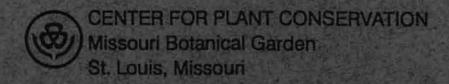
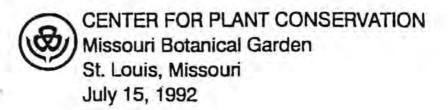
REPORT ON THE RARE PLANTS OF PUERTO RICO





REPORT ON THE RARE PLANTS OF PUERTO RICO





ACKNOWLEDGMENTS

The Center for Plant Conservation would like to acknowledge the John D. and Catherine T. MacArthur Foundation and the W. Alton Jones Foundation for their generous support of the Center's work in the priority region of Puerto Rico. We would also like to thank all the participants in the task force meetings, without whose information this report would not be possible.

Cover: Zanthoxylum thomasianum is known from several sites in Puerto Rico and the U.S. Virgin Islands. It is a small shrub (2-3 meters) that grows on the banks of cliffs. Threats to this taxon include development, seed consumption by insects, and road erosion. The seeds are difficult to germinate, but Fairchild Tropical Garden in Miami has plants growing as part of the Center for Plant Conservation's National Collection of Endangered Plants. (Drawing taken from USFWS 1987 Draft Recovery Plan.)

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REPORT ON THE RARE PLANTS OF PUERTO RICO

SUMMARY

The Center for Plant Conservation (Center) has held two meetings of the Puerto Rico\Virgin Islands Task Force in Puerto Rico. The first task force meeting was August 21, 1989, and the second meeting was September 16 and 17, 1992. Both meetings were hosted by Puerto Rico's Department of Natural Resources. The results are compiled in this report. At both meetings species were ranked as to their degree of conservation concern. Those species which are at risk of extinction in the next five years if no conservation efforts are implemented are ranked as priority A, and those species at risk of extinction in the next ten years are ranked as priority B. Following the two meetings, 57 species have been ranked as priority A, and 21 as priority B, for a total of 78 species at risk of extinction. A total of 165 species were identified as species of conservation concern.

The data contained in the enclosed lists represents the collected field information of 37 individuals from 19 different agencies, and over 200 years of experience collectively in the botany of Puerto Rico and the U.S. Virgin Islands.

The results of these meetings are used to assist the Center in setting priorities for what taxa to accession into the National Collection of Endangered Plants, a source of plant material for germplasm storage, research, and conservation of rare and endangered plants in the wild. Additionally, these meetings indicate the need for more studies on the lack of regeneration of many of the taxa and the need to do further surveys to determine more accurate distributions of these taxa. Recommendations from the meetings have been made to various government agencies and institutions, such as the U.S. Fish and Wildlife Service, recommending surveys and additions to the Federal Register.

One recurring theme at these meetings was the need for a botanical garden in Puerto Rico to help with the plant conservation efforts of the region and to maintain the Center's National Collection. Several possibilities exist for such a local affiliation; such as the University of Puerto Rico at Mayaguez (UPR). A representative of the university attended the Center's Participating Institutions Annual Meeting in 1991 to learn more about the Center and its programs. A Participating Institution in Puerto Rico would be a valuable addition to the Center's network and the Center is working towards that end.

The information in this report is as accurate as the information collected at the task force meetings or sent to the Center. Therefore, the Center would appreciate any updates, corrections, or new information. The Center is committed to keeping the lines of communication open through this exchange of information on the rare plants of Puerto Rico. The Center plans to generate such a report following each of the task force meetings, and appreciates the efforts of the task force participants in providing the needed information.

B. All Puerto Rico\Virgin Islands Species of Conservation Concern Explanation of Attached Lists

sc	FED	G-RANK	P	PRO	POS	ED	NCIN	EN	CPC_#	SCIENTIFIC_NAME	FAMILY	COMMON_NAME(S)	RANGE
. 1	38	G19							10	Abutilon commutatum	Malvaceae	Terciopelo	PR
1	1	G1G3							15	Abutilon virginianum	Malvaceae	Jost Van Dyke	PR VI, British
		222								292-100-000		Indian-mallow	Virgin Islands
	1	G1?	^		525	1444	320		100	Adiantum vivesii	Adiantacea	Access to the second	PR
- 0	2	G1G3				(P/P) (PR/A)	FTG		46	Agave eggersiana	Liliaceae	Egger's Agave	VI
1	LE	G1G3							9355	Alsophila amintae	Cyatheacea		PR
1	3C	G1G3							97	Alsophila brooksii	Cyatheacea	Brooks' Alsophila	Mexico PR, Latin America, Cuba
1	S	G1G3							98	Alsophila dryopteroides [=Cyathea dryopteroides]	Cyatheacea		PR
H	s	G1G3							136	Anguria cookiana	Cucurbi tac	Algodoncillo	PR
J.										[=Psiguria cookiana]	24	2.7	i.e
	2	G1	X							Antirhea portoricensis	Rubiaceae	100,75	PR
141		G1	X							Antirhea sintenisii	Rubiaceae		PR
1		G1	В							Ardisia luquillensis	Myrsinacea	Mameyuelo	PR
1			В						9886	Aristida chaseae [=Aristida chasei]	Poaceae		PR
111	LE	G1	A						286	Aristida portoricensis	Poaceae	Pelos del Diablo	PR
1	1	G?	A						12937	Auerodendron pauciflorum	Rhamnaceae		PR
1	LE	G1				(P/A) (RC/A)	FTG	Y	536	Banara vanderbiltii	Flacourtia	Palo de Ramon	PR
1	38	G1?							545	Basiphyllaea angustifolia [=Basiphyllaea corallicola]	Orchidacea		Mexico PR, Latin America, Cuba
1		G1?	C						9280	Basiphyllaea corallicola [=Basiphyllaea angustifolia]		Carter's Orchid	FL PR, Cuba, Bahamas
1	1	G1G3	A						6104	Brachionidium ciliolatum	Orchidacea		PR
1		G1	В	89	FTG	(P/A)	FTG			Brunfelsia densifolia		Serpentine Hill Raintree	PR
1		G1	x						6113	Brunfelsia lactea	Solanareae	Vega Blanca	PR
	2	G1	В						Janua	Brunfelsia portoricensis		Puerto Rico Raintree	PR
	LE	G1	-70	20	CTC	(P/A)	FTG			Buxus vahlii		Vahl's Boxwood	PR [VI]
	2	G1G3	ь	00	714	(F/A)	riu			Byrsonima horneana	**************************************	Maricao Cimarron	PR
	2	G1G3								Byrsonima ophiticola	100 - 100 -	Maricao Cimarron	PR
	2	G1G3								Caesalpinia culebrae	Fabaceae	Mato Amarillo	PR
113	2	6163							050	caesatpinia cutebiae	rabaceae	Smooth Yellow Nicker	r.n
1	3B	610				(P/D)			652	Caesalpinia monensis	Fabaceae	Mato Negro	PR
1	2	G1	x	92	FIG	(R/H)			653	Caesalpinia portoricensis	Fabaceae	Black Nicker Mato	PR
									1.5			Brown Nicker	
	1	G1	A						672	Callicarpa ampla	Verbenacea	Palo de Rosa Capa Rosa	PR VI
		G1							6119	Calyptranthes dumetorum [=Calyptranthes peduncularis]	Myrtaceae	Susa	PR.
19	0.0		A						13641	Calyptranthes kiaerskovii	Myrtaceae		PR
	3	G1	C						696	Calyptranthes luquillensis	Myrtaceae	Luquillo Forest Lidflower	PR
	2	G1		91	FTG	(P/P) (PR/P) (PR/A)			697	Calyptranthes peduncularis [=Calyptranthes dumetorum]	Myrtaceae	Serpentine Lidflower Maricao	PR

SO F	EO	G-RANK	P	PR	OPO	SED	. NCIN E	N CPC_#	SCIENTIFIC_NAM	4E	FAMILY	COMMON_NAME(S)	RANGE
1		G1	8					6120	Calvotranthee	portoricensis	Myrtaceae		PR
11		G1	A			G (P/A)	FTG		Calyptranthes		1. A.A. C. A. S. S. A. M.	Thomas' Lidflower	PR VI
1 2	2	G1	8	-		- 30-104		6121	Calyptranthes	triflora	Myrtaceae	Three-blossom Lidflower	PR
2		G2G3						9620	Calyptranthes	woodburyi	Myrtaceae	G-(A-)-(A-)-(A-)-(A-)-(A-)-(A-)-(A-)-(A-	PR
1 1	1.	G1G2	8	85	FT	G (P/A)	FTG		Calyptronoma		Arecaceae	Palma Manaca Puerto Rican Manac	PR
1 1	E	G1	٨					796	Cassia mirabi	lis ta mirabilis]	Fabaceae	Puerto Rico Senna	PR
1:2	2	G7	A					9879	Catesbaea mel		Rubiaceae	Tropical Lily-thorn	PR
1 6	T	GINE	c						Cereus portor		Cactaceae	Hijo Chumbo	PR
1 3	sc	G1	x						Cereus quadric [=Leptocereus quadricostati	costatus s	Cactaceae	Sebucan	PR
1		G10						8580	Chamaesyce mor	nensis	Euphorbiac	Caribbean Broomspurge	PR
1			٨					13644	Chamaesyce orl	bifolia	Euphorbiac		PR
1		G10						6179	Coccoloba pal	lida	Polygonace	Pale Seagrape	PR
1 1		G2	A					6180	Coccoloba rugo	osa	Polygonace	Ortegon	PR [VI]
1 2	2	G1G3	A					1047	Cordia bellon	is	Boraginace	Puerto Rico Manjack	PR
1 2	2	G1	A	90	FT	G (P/P)		1048	Cordia rupico	la	Boraginace	Puerto Rico Manjack	PR, British Virgin
				20		G (PR/P)							Islands
1.1	į.	G1	A					1049	Cordia wagner	orum	Boraginace	Luquillo Mountain Manjack Wagners' Cordia	PR
1 1	E	G1	A	88	FT	G (P/A)	FTG	1072	Cornutia obov	ata	Verbenacea		PR
						G (RC/A)			Converses and a			Palo de Nigua	
1			٨			2 410414		9867	Cranichis rice	artii	Orchidacea	1617 00 0 4 10	PR
1 1	.E	G1	c	90	FT	G (P/A)	FTG	1103	Crescentia po	rtoricensis	Bignoniace	Higuero de Sierra	PR
1			B						Croton fishlo		Euphorbiac		PR, British Virgin Islands VI
1.3	SC.	G1G3						1110	Croton impres	sus	Euphorbiac	Puerto Rico Croton	Mexico PR, Latin America
11	E		A					1203	Cyathea dryop [=Alsophila	teroides dryopteroides]	Cyatheacea	Elfin Tree Fern	PR
2 3	SC	G2						1224	Cynanchum mon	ense	Asclepiada	Mona Island Swallow-wort	PR
1 2	2	G1Q						1230	Cyperus urban (=Mariscus u		Cyperaceae	Urban's Flatsedge	PR
1		GUT 1						6232	Dalea carthago portoricana	nensis var	Fabaceae		PR
11	E.	G1	A					1358	Daphnopsis he	lleriana	Thymelaeac		PR
1 2	2	G1G3						1393	Dendropemon s	intenisii	Loranthace	Hicaquillo Mistletoe	PR
1.1	0.0	G10						1410	Dicliptera kr	ugii	Acanthacea	Krug's Mudwort	PR
1		G1	x						Didymopanax g		Araliaceae		PR
2		G2							Diospyros sin			Guayabota Nispero	PR
11		G?	A						Elaphoglossum			Cerro de Punta Jayuya	PR
1 3	SC .	G1	x						Encyclia krug	Laborate Deliteration		Krug's Encyclia	PR
1 3		G1G3							Encyclia sint			Sintenis' Encyclia	Mexico PR, Latin America, Jamaica, Cuba
													V-0-1

