

4. VASCULAR PLANTS OF AITUTAKI

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Cheeseman (1903) and Wilder (1931) have published floras of Rarotonga, and Philipson (1971) has commented on collections made on that island in 1969. No list has previously been published for Aitutaki. Ferns collected on Aitutaki in 1969 are included in the treatment of ferns of the Cook Islands by Brownlie and Philipson (1971). The following list is mainly of plants collected on the main island of Aitutaki, but some plants from the reef islands are included; it may be compared with the list of plants from the reef islands of Rarotonga published by Fosberg (1972). Collecting localities are shown in Figure 32. Plants marked + are considered indigenous, those marked ♂ are considered aboriginal introductions, and those marked * recent introductions.

PSILOTACEAE

- + Psilotum nudum (L.) Beauv.
Teaitu, Stoddart 2332 (US, CANTY, BISH).

POLYPODIACEAE

- + Nephrolepis hirsutula (Forst.f.) Presl
Vaipae, Stoddart 2230 (US, CANTY); Anaunga, Stoddart 2266
(US, CANTY).

+ Polypodium scolopendria Burm.f.
Akitua, Stoddart 2223 (US, CANTY).

+ Thelypteris forsteri Mort. (?)
Anaunga, Stoddart 2265 (US, CANTY); Aretere, Stoddart 2333
(US, CANTY).

ARAUCARIACEAE

- * Araucaria heterophylla (Salisb.) Franco
Aremati, Stoddart 2298 (US, CANTY, BISH).

PANDANACEAE

- + Pandanus tectorius Park.
Ootu, Stoddart 2225 (US).

GRAMINEAE

- * Cenchrus echinatus L.
Ootu, Stoddart 2210 (US, CANTY).

- * Coix lachryma-jobi L.
Vaipae, Stoddart 2245 (US, CANTY, BISH).
- * Cynodon dactylon (L.) Pers.
Ootu, Stoddart 2192 (US, CANTY).
- * Dactyloctenium aegyptium (L.) Willd.
Ootu, Stoddart 2191 (US, CANTY).
- * Digitaria ciliaris (Retz.) Krel.
Ootu, Stoddart 2193 (US, CANTY).
- ♂ Echinochloa colonum (L.) Beauv.
Vaipae, Stoddart 2227 (US), Stoddart 2242 (US, CANTY, BISH).
- * Panicum maximum Jacq.
Vaipae, Stoddart 2235 (US, CANTY, BISH).
- + Panicum reptans var. marquesensis (Brown) Fosb.
Anaunga, Stoddart 2267 (US, CANTY, BISH).
- + Paspalum distichum L.
Arutanga, Stoddart 2292 (US).
- ♂ Paspalum orbiculare Forst.
Vaipae, Stoddart 2242a (US).
- * Sorghum bicolor (L.) Moench
Maungapu Hill, Stoddart 2276 (US, CANTY, BISH).
- * Sporobolus africanus (Poir.) Robyns and Tourn.
Anaunga, Stoddart 2264 (US, CANTY, BISH); Maungapu Hill, Stoddart 2283 (US, CANTY).
- + Stenotaphrum micranthum (Desv.) Hubb.
Papau, Stoddart 2346 (US, CANTY, BISH).

CYPERACEAE

- + Cladium jamaicense Crantz
Akitua, Stoddart 2218 (US, CANTY, BISH).
- * Cyperus alternifolius L.
Arutanga, Stoddart 2289 (US, CANTY, BISH); Rangiteia-Pata, Stoddart 2319 (US, CANTY, BISH).
- * Cyperus brevifolius (Rottb.) Hassk.
Vaipae, Stoddart 2241 (US).
- + Cyperus javanicus Houtt.
Ootu, Stoddart 2178 (US, CANTY, BISH).

