

## Appendix 9 Rare and endangered plants of South Viti Levu (Namosi, Serua, Naitasiri, Navosa and Rewa) (1)

### Checklist Legend:

#### Distribution Status (Dist/St):

E=endemic; I=indigenous

#### Conservation Status and its Basis (CSB):

CE=critically endangered; EN=endangered; TH=threatened; DD=data deficient.

TC=plant known from type collection, holotype collection and type locality only; 1L= one locality; 2L= two localities; 3L three localities; 1C=a single collection; 2C=two collections; 3C=three collections; \*= inadequately known.

#### Location - Province:

Cak= Cakaudrove; Lom=Lomaiviti; Mac=Macuata; Nad=Nadroga; Nai= Naitasiri; Nam=Namosi; Nav=Navosa; Rew=Rewa; Ser=Serua

| Species  | Dist/St | CSB |    | Locality   | Province           |
|--|---------|-----|----|--|--------------------|
| <i>Acropyle sahniana</i> Buchh. & N. E. Gray   | E       | CE  |    | Mt. Vakarogasau, Waisoi – Korobasabasaga range         | Nam                |
| <i>Agathis macrophylla</i>   | I       | E   |    | Threatened from Logging                                |                    |
| <i>Agrostophyllum megalurum</i> Reichenb.  | I       | TH  | 1C | Namosi Village vicinity                                | Nam                |
| <i>Alyxia erythrosperma</i> Gillespie  | E       | DD  | TC | Between Naqarawai and Saliadrau- Wainikoroluva         | Nam                |
| <i>Angiopteris opaca</i> Copel.  | E       | TH  | TC | Nadarivatu   | Ba                 |
| <i>Appendicula bracteosa</i> Reichenb.   | I       | DD  | TC | Namosi Village vicinity                                | Nam                |
| <i>Asplenium induratum</i> Hook.   | E       | DD  | 1L | Mt. Voma   | Nam                |
| <i>Astronidium floribundum</i> A. C. Sm.   | E       | DD  | TC | Mt. Korobaba upper south east slopes                   | Rew                |
| <i>Astronidium pallidiflorum</i> A. C. Sm.   | E       | DD  | TC | Hills west Waivunu creek between Galoa & Korovou       | Ser                |
| <i>Astronidium saulae</i> A. C. Sm.  | E       | DD  | 1L | Mt. Korababa south slopes                              | Rew                |
| <i>Atuna elliptica</i> (Kostermans) Kostermans   | E       | TH  | 2L | Saru vicinity, Tamanua creek, Vatukarasa, Viria        | Nad-Nav, Nai       |
| <i>Balaka macrocarpa</i> Burret  | E       | CE  | 4L | Along the Nabukavesi - Namosi road.                    | Ser, Nam, Cak, Mac |
| <i>Balaka microcarpa</i> Burret  | E       | E   | 1L | Wailoku water catchment, Savura reserved forest        | Nai                |
| <i>Blechnum gibbum</i> (Labill.) Mett.   | I       | DD  | 1L | Maybe grown as an ornamental                           |                    |
| <i>Bulbophyllum polypodioides</i> Schltr.  | I       | TH  | 1C |  |                    |
| <i>Bulbophyllum samoanum</i> Schltr.   | I       | TH  | 2C | Nadarivatu vicinity & Namosi village, waisoi           | Ba, Nam            |
| <i>Bulbophyllum sessile</i> (Koen) J.J. Sm.  | I       | TH  |    | Near Suva, waisoi                                      | Rew, Nam           |
| <i>Calophyllum amblyphyllum</i>  | E       | E   |    | Waisoi   | Nam                |
| <i>Carruthersia macrantha</i> A. C. Sm.  | E       | TH  | 2C | Waisoi, Lomaivuna                                      | Nam, Nai           |
| <i>Casearia fissistipula</i> A. C. Sm.   | E       | TH  | TC | Naivucini, Waisale creek junction with Wainimala river | Nai                |
| <i>Cleistanthus micranthus</i> Croizat   | E       | TH  | 3C | Hills between Wainigere & Waisese                      | Ser                |
| <i>Cleistocalyx seemannii</i> (A. Gray) Merr. & Perry<br>var. <i>punctatus</i> Merr. & Perry | E       | DD  | TC | vicinity of Namosi,                                    | Nam                |