S	O FED	G-RANK	P PROPOSED	NCIN EN	CPC_#	SCIENTIFIC_NAME	FAMILY	COMMON_NAME(S)	RANGE
	1 38	G1G3			1603	Epidendrum lacerum	Orchidacea		PR, Cuba
	1 2	G1G3				Erithalis revoluta	Rubiaceae		PR
	1 1	G1	A 90 FTG (P/A)	FTG		Erythrina eggersii	Fabaceae	Cock's-spur Pinon Bucare Bucayo	PR VI
	1 1 1 1 1 2	G1 G1 G1 G1G3 G1	A X A		6279 1847 1848 6280	Eugenia bellonis Eugenia eggersii Eugenia haematocarpa Eugenia margarettae Eugenia stewardsonii	Myrtaceae Myrtaceae	Coral Coral Vegetal Espuelo de Gallo Pinon espinoso Guasavara Uvillo Stewardson's Eugenia	PR PR PR PR
	1 2	G1	A		1850	Eugenia underwoodii	Myrtaceae	Underwood's Eugenia	PR
	1	G?	В			Eugenia woodburyana	Myrtaceae		PR
	1 2	G1G3			1852	Eupatorium borinquense [=Chromolaena borinquensis]	Asteraceae	Puerto Rico Thorough-wort	PR
	1 2	GH	A		1853	Eupatorium droserolepis	Asteraceae	Oreganillo	PR
	1 2	G10			1856	Eupatorium oteroi [=Chromolaena oteroi]	Asteraceae	Mona Island Thorough-wort	PR
	1 2	G1G3	C		1971	Galactia eggersii	Fabaceae	Eggers' Milkpea	VI, British Virgin Islands
ľ	1	G1	C 89 FTG (P/A)	FTG	6294	Gaussia attenuata	Arecaceae	Palma de Lluvia Palma Flaca Llume	PR
18	1.1	G1	A		2020	Gesneria pauciflora	Gesneriace	Few-flowered Gesneria	PR "
	1 LE	G1	A 86 FTG (P/A)	FTG	2041	Goetzea elegans	Solanaceae	Mata Buey Beautiful Goetzea	PR
	1 2	G1G3	A		2042	Gonocalyx concolor	Ericaceae		PR
	1 2	G1G30			2073	Graffenrieda ottoschulzii	Melastomat	Petites Graines Camasey	Haiti PR XT, Dominican Republic
113	1 38	G1G3Q			2208	Heliotropium guanicense	Boraginace	Cotorrilla	PR
	1	G1			6318	Henriettea membranifolia [=Henriettella membranifolia]	Melastomat	Camasey	PR
	1 LE	G1	A		2307	Ilex cookii	Aquifoliac	Cook's Holly Te	PR
18	1	G1	В		6341	Ilex sintenisii	Aquifoliac	Sintenis' Holly Cuero de Sapo	PR
	1 2	G1G3			2316	Ipomoea krugii	Convolvula	Krug's White Morning-glory	PR
1	1 2	G2	A		6351	Juglans jamaicensis	Juglandace	West Indian Walnut Nogal	PR
	1 2	G1G3			2373	Justicia borinquensis	Acanthacea		PR
	1 2	G1	x			Justicia culebritae		Culebrita Island Water-willow	PR VI, British Virgin Islands
2	1 3C	G1G3	0.		2433	Laplacea portoricensis	Theaceae	Nino de Cota Maricao Verde	Mexico PR, Latin America
17	1 3C	G1	×		2468	Lepanthes dodiana	Orchidacea	A CONTRACTOR OF THE PARTY OF TH	PR
		G1	c			Lepanthes eltoroensis	Orchidacea		PR
	1 1	G?	A			Leptocereus grantianus		Puerto Rico	PR
		177				Name of the Color of the Party of the Color		A ALL DE MACO.	A. C.

7	SO FEI	G-RANK	P	PROPOSE	D	NCIN EN	CPC_#	SCIENTIFIC_NAME	FAMILY	COMMON_NAME(S)	RANGE
										Apple-cactus	
	1	G3	В				6392	Lycaste barringtoniae	Orchidacea		Cuba, Dominican
											Republic, Jamaica PR
	1.1	G1G3	8				2789	Malpighia infestissima	Malpighiac	Stingingbush	VI
								Andreas and Service Co.		Cowhage-cherry	
	1		B				13646	Mappia racemosa	Icacinacea	200	Cuba, Jamaica PR
	2 1							Mariscus urbanii	Сурегасеве		PR
								[=Cyperus urbanii]	and the contract		
	1 38	G1	x				2803	Marlierea sintenisii	Myrtaceae	Murta	PR
	12	G1G3	1					Marsdenia elliptica	Asclepiada	,	PR
	12		A					Maytenus cymosa		Caribbean Mayten	PR VI, British
	9151		W				99500		210000000	20. 102020 1036000	Virgin Islands
	12	G1	C				2818	Maytenus elongata	Celastrace	Cuero de Sapo	PR VI
	1.1	G1		91 FTG	(P/P)			Maytenus ponceana		Cuero de Sapo	PR
	1 3B	G1G3Q	Ŷ	5000	20.55.5			Mesadenus portoricensis	Orchidacea	2011 2 20 2161	PR
	1	G1	x					Miconia foveolata	Melastomat	Camasev	PR
	1	G1	x				6409	Miconia pycnoneura	Melastomat		PR
	1 30	G1	В					Mikania stevensiana	Asteraceae	Y 7 Y 1 Y 1	PR
	1.1	G19	A	92 FTG	(P/A)			Mitracarpus maxwelliae	Rubiaceae		PR
	1 2	G1		90 FTG		FTG		Mitracarpus polycladus	Rubiaceae		PR
					(RC/A)		92.0	in historian environmen			
	1.1	G1Q	A	700 1 2.5	district.		2911	Myrcia paganii	Myrtaceae	Ausu	PR
	1	G1	c					Myrica holdridgeana		Palo de Cera	PR
	1	94	A					Myrica maricaensis	Myricaceae		PR
	12	G1G3						Operculina triquetra	Convolvula		Vt
	1 30	G1G3		89 FTG	(P/P)	FTG		Opuntia triacantha		Big Pine Key	FL, Mexico PR VI,
		9199			(PR/A)			apareta di rasartina		Prickly-pear	Latin America,
										Jumping Prickly Apple	Guadel oupe
	1	G1	×				6442	Ossaea krugiana	Melastomat		PR
	1 LE	G1G3	C					Ottoschulzia rhodoxylon		Palo de Rosa	PR, Dominican
	0.45	37.5	17				7.57	Tition (Incomply and		7312 50 1123	Republic
	1	GUT1					6444	Palicourea crocea var	Rubiaceae	Cachimbo	PR
							2,770	crocea	Num. decae	gasii (iiias	
	1 2	G1	A				3095	Panicum stevensianum	Poaceae	Stevens' Panic-grass	PR, Cuba
	1 2	G1G3					100000	Passiflora bilobata	Passiflora	Service of the servic	Mexico PR, Latin
							13.65	,	33327112	Passion-flower	America
	1 30	G1G3					3120	Passiflora murucuia	Passiflora	Virgin Island	Mexico PR, Latin
							- Syraz	,		Passion-flower	America
	1.1	G1	X				7032	Peperomia megalopoda	Piperaceae	Puerto Rico Peperomia	[PR]
	1 LE	G1	В	87 FTG	(P/A)	FTG		Peperomia wheeleri		Wheeler's Peperomia	PR
	12	G19			25/8/3/20			Pilea leptophylla		Puerto Rico Clearweed	PR
	1 2	G1G3						Pilea multicaulis		Many-stemmed Clearweed	PR VI
	1 2	G1G3					3456	Pilea richardii		Richard's Clearweed	PR VI
	1 30	G1G3						Pilea yunquensis	Urticaceae	Mountain Clearweed	PR
	11	G1	A					Pleodendron macranthum		Chupacallos	PR
	1 30	G1	C	89 FTG	(P/A)	FTG		Polygala cowellii		Palo de Violeta	PR
				2		7.00	20-5	Acceptance of Appares	1.1.1.4.2.2.2.2	Violet Tree	7.7
	1.1	G1?	A				9870	Polystichum calderonense	Dryopterid	Vin354 IV 44	PR
	1 30		C					Portulaca caulerpoides		Puerto Rico Portulaca	PR
	1	GUT 10	-3	90 FTG	(P/P)			Pseudophoenix sargentii var	Arecaceae		PR, Dominican
			-	437.03	20111			saonae			Republic
	1		A				13643	Psidium insulanum	Myrtaceae		PR
	11	G1	A					Psidium sintenisii		Hoja Menuda	PR
	5										· 1

Center for Plant Conservation - All Puerto Rico\Virgin Islands Species of Conservation Concern as of 15 JUL 1992

SO F	ED G	G-RANK	P	PRO	POS	ED	NCIN E	N CPC_#	SCIENTIFIC_NAME	FAMILY	COMMON_NAME(S)	RANGE
1 2		G1G3						3704	Randia portoricensis	Rubiaceae	Puerto Rico Indigo-berry	PR
1 3	c c	G1G3						3718	Ravenia urbanii	Rutaceae	Tortugo Prieto	PR
1	6	31	В	89	FTG	(P/A)	FTG	6532	Sabal causiarum	Arecaceae	Palma de Sombrero	PR VI, British
											Puerto Rican Hat-palm	Virgin Islands
1 1	T	G17	A	90	FTG	(P/P)		3875	Schoepfia arenaria	Olacaceae	Arana	PR
1 2	G	G1G3						3876	Schrankia portoricensis	Fabaceae	Zarzarilla	PR
1 3	B G	919							Scleria doradoensis	Сурегасеве		PR
2 1		SH						4027	Solanum conocarpum	Solanaceae	Marronbacoba	VI
1 1	E G	G1	A	86	FTG	(P/A)	FTG	4028	Solanum drymophilum	Solanaceae	Enrubio	PR
											Erubia	
1 2		G1G3						4034	Solanum mucronatum	Solanaceae	Pepino	PR VI
1 3	C 0	31	C					4039	Solanum woodburyi	Solanaceae	Woodbury's Nightshade	PR
1 2	G	G1G3						4080	Spiranthes polyantha	Orchidacea	Florida Key	FL, Honduras PR,
											Ladies-tresses	Guatemala, Bahamas,
											Green Ladies'-tresses	Mexico, Dominican
												Republic
1 1	T G	1G3	8	90	FTG	(P/P)		4087	Stahlia monosperma	Fabaceae	Cobana Negra	PR, Dominican
			18	91	FTG	(PR/P)						Republic
			1	92	FTG	(PR/A)						
1 3	A G	31	A					4161	Styrax portoricensis	Styracacea	Palo de Jazmin	PR
1	G	11	X					6586	Symplocos lanata	Sympl ocace	Nispero Cimarron	PR
1.1	G	31?	A					9871	Tectaria estremerana	Dryopterid		PR
1	G	31	X					6590	Ternstroemia heptasepala	Theaceae		PR
1.1	G	31	A					4208	Ternstroemia luquillensis	Theaceae	Palo Colorado	PR
1 1	G	1	A					4209	Ternstroemia subsessilis	Theaceae		PR
1	G	3717	A					9872	Thelypteris hastata var heterodoxa	Thelypteri		PR
1	G	37	A					9873	Thelypteris inabonensis	Thelypteri		PR
11	G	3?	A					9874	Thelypteris verecunda	Thelypteri	Susanna	PR
11	G	17	A					9875	Thelypteris yaucoensis	Thelypteri		PR
12	G	1	A					4291	Tillandsia lineatispica	Bromeliace	Pinon	PR VI
1 4	E G	31	A	88	FTG	(P/A)		4316	Trichilia triacantha	Meliaceae	Bariaco	PR
1	G	31	C					6620	Urera chlorocarpa	Urticaceae	Ortiga Colorada	PR
1.2	G	163						4379	Vernonia borinquensis	Asteraceae	Puerto Rico Ironweed	PR
1.1	G	31	A					13082	Vernonia proctori	Asteraceae		PR
1	0	31	A					6635	Xylosma pachyphyllum	Flacourtia	Spiny Log-wood	PR
1	G	31	C					6636	Xylosma schwaneckeana	Flacourtia	Palo de Candela	PR
1 L	E G	11	A	85	FTG	(P/A)	FTG	4452	Zanthoxylum thomasianum	Rutaceae	St. Thomas Prickly-ash	PR VI
			10	91	FTG	(RC/A)						

MEMORANDUM

TO: Recipients of CPC Lists

FROM: Center for Plant Conservation RE: Explanation of Attached Lists

This memo is intended to explain the format of the CPC lists. Each list contains all the plants in our database that meet the selection criteria as described in the heading of each list.

The fist column labelled <u>SO</u> is an algorithm used at the Center to determine an overall ranking for endangerment. Taxa with a value of 1 are of highest concern.

The column labelled <u>FED</u> lists the federal status of this taxon, if any, under the Endangered Species Act.

The column labelled $\underline{G-RANK}$ is the global rank as supplied by The Nature Conservancy.

The next column, simply labelled P, is the code from the Center's priority survey (results released December 1988), and from subsequent regional meetings. You should pay particular attention to any plant that has an "A" or a "B" in this column, as these are the plants of highest conservation concern.

The next column, <u>PROPOSED</u>, lists the institutions that have proposed to work on or have collected the plant as part of the National Collection of Endangered Plants, along with the decision of the Center's Advisory Council on those proposals.

The column labelled NCIN displays the institution that has accessioned this taxon into the National Collection of Endangered Plants.

The next column, EN, deals with sponsorships received (or promised) for the taxa in the National Collection of Endangered Plants.

The column labelled CPC # gives the unique number assigned to the plant within the Center's database.

The column labelled <u>SCIENTIFIC NAME</u> is fairly self-explanatory. Many of our 10,000+ names are synonyms of other names on the list; it is a difficult task to find and code all of these synonyms, and we have much more work to do in this regard. However, for some names, you will see bracketed names preceded by an equal sign; this indicates alternative names by which this plant may be known. Any other names that you can supply us will be appreciated.

The (often truncated) family name shows up under FAMILY.

The next heading, <u>COMMON NAME(S)</u>, lists as many common names for a plant as we know. As always, we are interested in learning of other common names, so we seek your help in providing regional common names.

The last column, RANGE, lists the two-letter state abbreviations. In addition to "real" state abbreviations, some extra abbreviations show up here; these are the codes used by TNC for non-state areas such as the Canadian provinces, the Navajo Nation, the Tennessee Valley Authority, other countries, etc.

If you have questions about these lists, please call [(314) 577-9450] or write the Center for Plant Conservation.

Explanation of Codes Used in CPC Lists

Sorting Order [SO]

A numerical code based on rankings from the The Center for Plant Conservation, The Nature Conservancy, and the Fish Wildlife Service.

