Angraecum filicornu	LIV			5	3			1.6
Angraecum germinyanum	LIV			25	52	3	15	19
Angraecum leonis	LIV			123	4	1	5	26.6
Angraecum letouzeyi	SEE				10			2
Angraecum linearifolium	SEE				10			2
Angraecum madagascariense	DPL		5	1				1.2
Angraecum magdalenae	LIV		3	31	36	3		14.6
Angraecum mahavavense	LIV			2	10			2.4
Angraecum musculiferum	SEE				8			1.6
Angraecum obesum	LIV			70	11	20	20	24.2
Angraecum oblongifolium	SEE				5			1
Angraecum panicifolium	DPL			2		3		1
Angraecum popowii	FRU				12			2.4
Angraecum praestans	FRU			10				2
Angraecum praestans	LIV			56	60			23.2
Angraecum praestans	SEE				10			2
Angraecum protensum	FRU			5				1
Angraecum protensum	LIV			30				6
Angraecum pseudofilicornu	LIV			28		3	10	8.2
Angraecum pumilio	LIV			6				1.2
Angraecum ramosum	LIV			6		1	10	3.4
Angraecum rutenbergianum	FRU				25			5
Angraecum rutenbergianum	LIV			62	13	4	20	19.8
Angraecum scottianum	LIV			143	82			45
Angraecum sesquipedale	LIV		3	22	2	4	2	6.6
Angraecum sesquipedale	LVS					18	150	33.6
Angraecum sororium	LIV		3	10	8		10	6.2
Angraecum spp.	DPL		20	16	1	12	2	10.2
Angraecum spp.	FRU				14			2.8
Angraecum spp.	LIV		127		21		10	31.6
Angraecum spp.	LVS		12					2.4
Angraecum spp.	SEE	µg		9				1.8
Angraecum spp.	SPE	kg					6.6	1.3

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Angraecum teretifolium	FRU				5			1
Angraecum teretifolium	LIV			196	9	22	20	49.4
Angraecum triquetrum	LIV			100				20
Angraecum urschianum	FRU			4	1			1
Angraecum viguieri	LIV			30	3	21	20	14.8
Anguloa uniflora	SPE		1				4	1
Appendicula spp.	LIV						20	4
Arpophyllum giganteum	LIV		150					30
Ascocentrum ampullaceum	LIV		5					1
Ascocentrum miniatum	LIV		11			5		3.2
Beclardia macrostachya	FRU				6			1.2
Beclardia macrostachya	LIV			25	13	13		10.2
Bletia florida	LIV				10	4		2.8
Bletia patula	LIV		5					1
Bonatea spp.	LIV		25					5
Bothriochilus bellus	LIV		25	20				9
Brachycorythis spp.	LIV		13					2.6
Brachypeza indusiata	LVS						5	1
Brassavola cordata	LIV		1		4	1		1.2
Brassavola grandiflora	LIV		25					5
Brassavola nodosa	LIV		1488	555	400			488.6
Brassavola tuberculata	LIV						10	2
Brassia arcuigera	LVS		6					1.2
Brassia caudata	LIV		62	6	10	4		16.4
Brassia maculata	LIV		303		100			80.6
Brassia spp.	LIV		5					1
Brassia spp.	LVS		6					1.2
Broughtonia negrilensis	LIV			7				1.4
Broughtonia sanguinea	LIV		2		8			2
Bulbophyllum affine	LIV		5					1
Bulbophyllum afzelii	SEE				8			1.6
Bulbophyllum alexandrae	LIV		1		5	10	1	3.4
Bulbophyllum antenniferum	LIV				10			2
Bulbophyllum baronii	DPL		1	1		3	1	1.2
Bulbophyllum baronii	LIV				7		10	3.4
Bulbophyllum boiteaui	LIV		15		10			5
Bulbophyllum coccinatum	SEE				8			1.6
Bulbophyllum complanatum	SEE				8			1.6
Bulbophyllum conchidioides	SEE				5			1
Bulbophyllum coriophorum	DPL			3		2		1
Bulbophyllum coriophorum	LIV		5		5		22	6.4
Bulbophyllum dearei	LIV				20			4
Bulbophyllum elliottii	LIV		5					1
Bulbophyllum erectum	LIV				10			2
Bulbophyllum hamelinii	LIV		5	75	20	10	20	26
Bulbophyllum hamelinii	SEE				8			1.6
Bulbophyllum humbertii	LIV			20	10			6
Bulbophyllum insolitum	SEE				11			2.2
Bulbophyllum lakatoense	SEE				10			2

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Bulbophyllum leandrianum	LIV		24					4.8
Bulbophyllum lemniscatoides	LIV		6					1.2
Bulbophyllum lepidum	LIV		5					1
Bulbophyllum lichenophylax	SEE				10			2
Bulbophyllum lobbii	LIV				15			3
Bulbophyllum longiflorum	FRU				9			1.8
Bulbophyllum macranthum	LIV		5					1
Bulbophyllum mandibulare	LIV				30			6
Bulbophyllum mangenotii	SEE				10			2
Bulbophyllum megalonyx	LIV				35			7
Bulbophyllum microglossum	LIV				30			6
Bulbophyllum namoronae	SEE				6			1.2
Bulbophyllum occlusum	LIV			40	15	10	11	15.2
Bulbophyllum occultum	LIV		1	5				1.2
Bulbophyllum pachypus	LIV		1	25	30			11.2
Bulbophyllum pleurothallopsis	SEE				5			1
Bulbophyllum refractum	LIV		6					1.2
Bulbophyllum rubrum	LIV			25	35			12
Bulbophyllum rufinum	LIV		5					1
Bulbophyllum septatum	LIV			37	13			10
Bulbophyllum spp.	DPL		16	24	90	77		41.4
Bulbophyllum spp.	FLO					12		2.4
Bulbophyllum spp.	LIV		64	37			434	107
Bulbophyllum spp.	LVS					12		2.4
Bulbophyllum spp.	SPE					180		36
Bulbophyllum sulfureum	FRU				7			1.4
Bulbophyllum therezienii	SEE				5			1
Bulbophyllum trilineatum	LIV			45	50			19
Bulbophyllum vinaceum	LIV				20			4
Cadetia spp.	LIV						13	2.6
Calanthe calanthoides	DPL				8			1.6
Calanthe madagascariensis	LIV			97	32		20	29.8
Calanthe repens	LIV			5				1
Calanthe rubens	LIV		50					10
Calanthe spp.	DPL			1		4		1
Calanthe spp.	LIV						60	12
Calanthe sylvatica	LIV		10	15	10		2	7.4
Calanthe triplicata	LIV				15			3
Calanthe vestita	LIV		25	25				10
Campylocentrum ariza-juliae	LIV		10					2
Campylocentrum micranthum	LIV		13	8				4.2
Campylocentrum pachyrrhizum	LIV					10		2
Catasetum integerrimum	LIV		62					12.4
Catasetum saccatum	STE			20				4
Catasetum tenebrosum	SPE						7	1.4
Cattleya bowringiana	LIV		14					2.8
Cattleya granulosa	LVS		6					1.2
Cattleya labiata	LVS		6					1.2
Cattleya spp.	LIV		250					50

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Cattleya spp.	ROO						9	1.8
Caularthron bilamellatum	LIV		48					9.6
Ceratandra spp.	LIV		10					2
Chamaeangis gracilis	LIV		10				22	6.4
Chondrorhyncha spp.	LIV		5					1
Chysis bractescens	LIV		490	801	300			318.2
Chysis spp.	LIV		100					20
Cleisomeria spp.	LIV		5					1
Cleisostoma spp.	LVS						5	1
Clowesia russelliana	LIV		20					4
Cochleanthes flabelliformis	LIV		5	9	6	8		5.6
Coelia spp.	LIV				25			5
Coelogyne brachyptera	LIV		5					1
Coelogyne fimbriata	LIV		105					21
Coelogyne mooreana	LIV		20					4
Coelogyne spp.	LIV		88				21	21.8
Comparettia falcata	LIV			50				10
Corallorrhiza maculata	STE				6			1.2
Coryanthes speciosa	LIV		135	205				68
Coryanthes spp.	LIV		14					2.8
Corycium spp.	LIV		16					3.2
Cranichis spp.	DPL		6			8	3	3.4
Cranichis sylvatica	LIV		5					1
Cryptarrhena guatemalensis	LIV		20					4
Cryptarrhena lunata	LIV		20		2			4.4
Cryptopus paniculatus	LIV			20				4
Cryptopus spp.	LIV			10				2
Cryptostylis subulata	LIV				8			1.6
Cyclopogon spp.	DPL		4	2		3		1.8
Cycnoches egertonianum	LIV		324					64.8
Cycnoches spp.	LIV		12					2.4
Cycnoches ventricosum	LIV		45					9
Cymbidiella falcigera	DPL		4			1		1
Cymbidiella falcigera	LIV			11		8	15	6.8
Cymbidiella flabellata	LIV		6	15	20	2		8.6
Cymbidiella pardalina	LIV		3	32	3	1	1	8
Cymbidiella spp.	LIV		3		1	5	15	4.8
Cymbidium dayanum	LIV		35					7
Cymbidium devonianum	LIV		135					27
Cymbidium eburneum	LIV		110					22
Cymbidium ensifolium	LIV		35					7
Cymbidium erythrostylum	LIV		35					7
Cymbidium insigne	LIV		25					5
Cymbidium iridioides	LIV		25					5
Cymbidium kanran	LIV		37					7.4
Cymbidium lancifolium	LIV		6					1.2
Cymbidium munronianum	LIV		31					6.2
Cymbidium sinense	LIV		25					5
Cymbidium spp.	FLO						1000	200

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Cymbidium spp.	LIV		6	205	32503			6542.8
Cynorkis ampullacea	LIV			50				10
Cynorkis boinana	SEE				5			1
Cynorkis brevicornu	LIV			50				10
Cynorkis fallax	LIV				100			20
Cynorkis gibbosa	LIV		4	48	3	3	15	14.6
Cynorkis gibbosa	SEE				5			1
Cynorkis lilacina var. pulchra	SEE				5			1
Cynorkis perrieri	LIV				100			20
Cynorkis peyrotii	SEE				5			1
Cynorkis sacculata	LIV			49	100			29.8
Cynorkis spp.	DPL		20	10	3	11	1	9
Cynorkis spp.	FRU			10				2
Cynorkis spp.	LIV		8	40		3	30	16.2
Cynorkis spp.	LVS		5					1
Cynorkis uncinata	LIV			40		3	15	11.6
Cynorkis uncinata	SEE				5			1
Cynorkis uniflora	SEE				5			1
Cypripedium acaule	LIV		30					6
Cypripedium parviflorum	LIV				120	61		36.2
Cypripedium reginae	LIV			2	10	25		7.4
Cyrtochilum loxense	SPE						10	2
Cyrtochilum spp.	DPL		27			6	4	7.4
Cyrtochilum spp.	SPE		2			3		1
Cyrtopodium punctatum	LIV		524	170				138.8
Dendrobium aduncum	LIV		25					5
Dendrobium amabile	LIV		178					35.6
Dendrobium anosmum	LIV		25					5
Dendrobium aphyllum	LIV		25					5
Dendrobium aphyllum	LIV	kg					1500	300
Dendrobium bellatulum	LIV		153					30.6
Dendrobium capillipes	LIV		1174					234.8
Dendrobium capillipes	ROO	kg				8000		1600
Dendrobium cariniferum	LIV		25					5
Dendrobium cathcartii	LIV		25					5
Dendrobium chlorostylum	LIV		25					5
Dendrobium christyanum	LIV		20					4
Dendrobium chrysanthum	LIV		81					16.2
Dendrobium chrysotoxum	LIV		4			5		1.8
Dendrobium chrysotoxum	LIV	kg			80000	150000		46000
Dendrobium chrysotoxum	ROO	kg				7000		1400
Dendrobium crepidatum	LIV		156					31.2
Dendrobium crumenatum	LIV		6					1.2
Dendrobium densiflorum	LIV		154					30.8
Dendrobium dickasonii	LIV		155					31
Dendrobium draconis	LIV		153					30.6
Dendrobium ellipsophyllum	LIV		5					1
Dendrobium eriiflorum	STE	kg					18990	3798
Dendrobium farmeri	LIV		54					10.8