**Appendix 9 Rare and endangered plants of South Viti Levu (Namosi, Serua, Naitasiri, Navosa and Rewa) (2)**

| Species   | Dist/St | CSB |        | Locality   | Province           |
|---|---------|-----|--------|--|--------------------|
| <i>Coelogyne lycastoides</i>                                  | I       | DD  |        | Waisoi   | Nam                |
| <i>Cryptocarya laucifolia</i> A. C. Sm.                       | E       | TH  | 2C     | Nasinu   | Nai                |
| <i>Ctenopteris vodonaivalui</i> Brownlie                      | E       | DD  | TC     |  | Nam                |
| <i>Ctenopteris vomaensis</i> Brownlie                         | E       | DD  | TC     | Mt. Voma track   | Nam                |
| <i>Cyathea affinis</i>  | I       | E   |        | Waisoi   | Nam                |
| <i>Cyathea plagiostegia</i> Copel.                            | E       | DD  | TC     | Mt. Naitaradamu  | Nam                |
| <i>Cyphosperma "naboutini"</i>                                | E       | CE  |        | North of Naboutini village in Mahogany forest            | Ser                |
| <i>Cyrtandra cyathibracteata</i> Gillet                       | E       | TH  | TC     | Matawailevu, Wainano crk- Wainimala river                | Nai                |
| <i>Dennstaedtia flaccida</i>                                  | I       | E   |        | Waisoi   | Nam                |
| <i>Diospyros elliptica</i> var. <i>opaca</i> A. C. Sm.        | E       | DD  | TC     | Uper Navua River   | Ser                |
| <i>Discocalyx amplifolia</i> A. C. Sm.                        | E       | TH  |        | Upper Wainimala  | Nai                |
| <i>Discocalyx crinita</i> A. C. Sm.                           | E       | TH  | 1L     | Tawavulu creek, inland from Naboutini, Galoa             | Ser                |
| <i>Elaeocarpus ampliflorus</i> A. C. Sm.                      | E       | TH  | TC     | Waibue creek, upper Waimanu river                        | Rew                |
| <i>Elaeocarpus pittosporoides</i> A. C. Sm.                   | E       | DD  | TC     | Hills east of Navua river                                | Nam                |
| <i>Elaphoglossum basitruncatum</i> Brownlie                   | E       | DD  | TC     |  | Nam                |
| <i>Elaeocarpus chionanthus</i> A. C. Sm.                      | E       | DD  | TC     | Hills west of Waivunu creek between Galoa & Korovou      | Ser                |
| <i>Flacourtia mollipila</i> Sleumer                           | E       | TH  | TC     | Lami quarry  | Rewa               |
| <i>Flickingeria comata</i> (Bl.) A. Hawkes                    | I       | TH  | 1C     | Lami quarry, Suva, Waisoi                                | Rew, Nam           |
| <i>Freycinetia vitiensis</i> Seem.                            | E       | TH  | 4C     | Mt. Voma   | Nam                |
| <i>Garnoti villosa</i> Swallen                                | E       | DD  | TC     | Korobasabasaga range rock cliffs                         | Nam                |
| <i>Glochidion atalotrichum</i>                                | E       | CE  | 1L     | Waisoi   | nam                |
| <i>Grammitis vitiensis</i> Brownlie                           | E       | DD  | TC     | Mt. Voma   | Nam                |
| <i>Gulubia microcarpa</i> Essig                               | E       | V   | 2L     | Galoa road to Namuamua village, Raciba rd to Mt Sorolevu | Nam, Mac           |
| <i>Heterospathe phillipsii</i> Sp. Nov. Fuller & Dowe         | E       | E   | 1L     | Nakavu forest (NFMPP Reserve)                            | Nam                |
| <i>Lindsaea gueriniana</i> (Gaud.) Desv.                      | I       | DD  | 1L     | Mt. Korobaba   | Rew                |
| <i>Lindsaea moorei</i> (Hook.) Fourn.                         | I       | DD  | 1L     | Mt. Korobaba   | Rew                |
| <i>Lunathyrium gillespiei</i> (Copel.) Brownlie               | E       | DD  | 1C; 1L | Stream banks in dense forest                             | Nam                |
| <i>Lycopodium serratum</i> Thunb.                             | I       | TH  | 1L     | Waisoi – Korobasabasaga Range                            | Nam                |
| <i>Malaisia scandens</i> (Lour.) Planch.                      | I       | TH  |        | Waidina river above Naqali                               | Nai                |
| <i>Malaxis platychila</i>                                     | E       | DD  |        | Waisoi   | Nam,               |
| <i>Mapania parvibractea</i> (C. B. Clarke) T. Koyama          | I       | TH  | 1C     | Wainadoi river   | Nam                |
| <i>Memecylon inseparatum</i> A. C. Sm.                        | E       | DD  | TC     | Near Nabua Village                                       | Nai                |
| <i>Metroxylon vitiense</i> (H.A. Wendl.) H.A. Wendl. ex Hook. | E       | V   | 5L     | Naduruloulou, Deuba, Galoa swamps.                       | Nai, Ser, Nam, Cak |