<u>so</u>		CPC		TNC		<u>FWS</u>
1		A,B	or	G1,T1	or	LE, LT, PE, PT
2	-			G2,T2	or	1, 1*, 1**
3	=	C,-		G3,T3	or	2, 2*, 2**
4	=	x	or	G4, T4, G5	or	3, 3A, 3B, 3C
				T5,GH,GU		

Federal Status [FED] (as defined by the Fish and Wildlife Service)

- LE = Listed Endangered
- LT = Listed Threatened
- PE = Proposed Endangered
- PT = Proposed Threatened
- taxa for which FWS has on file substantial information on biological vulnerability and threat(s) to support the appropriateness of proposing to list taxa as Endangered or Threatened
- 1* = Category 1 taxa that may already have gone extinct
- 1** = Category 1 taxa believed to be extinct in the wild, but known to be extant in cultivation
- 2 = taxa for which information indicates that proposing to list the taxa as Endangered or Threatened is possibly appropriate, but for which substantial data on biological vulnerability and threat(s) are not currently known or on file to support proposed rules
- 2* = Category 2 taxa that may possibly be extinct
- 2** = Category 2 taxa believed to be extinct in the wild, but known to be extant in cultivation
- 3 = taxa no longer being considered for listing as Threatened or Endangered
- 3A = taxa for which FWS has persuasive evidence of extinction
- 3B = names that, on basis of current taxonomic understanding, usually as represented in published revisions and monographs, do not represent taxa meeting the Endangered Species Act's definition of "species"
- 3C = taxa that have been proven to be more abundant or widespread than was previously believed and/or those not subject to any identifiable threat

Global Rank [G-RANK] (as defined by The Nature Conservancy)

G1 = critically imperiled globally because of extreme rarity (5 or fewer occurences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extinction

Global Rank [G-RANK] (continued)

- G2 = imperiled globally because of rarity (6 to 20 occurences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extinction throughout its range
- either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range, or because of other factors making it vulnerable to extinction throughout its range; in terms of occurences, in the range of 21 to 100
- G4 = apparently secure globally, although it may be quite rare in parts of its range, especially at the periphery
- G5 = demonstrably secure globally although it may be quite rare in parts of its range, especially in its periphery
- GH = of historical occurence throughout its range, i.e. formerly part of the established biota, with the expectation that it may be rediscovered
- GU = possibly in peril range-wide but status uncertain; need more information
- GX = believed to be extinct throughout its range with virtually no likelihood that it will be rediscovered

Subspecies and varieties are codes by combining the full species Global Rank with a "sub-rank" comprised of a "T" plus the appropriate rank (1,2,3,4,5,H,U, or X), representing the rarity of the subspecies or variety itself.

CPC Priority [P] (as defined by CPC survey and Priority Regions Task Force meetings)

- A = taxa that could possibly go extinct in the wild within the next 5 years
- B = taxa that could possibly go extinct in the wild within the next ten years
- C = taxa that will probably remain extant in the wild for the next 10 years
- "-" = very rare taxa for which no response was received or taxa
 that were proposed to be added to our survey list by
 respondents but for which no priority ranks were provided
- X = taxa that were once proposed as Priority A, B, or C, but that have since been removed from the list by one or more Regional Task Force

<u>Proposed</u> [PROPOSED] Type of Proposal Submitted Codes that can appear before the slash (/):

- N = Renewal
- P = Proposed
- PR = Pre-approved

<u>Proposed</u> [PROPOSED] <u>Type of Proposal Submitted</u> (continued) Codes that can appear before the slash (/):

R = Reproposed RC = Recollection W = Withdrawn

<u>Proposed</u> [PROPOSED] <u>Advisor's Decision</u> Codes that can appear after the slash (/):

- A APPROVED: Proposed taxon met the criteria for accession in the National Collection and was of the highest priority.
- M APPROVED: Same as above. Applicable to multi-year proposals.
- P PRE-APPROVED: Proposed taxon met the criteria for accession into the National Collection or for recollection of existing material, but was not of the highest priority at the time.
- H HOLD: Proposal was approved, or even pre-approved, conditionally on some specified requirement. Decision is on "hold" until the condition is met.
- D DENIED: Proposed taxa did not meet the criteria for accession in the National Collection at the time.

Institutional Abbreviations [PROPOSED] [NCIN]

AAH	= The Arnold Arboretum of Harvard University
BERR	= Berry Botanic Garden
BOK	= Bok Tower Gardens
DES	= Desert Botanical Garden
FTG	= Fairchild Tropical Garden
HOL	= The Holden Arboretum
KHD	= Denver Botanic Gardens
MERC	= Mercer Arboretum
МО	= Missouri Botanical Garden
NCA	= The North Carolina Arboretum
NCU	= The North Carolina Botanical Garden
NEWF	= Garden in the Woods
NSA	= The Nebraska Statewide Arboretum
NY	= The New York Botanical Garden
PTBG	= National Tropical Botanical Garden
RPBG	= Regional Parks Botanic Garden (Tilden)
RSA	= Rancho Santa Ana Botanic Garden
SABG	= San Antonio Botanical Gardens
TZHI	= The Arboretum at Flagstaff
UCB	= University of California Botanical Garden
UTSA	= Red Butte Gardens and Arboretum at the University of Utah
WAI	= Waimea Arboretum and Botanical Garden

Explanation of Codes Used in CPC Lists - p. 4

Endowed [EN]

- Y = this taxon has been endowed
- R = this taxon is "reserved" for endowment

Range [RANGE]

- [] = state historical no currently known sites, but may still exist in this state
 - () = state extirpated no currently known sites, reasonable evidence that this taxon is gone from this state

C. Puerto Rico\Virgin Islands [A] and [B] species

ADIANTUM VIVESII Proctor (Adiantaceae) [no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1?

TNC element code: PPADI030N0

Distribution: Puerto Rico

Habitat(s):

deep permanent shade, moist humus over limestone [2977]

Habit:

perennial herb [2977]

Extant individuals/population/sites:

known only from type locality (Quebradillas) - 100 individuals [1686] 250 individuals in 1 population at 1 site [2977]

Site ownership and status:

private, Barrio San Antonio, Quebradillas, Finca Alvarez [2977]

Threat(s):

development pressure in area, protected by limestone cliffs [2977]

Horticultural/economic potential:

almost none [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

In cultivation at: none [2977] CPC#: 9868

AGAVE EGGERSIANA Trel. (Liliaceae)

Egger's Agave

Overall CPC sorting order: 1 In National Collection at: FTG

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2 Global rank: G1G3

TNC element code: PMAGA01070

Distribution:

U.S. Virgin Islands

Habitat(s):

dry, exposed areas [2977]

Extant individuals/population/sites:

only known in cultivation - Margaret Hayes; Fairchild; Conrad Fleming [1686] end to St. Croix, extinct in wild [2977]

Reproductive biology;

unknown if cultivated ones are all from the same parent; offspring should be sent to FTG for work on DNA f

Reintroduction note(s):

good habitat available [2977]

In cultivation at:

FTG [2977] WAI [2977] Center for Plant Conservation - Puerto Rico\Virgin Islands Priority [A] and [B] Species as of 15 JUL 1992 Page 2

Ken Jones, St. George Village Botanical Garden, St. Croix - from 2 parents that were destroyed and had been planted; may be vegetatively identical [2977]

Margaret Conrad Fleming, Cruzan Garden, by Fredricksted and at home [2977]

Eleanor Gibney, St. John [2977] Darlene Brown, St. Thomas [2977]

CPC#: 46

ARDISIA LUQUILLENSIS (Britt.) Alain (Myrsinaceae)

Mameyuelo

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: Global rank: G1

TNC element code: PDMRS01030

Distribution:

Puerto Rico (state rank: S1)

Extant individuals/population/sites:

100-200 individuals in ?? populations [1686] very restricted, but doing fairly well there [1686]

Threat(s):

expansion of existing communication facility [1686]

Off-site need:

propagules needed [1686]

Horticultural/economic potential:

attractive, arborescent shrub [1686]

Specialist(s):

Mr. Cyrus Lundell

CPC#: 6041

ARISTIDA CHASEAE (Poaceae)

(alternate name: Aristida chasei)

[no common name]

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status:

Global rank:

TNC element code: (unknown)

Distribution:

Puerto Rico

Habitat(s):

dry, stoney, sandy soil [2977]

Habit:

perennial herb (dies back in dry season) [2977]

Extant individuals/population/sites:

large colony found recently [1686]

ca 2000 individuals in 4 populations [2977]

most on private land - threats high [2977]

Site ownership and status:

Caba Rojo National Wildlife Refuge, 180 individuals 2 years ago [2977]

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Sierra Burmeja - Cerro Mariquita, ca 200 individuals, private [2977]
     Sierra Burmeja - west end (2 populations) [2977]
  Threat(s):
     exotic grasses [1686]
     clearing [2977]
     grazing [2977]
     fire [2977]
  Reproductive biology;
     unknown [2977]
  Seed:
     seed is orthodox [2977]
  Horticultural/economic potential:
     none [2977]
  Miscellaneous:
     "A" to "B", DS#2977
  Specialist(s):
     Dr. Paul Mackensie, Louisiana State University
     Dr. George R. Proctor, Department of Natural Resources (DRN)
  In cultivation at:
     none [2977]
  CPC#: 9886
ARISTIDA PORTORICENSIS Pilger (Poaceae)
  Pelos del Diablo
  Overall CPC sorting order: 1
  CPC Priority: A (could possibly go extinct in the wild in the next 5 years)
  Federal status: LE
  Global rank: G1
  TNC element code: PMPOA0K0U0
  Distribution:
     Puerto Rico (state rank: S1)
  Habitat(s):
     dry, stony ground or laterite [2977]
  Habit:
     perennial herb [2977]
  Extant individuals/population/sites:
     large population discovered recently [1686]
      ? individuals in 2 populations [2977]
  Site ownership and status:
     Sierra Bermeja - Cerro Mariquita [2977]
     Cerro las Mesas, Mayaguez (on its way out, clearing area for housing) [2977]
     Milleros - S. Silander (possible population?) [2977]
  Threat(s):
     exotic grasses [1686]
     suburban development (at Mesas) [2977]
     grazing (at Mariguita) [2977]
     clearing (at Mariguita) [2977]
     fire (at Mariguita) [2977]
  Seed:
     seed is orthodox [2977]
  Horticultural/economic potential:
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none [2977] Specialist(s):

Dr. Paul Mackensie, Louisiana State University

Dr. George R. Proctor, Department of Natural Resources (DRN)

CPC#: 286

AUERODENDRON PAUCIFLORUM (Rhamnaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G?

TNC element code: PDRHA0F010

Distribution: Puerto Rico

Habitat(s):

woodland near brink of limestone cliff [2977]

Habit:

small tree [2977]

Extant individuals/population/sites:

10 individuals in 1 population at 1 site [2977]

Site ownership and status:

Costa Isabela - development company [2977] 2 trees that are not on Costa Isabella land [2977]

Threat(s):

resort development [2977]

Reproductive biology;

no seeds have been seen [2977]

Horticultural/economic potential:

used for fence posts, hard wood [2977]

Specialist(s):

Dr. Henri Alain Liogier, Botanic Garden

Cultivation information:

may be tissue cultured, not from cuttings [2977]

In cultivation at:

none [2977]

CPC#: 12937

BANARA VANDERBILTII Urban (Flacourtiaceae)

Palo de Ramon

Overall CPC sorting order: 1

In National Collection at: FTG

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE Global rank: Gl

TNC element code: PDFLA01020

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

limestone [2977] Habit: small tree [2977] Extant individuals/population/sites: ca 18 known in wild [1686] second population was found several years ago - a disjunct population [1686] original site was on limestone; new site is higher and on a different substrate [1686] Site ownership and status: Hwy. 2, west of Toabaja [2977] east peak of Cayey [2977] base of Lugillo by road (new location; Julio Figueroa), south of Hwy. 3 - one tree (Liogier has spec.) [2977] Threat(s): habitat destruction [1686] limestone quarrying [1686] cows [1686] farming [1686] road construction [1686] Seed: seed is recalcitrant [2977] Off-site need: increase genetic lineages in cultivation [1686] Horticultural/economic potential: very handsome plant, attractive flowers [1686] Cultivation information: dried and refrigerated, lose viability after 2 months (FTG) [2977] In cultivation at: 25 plants from FTG, Cambalache Forest, doing well and FTG, St. John 2 plants [2977] CPC#: 536 BRACHIONIDIUM CILIOLATUM Garay (Orchidaceae) [no common name] Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 1 Global rank: G1G3 CITES appendix: 2 TNC element code: PMORCO8010 Distribution: Puerto Rico Habitat(s): mossy branches of moss forest [2977] elfin cloud forest [2977] Habit: perennial herb [2977] epiphyte [2977] Extant individuals/population/sites: known only from type locality - Sierra de Luquillo, Pico del Este, ca 1000 m [1686] may be extinct, needs to be surveyed [2977] not collected since type (Dr. Dick Howard and Roy Woodbury) [2977] Site ownership and status:

Center for Plant Conservation - Puerto Rico\Virgin Islands Priority [A] and [B] Species as of 15 JUL 1992 Page 6

El Yunque Rock [2977]

El Yunque, west peak of east peak - 2 colonies [2977]

Threat(s):

expansion of communication facilities [2977]

Reproductive biology:

this might be a self-pollinating form [1686]

unknown [2977]