- * Cyperus cyperoides (L.) O.Ktze.
Vaipae, Stoddart 2226 (US, CANTY); Rangiteia-Pata,
Stoddart 2320 (US).
- + Fimbristylis cymosa R.Br.
Ootu, Stoddart 2180 (US, CANTY), Stoddart 2187 (US, CANTY,
BISH); Rangiteia-Pata, Stoddart 2321 (US, CANTY).

PALMAE

- ♂ Cocos nucifera L.
Widespread on main island and on all reef islands.

ARACEAE

- ♂ Colocasia esculenta (L.) Schott
Stoddart, sight; main island.

- * Xanthosoma sagittifolia (L.) Schott (?)
Aretea, Stoddart 2314 (US, CANTY).

COMMELINACEAE

- * Commelina diffusa Burm.f.
Rangiteia-Pata, Stoddart 2325 (US).

LILIACEAE

- * Gloriosa superba L.
Arutanga, Stoddart 2285 (US, CANTY).

AMARYLLIDACEAE

- * Crinum procerum Carey
Teaitu, Stoddart 2316 (US, CANTY).

AGAVACEAE

- ♂ Cordyline fruticosa (L.) Chev.
Maungapu Hill, Stoddart 2295 (US, CANTY).

- * Furcraea probably F. foetida L.
Moturakau, Stoddart, sight.

TACCACEAE

- ♂ Tacca leontopetaloides (L.) O.Ktze.
Teaitu, Stoddart 2331 (US, CANTY); Tapuaeta, Stoddart 2343 (US).

MUSACEAE

- ♂ Musa sp.
Stoddart, sight.

CANNACEAE

- * Canna indica L.
Vaipae, Stoddart 2255 (US, CANTY, BISH).

CASUARINACEAE

- + Casuarina equisetifolia L.
Ootu, Stoddart 2179 (US, CANTY, BISH).

URTICACEAE

- + Pipturus argenteus (Forst.f.) Wedd.
Motukitiu, Stoddart 2340 (US, CANTY, BISH).

MORACEAE

- ø Artocarpus altilis (Park.) Fosb.
Aretea, Stoddart 2312 (US).

Ficus sp.

Arutanga-Aretea road, Stoddart, sight.

NYCTAGINACEAE

- + Boerhavia repens L.
Akitua, Stoddart 2222 (US, CANTY, BISH).
- + Boerhavia tetrandra Forst. (?)
Motukitiu, Stoddart 2342 (US, CANTY, BISH); Taverua Iti,
Stoddart 2345 (US, CANTY, BISH).
- + Pisonia grandis R.Br.
Ootu, Stoddart 2174 (US, CANTY).

AMARANTHACEAE

- + Achyranthes canescens R.Br.
Motukitiu, Stoddart 2341 (US, CANTY, BISH).

PORTULACACEAE

- * Portulaca oleracea L. (?)
Ootu, Stoddart 2196 (US, CANTY, BISH).

LAURACEAE

- + Cassytha filiformis L.
Ootu, Stoddart 2177 (US, CANTY).
- * Persea americana L.
Aretea, Stoddart 2315 (US, CANTY, BISH).

HERNANDIACEAE

- + Hernandia sonora L.
Teruarei, Stoddart 2261 (US, CANTY).

CAPPARIDACEAE

- + Capparis cordifolia Lam.
Ootu, Stoddart 2297 (US, CANTY).

CRUCIFERAE

- + Lepidium bidentatum Montin
Papau, Stoddart 2347 (US, CANTY, BISH).

LEGUMINOSAE

- * Abrus precatorius L.
Rangiteia-Pata, Stoddart 2329 (US, CANTY); Aremati,
Stoddart 2306 (US).

- * Acacia farnesiana (L.) Willd.
0 Arutanga, Stoddart 2304 (US, CANTY, BISH).

- * Adenanthera pavonina L.
Vaipae, Stoddart 2330 (US).

- * Alysicarpus vaginalis (L.) DC.
Rangiteia-Pata, Stoddart 2326 (US).

- * Bauhinia monandra Kurz (?)
Vaipae, Stoddart 2337 (US, CANTY, BISH).