**Appendix 9 Rare and endangered plants of South Viti Levu (Namosi, Serua, Naitasiri, Navosa and Rewa) (3)**

| Species  | Dist/St | CSB |       | Locality   | Province      |
|--|---------|-----|-------|--|---------------|
| <i>Neovitchii storckii</i> (H.A. Wendl.) Becc.             | E       | E   | 2L    | Naduna near Waidradra crk, Near Nagali village                                     | Rew, Nai      |
| <i>Octarrhena oberonioides</i> (Schltr.) Schltr.           | I       | DD  | 1C    | Mt. Korobalevu slopes, near the Naitasiri-Rewa boundary                            | Nai-Rew       |
| <i>Pandanus sonicola</i> A. C. Sm.                         | E       | DD  | TC    | Bay of Islands   | Rew           |
| <i>Parkia parri</i> Horne ex Baker                         | E       | DD  | Ex    | Parr's coffee plantation;  | Rew, Bua      |
| <i>Passiflora barclayi</i> (Seem) Mast.                    | I       | TH  |       | Nukulau Is, Levuka   | Rew, Lom      |
| <i>Peperomia namosiana</i> Yuncker                         | E       | DD  | TC    | Wainabua creek near Mt. Naitaradamu  | Nam           |
| <i>Pleocnemia elagans</i> (Copel.) Holtt.                  | E       | TH  | 1L    | Wet lowland forest of Vanua Levu & eastern Viti Levu                               | Nam, Cak      |
| <i>Pleocnemia leuzeana</i> (Gaud.) Presl                   | I       | TH  | 1L    |  | Nai           |
| <i>Podocarpus affinis</i> Seem.                            | E       | EN  | 1L    | Mt. Tuvutau., Mt. Voma, Mt. Naitaradamu, near its summit, Korobasabasaga, Monasavu | Nam, Ser, Ba  |
| <i>Pomatocalpa vaupelii</i> (Schltr.) J. J. Sm.            | I       | TH  |       | Veinuqa creek, Navua tributary   | Nam           |
| <i>Psychotria bullata</i> A. C. Sm.                        | E       | TH  | 3L    | Veinuqa creek, Galoa   | Nam, Ser      |
| <i>Psychotria magnifica</i> (Gillespie) Forsberg           | E       | TH  | 3C    | Mt. Naitaradamu; Hills north of Wainavidrau creek;                                 | Nam           |
| <i>Psychotria scitula</i> A. C. Sm.                        | E       | DD  | TC    | Mt. Voma   | Nam           |
| <i>Psychotria valleculata</i> A. C. Sm.                    | E       | TH  | TC    | Nausori highland south slopes, Namosi creek drainage                               | Nad-Nam       |
| <i>Psychotria vomensis</i> Gillespie                       | E       | TH  | 3C;1L | Mt. Voma; Mt. Naitaradamu  | Nam           |
| <i>eris vittata</i> L.                                     | I       | TH  | 1L    | South east Viti Levu   | Nam, Nai, Ser |
| <i>Schizaea fistulosa</i> Labill.                          | I       | DD  | 1L    | Mt. Vuimasia – Korobasabasaga range  | Nam           |
| <i>Schoenus achaetus</i> (T. Koyama) T. Koyama             | I       | CE  | 1C    | Mt. Nabui track, Waisoi  | Nam           |
| <i>Serianthes melanesica</i> var. <i>meeboldii</i> Fosberg | E       | DD  | *1L   | Lami   | Rew           |
| <i>Syzygium simillimum</i> Merr. & Perry                   | E       | TH  | 2C    | Summit Mt. Korababa  | Rew           |
| <i>Tapeinosperma babuscense</i> Mez.                       | E       | TH  | TC    | Naboubuco creek headwaters, upper Wainimala  | Nai           |
| <i>Tarenna joskei</i> (Horne ex Baker) A. C. Sm.           | E       | TH  | 2C    | Navesi, east of Naikorokoro creek  | Rew           |
| <i>Terminalia capitanea</i>                                | E       | V   |       | Waisoi   | nam           |
| <i>Tmesipteris truncata</i> (R. Br.) Desv.                 | I       | TH  | 2L    | Waisoi – Korobasabasaga range  | Nam           |
| <i>Zeuxine vieillardii</i> (Reichenb) Schltr.              | I       | TH  |       | Veisari river  | Rew           |