Horticultural/economic potential: no horticultural potential [2977]

Miscellaneous:

could be a self-pollinating, aberrant form of B. parvum

Specialist(s):

Dr. James D. Ackerman, University of Puerto Rico

Dr. George R. Proctor, Department of Natural Resources (DRN)

Reintroduction note(s):

good candidate if fruits are found and aseptically cultivated [2977]

Cultivation information:

aseptic culture [2977]

seeds are dust-like; lack endosperm, require microrhizae to germinate; intensive cultivation [2977]

In cultivation at:

none [2977] CPC#: 6104

BRUNFELSIA DENSIFOLIA Krug & Urban (Solanaceae)

Serpentine Hill Raintree

Overall CPC sorting order: 1

In National Collection at: FTG

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: Global rank: G1

TNC element code: PDSOL05020

Distribution:

Puerto Rico (state rank; S1)

Habitat(s):

serpentine [1686]

Habit:

shrub [1686]

Extant individuals/population/sites:

fairly common locally; confined to serpentine [1686]

Threat(s):

habitat destruction [1686] road widening [1686]

Horticultural/economic potential:

beautiful; good horticultural potential [1686]

Cultivation information:

being propagated at Fairchild - open pollinated [1686] will grow from seeds as well as from cuttings [1686]

In cultivation at:

FTG

CPC#: 6112

Distribution:

Puerto Rico (state rank: S1)

U.S. Virgin Islands

Habitat(s):

lower montane [2977]

Habit:

tree (may be dioecious, need to determine) [2977]

Extant individuals/population/sites:

30 individuals in 6-7 sites [1686]

Site ownership and status:

Rio Abajo State Forest, Aricebo; 8 or 18 plants (largest population) [2977]

Caribbean National Forest; 2 plants, road 191, Woodbury population 0.25 km below washout [2977]

Threat(s):

road construction [2977] forest maintenance [2977]

Reproductive biology;

no reproduction occurring [2977]

Horticultural/economic potential:

horticultural potential when in fruit [1686]

relatives have good wood [2977]

Specialist(s):

Sr. Jose Rivera, US Forest Service

Dr. Roger W. Sanders, Fairchild Tropical Garden

Cultivation information:

some seed germination trials were not successful [1686]

6 individuals in V. Guevedo's nursery were produced asexually [1686]

In cultivation at:

Jose Rivera, rooted from stump at Catalina [2977]

CPC#: 672

CALYPTRANTHES KIAERSKOVII (Myrtaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status:

Global rank;

TNC element code: (unknown)

Distribution:

Puerto Rico

Habitat(s):

high moist or moist end of dry forest [2977]

Habit:

small tree [2977]

Extant individuals/population/sites:

1 individual left in 3 populations (2 are historic) [2977]

8 plants in several populations on a national park in Gorda Park on Virgin Gorda, BVI (1991) [3485]

it is speculated that there are more populations in the bush where access is difficult [3485]

Site ownership and status:

Tortola - not seen in years [2977]

Virgin Gorda Island - path to tower, 1 individual (Gibney) [2977]

Viequez - extirpated, 10-15 originally, now helipad (Woodbury) [2977]

the Gorda Park locality is within a national park and is protected from habitat destruction [3485]

Threat(s):

habitat destruction [2977]

low numbers [2977]

Reproductive biology:

unknown [2977]

Horticultural/economic potential:

may be used as an ornamental [2977]

Specialist(s):

Dr. Fred Kraus, Department of Biology

Ms. Eleanor Gibney

In cultivation at:

FTG [2977]

CPC#: 13641

CALYPTRANTHES PEDUNCULARIS Alain (Myrtaceae)

(alternate name: Calyptranthes dumetorum)

Serpentine Lidflower; Maricao

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: 2 Global rank; G1

TNC element code: PDMRT01060

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

serpentine [1686]

Habit:

shrub to 2 meters [1686]

Extant individuals/population/sites:

200-300 left - scattered in edges of thickets [1686]

Puerto Rico, Susua Forest and surrounding areas; 200-300 plants [3113]

Threat(s):

road widening [1686]

Horticultural/economic potential:

very little horticultural potential [1686]

Specialist(s):

Dr. Henri Alain Liogier, Botanic Garden

Dr. George R. Proctor, Department of Natural Resources (DRN)

Cultivation information:

cuttings are difficult to root in this family [3113]

CPC#: 697

CALYPTRANTHES PORTORICENSIS Britt. (Myrtaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status:

Global rank: G1

TNC element code: PDMRT01070

Distribution:

Puerto Rico (state rank: S1)

Extant individuals/population/sites:

no current sites - 2 old sites (1981) [1686]

Miscellaneous:

very little information available for this taxon

CPC#: 6120

CALYPTRANTHES THOMASIANA Berg (Myrtaceae)

Thomas' Lidflower

Overall CPC sorting order: 1
In National Collection at: FTG

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1

TNC element code: PDMRT01090

Distribution;

Puerto Rico (state rank: S1)

U.S. Virgin Islands

Habitat(s):

moist forest [2977]

Habit:

shrub (Virgin Gorda) [2977]

tree (St. John) [2977]

Extant individuals/population/sites:

30-50 individuals left in 3 sites (original site may be gone) [1686] is also on St. John (St. Thomas site has been developed) [1686]

ca. 15-20 plants occur at Bordeaux Mt. on St. John [3485]

ca. 100+ plants at the Gorda Peak locality [3485]

Site ownership and status:

St. Thomas - not relocated, development high in area [2977]

Threat(s):

habitat destruction [2977]

Reproductive biology:

not much recruitment [2977]

Horticultural/economic potential:

handsome shrub [1686]

may be used as an ornamental [2977]

Reintroduction note(s):

no habitat on St. Thomas [2977]

Cultivation information:

unknown [2977]

In cultivation at:

FTG; 2 plants from Flag Hill, St. Thomas [2977]

St. Thomas; seed and 4 F1 seedlings (may be hybrids) [2977]

CPC#: 698

CALYPTRANTHES TRIFLORA Alain (Myrtaceae)

Three-blossom Lidflower

Overall CPC sorting order: 1 CPC Priority: B (could possibly go extinct in the wild in the next 10 years) Federal status: 2 Global rank: G1 TNC element code: PDMRT010A0 Distribution: Puerto Rico (state rank: S1) Habit: evergreen shrub [1686] Threat(s): road widening (grows along roadsides) [1686] Off-site need: should be propagated - interesting inflorescences [1686] Miscellaneous: serpentine; shrub in thickets along roadways CPC#: 6121 CALYPTRONOMA RIVALIS (O.F. Cook) Bailey (Arecaceae) Palma Manaca; Puerto Rican Manac Overall CPC sorting order: 1 In National Collection at: FTG CPC Priority: B (could possibly go extinct in the wild in the next 10 years) Federal status: LT Global rank: G1G2 IUCN ranking: E TNC element code: PMARE04010 Distribution: Puerto Rico (state rank: S2) Habit: tree [1686] Extant individuals/population/sites: 200-300 individuals total [1686] locally abundant, but very localized [1686] most are on private property [1686] 3-4 populations, only one is large [2977] Site ownership and status: Rio Camuy, ca. 150 individuals, including lots of seedlings [2977] Rio Guajataca, just below lake, William Estramer or Papo Vives [2977] below Callazo (or Quebazo Falls), San Sebastian, ca. 1 dozen; were ca, 100 earlier [2977] Threat(s): fire [1686] grazing [1686] destruction of habitat - land use change [2977] Horticultural/economic potential: very attractive, horticultural potential [1686] Miscellaneous:

"A" to "B", DS#2977

Dr. Robert W. Read, Quest End

Dr. John Popenoe, Fairchild Tropical Garden

Specialist(s):

In cultivation at:

FTG [2977]

John Causquillo (Ackerman's Lab) planted at Guajataca Boy Scout Camp [2977]

Rio Abaja Forest, 400 plants, 3 locations, 98-99% success in 1983 (DNR), Diego Jimenez [2977] widely cultivated by the Palm Society [1686]

CPC#: 701

CASSIA MIRABILIS Pollard (Fabaceae)

(alternate name: Chamaecrista mirabilis)

Puerto Rico Senna

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE Global rank: Gl

TNC element code: PDFAB0S190

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

confined to white silica sand, open [2977]

Habit:

perennial herb, creeping but not rooting [2977]

Site ownership and status:

Toabaja Forest [2977]

Condado Lagoon - gone [2977]

Threat(s):

sand mining [2977]

construction [2977]

burning [2977]

pasture [2977]

Reproductive biology:

check with Heritage Program about transplants to preserve [2977]

Seed:

seed is orthodox [2977]

Horticultural/economic potential:

very little horticultural potential [1686]

Specialist(s):

Dr. Rupert Barneby, The New York Botanical Garden

Cultivation information:

easily from seed [2977]

flowers year round? [2977]

In cultivation at:

none [2977]

CPC#: 796

CATESBAEA-MELANOCARPA Krug & Urban (Rubiaceae)

Tropical Lily-thorn

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2

Global rank: G? TNC element code: PDRUB08010 Distribution: Puerto Rico Habitat(s): dry, stoney thickets [2977] Habit: shrub [2977] Extant individuals/population/sites: 4 individuals in 1 population [1686] 6 individuals in 1 population [2977] Site ownership and status: Puerto Rico, no known populations, Guanica [2977] St. Croix, 4 adults and 3 seedlings; lost 1 adult in hurricane [2977] Antiqua (Lesser Antilles): consult Howard's flora, rare [2977] Threat(s): development [1686] low numbers [2977] fire [2977] close to oil refinery [2977] was proposed for golf course [2977] Reproductive biology: unknown; 1-2 small plants at garden have fruits [2977] pollinator unknown [2977] Horticultural/economic potential: good horticultural potential - handsome little shrub [2977] Specialist(s): Dr. Charlotte Taylor, Missouri Botanical Garden Dr. George R. Proctor, Department of Natural Resources (DRN) Reintroduction note(s): good reintroduction to Guanica from St. Croix [2977] reintroductions possible if propagated from seed [1686] **Cultivation information:** can establish without miccorhize [2977] In cultivation at: 13 in St. Croix Village Botanical Garden [2977] 5 at Mayaguez [2977] CPC#: 9879

CHAMAESYCE ORBIFOLIA (Euphorbiaceae)

[no common name]

Overall CPC sorting order: 1
CPC Priority: A (could possibly go extinct in the wild in the next 5 years)
Federal status:
Global rank:
TNC element code: (unknown)
Distribution:
Puerto Rico
Habitat(s):
bases of caves and depressions in rocks [2977]
Habit:

prostrate perennial herb, tussocks where goats are [2977] Extant individuals/population/sites: not more than 50 individuals in 1-6 populations at 1 site [2977] Site ownership and status: Mona Island - eastern end, state wildlife refuge [2977] Threat(s): goats [2977] pigs [2977] Horticultural/economic potential: ground cover or bonsai [2977] Specialist(s): Mr. Roy Woodbury In cultivation at: none [2977] CPC#: 13644 COCCOLOBA RUGOSA Desf. (Polygonaceae) Ortegon Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 1 Global rank: G2 TNC element code: PDPGN05080 Distribution: Puerto Rico (state rank: S2) U.S. Virgin Islands (state rank: SH) Habitat(s): semi-dry woodland ravines, lower montane [2977] Habit: small tree [2977] Extant individuals/population/sites: rare, PR endemic [1686] also known as a record from St. Thomas ca 100 years ago [1686] < 500 individuals in 4 populations (3 sites in same area, not counted) [2977] most sites destroyed [2977] Site ownership and status: Palmas de Mar area, chief remaining site (121 plants) [2977] Threat(s): quarrying [1686] development [1686] all surrounded by condos, roads and resorts [2977] Reproductive biology; reproduces in wild [2977] Off-site need: engineers want to know how to propagate it [1686] Horticultural/economic potential: beautiful tree - very showy [1686] whole flower spike is crimson [2977] gorgeous, leathery, wrinkled leaves [2977] Miscellaneous: "B" to "A", DS#2977

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Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

Cultivation information:

probably no special needs [2977]

In cultivation at:

previously under cultivation in Europe (Paris) [2977]

originally described from cultivation [2977]

CPC#: 6180

CORDIA BELLONIS Urban (Boraginaceae)

Puerto Rico Manjack

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2 Global rank: G1G3

TNC element code: PDBOR09040

Distribution:

Puerto Rico

Habitat(s):

serpentine, low, open thickets or road clearings within 1 km radius of Monte Aligrio tower, 750-900m [297

Habit:

weak shrub, very inconspicuous [2977]

4-mersus sessile clusters of flowers [2977]

Extant individuals/population/sites:

4 plants with flower buds [2977]

Site ownership and status:

Maricao, Monte Aligrio, now a police tower [2977]

Maricao, San German, 1/2 km east southeast of HQ office of forest; 4 plants, adults; may be more, very inconspicuous [2977]

Monté Serraté Forest, near lookout tower in 1982; may be sw of Alto de la Bandera on Road 10, different soil, only collected once [2977]

Threat(s):

along gravel road not open to the public, should stay closed [2977]

Reproductive biology;

anomalous Cordia, closely related to C. wagnerorum [2977]

Horticultural/economic potential:

unlikely [2977]

Specialist(s):

Sr. Ruben Padron

Reintroduction note(s):

serpentine gravel not promising substrate [2977]