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Dendrobium fimbriatum	LIV		54					10.8
Dendrobium fimbriatum	ROO	kg				8000		1600
Dendrobium finetianum	LIV		12					2.4
Dendrobium formosum	LIV		203	20				44.6
Dendrobium gratiosissimum	LIV		29					5.8
Dendrobium hemimelanoglossum	LIV		20					4
Dendrobium hercoglossum	LIV			20				4
Dendrobium hercoglossum	ROO	kg				7000		1400
Dendrobium infundibulum	LIV		177					35.4
Dendrobium lindleyi	LIV		10					2
Dendrobium lowii	LIV				30			6
Dendrobium macrophyllum	LIV			20				4
Dendrobium moschatum	LIV	kg			91000	150000		48200
Dendrobium nobile	DPL	kg	8000	6436		4000		3687.2
Dendrobium nobile	LIV						6	1.2
Dendrobium nobile	LIV	kg		4336				867.2
Dendrobium nobile	ROO				1000			200
Dendrobium nobile	ROO	kg			23489.1			4697.8
Dendrobium ochraceum	LIV		177					35.4
Dendrobium oligophyllum	LIV		7	20				5.4
Dendrobium parishii	LIV		7					1.4
Dendrobium parthenium	LIV				30			6
Dendrobium pendulum	LIV		6					1.2
Dendrobium primulinum	LIV		181					36.2
Dendrobium revolutum	LIV		25					5
Dendrobium serratilabium	LIV				10			2
Dendrobium speciosum	LIV					151	17	33.6
Dendrobium spp.	DER	kg	28.4	2.9		6.5		7.6
Dendrobium spp.	DPL	kg	15000					3000
Dendrobium spp.	FIB					12		2.4
Dendrobium spp.	LIV		33			1	512	109.2
Dendrobium spp.	LIV	kg				100000		20000
Dendrobium spp.	ROO						6	1.2
Dendrobium spp.	SPE						5	1
Dendrobium spp.	STE	kg			28.4			5.7
Dendrobium thyrsiflorum	LIV		28	25				10.6
Dendrobium unicum	LIV		5					1
Dendrobium venustum	LIV		10					2
Dendrobium wardianum	LIV		9					1.8
Dendrophylax funalis	LIV		4	50	10		10	14.8
Dichaea spp.	DPL		4	5		9	2	4
Dichaea spp.	SPE		5			1		1.2
Dimerandra emarginata	LIV		25	50				15
Dinema polybulbon	LIV		131	38	2			34.2
Diplocaulobium spp.	LIV						72	14.4
Disa caffra	LIV				50			10
Disa incarnata	LIV		5	2	50			11.4
Disa spp.	LIV		269					53.8
Disperis spp.	LIV		26					5.2

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Earina mucronata	LIV						20	4
Earina spp.	SPE				13			2.6
Elleanthus capitatus	LIV			20				4
Elleanthus longibracteatus	LIV		3	25	4	7		7.8
Elleanthus spp.	DPL		26	3		28	15	14.4
Elleanthus spp.	SPE					18		3.6
Eltroplectris calcarata	LIV			9	10		3	4.4
Encyclia alata	LIV		209	55	200			92.8
Encyclia amanda	LIV		25	130	100			51
Encyclia ambigua	LIV		125					25
Encyclia asperula	LIV		21					4.2
Encyclia baculus	LIV		45					9
Encyclia boothiana	LIV		743	455				239.6
Encyclia boothiana ssp. boothiana	LIV		120					24
Encyclia bractescens	LIV		703	680	200			316.6
Encyclia chacaoensis	LIV		29					5.8
Encyclia chloroleuca	LIV		20					4
Encyclia cochleata	LIV			12	6			3.6
Encyclia cordigera	LIV		29					5.8
Encyclia dickinsoniana	LIV		25					5
Encyclia distantiflora	LIV		20					4
Encyclia fragrans	LIV		4	100	6	6		23.2
Encyclia guatemalensis	LIV		274	240				102.8
Encyclia livida	LIV		25					5
Encyclia michuacana	LIV		50	30				16
Encyclia porrecta	LIV		20					4
Encyclia prismatocarpa	LIV			100				20
Encyclia pygmaea	LIV			6				1.2
Encyclia pyriformis	LIV			10				2
Encyclia radiata	LIV		1753	225	300			455.6
Encyclia spp.	DPL				3		3	1.2
Encyclia spp.	LIV		4	1				1
Epidendrum acunae	LIV		20					4
Epidendrum angustifolium	LIV			15		2		3.4
Epidendrum ciliare	LIV		722	75				159.4
Epidendrum cristatum	LIV		10					2
Epidendrum diffusum	LIV		123	107	106	6	8	70
Epidendrum imatophyllum	LIV		25					5
Epidendrum jamaicense	LIV			20				4
Epidendrum nocturnum	LIV		133	28		4		33
Epidendrum nutans	LIV		5		6			2.2
Epidendrum paniculatum	LIV		10					2
Epidendrum polyanthum	LIV		10					2
Epidendrum radicans	DPL				14			2.8
Epidendrum rigidum	LIV			12		4		3.2
Epidendrum saxicola	DPL					5		1
Epidendrum saxicola	SPE					5		1
Epidendrum secundum	LIV		45	3			3	10.2
Epidendrum sintenisii	LIV			5				1

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Epidendrum spp.	DPL		114	11	1	120	52	59.6
Epidendrum spp.	LIV		434	1	4			87.8
Epidendrum spp.	SPE		24			36		12
Epidendrum stamfordianum	LIV		677	555				246.4
Eria spp.	LIV						37	7.4
Eria truncata	LIV		5					1
Eulophia ibityensis	LIV			10				2
Eulophia livingstoneana	LIV		6					1.2
Eulophia perrieri	LIV			10				2
Eulophia pulchra	DPL		4		1			1
Eulophia pulchra	LIV			7	30			7.4
Eulophia ramosa	LIV			50	5			11
Eulophia spp.	DPL		11			3	5	3.8
Eulophia spp.	LIV		14	5	3	1		4.6
Eulophiella capuroniana	LIV			7				1.4
Eulophiella elisabethae	LIV			21	2	1		4.8
Eulophiella roempleriana	DPL		8					1.6
Eulophiella roempleriana	LIV			13	3	2	3	4.2
Eulophiella roempleriana	LVS		17					3.4
Fernandezia spp.	DPL		3			2		1
Flickingeria spp.	LIV						16	3.2
Galeandra batemanii	LIV		681	1060	100			368.2
Gastrodia elata	DER	kg		500				100
Gastrodia elata	LIV	kg		11296				2259.2
Gastrorchis francoisii	LIV		15	123	10	2	12	32.4
Gastrorchis humblotii	LIV		6	135	180	2	10	66.6
Gastrorchis humblotii var. schlechteri	LIV					3	12	3
Gastrorchis lutea	LIV			35				7
Gastrorchis peyrotii	LIV			10				2
Gastrorchis pulchra	LIV				10			2
Gastrorchis simulans	LIV			25				5
Gastrorchis spp.	LIV			5	10			3
Gastrorchis tuberculosa	LIV			108				21.6
Glomera spp.	LIV						10	2
Gongora cassidea	LIV		10					2
Gongora quinquenervis	LIV		61					12.2
Gongora spp.	LIV		12					2.4
Gongora truncata	LIV		20	200	100			64
Gongora unicolor	LIV		355		100			91
Goodyera erosa	LIV		9					1.8
Goodyera spp.	LIV						22	4.4
Govenia utriculata	LIV				5			1
Grammangis ellisii	LIV		1	10	25	9	2	9.4
Grammangis spectabilis	LIV		2	8				2
Grammangis spp.	LIV		46			5		10.2
Grammatophyllum spp.	LIV						7	1.4
Graphorkis concolor	FRU				8			1.6
Habenaria dentata	LIV		10					2
Habenaria distans	LIV		5					1

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Habenaria entomantha	LIV		5					1
Habenaria floribunda	LIV		5					1
Habenaria lindleyana	LIV		5					1
Habenaria spp.	DPL		8			12	4	4.8
Habenaria spp.	LIV		53					10.6
Habenaria spp.	SPE				3	6		1.8
Heterotaxis crassifolia	LIV		32	2	2			7.2
Hexadesmia spp.	LIV			50				10
Holcoglossum subulifolium	LIV		20					4
Holothrix spp.	LIV		28					5.6
Huntleya fasciata	LIV		25					5
Ionopsis satyrioides	LIV			6	20			5.2
Ionopsis spp.	LIV				70			14
Ionopsis utricularioides	LIV			49	200	12		52.2
Isochilus carnosiflorus	LIV		100					20
Isochilus linearis	LIV		123	204	103	3		86.6
Jumellea amplifolia	LIV				10			2
Jumellea angustifolia	LIV			5				1
Jumellea arborescens	FRU			8				1.6
Jumellea arborescens	LIV			20	10			6
Jumellea brevifolia	LIV			20	10			6
Jumellea confusa	LIV			60	40			20
Jumellea ibityana	LIV		5	5				2
Jumellea jumelleana	LIV			5			20	5
Jumellea major	LIV			35	10	3		9.6
Jumellea maxillarioides	LIV			4	1			1
Jumellea pandurata	LIV		3	60	1		20	16.8
Jumellea punctata	LIV			14			10	4.8
Jumellea spp.	DPL		6	14	1	1		4.4
Jumellea spp.	LIV			60			30	18
Jumellea teretifolia	LIV			4	2			1.2
Kefersteinia spp.	LIV		5					1
Lacaena bicolor	LIV		45					9
Laelia purpurata	LIV		5					1
Lemurella culicifera	FRU				20			4
Leochilus labiatus	LIV		20	9	115			28.8
Leochilus spp.	LIV		20		15			7
Lepanthes acuminata	LIV			40				8
Lepanthes ovalis	LIV		6					1.2
Lepanthes spp.	DPL		49	4		43	7	20.6
Lepanthes spp.	LIV			100	1			20.2
Lepanthes spp.	SPE		16			26		8.4
Lepanthopsis spp.	DPL			4		1		1
Liparis nervosa	LIV		5					1
Liparis spp.	DPL		6	2		8	1	3.4
Liparis spp.	LIV		4				10	2.8
Liparis viridiflora	LIV		5					1
Lockhartia biserra	DPL		26					5.2
Lockhartia hercodonta	LIV		200					40