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (1)

| Family           | Botanical name (collection #)                  | Distribution | Abundance           |
|------------------|--|--------------|---------------------|
| Adiantaceae      | <i>Coniogramme fraxinea</i> (107)              | Indigenous   | Locally common      |
| Adiantaceae      | <i>Taenitis pinnata</i> (83)                   | Indigenous   | Common              |
| Annonaceae       | <i>Cyathocalyx insularis</i> (125, 120, 211)   | Endemic      | Uncommon            |
| Annonaceae       | <i>Richella monosperma</i> (116)               | Endemic      | Uncommon            |
| Annonaceae       | <i>Xylopia pacifica</i> (57, 183, 194)         | Endemic      | Common              |
| Apocynaceae      | <i>Alstonia montana</i> (22)                   | Endemic      | Common              |
| Apocynaceae      | <i>Alstonia vitiense</i> (169)                 | Endemic      | Common              |
| Apocynaceae      | <i>Cerbera manghas</i> (20)                    | Indigenous   | Common              |
| Apocynaceae      | <i>Pagiantha thurstonii</i> (193)              | Endemic      | Common              |
| Araliaceae       | <i>Plerandra grayi</i> (207)                   | Endemic      | Common              |
| Araliaceae       | <i>Plerandra insolita</i> (77)                 | Endemic      | Common              |
| Araliaceae       | <i>Schefflera seemanniana</i> (111)            | Endemic      | Common              |
| Araucariaceae    | <i>Agathis macrophylla</i> (147)               | Indigenous   | Locally common      |
| Arecaceae        | <i>Veitchia vitiense</i> (29, 64, 65, 217)     | Endemic      | Common & widespread |
| Asclepiadaceae   | <i>Hoya australis</i> (167)                    | Indigenous   | Uncommon            |
| Asclepiadaceae   | <i>Hoya diptera</i> (92)                       | Endemic      | Common              |
| Aspleniaceae     | <i>Asplenium amboinense</i> (49, 82, 137)      | Indigenous   | Common              |
| Aspleniaceae     | <i>Asplenium australasicum</i> (165)           | Indigenous   | Common              |
| Aspleniaceae     | <i>Asplenium bipinnatifidum</i> (43, 141)      | Indigenous   | Common              |
| Aspleniaceae     | <i>Asplenium cuneatum</i> (149)                | Indigenous   | Common              |
| Aspleniaceae     | <i>Asplenium tenerum</i> (16)                  | Indigenous   | Uncommon            |
| Burseraceae      | <i>Canarium vitiense</i> (226)                 | Indigenous   | Common              |
| Burseraceae      | <i>Haplolobus floribundus</i> (134, 179)       | Indigenous   | Common              |
| Caesalpiniaceae  | <i>Maniltoa grandiflora</i> (206)              | Indigenous   | Uncommon            |
| Casuarinaceae    | <i>Gymnostoma vitiense</i> (219)               | Endemic      | Locally common      |
| Chrysobalanaceae | <i>Parinari insularum</i> (173, 176)           | Indigenous   | Very common         |