- * Caesalpinia pulcherrima (L.) Sw.
Arutanga, Stoddart 2290 (US, CANTY, BISH).

- + Canavalia cathartica Thouars
Vaipae, Stoddart 2238 (US).

- * Crotalaria pallida Ait.
Ootu, Stoddart 2183 (US, CANTY, BISH); Maungapu Hill,
Stoddart 2277 (US, CANTY).

- * Derris elliptica Benth.
Teaitu, Stoddart 2318 (US, CANTY).

- * Delonix regia (Bojer) Raf.
Arutanga, Stoddart, sight; mentioned by Tamashiro (1964).

- ∅ Erythrina variegata var. orientalis (L.) Merr.
Vaipeka, Stoddart 2339 (US, CANTY, BISH).

- * Indigofera suffruticosa Mill.
Vaipae, Stoddart 2247 (US, CANTY, BISH).
- ♂ Inocarpus fagifer (Park.) Fosb.
Teaitu, Stoddart 2317 (US, CANTY, BISH).
- + Leucaena insularum (Lam.) Dän.
Ootu, Stoddart 2175 (US, CANTY), Stoddart 2203 (US, CANTY, BISH).
- * Mimosa pudica L.
Ootu, Stoddart 2212 (US).
- + Mucuna gigantea (Willd.) DC.
Arutanga, Stoddart 2303 (US, CANTY, BISH).
- + Sophora tomentosa L.
Ootu, Stoddart 2185 (US, CANTY, BISH), Stoddart 2190 (US, CANTY).
- + Vigna marina (Burm.) Merr.
Ootu, Stoddart 2184 (US, CANTY).

RUTACEAE

- * Citrus sp.
Main island, Stoddart, sight.

SURIANACEAE

- + Suriana maritima L.
Ootu, Stoddart 2204 (US, CANTY, BISH).

ANACARDIACEAE

- * Mangifera indica L.
Vaipae, Stoddart 2229 (US, CANTY, BISH).

EUPHORBIACEAE

- * Acalypha godseffiana Mast.
Arutanga, Stoddart 2288 (US, CANTY, BISH).
- * Acalypha wilkesiana var. circinata M.-A.
Aretea, Stoddart 2310 (US, CANTY, BISH).
- ♂ Aleurites moluccana (L.) Willd.
Vaipae, Stoddart 2239 (US, CANTY, BISH); Rangiteia-Pata,
Stoddart 2323 (US).
- + Euphorbia chamissonis (Kl. and Gke.) Boiss
Ootu, Stoddart 2200 (US, CANTY, BISH).

* Euphorbia hirta L.
Ootu, Stoddart 2211 (US); Maungapu Hill, Stoddart 2282 (US).

* Manihot esculenta Crantz
Arutea, Stoddart 2307 (US, CANTY, BISH).

RHAMNACEAE

+ Colubrina asiatica (L.) O.Ktze.
Ootu, Stoddart 2182 (US, CANTY, BISH).

TILIACEAE

+ Corchorus torresianus Gaud.
Ootu, Stoddart 2173 (US, CANTY, BISH).

+ Triumfetta procumbens Forst.
Ootu, Stoddart 2195 (US, CANTY, BISH).

* Triumfetta rhomboidea Jacq.
Vaipae, Stoddart 2243 (US, CANTY, BISH); Maungapu Hill,
Stoddart 2278 (US, CANTY).

MALVACEAE

ø Hibiscus tiliaceus L.
Vaipae, Stoddart 2251 (US, CANTY); Teruarei, Stoddart 2260 (US).

* Hibiscus (ornamental hybrid)
Vaipae, Stoddart 2240 (US, CANTY, BISH).

* Sida rhombifolia L.
Akitua, Stoddart 2220 (US, CANTY); Vaipae, Stoddart 2234 (US, CANTY, BISH).

ø Theespisia populnea (L.) Sol. ex Correa
Rapota, Stoddart, sight.