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Luisia macrotis	LIV		5					1
Luisia thailandica	LIV		5					1
Lycaste aromatica	LIV		444	305	200			189.8
Lycaste barringtoniae	LIV		8		20	3		6.2
Lycaste cochleata	LIV		50					10
Lycaste leucantha	LIV			30				6
Macradenia lutescens	LIV				15	2	12	5.8
Macradenia spp.	LIV				15			3
Malaxis latifolia	LIV		20					4
Malaxis parthonii	LIV		5					1
Malaxis spp.	DPL		7			7		2.8
Malaxis spp.	LIV						8	1.6
Malaxis spp.	SPE					6		1.2
Malleola spp.	LVS						5	1
Masdevallia angulata	LIV		100					20
Masdevallia floribunda	LIV		500	30				106
Masdevallia spp.	DPL		16	9		11	1	7.4
Masdevallia spp.	LIV		146				2	29.6
Masdevallia spp.	SPE		6		4	4		2.8
Maxillaria alba	LIV		16	2	5			4.6
Maxillaria conferta	LIV		7	5	2	3	2	3.8
Maxillaria densa	LIV		26	100				25.2
Maxillaria elatior	LIV		2	200				40.4
Maxillaria exaltata	DPL			6				1.2
Maxillaria friedrichsthalii	LIV		56	18				14.8
Maxillaria fulgens	LIV		26					5.2
Maxillaria lankestri	DPL			7				1.4
Maxillaria minor	DPL			6				1.2
Maxillaria repens	DPL			18				3.6
Maxillaria ringens	LIV		25					5
Maxillaria rufescens	LIV		30	10	30		3	14.6
Maxillaria speciosa	LIV		141					28.2
Maxillaria spp.	DPL		73	16		115	37	48.2
Maxillaria spp.	LIV		1	104	4			21.8
Maxillaria spp.	SPE		32			29		12.2
Maxillaria tenuifolia	LIV		312	390	200			180.4
Maxillaria uncata	LIV		28					5.6
Maxillaria variabilis	LIV		41	250				58.2
Mediocalcar spp.	LIV						8	1.6
Microcoelia gilpinae	LIV					20	20	8
Microcoelia gilpinae	SEE				10			2
Microcoelia macrantha	LIV			21	9		30	12
Microcoelia perrieri	LIV			5				1
Microcoelia spp.	LIV		6	5	5		20	7.2
Miltonia flavescens	LVS		6					1.2
Miltonia regnellii	LVS		6					1.2
Mormodes lineata	LIV		10					2
Mormodes sotoana	LIV		10					2
Mormodes spp.	LIV		16	1				3.4

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Mormolyca ringens	LIV		25	100				25
Myoxanthus spp.	DPL		7			5	1	2.6
Myoxanthus spp.	SPE		2			3		1
Myoxanthus trachychlamys	DPL			7				1.4
Myrmecophila brysiana	LIV		55					11
Myrmecophila exaltata	LIV		30					6
Myrmecophila tibicinis	LIV		1385	250	600			447
Neobathiea grandidierana	LIV			80	1		1	16.4
Neobathiea perrieri	LIV		4	15		2		4.2
Neobathiea spatulata	LIV			100				20
Neobolusia spp.	LIV		5					1
Neodryas spp.	DPL					5	2	1.4
Neofinetia falcata	LIV		5					1
Neolehmannia difformis	LIV		100	2	4	10		23.2
Nervilia spp.	DPL		9			1		2
Nervilia spp.	SPE				5			1
Neuwiedia spp.	LVS						5	1
Neuwiedia veratrifolia	FLO						20	4
Neuwiedia veratrifolia	LVS						5	1
Nidema boothii	LIV		4	4				1.6
Nidema ottonis	LIV					5		1
Notylia barkeri	LIV		582	178				152
Notylia spp.	LIV				200			40
Oberonia disticha	DPL			2	1	3		1.2
Oberonia spp.	LIV						56	11.2
Odontoglossum spp.	DPL		26			5	4	7
Odontoglossum subuligerum	DPL					7		1.4
Odontoglossum subuligerum	SPE					6		1.2
Oeceoclades calcarata	LIV		10	110	20			28
Oeceoclades decaryana	LIV		7	121	4	50		36.4
Oeceoclades humbertii	LIV		30					6
Oeceoclades maculata	DPL		2	6				1.6
Oeceoclades pandurata	LIV			12	10			4.4
Oeceoclades perrieri	LIV				20	30		10
Oeceoclades petiolata	LIV		5	5	50			12
Oeceoclades peyrotii	LIV			100				20
Oeceoclades rauhii	LIV			200				40
Oeceoclades roseovariegata	LIV		6	172	22	40		48
Oeceoclades spathulifera	LIV			50	40	80		34
Oeceoclades spp.	DPL		6	4				2
Oeceoclades spp.	LIV		4	220		10		46.8
Oeonia rosea	LIV			65	20	3		17.6
Oeonia volucris	LIV		5	3	20			5.6
Oeoniella polystachys	LIV			15	14	7	2	7.6
Oeoniella spp.	LIV		5					1
Oncidium baueri	LVS		6					1.2
Oncidium blanchetii	LVS		6					1.2
Oncidium ciliatum	LVS		6					1.2
Oncidium concolor	LVS		6					1.2

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Oncidium cruciatum	LVS		6					1.2
Oncidium divaricatum	LVS		6					1.2
Oncidium ensatum	LIV		25	105				26
Oncidium fimbriatum	LVS		6					1.2
Oncidium flexuosum	LVS		6					1.2
Oncidium gardneri	LVS		6					1.2
Oncidium gauntlettii	LIV			10				2
Oncidium hastatum	LIV		25					5
Oncidium hians	LVS		6					1.2
Oncidium leiningii	LVS		6					1.2
Oncidium lindenii	LIV		160	30				38
Oncidium longicornu	LVS		6					1.2
Oncidium longipes	LVS		6					1.2
Oncidium pubes	LVS		6					1.2
Oncidium pulchellum	LIV						8	1.6
Oncidium pumilum	LVS		6					1.2
Oncidium raniferum	LVS		6					1.2
Oncidium sarcodes	LVS		6					1.2
Oncidium sphacelatum	LIV		246	135				76.2
Oncidium spp.	DER			196				39.2
Oncidium spp.	DPL		8	1		4	3	3.2
Oncidium spp.	LIV		23	1	2		1	5.4
Oncidium spp.	LVS		6					1.2
Oncidium spp.	SPE		4			1		1
Oncidium tetrapetalum	LIV		4		6	10		4
Oncidium triquetrum	LIV			12				2.4
Oncidium varicosum	LVS		6					1.2
Orchidaceae hybrid	LIV		37		4331		1	873.8
Orchidaceae spp.	DPL		265	229	1336	1175	353	671.6
Orchidaceae spp.	DPL	kg				106		21.2
Orchidaceae spp.	FLO				58	23		16.2
Orchidaceae spp.	FRU				197			39.4
Orchidaceae spp.	LIV		23070	5485	12637	367	226	8357
Orchidaceae spp.	LVS		157			61		43.6
Orchidaceae spp.	SPE		43	464	501	106	614	345.6
Orchidaceae spp.	SPE	kg		5.5				1.1
Ornithocephalus bicornis	LIV		250	100				70
Ornithocephalus gladiatus	LIV		102					20.4
Ornithocephalus inflexus	LIV		100	300				80
Ornithocephalus spp.	LIV		33					6.6
Otochilus fusca	LIV		5					1
Otoglossum globuliferum	DPL			8				1.6
Pachyphyllum spp.	DPL		1			30	7	7.6
Pachyphyllum spp.	SPE					22		4.4
Pedilochilus spp.	LIV						12	2.4
Peristeria elata	LIV				23			4.6
Phaius pulchellus	LIV			10				2
Phaius spp.	LIV		32				6	7.6
Phalaenopsis amabilis	LIV				30			6

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Phalaenopsis maculata	LIV				20			4
Phalaenopsis mannii	LIV		5					1
Phalaenopsis parishii	LIV		6					1.2
Phalaenopsis pulcherrima	LIV		5					1
Phalaenopsis spp.	LIV		3		1000	1000		400.6
Phalaenopsis violacea	LIV				15			3
Pholidota articulata	DPL		5					1
Pholidota spp.	LIV						9	1.8
Phreatia spp.	LIV						51	10.2
Piperia elegans	DPL			82				16.4
Piperia transversa	DPL			15				3
Piperia unalascensis	DPL			100				20
Platanthera bifolia	LVS					200		40
Platanthera chlorantha	LVS					200		40
Platystele spp.	DPL		13	10		4		5.4
Platystele spp.	SPE		3			3		1.2
Pleurothallis alpestris	LIV				10			2
Pleurothallis brighamii	LIV		100					20
Pleurothallis corniculata	LIV		6	15		10		6.2
Pleurothallis delicatula	LIV		10	12				4.4
Pleurothallis grobyi	LIV		200	556	100			171.2
Pleurothallis oblongifolia	LIV		8					1.6
Pleurothallis pruinosa	LIV					10	11	4.2
Pleurothallis quadrifida	LIV		13	7	8		4	6.4
Pleurothallis sertularioides	LIV		5	20	10		5	8
Pleurothallis spp.	DPL		126	69		92	33	64
Pleurothallis spp.	LIV		10	2				2.4
Pleurothallis spp.	SPE		34		15	31		16
Pleurothallis tikalensis	LIV		29					5.8
Pleurothallis tribuloides	LIV				4		5	1.8
Pleurothallis uncinata	LIV		25					5
Polycycnis spp.	LIV		12					2.4
Polystachya concreta	DPL			2		3		1
Polystachya henrici	LIV				50			10
Polystachya humbertii	FRU				30			6
Polystachya oreocharis	LIV		5					1
Polystachya rhodochila	LIV		6					1.2
Polystachya rosea	FRU				10			2
Polystachya rosea	LIV			23				4.6
Polystachya spp.	DPL		2	12		17	1	6.4
Polystachya spp.	FLO		5					1
Polystachya spp.	LIV			11			1	2.4
Polystachya spp.	SPE				6	1		1.4
Pomatocalpa kunstleri	LVS						5	1
Pomatocalpa spp.	LIV						12	2.4
Ponthieva spp.	DPL		14			4	1	3.8
Porroglossum spp.	DPL		6					1.2
Porroglossum spp.	SPE		5					1
Prescottia spp.	DPL		3			3		1.2