Cultivation information:

unknown [2977]

In cultivation at:

none [2977]

CPC#: 1047

CORDIA RUPICOLA Urban (Boraginaceae)

Puerto Rico Manjack

Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 2 Global rank: G1 TNC element code: PDBOR090H0 Distribution: Puerto Rico (state rank: S1) British Virgin Islands Habitat(s): serpentine [1686] limestone [1686] dry thicket, lots of orchids [2977] Habit: shrub [2977] Extant individuals/population/sites: 2 known populations: 1) Puerto Rico, Guanica Forest (# individuals unknown), 2) British Virgin Islands, Anegada Island (# individuals unknown) [3113] also fairly common in the central part of Anegada Island, with a few dozen individuals at each locality (according to Kraus) [3485] Site ownership and status: west side of Guanica State Forest (Guayanilla) (not found in recent years) [2977] west end of Anagada, BVI, 2 collections [2977] Los Indios [2977] Threat(s): habitat destruction [1686] Anagada - overun with livestock [2977] Reproductive biology: need to study - not sure how successful reproduction is [2977] cuttings root readily [3113] Horticultural/economic potential: slight horticultural interest due to textured leaves [2977] Specialist(s): Sr. Ruben Padron Dr. George R. Proctor, Department of Natural Resources (DRN) Cultivation information: easy to propagate [2977] In cultivation at: FTG, 1 plant; setting fertile seed, fast growing [2977] CPC#: 1048 CORDIA WAGNERORUM Howard (Boraginaceae) Luquillo Mountain Manjack; Wagners' Cordia Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 1 Global rank: G1 TNC element code: PDBOR090N0 Distribution: Puerto Rico (state rank: S1)

Habit:

straggling tree - rainforest species [1686]

woody vine to 12 ft. [2977]

Extant individuals/population/sites:

no recent sitings; only known from one site (El Toro trail) [1686]

if it still survives, it is excessively rare [1686]

known only from type locality [2977]

Site ownership and status:

type locality, El Toro Trail, no trace in July 1991; check if destroyed in slide area [2977]

Horticultural/economic potential:

not much horticultural potential [1686]

Specialist(s):

Dr. Patricia Holmgren, The New York Botanical Garden

Dr. George R. Proctor, Department of Natural Resources (DRN)

Dr. Jim Miller, U.S. Fish & Wildlife Service-Region 6

CPC#: 1049

CORNUTIA OBOVATA Urban (Verbenaceae)

Nigua; Palo de Nigua

Overall CPC sorting order: 1

In National Collection at: FTG

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE

Global rank: G1

TNC element code: PDVER08010

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

dry serpentine (Susua) [2977]

moist limestone (other locations) [2977]

Habit:

small tree [1686]

Extant individuals/population/sites:

10 individuals total in 5 sites [1686]

8 individuals occurring in 5 populations in 3 sites [2977]

Site ownership and status:

Rio Abajo - 3 individuals [2977]

Aricedo Observatory - left of entrance [2977]

Barrenquitas - private, near community [2977]

Susua - population of 4 plants, not relocated, State Forest [2977]

Threat(s):

habitat destruction [2977]

Reproductive biology;

unknown [2977]

Horticultural/economic potential:

definite horticultural potential [1686]

may be hard wood [2977]

Reintroduction note(s):

easily grown from cuttings [2977]

propagules could be put back into protected areas [1686]

Cultivation information:

none [2977]

In cultivation at:

FTG [2977] CPC#: 1072

CRANICHIS RICARTII (Orchidaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status:

Global rank:

TNC element code: (unknown)

Distribution:

Puerto Rico

Habitat(s):

serpentine thickets, 600-700 m. elevation in decomposing litter [2977]

Habit:

perennial herb (terrestrial) [2977]

Extant individuals/population/sites:

known only from type locality [1686]

may be 20 individuals in 2 populations at 1 site [2977]

Site ownership and status:

both populations are in Maricao Forest Reserve [2977]

Threat(s):

pine plantation possible - management DNR [2977]

Reproductive biology:

probably self-pollinating [2977]

Seed:

seed is orthodox [2977]

Horticultural/economic potential:

none [2977]

Specialist(s):

Dr. James D. Ackerman, University of Puerto Rico

Sr. Ruben Padron

Reintroduction note(s):

limiting factor - terrestrial orchid propagation inexact science [2977]

Cultivation information:

miccorhize, difficult from seed [2977]

fruit set is good [2977]

In cultivation at:

none [2977]

CPC#: 9867

CROTON FISHLOCKII (Euphorbiaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status:

Global rank:

TNC element code: (unknown)

Distribution:

Puerto Rico British Virgin Islands U.S. Virgin Islands

Habitat(s): scrub thicket to open canopy [2977]

low coastal forest [2977]

Habit:

small shrub < 1 m. [2977]

Extant individuals/population/sites:

several hundred individuals in 3 populations [2977]

Site ownership and status:

St. John, Minna Hill, southeast portion of Virgin Islands National Park - 100+ individuals [2977] State Concordia roadside - 25-30 individuals (BVI) [2977]

Great Camino - several 100 individuals (BVI) [2977]

Threat(s):

encroached by buildings (El Camino Island) [2977]

donkeys - core population (St. John) [2977] goats - east end pond (St. John) [2977]

Horticultural/economic potential:

none - need to study [2977]

Specialist(s):

Dr. Fred Kraus, Department of Biology

Cultivation information:

easy to grow [2977]

In cultivation at:

Fred Kraus - 25-30 plants in pots [2977]

CPC#: 13642

CYATHEA DRYOPTEROIDES (Cyatheaceae)

(alternate name: Alsophila dryopteroides)

Elfin Tree Fern

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE Global rank:

TNC element code: (unknown)

Distribution:

Puerto Rico (state rank: S?)

Habitat(s):

high humidity, shade, upper montane wet forest [2977]

Habit:

tree fern [2977]

Extant individuals/population/sites:

total of 200 individuals in 4 sites [1686]

4 populations all on Toro Negro and Monte Guilarte State Forest [2977]

Site ownership and status:

Cerro Rosa [2977] Cerro la Punta [2977]

Threat(s):

forest cutting [1686]

communication towers and maintenance roads [2977]

Reproductive biology;

hybridizes with other species [2977]

Horticultural/economic potential:

neat little tree-fern; good for greenhouse [1686]

horticultural; attractive [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

Cultivation information:

high humidity, low temperature, shade [2977]

In cultivation at:

none [2977]

CPC#: 1203

DAPHNOPSIS HELLERIANA Urban (Thymelaeaceae)

(alternate name: Daphnopsis hellerana)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE Global rank: G1

TNC element code: PDTHY02020

Distribution:

Puerto Rico (state rank: S?)

Habitat(s):

, moist woodland or limestone [2977]

Habit:

shrub [1686]

Extant individuals/population/sites:

> 140 individuals total, including seedlings (Peter Ortiz found lots of seedlings) from 7 sites [1686] finding more populations as they are searched for [2977]

Site ownership and status:

Guajataca Public Forest (30 individuals) [2977]

Costa Isabella (160 individuals) - transferring designated areas to DNR [2977]

Nevares, Toabaja (40-60 individuals; Peter Ortiz, PRHP) [2977]

Threat(s):

development [1686]

limestone quarry [2977]

Reproductive biology:

dioecious [1686]

no fruits at Guajataca [2977]

somewhat clonal [2977]

Horticultural/economic potential:

very attractive shrub [1686]

once used for making rope [2977]

attractive leaf venation and texture [2977]

Specialist(s):

Sr. Peter R. Ortiz, Natural Heritage Program - Conservation Data Center

Reintroduction note(s):

could be reintroduced into Commonwealth Forest [1686]

Cultivation information:

seedlings die back, need continual moisture (Vivian Negrier) [2977]

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In cultivation at: unknown [2977] CPC#: 1358

ELAPHOGLOSSUM SERPENS Maxon & Morton (Elaphoglossaceae)

Cerro de Punta Jayuya

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G?

TNC element code: PPASPODOKO

Distribution:
Puerto Rico
Habitat(s):

mossy cloud forest, highest points [2977]

Habit:

epiphyte [2977]

Extant individuals/population/sites:

30? plants total in 1 site (Cerro de Punta, Monte Jayuya) [1686]

30 individuals in 2 populations [2977]

Site ownership and status:

Cerro de Punta (Toro Negro State Forest) - 22 plants on 4 trees (trees-Lionia rubigenosa), not in good condition [2977]

Monte Tayuya - found none, mossy forest destroyed by Hurricane Hugo [2977]

Threat(s):

communication towers, need to prevent additional clearing [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

Reintroduction note(s):

can't take disturbance, in extreme peril [2977]

CPC#: 9869

ERYTHRINA EGGERSII Krukoff & Moldenke (Fabaceae)

Cock's-spur; Pinon; Bucare; Bucayo; Coral; Coral Vegetal; Éspuelo de Gallo; Pinon espinoso

Overall CPC sorting order: 1

In National Collection at: FTG

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1

TNC element code: PDFAB1M040

Distribution:

Puerto Rico (state rank: S1)

U.S. Virgin Islands

Habitat(s):

humus or limestone [2977]

Habit:

starts as a vine and becomes a tree [1686]

Extant individuals/population/sites:

12 individuals in Puerto Rico, 2 on St. John [1686] 2 locations [2977] Site ownership and status: St. John, Virgin Islands N.P. - 4 sites; 3 with only 1-2 trees, 1 with 30-50 trees [2977] Nevarez - 12 individuals, quarrying to east, have seen seedlings [2977] Threat(s): quarrying [1686] habitat destruction [1686] St. John (core population) - little human threat, hurricane [2977] St. John (small populations) - roadside, pigs and donkeys [2977] natural threat - shoot borer, prevents seed some years; one seedling seen [2977] Reproductive biology: research needs: reproductive biology, shoot borer [2977] taxonomy may be 2 spp. according to Woodbury [2977] seed is orthodox [2977] Horticultural/economic potential: gorgeous crimson flowers [2977] Miscellaneous: although listed for St. Croix, only seen on St. John Specialist(s): Dr. David A. Neill, Missouri Botanical Garden Ms. Eleanor Gibney Reintroduction note(s): should be easy to propagate and then reintroduce [1686] Cultivation information: control shoot borers [2977] in cultivation, grows to a certain height and dies, may not reach reproductive age [2977] In cultivation at: St. George Village Botanical Garden [3089] FTG [2977] St. Croix - 4 [2977] St. Thomas - 1 [2977] St. John [2977] Gemini Botanical Garden [2977] CPC#: 7012 EUGENIA BELLONIS Krug & Urban (Myrtaceae) [no common name] Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: Global rank: G1 TNC element code: PDMRT03050 Distribution: Puerto Rico (state rank: S1) Habitat(s): rocky, dry cliffs [2977]

tabletop hills [2977]

shrub, 1 ft. in height [2977]

Habit:

Extant individuals/population/sites:

1 individual in 1 population at 1 site [2977]

Site ownership and status:

Cayo de Muentos Island Lighthouse - 1 plant with 6 shoots [2977]

East Guanica - type locality, not relocated [2977]

Threat(s):

low numbers [2977]

Horticultural/economic potential:

unknown [2977]

Miscellaneous:

has not been seen for a long time, needs to survey for

Specialist(s):

Mr. Roy Woodbury

In cultivation at:

none [2977]

CPC#: 7013

EUGENIA HAEMATOCARPA Alain (Myrtaceae)

Uvillo

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1

TNC element code: PDMRT030H0

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

lower montane wet forest [2977]

Habit:

tree to 20 feet [1686] small tree [2977]

Extant individuals/population/sites:

4-5 sites with very few individuals in each [1686]

very rare; at lower elevations [1686]

Site ownership and status:

edge of Carite Forest - 9 reproductive individuals with seedlings; private land [2977] El Verde - 2 colonies, 50-100 individuals, 15.8 km last river to south up stream 200 ft. [2977]

Guavo - type collection [2977]

Threat(s):

landslides [1686]

little threat (El Verde) [2977]

Horticultural/economic potential:

a pretty Eugenia - large leaves and big, edible fruits [1686]

could be useful in breeding [1686]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

Mr. Eugenio Santiago

In cultivation at:

1-2 seedlings for reproductive biology study (Ricardo C.) [2977]

CPC#: 1847

EUGENIA UNDERWOODII Britt. (Myrtaceae)

Underwood's Eugenia

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2 Global rank: G1

TNC element code: PDMRT030Y0

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

moist forest on limestone (Puerto Rico) [2977]

moist ravine on volcanic rock (Guana Island) [2977]

Habit:

shrub [2977]

Extant individuals/population/sites:

1 individual known - Guana Island [1686]

since the Guana Island individual could not be located in 1991, it is believed that it was destroyed by Hurricane Hugo in 1989 [3485]

Site ownership and status:

Guana Island - 1 individual; Kraus has not been able to relocate [2977]

Nevarez - 1-2 individuals in 3 areas [2977]

Quebradillas [2977]

north of Salinas - 1-2 individuals [2977]

Threat(s):

low numbers [2977]

hurricane (on Guana) [2977]

quarrying (on Nevarez) [2977]

Reproductive biology;

need to study low numbers and lack of reproduction [2977]

Horticultural/economic potential:

no horticultural potential [1686]

nondescript shrub, flowers bright yellow to red [2977]

CPC#: 1850

EUGENIA WOODBURYANA (Myrtaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: Global rank: G?