BOMBACACEAE

* Ceiba pentandra (L.) Gaertn.
Arutanga, Stoddart 2291 (US).

GUTTIFERAE

+ Calophyllum inophyllum L.
Teruarei, Stoddart 2262 (US, CANTY, BISH).

CARICACEAE

* Carica papaya L.
Perekiaiu, Stoddart 2286 (US, CANTY, BISH).

PASSIFLORACEAE

- * *Passiflora rubra* L.
Vaipae, Stoddart 2244 (US, CANTY).

CUCURBITACEAE

- * *Cucurbita maxima* Duch. (?)
Vaipae, Stoddart 2246 (US, CANTY, BISH).
* *Luffa cylindrica* (L.) Roem.
Teruarei, Stoddart 2259 (US, CANTY, BISH); Rangiteia-Pata, Stoddart 2322 (US, CANTY).
* *Momordica charantia* L.
Ootu, Stoddart 2199 (US, CANTY).

LYTHRACEAE

- + *Pemphis acidula* Forst.
Ootu, Stoddart 2181 (US, CANTY, BISH).

LECYTHIDACEAE

- + *Barringtonia asiatica* (L.) Kurz
Aretea, Stoddart 2308 (US, CANTY, BISH).

MYRTACEAE

- * *Eugenia uniflora* L.
Aretea, Stoddart 2309 (US, CANTY, BISH).
* *Eugenia jambos* L.
Aretea, Stoddart 2311 (US, CANTY, BISH).

ONAGRACEAE

- ø *Ludwigia octovalvis* (Jacq.) Raven
Vaipae, Stoddart 2250 (US, CANTY, BISH).

OLEACEAE

- * *Jasminum officinale* var. *grandiflorum* (L.) Kobuski
Vaipae, Stoddart 2254 (US, CANTY, BISH).

APOCYNACEAE

- * *Allamanda cathartica* L.
Vaipae, Stoddart 2299 (US).
* *Catharanthus roseus* (L.) G. Don
Vaipae, Stoddart 2253 (US, CANTY, BISH).

* Nerium oleander var. indicum (Mill.) Deg. and Greenw.
Arutanga, Stoddart 2302 (US, CANTY).

* Tabernaemontana divaricata (L.) R.Br.
Vaipae, Stoddart 2257 (US, CANTY, BISH).

CONVOLVULACEAE

♂ Ipomoea batatas (L.) Lam.
Main island, Stoddart, sight.

+ Ipomoea indica (Burm.) Merr.
Vaipeka, Stoddart 2338 (US, CANTY, BISH).

+ Ipomoea littoralis BL. (?)
Aremati, Stoddart 2305 (US, CANTY, BISH).

+ Ipomoea macrantha R. and S.
Ootu, Stoddart 2188 (US); Akitua, Stoddart 2224 (US,
CANTY, BISH).

+ Ipomoea pes-caprae subsp. brasiliensis (L.) Ooststr.
Ootu, Stoddart 2208 (US, CANTY, BISH).

BORAGINACEAE

+ Cordia subcordata Lam.
Akitua, Stoddart 2219 (US, CANTY, BISH).

+ Heliotropium anomalum H. and A.
Ootu, Stoddart 2213 (US, CANTY, BISH).

+ Tournefortia argentea L.f.
Ootu, Stoddart 2214 (US).

VERBENACEAE

* Clerodendrum speciosissimum Van Geert
Vaipae, Stoddart 2256 (US, CANTY, BISH).

* Stachytarpheta urticifolia Sims
Vaipae, Stoddart 2236 (US, CANTY, BISH).

LABIATAE

* Coleus scutellarioides L.
Rangiteia-Pata, Stoddart 2324 (US, CANTY).

* Leonurus sibiricus L.
Aretea, Stoddart 2313 (US, CANTY, BISH).

* Ocimum suave Willd.
Vaipae, Stoddart 2258 (US, CANTY, BISH); Maungapu Hill,
Stoddart 2293 (US, CANTY, BISH).