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Prosthechea cochleata	LIV						5	1
Prosthechea spp.	DPL		5			5	3	2.6
Pseuderia spp.	LIV						6	1.2
Psygmorchis pumilio	LIV				100			20
Psygmorchis pusilla	LIV		280		100			76
Pteroceras semiteretifolium	LIV		5					1
Pterygodium spp.	LIV		27					5.4
Renanthera bella	LIV				15			3
Restrepia spp.	DPL		5					1
Restrepiopsis spp.	DPL			8				1.6
Rhyncholaelia digbyana	LIV		55	2				11.4
Rhyncholaelia glauca	LIV		619	365	200			236.8
Rhynchostylis gigantea	LIV					5		1
Rhynchostylis retusa	LIV					5		1
Robiquetia spp.	LIV						49	9.8
Rusbyella spp.	DPL					4	3	1.4
Sacoila lanceolata	LIV		8					1.6
Sarcanthopsis spp.	LIV						8	1.6
Sarcoglottis acaulis	LIV				15			3
Sarcoglottis sceptrodes	LIV		700	1				140.2
Satyrium amoenum	LIV		5					1
Satyrium spp.	LIV		103					20.6
Scaphosepalum spp.	DPL		5					1
Scaphosepalum spp.	SPE		6					1.2
Scaphyglottis behrii	LIV		54					10.8
Scaphyglottis prolifera	LIV		100					20
Scaphyglottis spp.	DPL			5		8	1	2.8
Scelochilus spp.	DPL						6	1.2
Schizochilus spp.	LIV		15					3
Schizodium spp.	LIV		20					4
Schoenorchis gemmata	LIV		30					6
Schoenorchis micrantha	LIV		30					6
Schomburgkia spp.	LIV			200				40
Sievekingia spp.	LIV		8					1.6
Sobennikoffia humbertiana	FRU			7				1.4
Sobennikoffia humbertiana	LIV			107	27	22		31.2
Sobennikoffia robusta	FRU			10				2
Sobennikoffia robusta	LIV			102	17	20		27.8
Sobennikoffia spp.	LIV					20		4
Sobralia decora	LIV		8					1.6
Sobralia macrantha	LIV		185					37
Sobralia spp.	DPL		11	13		13	4	8.2
Sobralia spp.	SPE		2			7		1.8
Solenangis aphylla	LIV			21	4			5
Spathoglottis plicata	LIV		5					1
Spiranthes costaricensis	LIV		5					1
Spiranthes romanzoffiana	LVS			39				7.8
Spiranthes romanzoffiana	SPE		2	30				6.4
Stanhopea ecornuta	LIV		20					4

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Stanhopea graveolens	LIV		20					4
Stanhopea inodora	LIV		40					8
Stanhopea oculata	LIV		150		100			50
Stanhopea spp.	LIV		116	150	100			73.2
Stelis ophioglossoides	LIV		10	15	20	5	4	10.8
Stelis spp.	DPL		141	57		169	31	79.6
Stelis spp.	SPE		58		15	31		20.8
Stelis superbiens	SPE						5	1
Stellilabium spp.	DPL					5	1	1.2
Stellilabium spp.	SPE		2			3		1
Stenorrhynchos speciosum	LIV		6	5	6		1	3.6
Stilifolium ascendens	LIV		119	145				52.8
Stilifolium jonesianum	LVS		6					1.2
Telipogon machupicchuensis	DPL					5		1
Telipogon spp.	DPL		12			44	8	12.8
Telipogon spp.	LIV				8			1.6
Telipogon spp.	SPE		1			25		5.2
Thelasis spp.	LIV						8	1.6
Thrixspermum centipeda	LIV		5					1
Thrixspermum spp.	LIV						10	2
Trichocentrum carthagenense	LIV		264	126	100			98
Trichocentrum cebolleta	LIV		6					1.2
Trichocentrum cebolleta	LVS		6					1.2
Trichocentrum microchilum	LIV		129	28	205	3	6	74.2
Trichocentrum spp.	LIV				8			1.6
Trichoglottis spp.	LIV						6	1.2
Trichosalpinx ciliaris	LIV		10					2
Trichosalpinx dura	LIV		200					40
Trichosalpinx spp.	DPL		15			3	2	4
Trichosalpinx spp.	SPE		7			2		1.8
Trigonidium egertonianum	LIV		153	50				40.6
Trisetella spp.	DPL		10					2
Vanda denisoniana	LIV		25					5
Vanda lilacina	LIV		7					1.4
Vanda pumila	LIV		35					7
Vanda spp.	LIV		6		2547		4	511.4
Vanilla francoisii	LIV			50				10
Vanilla inodora	LIV		25					5
Vanilla planifolia	LIV		116	2	100			43.6
Vanilla spp.	DPL		14	1		2		3.4
Vanilla spp.	LIV		4	3		3		2
Vanilla spp.	SEE		1200			70		254
Vanilla spp.	SPE					8		1.6
Xylobium spp.	DPL		5	1			1	1.4
Zootrophion atropurpureum	LIV			12	20			6.4
OROBANCHACEAE								
Cistanche deserticola	DER	kg	325.3	223.4	0.4	3.6	200.9	150.7
Cistanche deserticola	ROO	kg			89.3			17.9

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
PALMAE								
Beccariophoenix madagascariensis	DPL		4			2		1.2
Beccariophoenix madagascariensis	LVS		39			1		8
Beccariophoenix madagascariensis	SEE			4000		2		800.4
Beccariophoenix madagascariensis	SEE	kg		2		30.2	40	14.4
Lemurophoenix halleuxii	LIV				6			1.2
Lemurophoenix halleuxii	SEE			8010	20			1606
Lemurophoenix halleuxii	SEE	kg			3800	100	0.1	780.0
Marojejya darianii	DPL					4	2	1.2
Marojejya darianii	SEE	kg		0.2	1225.0			245.0
Neodypsis decaryi	LIV					3	2	1
Neodypsis decaryi	SEE	kg			250		320	114
Ravenea rivularis	LIV		28579	19342	2974	541	1200	10527.2
Ravenea rivularis	SEE	kg	4058	3475	4570	8925	3675	4940.6
Satranala decussilvae	LIV				6			1.2
Satranala decussilvae	SEE			210				42
Satranala decussilvae	SEE	kg		0.1	205	94.2	1.8	60.2
Voanioala gerardii	SEE			9110	10			1824
PRIMULACEAE								
Cyclamen cilicium	DPL			250			80	66
Cyclamen cilicium	LIV		250500	250075	250000	250000	227926	245700.2
Cyclamen coum	LIV		530000	500000	600000	520695	455725	521284
Cyclamen graecum	DPL						80	16
Cyclamen graecum	LIV			9			5	2.8
Cyclamen hederifolium	LIV		1001630	1000000	900000	800120	729160	886182
Cyclamen intaminatum	DPL		100					20
Cyclamen intaminatum	LIV		75					15
Cyclamen mirabile	DPL		100					20
Cyclamen mirabile	LIV		75					15
RANUNCULACEAE								
Adonis vernalis	DPL	kg		4710	55			953
Adonis vernalis	ROO	kg	5440					1088
Hydrastis canadensis	POW	kg				30		6
ROSACEAE								
Prunus africana	BAR						10	2
Prunus africana	BAR	kg	2160355.5	2937700	2093301	1227300	815151.4	1846761.6
Prunus africana	DER						20	4
Prunus africana	EXT	kg	738	491	722	46.8	673.5	534.3
Prunus africana	LVS					130	60	38
Prunus africana	POW	kg		59000	595000			130800
Prunus africana	SPE						490	98
Prunus africana	STE	kg			25			5
Prunus africana	TIM						240	48
SARRACENIACEAE								
Sarracenia purpurea	DPL	kg			12.3	36		9.7
STANGERIACEAE								
Bowenia serrulata	FLO			120	120			48

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Bowenia serrulata	LIV					132		26.4
Bowenia serrulata	LVS		3040					608
TAXACEAE								
Taxus chinensis	EXT	kg		27.0				5.4
Taxus cuspidata	EXT	kg				36		7.2
Taxus cuspidata	LIV					7	17	4.8
Taxus cuspidata	LOG	m^3				50		10
Taxus wallichiana	EXT	kg			180	6		37.2
THYMELAEACEAE								
Aquilaria beccariana	TIM				560			112
Aquilaria crassna	CHP	kg		78.3	86	180	176	104.1
Aquilaria crassna	OIL	kg			37.6	0.1	1.3	7.8
Aquilaria crassna	POW	kg			10000			2000
Aquilaria crassna	TIM	kg		40	9			9.8
Aquilaria filaria	CHP	kg		276015	360576	329269.2	179098	228991.6
Aquilaria filaria	POW	kg		91765	206051	56575	200460	110970.2
Aquilaria filaria	TIM	kg				10140	6710	3370
Aquilaria malaccensis	CHP	kg	281130.5	187458.5	222410.1	225747.3	137939.5	210937.2
Aquilaria malaccensis	DER	kg		4.9	5.0	2.3	3.8	3.2
Aquilaria malaccensis	OIL	kg			3	27	10.0	8.0
Aquilaria malaccensis	OIL	l			6.2	414.0	105.5	105.1
Aquilaria malaccensis	POW	kg	5000	29000	19619.5	66700	70786	38221.1
Aquilaria malaccensis	STE	kg			5.0			1.0
Aquilaria malaccensis	TIM	kg			411.4	12259	15368	5607.7
Aquilaria microcarpa	CHP	kg		100			2	20.4
Aquilaria sinensis	DER	kg				126.6	24.6	30.2
Aquilaria sinensis	STE	kg			229.9			46.0
Aquilaria spp.	CHP	kg	1408.5	239184.2	247573.8	5525.8	33200.3	105378.5
Aquilaria spp.	LIV					5	30000	6001
Aquilaria spp.	OIL	kg	292		5.2	3.8	0.4	60.3
Aquilaria spp.	OIL	l	0.1	11	169.6	37.9	179.8	79.7
Aquilaria spp.	POW	kg		21000	30985		7500	11897
Aquilaria spp.	STE	kg			189.4	89.2	21.2	60.0
Aquilaria spp.	TIM	kg			75		3954	805.8
Gonystylus bancanus	CAR	kg					6683.9	1336.8
Gonystylus bancanus	CAR	m^3		34	5905.8	740	865.8	1509.1
Gonystylus bancanus	LIV	m^3					20.3	4.1
Gonystylus bancanus	TIM					2	10332	2066.8
Gonystylus bancanus	TIM	m^3		5808.4	8990.8	12176.1	6529.9	6701.0
Gonystylus forbesii	SAW	m^3			172.6	31.8		40.9
Gonystylus forbesii	TIP	m^3				36.0		7.2
Gonystylus spp.	CAR	m^3		13247.1	3723.0	113.3	0.8	3416.9
Gonystylus spp.	FRN	m^3		1696.4		37.8		346.8
Gonystylus spp.	LIV				20			4
Gonystylus spp.	LIV	m^3					9.0	1.8
Gonystylus spp.	PLY	m^3		7.2	8.6	5.4		4.2
Gonystylus spp.	SPE	m^3		15.6				3.1
Gonystylus spp.	TIM	m^2		42.3				8.5
Gonystylus spp.	TIM	m^3		40581.0	10568.2	6859.4	6540.6	12909.9

Taxon	Term	Unit	2004	2005	2006	2007	2008	Yearly Average
Gyrinops spp.	CHP	kg		22700	64543	63006	22225	34494.8
Gyrinops spp.	POW	kg			33250	9000	17000	11850
Gyrinops spp.	TIP	kg					1090	218
Gyrinops versteegii	CHP	kg		605			10000	2121
Gyrinops versteegii	POW	kg		7450				1490
ZAMIACEAE								
Dioon mejiae	LIV		77	47				24.8
Dioon mejiae	LVS			30				6
Dioon spp.	DPL		44					8.8
Dioon spp.	SEE		1672					334.4
Macrozamia communis	LIV		70	170	123	375		147.6
Macrozamia communis	LVS					70000		14000
Macrozamia communis	STE			10				2
Macrozamia moorei	LIV		1995	2642	1036			1134.6
Macrozamia mountperriensis	LIV		1075	184	70			265.8
Macrozamia riedlei	LIV			20	17	119	163	63.8
Zamia angustifolia	SPE			50				10
Zamia elegantissima	LIV			15				3
Zamia fairchildiana	LVS			500				100
Zamia furfuracea	LIV		28000	1000				5800
Zamia manicata	LIV			17				3.4
Zamia spp.	DPL		22					4.4
Zamia spp.	LIV		28	17				9
Zamia spp.	LVS			9				1.8
Zamia spp.	SEE		836					167.2
Zamia spp.	STE			21				4.2
Zamia standleyi	LIV		33	28				12.2
Zamia standleyi	LVS			5				1
Zamiaceae spp.	LIV				90	2		18.4
ZYGOPHYLLACEAE								
Guaiacum coulteri	SAW	m^3	12.0					2.4
Guaiacum coulteri	TIM	m^3				18.2		3.6
Guaiacum officinale	DPL						50	10
Guaiacum sanctum	LVS			1500	250			350
Guaiacum sanctum	POW	m^3			7.6			1.5
Guaiacum sanctum	TIM	m^3	149.3	99.6	160.7	1777.6	64.7	450.4

Selection of species for inclusion in the Review of Significant Trade following CoP15: Extended analysis

UNEP-WCMC has undertaken an extended analysis of the Appendix-II trade data with the aim of assisting the CITES scientific committees with the task of species selection for the Review of Significant Trade. The species selected by the analysis described below are listed in Table 1. It should be noted, however, that many of these species may have been selected as a results of anomalies in the trade data rather than because of genuine concerns with the trade.