| Clusiaceae       | <i>Calophyllum amblyphyllum</i> (177)          | Endemic      | Uncommon            |
| Clusiaceae       | <i>Calophyllum cerasiferum</i> (44, 199)       | Endemic      | Uncommon            |
| Clusiaceae       | <i>Calophyllum vitiense</i> (51)               | Endemic      | Common              |
| Clusiaceae       | <i>Garcinia myrtiflora</i> (98, 182, 186, 208) | Indigenous   | Uncommon            |
| Clusiaceae       | <i>Garcinia pseudoguttifera</i> (95, 215)      | Indigenous   | Common              |
| Cunoniaceae      | <i>Geissois ternata</i> (222)                  | Endemic      | Uncommon            |
| Cunoniaceae      | <i>Weinmannia affinis</i> (26)                 | Endemic      | Uncommon            |
| Cyatheaceae      | <i>Culcita straminea</i> (163)                 | Indigenous   | Locally common      |
| Cyatheaceae      | <i>Cyathea alata</i> (67)                      | Indigenous   | Uncommon            |
| Cyatheaceae      | <i>Cyathea hornei</i> (156)                    | Indigenous   | Common              |
| Cyatheaceae      | <i>Cyathea lunulata</i> (164)                  | Indigenous   | Common              |
| Cyatheaceae      | <i>Dicksonia brackenridgei</i> (47)            | Indigenous   | Common              |
| Cyperaceae       | <i>Carex graeffeana</i> (13)                   | Indigenous   | Common              |
| Cyperaceae       | <i>Gahnia Vitiensis</i> (61)                   | Indigenous   | Uncommon            |
| Cyperaceae       | <i>Hypolytrum nemorum</i> (132)                | Indigenous   | Common & widespread |
| Davalliaceae     | <i>Oleandra neriiformis</i> (55)               | Indigenous   | Common              |
| Davalliaceae     | <i>Scyphularia pycnocarpa</i> (34)             | Endemic      | Common              |
| Degeneriaceae    | <i>Degeneria vitiensis</i> (150)               | Endemic      | Uncommon            |
| Dilleniaceae     | <i>Dillenia biflora</i>                        | Indigenous   | Common              |
| Euphorbiaceae    | <i>Acalypha insulana</i> (90)                  | Indigenous   | Uncommon            |
| Euphorbiaceae    | <i>Acalypha rivularis</i> (101)                | Endemic      | Locally common      |
| Euphorbiaceae    | <i>Baccaurea pulvinata</i> (81)                | Endemic      | Common              |
| Euphorbiaceae    | <i>Endospermum macrophyllum</i> (86, 201)      | Endemic      | Common              |
| Euphorbiaceae    | <i>Glochidion seemannii</i> (80)               | Endemic      | Uncommon            |
| Euphorbiaceae    | <i>Macaranga graeffeana</i> (88)               | Endemic      | Common              |
| Euphorbiaceae    | <i>Macaranga magna</i> (136)                   | Endemic      | Common              |
| Flacourtiaceae   | <i>Elaeocarpus chionanchus</i> (12)            | Endemic      | Uncommon, rare      |
| Flacourtiaceae   | <i>Homalium nitens</i> (108)                   | Endemic      | Uncommon            |

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (2)

