

SUMMARY AND RECOMMENDATIONS

Additional Collections

As indicated in this report, fieldwork was conducted in the rainiest month of 2004 in recorded history in Guam and followed in the wake of two tropical storms. It was sometimes difficult to collect plants with undamaged and complete plant parts. Plant collections were made during a short time period between mid-June and mid-July, when not all plants were reproductively active or were out of season. Therefore, collections of undamaged, fertile plant specimens during different times of the year are highly recommended. Collections made at different times of the year will also allow researchers to obtain a complete phenological picture of the plant species on Guam.

For several plant taxa, neither specimen nor image vouchers were obtained. While not considered the highest priority because a reported sighting exists, it is important to have voucher specimens, especially for empirical documentation and educational purposes. Table 3 lists the species for which collection of vouchers are recommended, the unit(s) in which the plants were observed, and notes regarding the observation(s) to facilitate future collections.

Table 3. Species for which collection of vouchers is recommended.

Species	WAPA Unit(s)	Notes
<i>Calophyllum inophyllum</i>	Agat, Asan Beach	Indigenous species; A common landscape plant at WAPA
<i>Canavalia cathartica</i>	Asan Beach	Plants destroyed in Tropical Storm Tinting in 2004; No individuals observed in 2005
<i>Cocos nucifera</i>	All units, except Mt. Chachao-Mt. Tenjo	Indigenous species; A common landscape plant at WAPA
<i>Cucurbita</i> sp.	Asan Inland	Individual apparently mowed; No individuals observed in 2005
<i>Dypsis lutescens</i>	Asan Beach	Cultivated palm
<i>Eupatorium odoratum</i>	All units	Common non-native plant
<i>Euphorbia cyathophora</i>	Fonte Plateau	Observed on inaccessible cliffs
<i>Ipomoea indica</i>	Asan Beach	Common non-native plant
<i>Miscanthus floridulus</i>	Asan Inland, Fonte Plateau, Mt. Alifan, Mt. Chachao-Mt. Tenjo, Piti Guns	Common non-native plant
<i>Nephrolepis multiflora</i>	Asan Beach	Common fern
<i>Nerium oleander</i>	Agat	Cultivated tree
<i>Persea americana</i>	Asan Inland, Mt. Alifan	Cultivated tree

Species	WAPA Unit(s)	Notes
<i>Plumeria obtusa</i>	Agat, Asan Inland	Cultivated tree
<i>Tabebuia rosea</i>	Fonte Plateau	Cultivated tree
<i>Tradescantia spathacea</i>	Asan Inland	Cultivated herb

During the course of the survey, Jenny Drake and I observed and collected plants that we were unable to identify. Many of these plants were unidentifiable because they lacked reproductive structures crucial for their identification. Table 4 lists the unidentified species for which collections of fertile specimens are recommended. Because I was unable to find examples of these plants at the University of Guam or Bishop Museum herbaria, collections of these plants are considered a high priority. Dr. Lynn Raulerson at the University of Guam, botanists at Bishop Museum, or taxon experts throughout the world can assist park staff in making definitive identifications in the future.

Table 4. Unidentified species for which additional collections are recommended.

Taxon	WAPA Unit	Collection No. (specimens) or Image file name (images)	NPS Accession No.	NPS Catalog No.
<i>Crinum</i> sp.	Asan Beach	crisp.ab.06192004.jpg	N/A	N/A
<i>Derris</i> sp.	Piti Guns	216-1, 216-2	WAPA-00268	WAPA 3133
<i>Dioscorea</i> sp.	Mt. Alifan	diosp.ma.07092004.jpg	N/A	N/A
<i>Elaeocarpus</i> sp.	Mt. Alifan	608-1, 608-2	WAPA-00268	WAPA 3546
<i>Schefflera</i> sp.	Mt. Chachao-Mt. Tenjo	694-1, 694-2	WAPA-00268	WAPA 3638
Unidentified sp22	Fonte Plateau	unidentifiedsp22.fp.06252004.3.jpg	N/A	N/A
Unidentified sp29	Fonte Plateau	461	WAPA-00268	WAPA 3392
Unidentified sp36	Piti Guns	unidentifiedsp36.pg.06242004.1.jpg	N/A	N/A

Given the location of Guam within the typhoon belt, sending duplicate specimens to other herbaria that specialize in the flora of the Pacific, such as the Bishop Museum on Oahu, to avoid the loss or damage of collections is important. The presence of Guam plant specimens at other herbaria is also useful to researchers, plant taxonomists, and others studying the distribution and/or genetic or morphological variability of the taxa. Therefore, sending the Bishop Museum or another repository duplicate specimens of plants collected on Guam is highly recommended.

Although vegetation maps were not a product of this report, vegetation maps are an important tool for natural and cultural resource managers. These maps may be created using remote sensing now available at the I&M office and ground truthed by field staff if additional funding can be secured.