Data used

This extended analysis of gross exports in Appendix-II species covers trade data over the most recent ten-year period for which near-complete data is available (1999-2008). A longer period was deemed more appropriate to enable the identification of slopes and dispersion of trade levels, used for the analysis. As with the initial data output produced (see Annex 1 of the present document), specimens traded at levels averaging less than one over the most recent five-year period were excluded. Similarly, only trade data where the reported source was wild-collected, ranched, unknown or where there was no reported source were included. Trade at the genus level is included. However, trade reported at higher taxonomic levels (e.g. at the family, order or class level) has been excluded. The number of individual trade records involved in this analysis totalled over 3,389,800.

As re-export data were not deemed to add relevant information to the analysis of the number of specimens taken for trade, only the data concerning direct exports was used in the analysis.

Data for 2009 were excluded from this extended analysis since less than 50 % of annual reports for 2009 had been received by UNEP-WCMC and included in the CITES Trade Database by the time of the data extraction (1 December 2010). However, data for 2009 have been included in a separate analysis described under "Preliminary analysis of 2009 data" (see p. 35 of the present document).

The resulting dataset was subsequently filtered to include only the following terms of trade (i.e. types of specimens in trade):

- bark, carvings, chips, cultures, derivatives, dried plants, extract, flowers, flower pots, fruit, furniture, leaves, live, logs, plywood, powder, roots, sawn wood, seeds, stems, timber, timber carvings, timber pieces, veneer, and wax.

A full list of terms traded is available in the CITES Trade Database interpretation guide, see: www.unep-wcmc.org/citestrade/docs/CITESTradeDatabaseGuide_v7.pdf. Conversion factors were applied to enable a more meaningful analysis of the different units in which trade was originally reported. Units of trade were converted in order to standardize the data and facilitate the analysis as follows.

Converted from	Converted to
grams or milligrams	kilograms
millilitres	litres
centimetres	metres
cm^2 or ft^2	m^2
cm^3	m^3

* *The geographical designations employed in this Annex do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

Parties often report timber in either kilograms or cubic metres. Therefore, prior to the creation of the gross export tables, timber reported in kilograms was converted to cubic metres where a conversion factor for the species was available from the CITES Identification Manual – see below:

Species	Mean specific weight
Gonystylus spp.	0.66 g/cm^3
Guaiacum sanctum	1.23 g/cm^3
Guaiacum officinale	1.23 g/cm^3
Pericopsis elata	0.725 g/cm^3
Prunus africana	0.74 g/cm^3
Swietenia humilis	0.61 g/cm^3
Swietenia macrophylla	0.60 g/cm^3
Swietenia mahagoni	0.75 g/cm^3

Species selection

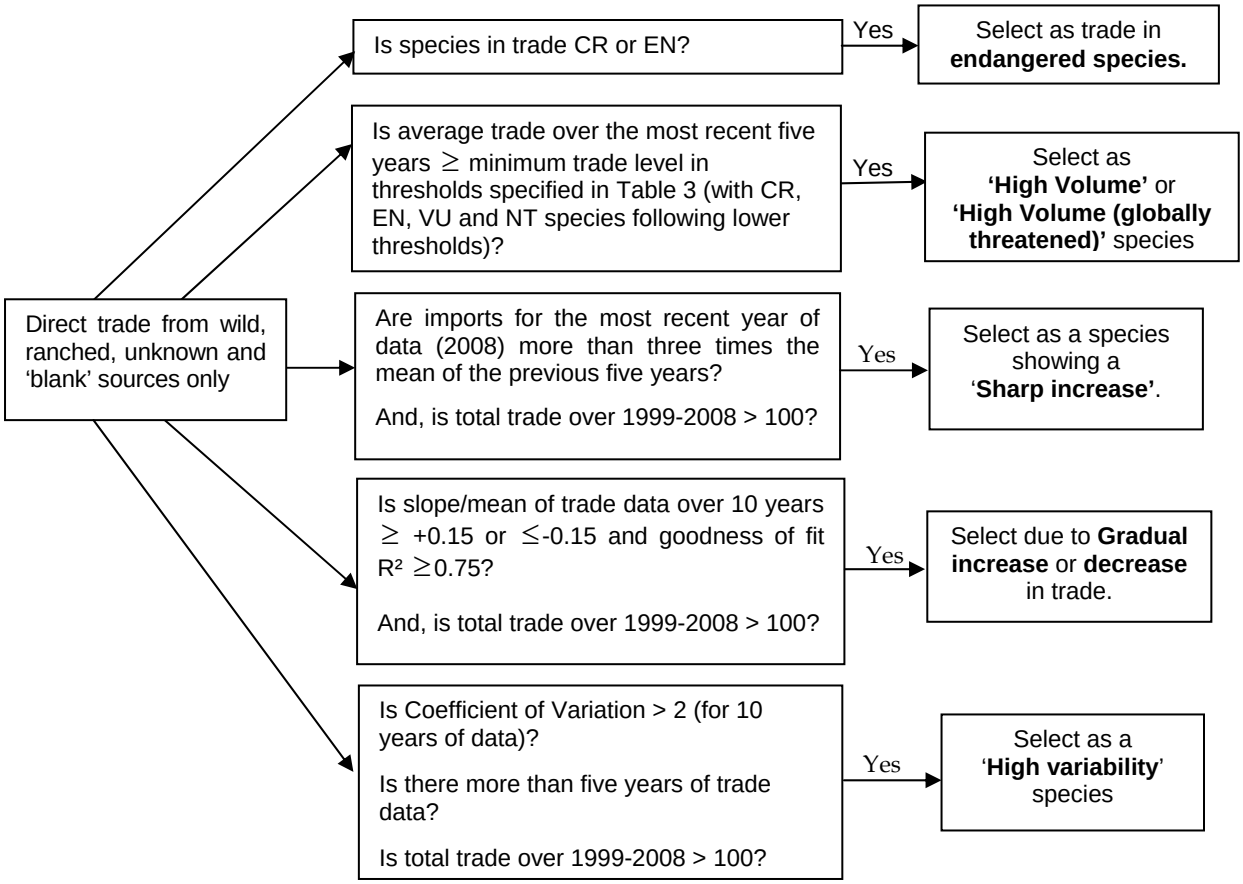
The resulting dataset was then filtered using a set of criteria to extract the species showing noteworthy patterns of trade. The selection of species highlighted in this detailed analysis was derived using the analysis protocol depicted in Figure 1. Trade levels were analysed and selected as noteworthy according to five criteria designed to identify:

- High volume of trade over the most recent five year period (2003-2008);
- Sharp increase in trade in 2008 in comparison to the average over preceding five-year period (2003-2007);
- General long-term increases or decreases in trade over a ten-year period (1999-2008);
- Long-term variability in trade between 1999 and 2008;
- Global threat status: Species categorized in the *IUCN Red List of Threatened Species* as Critically Endangered (CR) or Endangered (EN) were automatically selected for inclusion in Annex 1. Globally threatened and near-threatened species traded at relatively high volumes over 2003-2008 were also selected.

Further details on these criteria are summarized in Figure 1, followed by a detailed description of each criterion.

Species that met at least one of the criteria are included in Table 1, along with the details of which criterion or criteria they met. To assist the CITES scientific committees with the task of species selection for the Review of Significant Trade, UNEP-WCMC has provided additional information on species selected as part of this extended analysis in the Notes column. For instance, annotations are provided for species that were previously selected for review as part of the Review of Significant Trade, and for species that were newly listed on the CITES Appendices (within the period analysed).

Figure 1: Flow chart for the selection of candidate species for consideration in the Review of Significant Trade



Criterion 1: Global threat status

Species threatened with extinction are assumed to be more adversely affected by high trade volumes and more susceptible to changes in trade patterns than non-threatened species. For this reason, species in trade that have been classified as Critically Endangered and Endangered in the *2010 IUCN Red List of Threatened Species* were automatically selected for inclusion. The standard selection criteria have also been applied to these species – adjusted when other criteria are also met.

The global threat status was taken into consideration when applying the 'high volume' criterion. Thresholds used to determine high volume trade were lower for globally threatened species than for non-threatened species. The minimum trade level required to meet the high volume criteria (see criterion 2) was also adjusted for all species categorised as Critically Endangered ('CR'), Endangered ('EN'), Vulnerable ('VU') or Near Threatened ('NT') in the *2010 IUCN Red List of Threatened Species*.

It should be noted that not all species have been assessed in the *2010 IUCN Red List of Threatened Species* e.g. many reptiles and invertebrates. Therefore, the higher trade thresholds will apply to these species by default as it cannot be easily determined whether or not these species are threatened.

Criterion 2: High volume trade

Species qualified for inclusion in Table 1 on the basis of 'high volume trade' or 'high volume (globally threatened)' if the average level of gross direct exports during 2004-2008 exceeded pre-determined thresholds (see below). Terms with the same unit (e.g. number or m^3) were combined in order to assess the high volume criterion. For instance, a species might meet the high volume criterion on the combination of trade in live, bodies and skins. Trade in units other than number, or m^3 in the case of timber, (e.g. kg or m) were excluded from the high volume trade analysis, as it is difficult to combine these units meaningfully, but were included in the analyses for the remaining criteria.

Average minimum number of specimens from wild, ranched and unknown sources reported as directly exported per year over 2004-2008 needed to qualify for selection on the basis of high trade volume.

Types of plants	High volume	High volume (*globally threatened)
Non-tree	5000	250
Trees	500 m³	250 m³

*Applies to species that are classified as Critically Endangered (CR), Endangered (EN), Vulnerable (VU) or Near Threatened (NT) according to the *2010 IUCN Red List of Threatened Species*.

Criterion 3: Sharp increase in trade volume in 2008

Species met this criterion if the volume of direct exports during 2008 was more than three times the average trade volume of the preceding five years 2003-2007 (see graphic below). Species that, despite a sharp increase in trade in 2008, were still only traded in very low volumes (i.e. totalling less than 100 over the entire period), were not considered to meet this criterion.