TNC element code: PDMRT03120

Distribution:

Puerto Rico

Habit:

tree to 20 feet, with very slender trunks [1686]

(strange, flabby wings on fruit) [1686]

Extant individuals/population/sites:

45 plants total in 3 populations [1686]

Threat(s):

fire [1686] mining [1686] road building [1686] cow pastures [1686] Off-site need: should be cultivated [1686] Horticultural/economic potential: very beautiful [1686] Specialist(s): Dr. George R. Proctor, Department of Natural Resources (DRN) CPC#: 9881 EUPATORIUM DROSEROLEPIS B.L. Robins. (Asteraceae) Oreganillo Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 2 Global rank: GH TNC element code: PDAST3P0J0 Distribution: Puerto Rico (state rank: S?) Habitat(s): montane wet forest, 950 m. [2977] Habit:

perennial herb [2977]

Extant individuals/population/sites:

may be known from the type locality only [1686] 6 individuals in 1 population at 1 site [2977]

Site ownership and status:

type locality (1918) - Monte la Torrecillas, private, in Barranquitas [2977] voucher only recently recollected in 1988 [2977]

Threat(s):

telecommunication towers [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

In cultivation at: none [2977]

CPC#: 1853

GESNERIA PAUCIFLORA Urban (Gesneriaceae)

Few-flowered Gesneria

Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 1 Global rank: G1

TNC element code: PDGES04030

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

rocky stream beds, at seeps near top [2977] Habit: rosette herb [1686] miniature shrub [2977] Extant individuals/population/sites: 50 individuals in 2 populations at 1 site (700-800 m) [1686] estimated 1000 individuals in main colony, 2 populations [2977] Site ownership and status: south side of Maricao State Forest, few plants (Rueben Padron) [2977] Threat(s): flood wash-outs and landslides [2977] storm damage [1686] trail construction [1686] best to leave it alone, no roads or trails into area [2977] Horticultural/economic potential: beautiful red flowers [1686] gardeners would love it [1686] mini gesneriad, beautiful salmon yellow flowers [2977] Specialist(s): Dr. Laurence E. Skog, Smithsonian Institution Dr. George R. Proctor, Department of Natural Resources (DRN) In cultivation at: once in private collection in NJ but may not be there now [2977] CPC#: 2020 GOETZEA ELEGANS Wydler (Solanaceae) Mata Buey; Beautiful Goetzea Overall CPC sorting order: 1 In National Collection at: FTG CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: LE Global rank: G1 TNC element code: PDSOL0A010 Distribution: Puerto Rico (state rank: S1) Habitat(s): limestone forest under canopy [2977] Habit: small tree [2977] Extant individuals/population/sites: 48 total individuals in 3 populations plus 1 (planted?) individual [1686] 100-125 individuals (including juveniles) in 8 populations at 1 site [2977] narrow distribution: 1 tree lost to Hugo, 1 west of Luguillo gone, all within 1 mile radius [2977] road widening destroyed 6 trees but 40-50 root suckers came up [2977] Site ownership and status: private, Quebradillas, Isabela, 1 tree lost to Hugo, 1 west of Luguillo gone, all within 1 mile radius [2977] Guajataca Gorge [2977] Threat(s):

banana quits could be affecting pollinators [1686]

lots of flower damage - style is broken, buds are chewed [1686]

sewage [1686] pipeline construction [1686] habitat destruction [2977] hotel complex construction [2977] scale infection (may not be fatal) [2977] Reproductive biology: viable seed from single tree [2977] self-compatible but more seeds from cross-pollination [2977] Seed: seed is orthodox [2977] Horticultural/economic potential: nice flowers, shiny leaves [1686] horticulturally ornamental [2977] Costa Isabela - to be used as an ornamental around hotel, have nursery [2977] Miscellaneous: disjunct populations historically Specialist(s): Sr. Geraldino Caminero, Universidad de Puerto Rico - Recinto de Univ. de Mayaguez (RUM) Mr. Eugenio Santiago Cultivation information: scales can be a problem [2977] not good to grow from cuttings, easy to grow from seed [2977] greenhouse germination is relatively easy, but in the wild, very few seedlings [1686] cuttings do not root very easily, but Fairchild has done it [1686] Valerie Pence (Indiana) has done tissue cultures of it [1686] In cultivation at: FTG [2977] 50 in greenhouse at UPR, Mayaguez (Santiago) [2977] 6 specimens in Caribbean National Forest from seed [2977] 1 in UPR Botanical Garden [2977] 4 at Hacinda la Esperanza Puerto Rico Conservation Trust [2977] CPC#: 2041 GONOCALYX CONCOLOR Nevl. (Ericaceae) [no common name] Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 2 Global rank: G1G3 TNC element code: PDERIOH010 Distribution: Puerto Rico Habitat(s): cloud forest, high elevation [2977] Habit: shrubby epiphyte which becomes a vine [2977] Site ownership and status: Carite Forest - 35 individuals, type locality, state forest [2977] Cerro la Santa - Sierra de Cayay (same site as Carite Forest) [2977] destroyed - El Yunque - Roy Woodbury knows of population here; west peak of east peak, Cerro de Lugillo, Caribbean National Forest (where tower was built, population gone; 2-3 small colonies [2977] Threat(s):

within forest land, communication towers require lots of maintenance [2977]

Reproductive biology;

no germination success [2977]

Horticultural/economic potential;

ornamental [2977]

Miscellaneous:

"C" to "A", DS#2977

Cultivation information:

can grow from cuttings, needs high humidity, probably needs miccorhize [2977]

In cultivation at:

Flores took cuttings [2977]

CPC#: 2042

HENRIETTEA MEMBRANIFOLIA Liogier (Melastomataceae)

(alternate name: Henriettella membranifolia)

Camasey

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: Global rank: G1

TNC element code: PDMLS06030

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

wet montane forest [2977]

Habit:

small tree [2977]

Extant individuals/population/sites:

2 sites ? [1686]

Site ownership and status:

Cordillera Central - 1960's, not relocated [2977]

Specialist(s):

Dr. Henri Alain Liogier, Botanic Garden

CPC#: 6318

ILEX COOKII Britt. & Wilson (Aquifoliaceae)

Cook's Holly; Te

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE Global rank: G1

TNC element code: PDAQU01090

Distribution:

Puerto Rico (state rank: S1)

Habit:

small tree [1686]

dioecious tree [2977]

Extant individuals/population/sites:

no mature plants - only seen as seedlings; 2 sites [1686]

50+ with seedlings [2977]

Site ownership and status:

Cerro de Punta - west of towers, has been seen in flower (within Toro Negro State Forest) [2977] Monte Jayuya (within Toro Negro State Forest) [2977]

Threat(s):

habitat destruction [1686]

communication towers probably destroyed most of population [2977]

Reproductive biology;

dioecious [1686]

Off-site need:

ex-situ propagation needed [1686]

Horticultural/economic potential:

may have some horticultural potential [1686]

CPC#: 2307

ILEX SINTENISII (Urban) Britt. (Aquifoliaceae)

Sintenis' Holly; Cuero de Sapo

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status:

Global rank: G1

TNC element code: PDAQU010T0

Distribution:

Puerto Rico (state rank: S1)

Habit:

small tree [1686]

Extant individuals/population/sites:

restricted habitats, but quite stable [1686]

Threat(s):

communication towers [1686]

Horticultural/economic potential:

no horticultural potential [1686]

CPC#: 6341

JUGLANS JAMAICENSIS C. DC. (Juglandaceae)

West Indian Walnut; Nogal

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2 Global rank: G2

TNC element code: PDJUG02050

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

wet montane forest [2977]

Habit:

large tree with large fruits [1686]

Extant individuals/population/sites:

10 trees in 1 population at ca 1000 meters [1686] Site ownership and status: P.R. - 10 trees - La Silla de Calderon [2977] Cuba (not common) [2977] Hispaniola (not common) [2977] name may be wrong, individuals in Cuba and Hispaniola of J. insularis but may be 1 or 2 spp. [2977] Threat(s): farming [1686] habitat destruction [1686] area being cut by private owner for timber [2977] Horticultural/economic potential: some horticultural potential [1686] fruit, desirable wood, long-term forestry [2977] Specialist(s): Dr. George R. Proctor, Department of Natural Resources (DRN) Dr. Henri Alain Liogier, Botanic Garden **Cultivation information:** seed was collected by DRN before clear cut began [2977] cuttings impossible - thereby propagate by seed [1686] In cultivation at: propagated now for DRN Nursery - Pedro Riviera - distributed to local farmers [2977] Grenada cultivated extensively [2977] El Toro - Puerto Rico Aq. Ext. in charge of fruit crops, growing in Rio Abaja DNR nursery, none in ITF nursery [2977] seed was collected before site was cut for timber [2977] CPC#: 6351 LEPTOCEREUS GRANTIANUS Britt. (Cactaceae) Puerto Rico Apple-cactus Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 1 Global rank: G? TNC element code: PDCACOW010 Distribution: Puerto Rico Habitat(s): crumbling rocky bank above seepage [2977] Extant individuals/population/sites: 54 individuals in 1 population at 1 site [2977] Site ownership and status: southwest side of Culebra Islands, south of Ewing Village - 54 plants, private [2977] Threat(s): cut up and fed to livestock [1686]

Off-site need(s):

needs to be propagated [1686]
needs taxonomic study [1686]

development in nearby areas [2977]

no flower or fruit seen in wild, but flower and fruit in cultivation [2977]

landslide [2977]

Reproductive biology:

Horticultural/economic potential: as cactus, no spines [2977] Miscellaneous: endemic to Culebra, PR Specialist(s): Dr. Robert Ross, University of Puerto Rico Dr. George R. Proctor, Department of Natural Resources (DRN) Reintroduction note(s): cuttings, possibly good for reintroduction onto Wildlife Refuge [2977] In cultivation at: cuttings to St. George Village Botanical Garden, St. Croix [2977] Conrad Fleming - 1-2 cuttings [2977] Robert Ross has it in cultivation [1686] CPC#: 9882 LYCASTE BARRINGTONIAE (Sm.) Lindl. (Orchidaceae) [no common name] Overall CPC sorting order: 1 CPC Priority: B (could possibly go extinct in the wild in the next 10 years) Federal status: Global rank: G3 CITES appendix: 2 TNC element code: PMORCIP010 Distribution: Cuba Dominican Republic Jamaica Puerto Rico (state rank: S1) Habitat(s): moist forest, probably above 500 m. [2977] Habit: perennial herb [2977] shrub [2977] vine [2977] epiphyte [2977] Extant individuals/population/sites: 30 plants total in 6 sites (1 plant in PR) [1686] Site ownership and status: Puerto Rico - Maricao Forest Reserve - 1 individual [2977] Threat(s): horticultural collecting [2977] habitat destruction [2977] Reproductive biology: bee-pollinated, probably chasmogamous [2977] Seed: seed is recalcitrant [2977] Horticultural/economic potential: good horticultural potential [2977] Specialist(s): Dr. James D. Ackerman, University of Puerto Rico

Reintroduction note(s):

could be propagated and reintroduced [1686]
In cultivation at:
unknown [2977]
CPC#: 6392

MALPIGHIA INFESTISSIMA L.C. Rich. ex Ndz. (Malpighiaceae)

Stingingbush; Cowhage-cherry

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: 1 Global rank: G1G3

TNC element code: PDMLP09040

Distribution:

U.S. Virgin Islands

Habitat(s):

coastal thickets, and inland dry thickets [2977]

Habit:

clonal [1686]

stinging hairs [2977]

Extant individuals/population/sites:

ca 10 plants total (clonal) in 10 populations [1686]

ca 200 plants (stems?) on St. Croix and St. Thomas in 4 populations - not all are protected [1686] more now than 20 years ago, endemic to St. Croix, not on St. Thomas [2977]

Site ownership and status:

Buck Island - largest population, 50-100 individuals [2977]

St. Croix - widespread and scattered all over island; 1 in Sandy Point protected [2977]

Threat(s):

cut down because of stinging hairs, not affected by Hugo [2977]

Reproductive biology:

no seedlings seen [2977]

does clone [2977]
need to study reproduction [2977]

Miscellaneous:

"A" to "B", DS#2977

Specialist(s):

Mr. Roy Woodbury

In cultivation at:

St. George Village Botanical Garden [3089]

CPC#: 2789

MAPPIA RACEMOSA Jacq. (Icacinaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status:

Global rank:

TNC element code: (unknown)

Distribution:

Cuba

Jamaica
Puerto Rico
Habitat(s):

moist limestone forest [2977]

Habit:

tree [2977]

Site ownership and status:

fairly common in Cuba [2977] rare in Hispaniola [2977]

Jamaica - 1 tree at risk of destruction [2977] Costa Isabela, Puerto Rico - 5 trees [2977]

Threat(s):

Costa Isabela - golf course planned [2977]

Jamaica - deforestation extensive, not protected [2977]

CPC#: 13646

MAYTENUS CYMOSA Krug & Urban (Celastraceae)

Caribbean Mayten

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2 Global rank: G1G3

TNC element code: PDCEL08010

Distribution:

Puerto Rico (state rank: S1)

U.S. Virgin Islands British Virgin Islands

Habitat(s):

dry coastal woodland [2977]

Habit:

tree [2977]

Extant individuals/population/sites:

52 plants in 2 sites in PR [1686]

1 plant on St. Croix; also on St. Thomas [1686] ca. 95-100 plants at the Gorda Peak locality [3485]

it is speculated that there are hundreds of these trees in Gorda Peak [3485]

Site ownership and status:

St. Croix - 1 plant but may be gone since Hurricane Hugo [2977]

Virgin Gorda - unknown size, at least 2 [2977]

island of navy base, east end Pineros, scattered, P.R. [2977]

Fajardo - west in mountain range, P.R. [2977]

Threat(s):

military maneuvers - bombing practice [1686]

Reproductive biology:

few to no seedlings [2977]

Horticultural/economic potential:

Maytenus can be used pharmaceutically [2977]

In cultivation at:

none [2977]

CPC#: 2817

MIKANIA STEVENSIANA Britt. (Asteraceae)

Guaco

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: 3C Global rank: GI

TNC element code: PDAST6F080

Distribution;

Puerto Rico (state rank; S1?)