- * *Salvia occidentalis* L.
Vaipae, Stoddart 2233 (US, CANTY, BISH); Maungapu Hill,
Stoddart 2284 (US).

SOLANACEAE

- * *Capsicum frutescens* L.
Vaipae, Stoddart 2248 (US, CANTY, BISH).
- * *Datura metel* L.
Ootu, Stoddart 2207 (US); Arutanga, Stoddart 2287 (US,
CANTY, BISH).
- * *Solanum lycopersicum* L.
Vaipae, Stoddart 2228 (US).
- ♂ *Solanum nigrum* var. *americanum* (Mill.) O.E.Sch.
Ootu, Stoddart 2198 (US, CANTY, BISH); Vaipae, Stoddart 2249
(US, CANTY, BISH).

SCROPHULARIACEAE

- + *Lindernia crustacea* (L.) F.Muell. (?)
Rangiteia-Pata, Stoddart 2327 (US).

BIGNONIACEAE

- * *Spathodea campanulata* Beauv.
Anaunga, Stoddart 2268 (US, CANTY, BISH).

RUBIACEAE

- + *Guettarda speciosa* L.
Ootu, Stoddart 2189 (US, CANTY, BISH).
- ♂ *Morinda citrifolia* L.
Ootu, Stoddart 2206 (US, CANTY, BISH).
- * *Spermacoce suffrutescens* Jacq.
Ootu, Stoddart 2201 (US, CANTY).
- + *Timonius polygama* (Forst.) Rob.
Ootu, Stoddart 2176 (US, CANTY, BISH); Akitua, Stoddart 2221
(US, CANTY, BISH); Tavaerua Iti, Stoddart 2344
(US, CANTY).

CAMPANULACEAE

- * *Hippobroma longiflora* (L.) G.Don
Main island, south point, Stoddart 2263 (US, CANTY, BISH)

GOODENIACEAE

- + Scaevola taccada var. tuamotuensis St J.
Ootu, Stoddart 2186 (US, CANTY, BISH).

COMPOSITAE

- * Ageratum conyzoides L.
Vaipae, Stoddart 2231 (US, CANTY); Maungapu Hill,
Stoddart 2294 (US, CANTY, BISH).

- * Bidens pilosa L.
Ootu, Stoddart 2202 (US, CANTY, BISH); Vaipae, Stoddart 2232 (US, CANTY); Maungapu Hill, Stoddart 2281 (US, CANTY).

- * Eclipta prostrata (L.) Hassls.
Rangiteia-Pata, Stoddart 2328 (US, CANTY, BISH).

- ø Emilia sonchifolia (L.) DC.
Ootu, Stoddart 2194 (US, CANTY); Vaipae, Stoddart 2252 (US, CANTY, BISH); Maungapu Hill, Stoddart 2279 (US, CANTY, BISH).

- * Gaillardia pulchella var. picta (Sweet) Gray
Ootu, Stoddart 2205 (US, CANTY, BISH), Stoddart 2209 (US, CANTY, BISH).

- * Sonchus oleraceus L.
Ootu, Stoddart 2197 (US, CANTY, BISH).

- * Tagetes erecta L.
Vaipae, Stoddart 2301 (US, CANTY).

- * Tagetes patula L. (?)
Vaipae, Stoddart 2300 (US).

- * Tithonia diversifolia (Hems1.) A. Gray
Vaipae, Stoddart 2237 (US, CANTY, BISH).

- * Vernonia cinerea (L.) Less.
Maungapu Hill, Stoddart 2280 (US).

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ADDENDUM

The specimens Stoddart 2264 and 2283, referred on pages 74, 117 and 122 to Sporobolus africanus are in all probability Sporobolus fertilis (Steud.) Clayton, though the species in the S. indicus complex are extremely difficult to distinguish satisfactorily. - F.R.F.