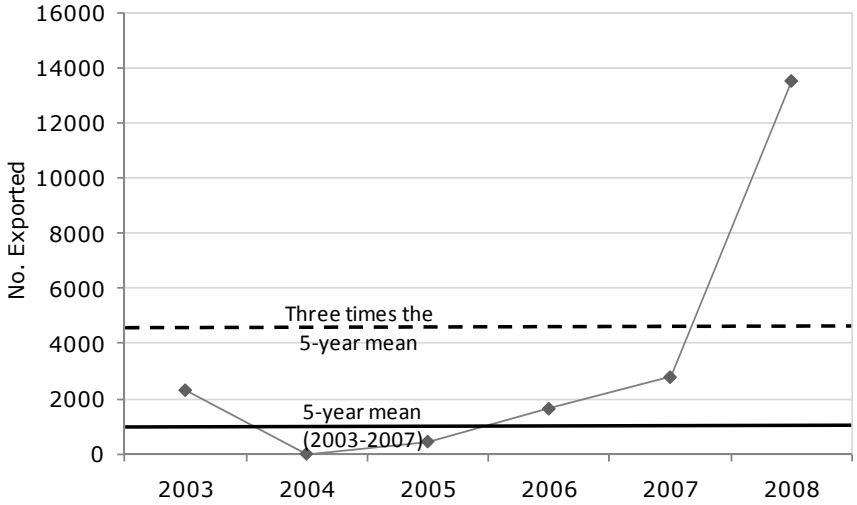


Illustration of the application of the 'sharp increase' criterion (direct gross exports).

Criterion 4: Overall increase or decrease in trade levels 1999-2008

This criterion was included to take into account more general trends over the ten-year period 1999-2008 ('overall increase' and 'overall decrease'). General trends in trade for each taxon were identified by calculating the slopes of a best-fit linear function to the trade data, a large slope (positive or negative) indicating a notable change in trade levels over time (see graphic below).

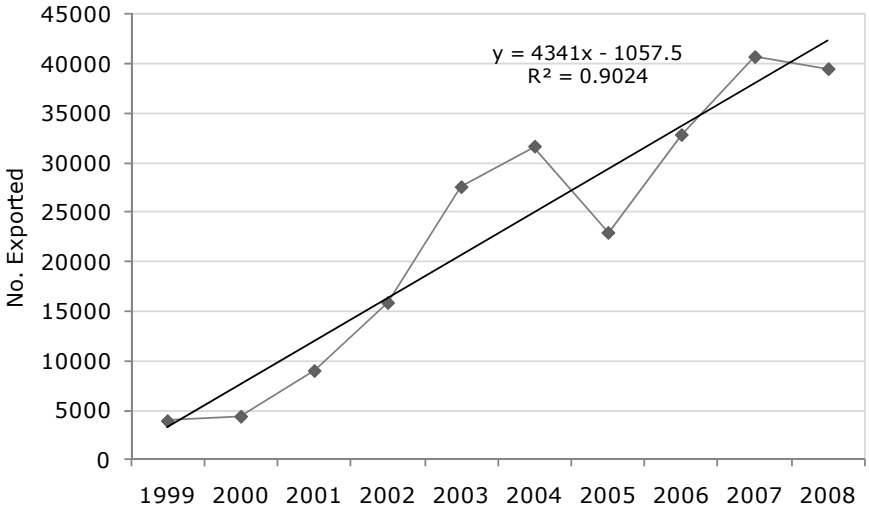


Illustration of the application of the 'overall increase' criterion (direct gross exports).

For the purpose of comparison between taxa, the value of the slope was divided by the mean level of trade (for the ten-year period in question) for each taxon. Following examination of the slope/mean values for all species,

a cut-off threshold of ± 0.15 was chosen. That is to say, values below +0.15 and above –0.15 were considered small slopes, while higher values than +0.15 and lower than –0.15 were considered large slopes. The goodness of fit of the trend-line was also considered with only species with R^2 values of greater than 0.75 retained in the final selection for overall increase or decrease (R^2 is a commonly-used criterion for goodness of fit with R^2=1.00 being best fit).

Species that, despite a gradual increase or decrease in trade over this period, were still only traded in very low volumes (i.e. totalling less than 100 over the entire period), were not selected on the basis of this criterion. The date of CITES listing was also taken into consideration for this criterion.

Criterion 5: Highly variable trade levels 1999-2008

Trade levels in some species can be highly variable, with relatively high volumes being traded in some years and little or no trade reported in other years. Most trade patterns do not fit the linear slope pattern, as described in the section on 'overall increase or decrease' above. Therefore, it was considered that a species showing high variation in levels of trade over the period of analysis might need more attention than those showing fairly constant trade levels. For the purpose of this analysis, a ten-year period (1999-2008) was examined. In the case of species added to the CITES Appendices within the period of analysis, only the years since its listing were analysed, provided that at least five years of trade data were available.

A number of measures of spread exist but the most appropriate when comparing across groups with different means was considered to be the coefficient of variation (CV). The CV is calculated as the standard deviation divided by the mean. This coefficient can therefore be used to make comparisons among taxa, as division of the standard deviation by the mean removes the effect of differences in scale of the trade volumes to which different taxa are subject.

Following examination of the coefficients of variation shown by all species within the period of analysis, a cut-off value of +2 was used to select candidate taxa. Thus, taxa whose levels of trade showed a coefficient of variation higher than +2 (i.e. highly variable trade levels) were considered as potential candidates for selection.

As with the previous criterion, species that were traded in low numbers (totalling less than 100 units during 1999-2008) were not selected for further consideration. In addition, species that had five or less data-points were excluded as zero-trade volumes are confounded with no-data due to lack of reporting, therefore many species would be selected as showing artificially high variability.

Preliminary analysis of 2009 data

As 2009 data were incomplete at the time of analysis (December 2010), they could not be subjected to the same analysis as other years of data. Nevertheless, a preliminary analysis was conducted to detect high volume and sharp increases in trade in 2009. The sharp increase criterion applied was the same as described above, with adjustments made for the year (e.g. taxa met the criterion if gross export levels in 2009 were over three times the average level of trade for the period 2004-2008). The high volume criterion applied differed slightly from the criterion applied to the main dataset. Instead of comparing the average of five years of data with the thresholds mentioned above, the 2009 data was assessed on its own to determine if the thresholds had been exceeded on the basis of trade reported to date.

Taxa suggested for review as part of this preliminary analysis of 2009 data are included in Table 2.

Table 1: Plant taxa selected through the flowchart process Quantities rounded to the nearest whole number, when applicable. Data extracted from the CITES Trade Database on 1 December 2010.

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
AMARYLLIDACEAE													
Galanthus elwesii	live	5500200	5500000	5361900	5976530	5650000	5700000	5700000	5600000	5700000	5454120		Selected due to high volume of trade.
Galanthus woronowii	live	10000000	12000042	17006100	14000285	20000000	4005775	19879750	20000000	17000020	16817942		Selected due to high volume trade. Selected at PC14 in the trade review following CoP12.
APOCYNACEAE													
Hoodia gordonii	derivatives								21057	360			Selected due to high volume and sharp increase in trade. Listed in the CITES Appendices in 2005.
	dried plants								1065				
	seeds									30010000	30000000		
	derivatives (kg)							124	1248	66	299		
	dried plants (kg)							994	4345	554	32791		
	extract (kg)							745	2427	140	250		
	leaves (kg)							4292	1500	30			
	powder (kg)							14712	55869	23385	32531		
	stems (kg)							1489	880				
Pachypodium spp.	live	367	30	125	5	239	1929	1558	1159	899	813		Selected due to high volume of trade, sharp increase and high variability. *P. bispinosum* and *P. succulentum* Selected at PC15 in the trade review following CoP13.
	seeds				3400				200		52000		
BROMELIACEAE													
Tillandsia spp.	live	32	530		5		30	4					Selected due to high variability in trade.
CACTACEAE													
Carnegiea gigantea	timber pcs.	13	10						80000	40000			Selected due to high volume of trade.
	timber pcs (m^3)						98	49	49				
Echinopsis chiloensis	carvings							742			13299		Selected due to high volume of trade and sharp increase. Trade in rainsticks.
	dried plants						1				900		
	stems	42462	37411	24941	39185	67432	57011	35312	36665	28180	3225		
	stems (m)									15093	13703		

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
Echinopsis peruviana	carvings				7775	4633	1730			850			Selected due to sharp increase and high variability in trade. Trade in rainsticks.
	live				80						40		
	stems			510	28810	2980		750	950		110		
Eulychnia acida	carvings							2204			23163		Selected due to high volume of trade, sharp increase and overall decrease in trade. Trade in rainsticks.
	derivatives									160	695		
	stems	218509	253039	141057	156604	148085	144050	97628	105426	72911	12101		
	stems (m)									44612	38662		
Ferocactus latispinus	seeds								1350000	1350000			Selected due to high volume of trade.
Myrtillocactus geometrizans	seeds			320					450000	450000			Selected due to high volume of trade.
	seeds (kg)									200			
Opuntia echios	derivatives										195		Selected due to sharp increase in trade.
Opuntia galapageia	derivatives										12	EN	Selected as trade in endangered species.
Opuntia insularis	derivatives										10	EN	Selected as trade in endangered species.
Opuntia megasperma	derivatives										5	EN	Selected as trade in endangered species.
Opuntia spp.	derivatives									7080			Selected due to sharp increase in trade.
	live	2			501	200	23	50					
	stems			712							4800		
	derivatives (flasks)										6960		
	stems (kg)										30000		
	timber pcs. (kg)						5000	13552	82100	75000			
Opuntia streptacantha	dried plants (kg)					1451	7		300		300		Selected due to sharp increase in trade.
	extract (kg)								300				
	stems (kg)										300		
CYATHEACEAE													
Cyathea contaminans	derivatives									1250			Selected due to high volume in trade and sharp increase. Sharp increase, however, resulting from variation in
	dried plants			1000		48726				42700			

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
	chips (kg)										56700		reporting of "chips" and "dried plants" by trading partners. Selected at PC14 in the trade review following CoP12.
	dried plants (kg)				195984	175146	53500		69986	77150			
Cyathea medullaris	live	887	786	501	4391	1050	611	294	178	3294	425		Selected due to sharp increase in trade. Discussed at PC14, but not selected for trade review (see document PC14 Doc. 9.3).
	dried plants (kg)										1000		
	powder (kg)										2000		
Cyathea spp.	dried plants	341	943	1731		167	335	44	128	399	25039		Selected due to sharp increase in trade and high variability. Several species within the genus discussed at PC14, with *Cyathea contamins* selected for review (see document PC14 Doc. 9.3 and PC16 Doc. 10.2. Annex 3).
	live	31	1	516		53	8	8166		260			
	dried plants (m^3)	115						97		124	230		
	chips (kg)							161375	38950				
	dried plants (kg)	90		875	1826	19072	11400	6720	33574	14308	5990		
CYCADACEAE													
Cycas spp.	dried plants		68							70			Selected due to high variability in trade. Review of Significant Trade in cycads published in 2003 (see document PC14 Doc. 9.2.2 Annex 1).
	live	4	60	4		23	4	3000					
	seeds		25	10					160				
DICKSONIACEAE													
Cibotium barometz	derivatives (kg)	19	505	6675	2457	11732	1218	45					Selected due to overall decrease in trade. Selected at PC14 in the trade review following CoP12
	roots (kg)	213000	185000	167200	178209	72139	69600	136000	79022	61000	69450		
	timber pcs. (kg)									500			
Dicksonia spp.	dried plants			255			3	12	6	7	5		Selected due to high variability in trade. Listed in the CITES Appendices in 2000.
	live	77						5	350				
DIDIEREACEAE													
Alluaudia ascendens	live		4			9	7	106	2	720			Selected due to high variability in trade.
EUPHORBIACEAE													