Habitat(s):

serpentine [1686]

Habit:

vining [1686]

may be suffrutescent [1686]

Extant individuals/population/sites:

common locally on serpentine [1686]

Threat(s):

road building [1686]

Off-site need;

should be easy to propagate by seeds or cuttings [1686]

Horticultural/economic potential:

minimal horticultural potential [1686]

Specialist(s):

Sr. Ruben Padron

CPC#: 2844

MITRACARPUS MAXWELLIAE Britt. & Wilson (Rubiaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1Q

TNC element code: PDRUB17020

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

exposed limestone gravel, scrub [2977]

Habit:

little mound-like shrub, < 1 foot [1686]

Extant individuals/population/sites:

ca 200 individuals [1686]

known from type locality only [1686]

1443 plants of 1/2 km area, many seedlings in 1 population at 1 site (Guanica State Forest, Puerto Rico) [3113]

Site ownership and status:

west segment of Guanica State Forest - Mt. Alba area [2977]

Threat(s):

roadside construction [1686]

danger from road improvement - grows in gravel road or 3 m. to side [2977]

Reproductive biology:

many seedlings seen [2977]

Horticultural/economic potential:

none likely [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

Cultivation information:

cuttings root readily for this genus [3113]

In cultivation at:

none [2977]

CPC#: 2871

MITRACARPUS POLYCLADUS Urban (Rubiaceae)

[no common name]

Overall CPC sorting order: 1

In National Collection at: FTG

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: 2 Global rank: G1

TNC element code: PDRUB17030

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

exposed rocky areas near sea [2977]

Habit:

small, erect shrub [2977]

Extant individuals/population/sites:

50 ? individuals in 1 site [1686]

estimated 2000 individuals [2977]

no good count due to drought this year, needs more study after rains [2977]

Site ownership and status:

Guanica State Forest [2977]

Saba (Lesser Antilles) - 6 collections [2977]

in a protected area (Commonwealth Forest), but along roadside [1686]

Threat(s):

fire [1686]

none; goats removed, protected site (Guanica) [2977]

goats and sheep (Saba) [2977]

Horticultural/economic potential:

none [2977]

Miscellaneous:

"A" to "B", DS#2977

Specialist(s):

Dr. Charlotte Taylor, Missouri Botanical Garden

Dr. George R. Proctor, Department of Natural Resources (DRN)

Cultivation information:

grows easily from cuttings, not from seed [2977]

very dependent upon rain [1686]

In cultivation at:

FTG - dies back and resprouts, no seed set [2977]

CPC#: 2872

MYRCIA PAGANII Krug & Urban (Myrtaceae)

Ausu

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G10

TNC element code: PDMRT09050

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

moist limestone forest [2977]

Extant individuals/population/sites:

10 individuals at 2 sites [1686]

Site ownership and status:

north and west of Florida, P.R., km 6.2 along road [2977]

Quebradillas [2977]

Threat(s):

only on private land [1686]

Reproductive biology:

no flowers or fruits seen [2977] need study of flowers [2977]

Horticultural/economic potential:

none [2977]

tree cut for wood samples [2977]

Specialist(s):

Mr. Roy Woodbury

Cultivation information:

attempts to root cuttings have been unsuccessful [1686]

In cultivation at:

none [2977]

CPC#: 2911

MYRICA MARICAENSIS (Myricaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status:

Global rank:

TNC element code: (unknown)

Distribution:

Puerto Rico

Habitat(s):

moist limestone forest [2977]

Habit:

tree [2977]

Extant individuals/population/sites:

3 individuals in 2 populations at 1 site [2977]

Site ownership and status:

Maricao State Forest - roadside of Highway 120 - 2 individuals [2977]

Maricao State Forest - unnamed mountain, 200 m., Monte Padron - I individual [2977]

Reproductive biology:

flowers and fruits have never been seen [2977]

Horticultural/economic potential:

none [2977]

Specialist(s):

Mr. Roy Woodbury

CPC#: 13645

PANICUM STEVENSIANUM A.S. Hitchc. & Chase (Poaceae)

Stevens' Panic-grass

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2 Global rank: Gl

TNC element code: PMPOA4K220

Distribution:

Puerto Rico (state rank: S1)

Cuba

Habitat(s):

semi-aquatic, on acid white sands [1686]

wet silica sand [2977]

Habit:

perennial herb [2977]

Extant individuals/population/sites:

no current populations in PR; Woodbury knew where original collection was made [1686]

Site ownership and status:

type 1912, not seen since, edge of Laguna Tortugero, no trace in recent surveys [2977]

west Cuba - common [2977]

Threat(s):

habitat destruction [2977]

Reproductive biology;

vegetative propagation occurs in the wild [1686]

Reintroduction note(s):

reintroduction is desirable [1686]

In cultivation at:

FTG willing to grow; Proctor can get propagules from Cuba to FTG [2977]

CPC#: 3095

PEPEROMIA WHEELERI Britt. (Piperaceae)

Wheeler's Peperomia

Overall CPC sorting order: 1

In National Collection at: FTG

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: LE Global rank; G1

TNC element code: PDPIP01240

Distribution:

Puerto Rico (state rank; S1) Habit: bushy shrubs, almost woody [1686] Extant individuals/population/sites: 1 site, but common in those 10 acres [1686] Threat(s): chicken scratching [1686] habitat modification [1686] Off-site need; habitat protection is all that is needed [1686] Horticultural/economic potential: definite horticultural potential [1686] In cultivation at: FTG CPC#: 3299 PLEODENDRON MACRANTHUM (Baill.) v. Tiegh. (Canellaceae) Chupacallos Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 1 Global rank: G1 TNC element code: PDCAN02010 Distribution: Puerto Rico (state rank: S1) Habitat(s): wet to moist lower montane forest [2977] Habit: small tree [2977] Extant individuals/population/sites: 10-12 individuals left, in 3 populations [1686] Site ownership and status: Rio Abajo State Park [2977] El Yungue - 2 individuals [2977] Threat(s): habitat modification [1686] low numbers, in protected area [2977] Reproductive biology: fruit and seed produced [2977] Off-site need: needs to be propagated; propagules are needed [1686] Horticultural/economic potential: aromatic oil [2977] fish-stunning chemicals [1686] ornamental [2977] In cultivation at: seeds collected - DNR (Deigo Jimenez), in nursery? [2977] V. Quevedo started seeds in August 1989 [1686]

CPC#: 3525

POLYSTICHUM CALDERONENSE Proctor (Dryopteridaceae)

[no common name]

Overall CPC sorting order; 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1?

TNC element code: PPASPOUONO

Distribution: Puerto Rico

Habitat(s):

cool, mossy ledges; partial shade [2977]

Habit:

perennial herb [2977]

Extant individuals/population/sites:

60 plants total in 2 sites (La Silla de Calderon, Adjuntas; Cerrote de Penuelas, Penuelas) [1686]

57 individuals in 2 populations at 2 sites [2977]

Site ownership and status:

45 plants, La Silla de Calderon State Forest (same site as Juglans jamaicensis) [2977]

12 plants, Serrote de Peluevao State Forest [2977]

Threat(s):

clearing, individuals, private individuals encroaching into forest (Calderon) [2977]

Horticultural/economic potential:

horticultural [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

In cultivation at:

CPC#: 9870

PSIDIUM INSULANUM (Myrtaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: Global rank:

TNC element code: (unknown)

Distribution: Puerto Rico

Habitat(s):

dry coastal forest [2977]

Habit;

shrub to 6 ft. [2977]

Extant individuals/population/sites:

3 adults and 10 saplings in 1 population [2977]

Site ownership and status:

east end of Viequez Islands, U.S. Navy [2977]

Threat(s):

off-road vehicles [2977] military maneuvers [2977]

Reproductive biology;

mostly young plants [2977]

Horticultural/economic potential;

flowers tasty [2977]

Specialist(s):

Dr. Henri Alain Liogier, Botanic Garden

Cultivation information:

susceptible to Cassytha filiformis, a parasitic plant [2977]

In cultivation at:

none [2977]

CPC#: 13643

PSIDIUM SINTENISII (Kiaersk.) Alain (Myrtaceae)

Hoja Menuda

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1

TNC element code: PDMRT0E050

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

mossy, wet forest on peaks [2977]

Habit:

small tree to 15 feet [1686]

Extant individuals/population/sites:

6 individuals total in 3 sites (El Yunque) [1686]

4 populations [2977]

Site ownership and status:

Luquillo, El Yunque - 2 sites [2977]

Maricao - capetal section, not far from tower, north of highway 120 [2977]

Carite report [2977]

Threat(s):

road-widening [1686]

electronic site enlargement - communication towers [2977]

Reproductive biology;

no seedlings [2977]

Horticultural/economic potential:

attractive tree [1686]

Specialist(s):

Sr. Vicente Quevedo, PR Natural Heritage Program

Dr. George R. Proctor, Department of Natural Resources (DRN)

Reintroduction note(s):

could be used for reintroduction [1686]

CPC#: 3653

SABAL CAUSIARUM (O.F. Cook) Becc. (Arecaceae)

Palma de Sombrero; Puerto Rican Hat-palm

Overall CPC sorting order: 1 In National Collection at: FTG

CPC Priority: B (could possibly go extinct in the wild in the next 10 years) Federal status: Global rank: Gl TNC element code: PMAREODO10 Distribution: Puerto Rico (state rank: S1) U.S. Virgin Islands British Virgin Islands Habitat(s): hillside or ridges in dry forest [2977] flatlands behind beaches [2977] fairly tolerant of wind [2977] Habit: tree to 30 feet [1686] Extant individuals/population/sites: 1000's of trees now in 3 sites in PR [1686] 12-15 individuals on St. Thomas [1686] 116 individuals on Guana Islands, BVI (106 occur in 1 population) [3485] 14 individuals which occur on the southwest part of Anegada Island [3485] commercial collecting (especially large specimens) - very "hot" item horticulturally [1686] hotel complex [1686] road construction [1686] feral sheep (Guana) [2977] sheep and goats (Anegada) [2977] Reproductive biology: flowers infrequently on Guana Islands [2977] Seed: seed is orthodox [2977] Off-site need: could be propagated and distributed, but people are after large specimens [1686] Horticultural/economic potential: has horticultural potential, especially as large specimens [1686] Specialist(s): Dr. John Popenoe, Fairchild Tropical Garden Dr. Fred Kraus, Department of Biology Cultivation information: slow-growing, long-term project [2977] In cultivation at: St. George Village Botanical Garden [3089] CPC#: 6532 SCHOEPFIA ARENARIA Britt. (Olacaceae) Arana Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: LT Global rank: G1? TNC element code: PDOLA01010 Distribution: Puerto Rico (state rank: S1?)

Extant individuals/population/sites: 120 individuals total in 4 sites [1686] Site ownership and status: Pinones - hard hit by Hurricane Hugo [2977] Isabela - only good population [2977]

Threat(s): habitat destruction [1686]

Reproductive biology:

seeds heavily in Pinones [2977]

Off-site need:

would be useful to have propagules, if they could be produced [1686]

Horticultural/economic potential: not much horticultural potential [1686]

Miscellaneous: "B" to "A", DS#2977 Cultivation information: hard to propagate [2977]

hemiparasite - try it on Coccolba uvifera [1686]

In cultivation at:

FTG

CPC#: 3875

SOLANUM DRYMOPHILUM O.E. Schulz (Solanaceae)

Enrubio; Erubia

Overall CPC sorting order: 1 In National Collection at: FTG

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE Global rank: G1

TNC element code: PDSOLOZOLO

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

thickets at edge of pasture [2977]

Habit:

spiny shrub to 10 feet tall [1686] Extant individuals/population/sites:

50-150 individuals total in only 1 site [1686]

Threat(s):

fire [1686]

private land - unprotected - depends upon what the farmer chops out [1686] development [2977]

Reproductive biology:

becoming weed in disturbed areas [2977]

Horticultural/economic potential:

chemical - alkaloids [1686]

chemical - pest resistance? [1686]

In cultivation at:

FTG [2977]

CPC#: 4028

Center for Plant Conservation - Puerto Rico\Virgin Islands Priority [A] and [B] Species as of 15 JUL 1992 Page 44

STAHLIA MONOSPERMA (Tul.) Urban (Fabaceae)

Cobana Negra

Overall CPC sorting order: 1

CPC Priority: B (could possibly go extinct in the wild in the next 10 years)

Federal status: LT Global rank: G1G3

TNC element code: PDFAB3S010

Distribution:

Puerto Rico (state rank: S2)

Dominican Republic

Extant individuals/population/sites:

several sites [1686]

2 known populations in Puerto Rico: 1) Boqueron and 2) Sabana Grande with both populations totaling < 20 individuals [3113]

Threat(s):

coastal development [1686]

Reproductive biology;

cuttings will likely root if seed unavailable [3113]

Off-site need:

Gary Breckon's student is conducting electrophoretic studies [1686]

Miscellaneous:

very rare in the Dominican Republic

CPC#: 4087

STYRAX PORTORICENSIS Krug & Urban (Styracaceae)

Palo de Jazmin

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 3A Global rank: G1

TNC element code: PDSTY02050

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

upper montane wet forest [2977]

Habit:

tree [2977]

Extant individuals/population/sites:

3 individuals total in only 1 population [1686] 4 individuals in 1 population at 1 site [2977]

Site ownership and status:

Caribbean National Forest [2977]

Threat(s):

hurricane [2977]

Horticultural/economic potential:

should have horticultural potential [1686]

Specialist(s):

Sr. Vicente Quevedo, PR Natural Heritage Program

Sr. Carlos Rivera, Institute of Tropical Forestry

Reintroduction note(s):

could be reintroduced if propagules were available [1686]

CPC#: 4161

TECTARIA ESTREMERANA Proctor & Evans (Dryopteridaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1?