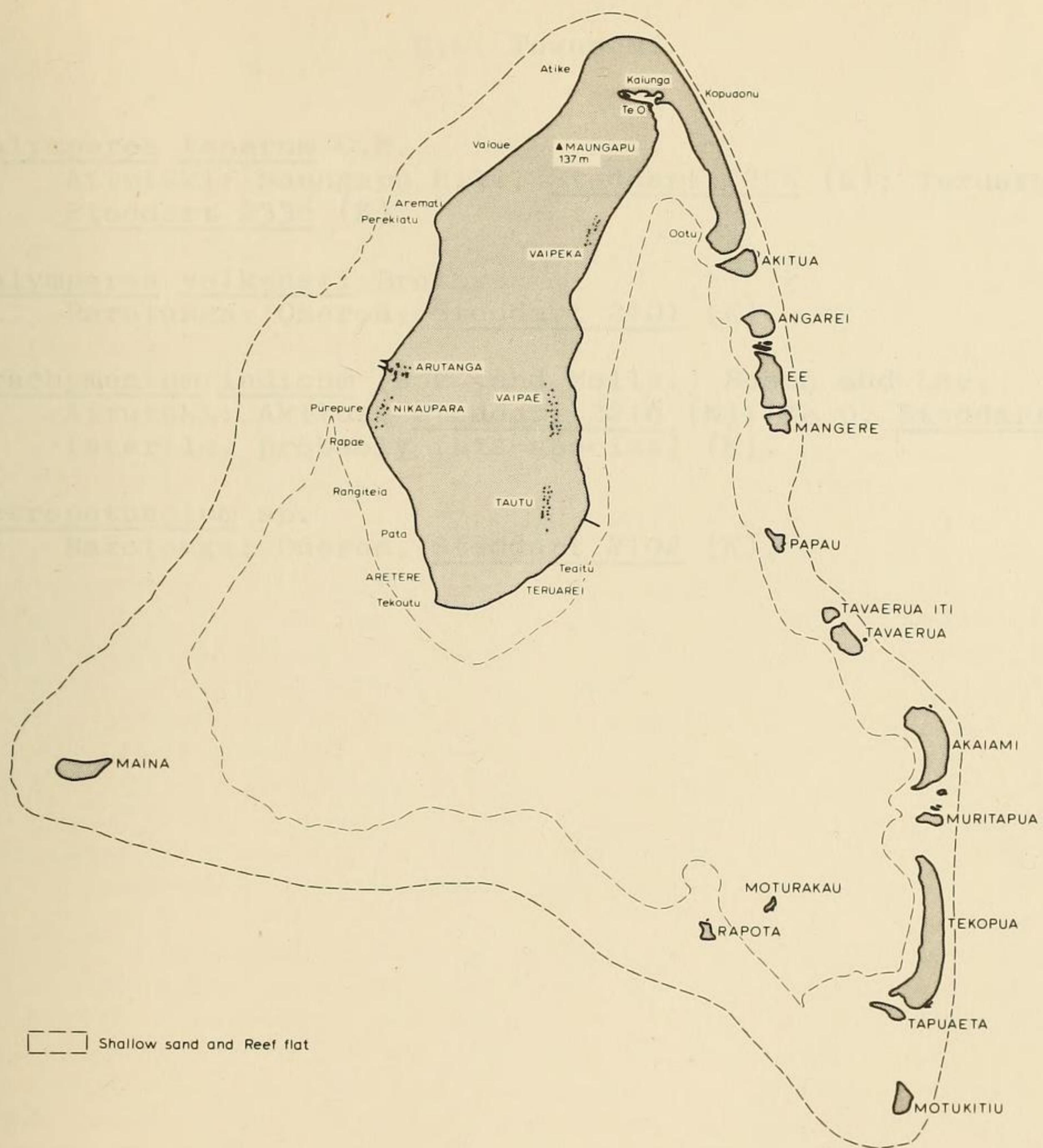
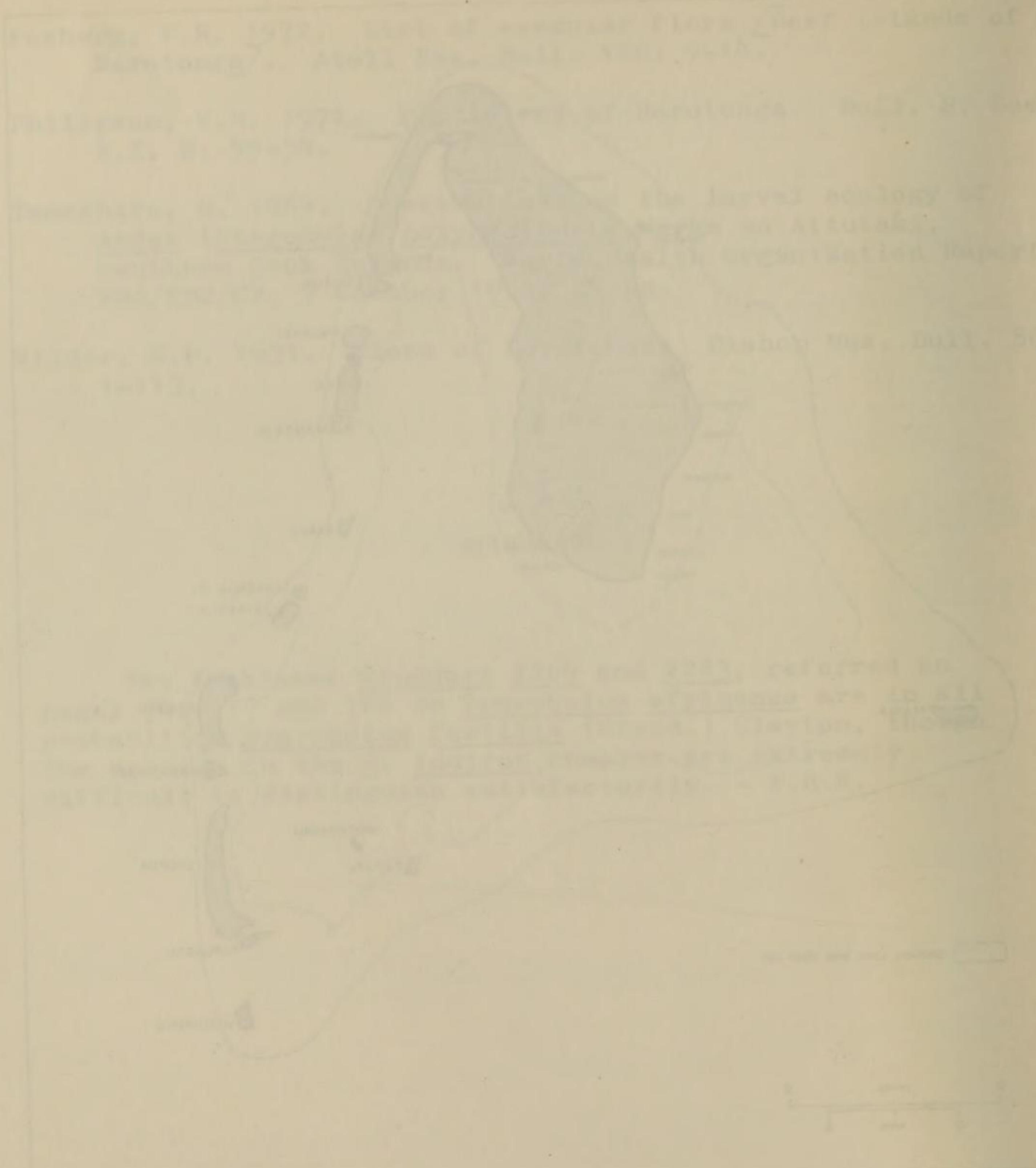


Figure 32. Aitutaki plants: collecting localities



Scanning electron micrograph showing the surface morphology of a polymer film. The image displays a complex network of interconnected pores and irregular surface features. A scale bar at the bottom right indicates 10 micrometers.