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
Euphorbia abyssinica	live	96110	22700	176700	175580	107420	84330	100500					Selected due to high volume in trade. Traded under synonym *Euphorbia acrurensis*.
Euphorbia ankarensis	live	24				52	159	275	95	82		EN	Selected as trade in endangered species.
Euphorbia antisyphilitica	dried plants (kg)										15000		Selected due to sharp increase and overall increase in trade.
	extract (kg)								19500				
	wax (kg)			98000	208000	191525	417151	430525	393525	689200	1005865		
Euphorbia canariensis	live			20				49000					Selected due to high volume of trade.
Euphorbia croizatii	live					5	3	50	102	200		EN	Selected as trade in endangered species.
Euphorbia didiereoides	live	22	5					5	3			EN	Selected as trade in endangered species. Selected at PC17 in the trade review following CoP14.
Euphorbia duranii	live	20				5	24	118	36			EN	Selected as trade in endangered species.
Euphorbia elliotii	live						13					EN	Selected as trade in endangered species. Selected at PC17 in the trade review following CoP14.
Euphorbia guillauminiana	live	9		100		40	739	188	118	218	120	EN	Selected as trade in endangered species and also met the high volume of trade (globally threatened) criterion.
Euphorbia hedyotoides	live		6			60	179	234	99	75	60	EN	Selected as trade in endangered species.
Euphorbia horombensis	live	20	1				39	60	126			EN	Selected as trade in endangered species. Selected at PC17 in the trade review following CoP14.
Euphorbia labatii	live							295	268	150		CR	Selected as trade in endangered species.
Euphorbia lophogona	live	10				11200	2	5605	20	750		VU	Selected due to high volume (globally threatened) and high variability in trade.
Euphorbia mainty	live										100		Selected due to sharp increase in trade.

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
Euphorbia mangokyensis	live							10	16			EN	Selected as trade in endangered species. Selected at PC17 in the trade review following CoP14.
Euphorbia milii	live	33	205	148	6	2275	307	162	58	10			Selected due to high variability in trade.
Euphorbia millotii	live										100	CR	Selected as trade in endangered species.
Euphorbia neohumbertii	live	24	20	2			5	195	20			EN	Selected as trade in endangered species and also met the high variability criterion.
Euphorbia pachypodioides	live	6	31				31	333	205	65		CR	Selected as trade in endangered species. Selected at PC17 in the trade review following CoP14.
Euphorbia primulifolia	live	65	61	81		558	3322	1478	386	292	694	VU	Selected due to high volume of trade (globally threatened). Selected at PC17 in the trade review following CoP14.
Euphorbia razafindratsirae	live					31	147	10	8	43	10	CR	Selected as trade in endangered species.
Euphorbia robivelonae	live								11			CR	Selected as trade in endangered species. Selected at PC17 in the trade review following CoP14.
Euphorbia spp.	dried plants	12		146	31	51	14	17	142	69	22		Selected due to sharp increase. Euphorbias from Madagascar selected for review following CoP14 at PC17.
	live	1752	25	2026	4170	367	1957	3759	265	325	22		
	seeds			54							600		
Euphorbia viguieri	live	20	10				8	12	10	300			Selected due to high variability in trade.
Euphorbia waringiae	live							274	33	3860	10	VU	Selected due to high volume of trade (globally threatened).
LEGUMINOSAE													
Pericopsis elata	carvings									15		EN	Selected as trade in endangered species and also

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
	timber (m^3)	30507	14058	13691	11748	16415	13534	17381	21846	28661	23300	EN	met the high volume (globally threatened) criterion. Selected at PC17 in the trade review following CoP14.
LILIACEAE													
Aloe deltoideodonta	live	14	15	15	5	6	6	4800	5	510			Selected due to high variability in trade. Selected at PC17 in the trade review following CoP14.
Aloe ferox	dried plants		899		7000	13050	20735	1500					
	extract	504		9496	43140	42314	17098	24165	55375	17352	23214		Selected due to high volume of trade. Selected at PC15 in the trade review following CoP13.
	live	27635		110				35		202	1		
	leaves		6507	8000	12950	120377	90590	74856	71900	108190	69625		
Aloe ferox (cont.)	stems		1007		83349			3692					
	timber pcs.		39984	55101		29528	107383	83309	92908				
	extract (flasks)						489						
	extract (kg)	324939	306679	402901	342713	453093	381137	447771	618117	423026	439103		Selected due to high volume of trade. Selected at PC15 in the trade review following CoP13.
	fibres (kg)		48			1	200	1					
	leaves (kg)		5000			5000		3000	6882	24043	33115		
	timber pcs. (kg)					11	7500						
	extract (l)			28786	149688	130294	121500	102641	55884	85253	51050		
Aloe spp.	live	34	240	105	150	824	406	96	235	384	130		Selected due to sharp increase in trade. Various species have been selected for trade review following CoP11 at PC12 (East Africa), CoP13 at PC15 (South Africa) and following CoP14 at PC17 (Madagascar),
	seeds										1300		
MELIACEAE													
Swietenia humilis	timber (m^3)									121	401	VU	Selected due to sharp increase in trade.
Swietenia macrophylla	leaves						101					VU	Selected due to high volume of trade (globally threatened). Listed in Appendix II in 2003. Selected at PC17 in the trade review following CoP14.
	timber (m^3)					13317	353062	48867	40958	33211	49119		

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
NEPENTHACEAE													
Nepenthes bellii	live	3						1		4		EN	Selected as trade in endangered species.
Nepenthes spp.	live	54								47	704		Selected due to sharp increase in trade.
Nepenthes truncata	live							1		20		EN	Selected as trade in endangered species.
ORCHIDACEAE													
Aerangis macrocentra	live	36	11		2	14		180	6		2		Selected due to high variability in trade.
Aerides odoratum	live	13	50		850	3	40		20				Selected due to high variability in trade.
Angraecum didieri	live	12	26	4	1	12		160	3				Selected due to high variability in trade.
Angraecum leonis	live	31			2	1		123	4	1	5		Selected due to high variability in trade.
Angraecum sesquipedale	leaves									18	150		Selected due to sharp increase in trade.
Broughtonia sanguinea	live	24	89	10	4		2		8				Selected due to high variability in trade.
Calanthe spp.	live	10	20	16							60		Selected due to sharp increase in trade.
Cymbidium spp.	flowers										1000		Selected due to high volume, sharp increase and high variability in trade.
	live	42	16670	100		250	6	205	32503				
Dendrobium anosmum	live	1014	230	100	20	3	25						Selected due to high variability in trade.
Dendrobium aphyllum	live (kg)										1500		Selected due to sharp increase in trade.
Dendrobium eriiflorum	stems (kg)										18990		Selected due to sharp increase in trade.
Dendrobium nobile	live	1776	130	25	1000	25					6		Selected due to high variability in trade. Selected at PC1 in the trade review following CoP12.
	roots								1000				
	dried plants (kg)	67000		16500	22000	36000	8000	6436		4000			
	live (kg)							4336					
	roots (kg)		23000	413000	13752				23489				

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
Dendrobium spp.	live	60744	319	10001	711	1579	33			1	512		Selected due to high variability in trade. Selected as part of the review of medicinal plants following PC9.
	dried plants (kg)	25000		10000		13000	15000						
	live (kg)									100000			
Dendrobium thyrsiflorum	live	2710	735	307		64	28	25					Selected due to high variability in trade.
Diplocaulobium spp.	live				62						72		Selected due to sharp increase in trade.
Encyclia bractescens	live	1265	1067	779	695	941	703	680	200				Selected due to overall decrease in trade.
Encyclia fragrans	live	150	637		34	25	4	100	6	6			Selected due to high variability in trade.
Gongora spp.	live	159	11	1162	72	14	12						Selected due to high variability in trade.
Grammangis spp.	live	12		2	1	3	92			5			Selected due to high variability in trade.
Habenaria spp.	live	15	4	9	500	2	53						Selected due to high variability in trade.
Ionopsis satyrioides	live	6	8	16		201		6	20				Selected due to high variability in trade.
Leochilus labiatus	live	3	19	5			20	9	115				Selected due to high variability in trade.
Liparis spp.	live	803	105		5	1	4				10		Selected due to high variability in trade.
Maxillaria densa	live	629	9	2		25	26	100					Selected due to high variability in trade.
Oberonia spp.	live	226			100						56		Selected due to sharp increase.
Oeceoclades decaryana	live		4	1			7	121	4	50			Selected due to high variability in trade.
Oeceoclades roseovariegata	live				2	6	6	172	22	40			Selected due to high variability in trade.
Oeceoclades spp.	live	10	25	2	5	7	4	220		10			Selected due to high variability in trade.
Oncidium spp.	derivatives							196					Selected due to high variability in trade.
	live	2222	643	40898	1008	31	23	1	2		1		

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
Phalaenopsis spp.	live	25		6309	165	464	3		1000	1000			Selected due to high variability in trade.
Sobralia macrantha	live	10	22	4	1		185						Selected due to high variability in trade.
Trichocentrum cebolleta	live	32	2	4	25	195	6						Selected due to high variability in trade.
Vanda spp.	live	241		321	23	220	6		2547		4		Selected due to high variability in trade.
Vanilla spp.	live	121	252	15	4	6	4	3		3			Selected due to high variability in trade.
	seeds						1200			70			
PALMAE													
Beccariophoenix madagascariensis	dried plants						4			2		CR	Selected as trade in endangered species and also met the high volume of trade (globally threatened) criterion. Listed in the CITES Appendices in 2003. Selected at PC17 in the trade review following CoP14.
	leaves						39			1			
	seeds							4000		2			
	seeds (kg)							2		30	40		
Lemurophoenix halleuxii	live								6			EN	Selected as trade in endangered species and also met the high volume of trade (globally threatened) criterion. Listed in the CITES Appendices in 2003. Selected at PC17 in the trade review following CoP14.
	seeds							8010	20				
	seeds (kg)								3800	100			
Marojejya darianii	dried plants									4	2	CR	Selected as trade in endangered species. Listed in the CITES Appendices in 2003. Selected at PC17 in the trade review following CoP14.
	seeds (kg)								1225				
Ravenea rivularis	live					15448	28579	19342	2974	541	1200	VU	Selected due to high volume of trade (globally threatened). Listed in the CITES Appendices in 2003.
	seeds (kg)					1500	4058	3475	4570	8925	3675		
Satranala decussilvae	live								6			EN	Selected as trade in