TNC element code: PPASPOWOAO

Distribution:

Puerto Rico

Habitat(s):

moist limestone ravine; shady [2977]

Extant individuals/population/sites: 20 plants in 1 site (Arecibo) [1686]

23 individuals in 1 population [2977]

Site ownership and status:

few 100 m. south of Arecedo Observatory; type locality [2977]

Threat(s):

future observatory enlargement but rough area [2977]

low numbers and distribution [2977]

Horticultural/economic potential:

horticultural, handsome [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

In cultivation at:

was at University of Tennessee for cytological studies (Dr. A. Murray Evens) [2977]

CPC#: 9871

TERNSTROEMIA LUQUILLENSIS Krug & Urban (Theaceae)

Palo Colorado

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: Gl

TNC element code: PDTHC07020

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

dwarf elfin forest [1686]

upper montane forest [2977]

Habit:

small tree to 25 feet [1686]

Extant individuals/population/sites:

8-10 individuals total in 4-6 sites [1686]

few more individuals on slopes (according to Woodbury) [2977]

Threat(s):

communication towers [1686]
road widening [1686]
low numbers [2977]
Off-site need:
difficult to grow [1686]
CPC#: 4208

TERNSTROEMIA SUBSESSILIS (Britt.) Kobuski (Theaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1 Global rank: G1

TNC element code: PDTHC07050

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

montane wet forest [2977]

Habit:

small tree to 15 feet [1686]

Extant individuals/population/sites:

15 individuals total in 2 site [1686]

30 individuals in 3 populations at 1 sites [2977]

Site ownership and status:

Caribbean National Forest - road 191 [2977]

Carlos Rivera - 10-15 throughout forest near landslide (new location) [2977]

Threat(s):

landslides [1686]

reopening of road [2977]

Reproductive biology:

no seedlings [2977]

need to study lack of reproduction [2977]

Horticultural/economic potential:

probably not [2977]

In cultivation at:

none [2977]

CPC#: 4209

THELYPTERIS HASTATA VAR HETERODOXA Proctor (Thelypteridaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status:

Global rank: G?T?

TNC element code: PPASPOXOJ1

Distribution:

Puerto Rico

Habitat(s):

moist limestone ravines [2977]

grows with Goetzia [2977]

Extant individuals/population/sites:

15 plants total in 2 sites [1686]

PR sites: Hatillo, Cueva de la Catedral; Quebradillas, Quebrada Bellaca [1686]

Site ownership and status:

Quedrada Riaja - with? [2977]

Threat(s):

land clearing [2977]

Reproductive biology;

none noticed [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

CPC#: 9872

THELYPTERIS INABONENSIS Proctor (Thelypteridaceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status:

Global rank: G?

TNC element code: PPASPOX1NO

Distribution:

Puerto Rico

Habitat(s):

upper montane mossy cloud forest, deeply shaded humus, 1250 m. [2977]

Habit:

perennial herb [2977]

Extant individuals/population/sites:

46 individuals in 2 populations [2977]

Site ownership and status:

stream Rio Inabon - Toro Negro State Forest [2977]

summit of Cerro Rosa, Cordillera Central (may be Toro Negro State Forest) [2977]

Threat(s):

floods at Rio Inabon [2977]

landslide at Cerro Rosa [2977]

Horticultural/economic potential:

very attractive, ornamental potential [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

In cultivation at:

none [2977]

CPC#: 9873

THELYPTERIS VERECUNDA Proctor (Thelypteridaceae)

Susanna

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1

Global rank: G?

lenter for Plant Conservation - Puerto Rico\Virgin Islands Priority [A] and [B] Species as of 15 JUL 1992 age 48

TNC element code: PPASPOX1Q0 Distribution: Puerto Rico Habitat(s): limestone detritus at mouth of caves [2977] Habit: fern [2977] Extant individuals/population/sites: ca 20 plants left in 3 sites [1686] Site ownership and status: private [2977] Threat(s): development [2977] cave with largest population - owner wants to make tourist attraction [2977] Horticultural/economic potential: horticultural potential is doubtful [2977] Specialist(s): Dr. George R. Proctor, Department of Natural Resources (DRN) CPC#: 9874 HELYPTERIS YAUCOENSIS Proctor (Thelypteridaceae) [no common name] Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: 1 Global rank: G1? TNC element code: PPASPOXIXO Distribution: Puerto Rico Habitat(s): wooded slopes, moist forest, near dolomite [2977] Habit: fern [2977] Extant individuals/population/sites: at least 65 plants known from 3 sites [1686] Site ownership and status: Muncipal Yauco, Pico Rigadera - 800m, largest population, near dolomite cliffs (all private) [2977] Tres Picachos, north of Cerro Rosa (private) [2977] Threat(s): fire at largest site [2977] Horticultural/economic potential: little horticultural value [2977] Specialist(s): Dr. George R. Proctor, Department of Natural Resources (DRN) Cultivation information: hard to grow [2977]

In cultivation at: none [2977] CPC#; 9875

TILLANDSIA LINEATISPICA Mez (Bromeliaceae)

Pinon

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 2 Global rank: G1

TNC element code: PMBRO090B0

Distribution:

Puerto Rico (state rank: S1)

U.S. Virgin Islands

Habitat(s):

coastal moist forest, rocky to peaks [2977]

Extant individuals/population/sites:

10 individuals total in 3 sites [1686]

Site ownership and status:

St. Thomas - substantial, at least 50 individuals [2977] St. John - Cruz Bay, 200 yds. from main street [2977]

St. John - 2 other populations, 200-300 individuals total [2977]

Culebra - protected area, at least 50 individuals [2977]

Guanica, west end Viequez - 2 populations, (affected by Hugo?) [2977]

Threat(s):

habitat destruction [1686]

overcollecting (St. John) [2977] site proposed for development (St. Thomas) [2977]

Reproductive biology:

don't know if reproducing - seed study needed (produces no seed as known) [2977]

Horticultural/economic potential:

should have horticultural potential [1686]

fantastic plant [2977]

Miscellaneous:

may be a hybrid; no good fruit set

Specialist(s):

Dr. Lyman Benson

Dr. Robert W. Read, Quest End

Mr. Harry E. Luther, The Marie Selby Botanical Gardens

Ms. Eleanor Gibney

In cultivation at:

St. Thomas-Brown [2977]

St. George Village Botanical Garden [3089]

CPC#: 4291

TRICHILIA TRIACANTHA Urban (Meliaceae)

Bariaco

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: LE Global rank: GI

TNC element code: PDMLC05030

Distribution:

Puerto Rico (state rank: S1)

Habitat(s):

semi-dry forest over limestone [2977]

most occur along roadsides or in ravines [2977]

Habit:

shrub [2977]

tree to 25 ft. on west coast [2977]

Extant individuals/population/sites:

50-55 individuals total in 5-6 sites [1686]

Site ownership and status:

Guanica Forest [2977]

Boqueron [2977]

Threat(s):

road construction [2977]

housing construction [1686]

Reproductive biology:

not reproducing in wild [2977]

need to study reproductive biology [2977]

does not set a lot of seed [1686]

Horticultural/economic potential:

horticultural potential - glossy leaves [1686]

economic potential (mahogany family) [1686]

Miscellaneous:

"B" to "A", DS#2977

Cultivation information:

some cuttings have rooted at Fairchild [1686]

CPC#: 4316

VERNONIA PROCTORI L.E. Urbatsch (Asteraceae)

[no common name]

Overall CPC sorting order: 1

CPC Priority: A (could possibly go extinct in the wild in the next 5 years)

Federal status: 1

Global rank: G1
TNC element code: PDAST9S0Y0

Distribution:

Puerto Rico

Habitat(s):

dry, scrubby woodland over chert [2977]

Extant individuals/population/sites:

ca. 950 individuals at 1 site [2977]

Site ownership and status:

Cerro Mariquita, Cabo Rojo, top, scattered over 250 x 100 m.; private [2977]

Threat(s):

major highway (100) completed to Mayaguez [2977]

land cleared for grazing and quarrying [2977]

suburbs are likely to be built [2977]

Horticultural/economic potential:

has beautiful purple flowers [2977]

Specialist(s):

Dr. George R. Proctor, Department of Natural Resources (DRN)

Reintroduction note(s):

possible if a protected habitat can be found [2977] In cultivation at: none [2977] CPC#: 13082 XYLOSMA PACHYPHYLLUM (Krug & Urban) Urban (Flacourtiaceae) (alternate name: Xylosma pachyphylla) Spiny Log-wood Overall CPC sorting order: 1 CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: Global rank: Gl TNC element code: PDFLA09050 Distribution: Puerto Rico (state rank: S1) Habitat(s): serpentine gravel (Maricao) [2977] moist limestone, lower montane forest (Cambalache) [2977] Extant individuals/population/sites: 14 individuals total left in 4 sites [1686] very rare [2977] Site ownership and status: Cambalache Forest [2977] Maricao [2977] Threat(s): development [1686] cutting [1686] burning [1686] habitat destruction [1686] Reproductive biology; dioecious [1686] Off-site need: could be grown at Fairchild [1686] Horticultural/economic potential: some horticultural potential [1686] Specialist(s): Sr. Ruben Padron CPC#: 6635 ZANTHOXYLUM THOMASIANUM (Krug & Urban) Krug & Urban ex P. Wilson (Rutaceae) St. Thomas Prickly-ash Overall CPC sorting order: 1 In National Collection at: FTG CPC Priority: A (could possibly go extinct in the wild in the next 5 years) Federal status: LE Global rank: Gl TNC element code: PDRUTOLOMO Distribution:

Puerto Rico (state rank: S1)

U.S. Virgin Islands

Habitat(s):

brink of cliffs [2977]

Habit:

small shrub, 2-3 m. [2977]

Extant individuals/population/sites:

200 individuals at 1 site, and several other sites [1686]

widely scattered, but never common - St. Thomas, St. John [1686]

Site ownership and status:

Isabela - 2 populations [2977]

St. Thomas - after Hugo lots of damage, some dead; 150 before lost to development and Hugo [2977]

St. John - Minna Hill, 25 individuals, Cobb Fish Bay (private being developed, may be destroyed)

west side has 1 individual [2977]

Guajataca Forest [2977]

Piedras Chiquitas Forest, 1-3 individuals [2977]

Banos de Coamo, 5-6 individuals [2977]

Threat(s):

development is pressuring the main population [1686]

seeds may be consumed by insects [2977]

roads eroded in development (St. Thomas) [2977]

Reproductive biology:

dioecious [1686]

needs reproductive biology study [2977]

some trees copious, seeds but no seedlings, no germination [2977]

Off-site need:

seeds very difficult to germinate [1686]

Reintroduction note(s):

low to medium germination in cultivation, regrows when cut [2977]

Cultivation information:

seeds very difficult to germinate [1686]

low to medium germination in cultivation [2977]

In cultivation at:

FTG [2977]

CPC#: 4452

D. Blank Taxon Questionnaire

17. Potential funding sources for research or species sponsorship:

E. Data Sources for Puerto Rico\Virgin Islands [A] and [B] species

Center for Plant Conservation - Data Sources for Puerto Rico\Virgin Islands [A] and [B] Species

1686 CPC Puerto Rican Task Force. 1989. First Meeting of CPC Puerto Rican Priority Region Task Force. Department of Natural Resources (DRN), Puerta de Tierra, PR. [1686]

2977 CPC Puerto Rican Task Force. 1991. Second Meeting of CPC Puerto Rican Priority Region Task Force. Department of Natural Resources (DRN), San Juan, PR. [2977]

3089 Jones, Ken. 1991. Letter to Peggy Olwell Listing Rare Plants in Cultivation at St. George Village Botanical Garden of St. Croix, Inc. [3089]

3113 Fairchild Tropical Garden, 1992 Accession Proposals. (unpublished). [3113]

3485 Kraus, Fred. 1992. Letter to Peggy Olwell Containing Information on Puerto Rico\Virgin Island Rare and Endangered Plant Species. (unpublished). [3485]

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