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
	seeds							210					endangered species. Listed in the CITES Appendices in 2003. Selected at PC17 in the trade review following CoP14
	seeds (kg)								205	94	2		
Voanioala gerardii	seeds							9110	10			CR	Selected as trade in endangered species and met the high volume of trade (globally threatened) criterion. Listed in the CITES Appendices in 2003. Selected at PC17 in the trade review following CoP14
PRIMULACEAE													
Cyclamen cilicium	dried plants							250			80		Selected due to high volume of trade.
	live	250000	250000	250000	250000	250000	250500	250075	250000	250000	229516		
Cyclamen coum	live	250000	250000	500020	600200	500000	530000	500000	600000	520695	456965		Selected due to high volume of trade.
Cyclamen hederifolium	live	748962	1270000	1300000	1275000	1250050	1001630	1000000	900000	800120	729160		Selected due to high volume of trade.
STANGERIACEAE													
Bowenia serrulata	flowers							120	120				Selected due to high variability in trade. Review of Significant Trade in cycads published in 2003.
	live			21						132			
	leaves	3020	18700				3040						
TAXACEAE													
Taxus wallichiana	extract (kg)		56	38	3	50000			180	6			Selected due to high variability in trade. Selected at PC15 in the trade review following CoP13.
THYMELAEACEAE													
Aquilaria crassna	chips (kg)							78	10018	180	176	CR	Selected as trade in endangered species. Listed in the CITES Appendices in 2005.
Aquilaria spp.	live									5	30000		Selected due to sharp increase in trade. Listed in the CITES Appendices in 2004. *Aquilaria malaccensis* was selected at PC12 for trade review following CoP11.
	chips (kg)	232660	725000			170	1409	260184	291603	5566	44900		
	stems (kg)								189	89	21		

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
Gonystylus bancanus	carvings (m^3)							34	6085	740	866	VU	Selected due to high volume (globally threatened) and sharp increase in trade. Listed in Appendix II in 2005.
	timber (m^3)							5808	9179	12389	6655		
	carvings (kg)										6684		
Gonystylus spp.	carvings (m^3)							13247	3723	113	1		Selected due to high volume of trade. Listed in Appendix II in 2005.
	timber (m^3)							40927	10570	6859	6541		
Gyrinops spp.	chips (kg)							22700	64543	72964	22225		Selected due to sharp increasein trade. Listed in the CITES Appendices in 2005.
	powder (kg)								33250	9000	17000		
	timber pcs. (kg)										1090		
Gyrinops versteegii	chips (kg)							605			10000		Selected due to sharp increase in trade. Listed in the CITES Appendices in 2005.
	powder (kg)							7450					
ZAMIACEAE													
Macrozamia communis	live						70	170	123	375			Selected due to high volume in trade and high variability in trade. Review of Significant Trade in cycads published in 2003.
	leaves		4000							70000			
	stems			70000				10					
Macrozamia moorei	live	419	1382	1582	707	448	1995	2642	1036			NT	Selected due to high volume in trade (globally threatened). Review of Significant Trade in cycads published in 2003.
Macrozamia mountperriensis	live			4	50	9	1075	184	70				Selected due to high variability in trade. Review of Significant Trade in cycads published in 2003.
Zamia elegantissima	live							15				EN	Selected as trade in endangered species.
Zamia spp.	live	14		22	3	28	28	17					Selected due to high variability in trade. Review of Significant Trade in Cycads published in 2003.
	seeds			50			836						
ZYGOPHYLLACEAE													
Guaiacum officinale	dried plants										50	EN	Selected as trade in endangered species. Discussed as part of the review of medicinal plants following PC9.

Taxon	Term (units)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	IUCN	Notes
Guaiacum sanctum	powder (m^3)								8			EN	Selected as trade in endangered species and also met the high volume (globally threatened) criterion. Discussed as part of the review of medicinal plants following PC9.
	timber (m^3)	171	315	149	232	162	149	100	161	1778	74		

Table 2: Preliminary analysis of 2009 data showing plant taxa with high volume trade in 2009 or a sharp increase in trade in 2009 compared with the average trade levels for 2004-2008. Quantities rounded to the nearest decimal place, when applicable. Data extracted from CITES Trade Database on 1 December 2010. NB 2009 data are incomplete.

Taxon	Term (units)	Mean 2004-2008	2009	IUCN	Notes
AMARYLLIDACEAE					
Galanthus elwesii	live	5630824	5600000		Selected due to high volume of trade in 2009.
Galanthus woronowii	live	15540697.4	8920920		Selected due to high volume of trade in 2009.
BROMELIACEAE					
Tillandsia xerographica	cultures	0	150		Selected due to sharp increase in trade in 2009.
CACTACEAE					
Cereus repandus	live	0	280		Selected due to sharp increase in trade in 2009.
Cleistocactus winteri	live	0	3500		Selected due to sharp increase in trade in 2009.
Echinocactus grusonii	live	0.4	300	CR	Selected due to high volume (globally threatened) of trade and sharp increase in 2009.
Echinopsis chamaecereus	live	0.4	13090		Selected due to high volume of trade and sharp increase in 2009.
Echinopsis chiloensis	carvings	2808.2	9622		Selected due to high volume of trade and sharp increase in 2009.
	stems	32078.6	1080		
	stems (m.)	5759.2	10882.1		
Eulychnia acida	carvings	5073.4	22846		Selected due to high volume of trade and sharp increase in 2009.
	dried plants	0	340		
	stems	86423.2	7350		
	stems (kg)	0	1500		
	stems (m.)	16654.8	30268.7		
Gymnocalycium mihanovichii	live	0	415		Selected due to sharp increase in trade in 2009.
Mammillaria hahniana	live	0	1750		Selected due to sharp increase in trade in 2009.
Opuntia cholla	powder (kg)	0	2200		Selected due to sharp increase in trade in 2009.
Opuntia spp.	stems	960	60		Selected due to sharp increase in trade in 2009.
	stems (m^3)	0	23		
	stems (kg)	6000	45000		
Opuntia streptacantha	powder (kg)	0	1600		Selected due to sharp increase in trade in 2009.
Parodia leninghausii	live	0	400		Selected due to sharp increase in trade in 2009.
Schlumbergera truncata	live	0	8800		Selected due to high volume of trade and sharp increase in 2009.
CYATHEACEAE					
Cyathea australis	live	315.4	7583		Selected due to high volume of trade and sharp increase in 2009.
Cyathea medullaris	live	960.4	300		Selected due to sharp increase in trade in 2009.

Taxon	Term (units)	Mean 2004-2008	2009	IUCN	Notes
	dried plants (kg)	200	1265		
	extract (kg)	0	70		
	powder (kg)	400	870		
Cycas revoluta	live	60.4	23366		Selected due to high volume of trade and sharp increase in 2009.
EUPHORBIACEAE					
Euphorbia antisyphilitica	derivatives	0	1290		Selected due to high volume of trade and sharp increase in 2009.
	wax	0	10370		
	wax (kg)	587253.2	1672245.8		
Euphorbia lactea	live	4550	11250		Selected due to high volume of trade in 2009.
Euphorbia primulifolia	live	1234.4	300	VU	Selected due to high volume in trade (globally threatened) in 2009.
LEGUMINOSAE					
Caesalpinia echinata	logs (kg)	0	36815	EN	Selected due to sharp increase in trade in 2009. Listed in the CITES Appendices in 2007.
Pericopsis elata	timber (m^3)	20295.1	17048.6	EN	Selected due to high volume in trade (globally threatened) in 2009.
LILIACEAE					
Aloe arborescens	leaves (kg)	0	60000		Selected due to sharp increase in trade in 2009.
Aloe ferox	dried plants	4447	6820		Selected due to high volume of trade in 2009.
	extract	27440.9	2456		
	leaves	83032.2	31400		
	extract (kg)	461830.8	78354.7		
	extract (l.)	83265.6	14339		
Aloe humilis	live	0	350		Selected due to sharp increase in trade in 2009.
MELIACEAE					
Swietenia macrophylla	carvings	10.6	7102	VU	Selected due to high volume in trade (globally threatened) and sharp increase in 2009.
	carvings (m^3)	0.4	387.5		
	timber (m^3)	105043.5	29187.3		
	carvings (kg)	0	454.6		
ORCHIDACEAE					
Brassavola cordata	live	1.2	40		Selected due to sharp increase in trade in 2009.
Broughtonia sanguinea	live	2	100		Selected due to sharp increase in trade in 2009.

Taxon	Term (units)	Mean 2004-2008	2009	IUCN	Notes
Bulbophyllum putidum	live	0	10		Selected due to sharp increase in trade in 2009.
Bulbophyllum spp.	dried plants	41.4	1068		Selected due to sharp increase in trade in 2009.
	live	118	350		
Dendrobium lindleyi	live	2	20		Selected due to sharp increase in trade in 2009.
Dendrobium pendulum	live	1.2	10		Selected due to sharp increase in trade in 2009.
Dendrophylax funalis	live	14.8	50		Selected due to sharp increase in trade in 2009.
Diplocaulobium spp.	live	14.4	70		Selected due to sharp increase in trade in 2009.
Liparis spp.	live	2.8	30		Selected due to sharp increase in trade in 2009.
Oncidium pulchellum	live	1.6	50		Selected due to sharp increase in trade in 2009.
Oncidium spp.	live	5.4	50		Selected due to sharp increase in trade in 2009.
Rhynchostylis coelestis	live	0	10		Selected due to sharp increase in trade in 2009.
Rhynchostylis gigantea	live	1	355		Selected due to sharp increase in trade in 2009.
PRIMULACEAE					
Cyclamen cilicium	dried plants	66	100		Selected due to high volume of trade in 2009.
	live	246018.2	116150		
Cyclamen coum	live	521532	456095		Selected due to high volume of trade in 2009. Listed in the CITES Appendices in 2007.
Cyclamen graecum	dried plants	16	100		Selected due to sharp increase in trade in 2009.
	live	2.8	75		
Cyclamen hederifolium	live	886182	373550		Selected due to high volume of trade in 2009.
ROSACEAE					
Prunus africana	bark	2	66	VU	Selected due to sharp increase in trade in 2009.
	bark (kg)	1849982	604755		
	carvings (kg)	0	12		
	extract (kg)	558.3	1676.2		
	leaves (kg)	0.3	31		
THYMELAEACEAE					
Gyrinops versteegii	chips (kg)	2121	9720		Selected due to sharp increase in trade in 2009. Listed in the CITES Appendices in 2005.
Aquilaria beccariana	timber (m^3)	0	300	VU	Selected due to high volume in trade (globally threatened) and sharp increase in 2009. Listed in the CITES Appendices in 2005.

Taxon	Term (units)	Mean 2004-2008	2009	IUCN	Notes
Aquilaria spp.	live	6001	50000		Selected due to sharp increase in trade in 2009. Listed in the CITES Appendices in 2005.
	chips (kg)	120732.4	231534.4		
Gonystylus bancanus	carvings (m^3)	1545	872.9	VU	Selected due to high volume in trade (globally threatened) in 2009. Listed in Appendix II in 2005.
	timber (m^3)	6806.4	3349.9	VU	
	carvings (kg)	1336.8	5783.4	VU	
Gonystylus spp.	carvings (m^3)	3416.9	94.8		Selected due to high volume trade in trade in 2009. Listed in Appendix II in 2005.
	timber (m^3)	12979.3	3283.4		
ZAMIACEAE					
Zamia floridana	live	0	2965	NT	Selected due to high volume in trade (globally threatened) and sharp increase in 2009.
Zamia furfuracea	live	5800	12625	EN	Selected due to high volume in trade (globally threatened) in 2009.
ZYGOPHYLLACEAE					
Guaiacum sanctum	timber (m^3)	452.2	260.2	EN	Selected due to high volume in trade (globally threatened) in 2009.