| Family           | Botanical name (collection #)                    | Distribution | Abundance           |
|------------------|--|--------------|---------------------|
| Flagellariaceae  | <i>Flagellaria gigantea</i> (227)                | Endemic      | Common              |
| Gesneriaceae     | <i>Cyrtandra anthropophagorum</i> (131)          | Endemic      | Common              |
| Gesneriaceae     | <i>Cyrtandra cf. Pritchardii</i> (36)            | Endemic      | Uncommon            |
| Gesneriaceae     | <i>Cyrtandra cyathibracteata</i> (119)           | Endemic      | Uncommon, rare      |
| Gesneriaceae     | <i>Cyrtandra jugalis</i> (121)                   | Endemic      | Common              |
| Gesneriaceae     | <i>Cyrtandra victoriae</i> (37)                  | Endemic      | Common              |
| Gnetaceae        | <i>Gnetum gnemon</i> (168)                       | Indigenous   | Common & widespread |
| Gonystylaceae    | <i>Gonystylus punctatus</i> (178)                | Endemic      | Common              |
| Hernandiaceae    | <i>Hernandia olivacea</i> (214)                  | Endemic      | Uncommon            |
| Hymenophyllaceae | <i>Trichomanes apiifolium</i>                    | Indigenous   | Locally common      |
| Lauraceae        | <i>Cryptocarya fusca</i> (166)                   | Endemic      | Uncommon            |
| Lauraceae        | <i>Endiandra gillespiei</i> (185, 209)           | Endemic      | Uncommon            |
| Lauraceae        | <i>Litsea vitiana</i> (129)                      | Endemic      | Uncommon            |
| Liliaceae        | <i>Collospermum montanum</i> (226)               | Endemic      | Common              |
| Lomariopsidaceae | <i>Elaphoglossum imthurnii</i> (48)              | Endemic      | Common              |
| Lycopodiaceae    | <i>Lycopodium cernuum</i> (11)                   | Indigenous   | Locally common      |
| Lycopodiaceae    | <i>Lycopodium foliosum</i> (54,72, 78, 151)      | Endemic      | Common              |
| Lycopodiaceae    | <i>Lycopodium phlegmaria</i> (31)                | Indigenous   | Common              |
| Lycopodiaceae    | <i>Lycopodium squarrosum</i> (139)               | Indigenous   | Uncommon            |
| Lycopodiaceae    | <i>Lycopodium subtrifoliatum</i> (30, 89, 138)   | Endemic      | Common              |
| Marattiaceae     | <i>Angiopteris evecta</i> (4)                    | Indigenous   | Common              |
| Marattiaceae     | <i>Marattia smithii</i> (10)                     | Indigenous   | Common & widespread |
| Melastomataceae  | <i>Astronidium confertiflorum</i> (212)          | Endemic      | Common              |
| Melastomataceae  | <i>Astronidium robustum</i>                      | Endemic      | Locally common      |
| Melastomataceae  | <i>Medinilla subviridis</i> (6)                  | Endemic      | Common              |
| Meliaceae        | <i>Aglaia greenwoodii</i>                        | Endemic      | Common              |
| Meliaceae        | <i>Aglaia vitiensis</i> (14)                     | Endemic      | Common              |
| Moraceae         | <i>Ficus bambusifolia</i> (106)                  | Endemic      | Locally common      |
| Moraceae         | <i>Ficus masonii</i> (40)                        | Endemic      | Common              |
| Moraceae         | <i>Ficus pritchardii</i> (5)                     | Endemic      | Common              |
| Moraceae         | <i>Ficus pulvo-pilosa</i> (8)                    | Endemic      | Common              |
| Moraceae         | <i>Ficus smithii</i> (9)                         | Indigenous   | Common              |
| Moraceae         | <i>Ficus theophrastoides</i> (53)                | Endemic      | Locally common      |
| Moraceae         | <i>Ficus vitiense</i> (143)                      | Endemic      | Common & widespread |
| Myristicaceae    | <i>Myristica castaneifolia</i> (223)             | Endemic      | Very common         |
| Myristicaceae    | <i>Myristica chartacea</i> (6, 17, 59, 191, 223) | Endemic      | Very Common         |
| Myristicaceae    | <i>Myristica gillespieana</i> (7, 184, 213)      | Endemic      | Common              |
| Myristicaceae    | <i>Myristica grandifolia</i> (187)               | Endemic      | Uncommon            |
| Myristicaceae    | <i>Myristica macrantha</i> (58)                  | Endemic      | Common              |
| Myrsinaceae      | <i>Maesa insularis</i> (84)                      | Endemic      | Locally common      |
| Myrsinaceae      | <i>Tapeinosperma hornei</i> (79)                 | Endemic      | Uncommon            |
| Myrtaceae        | <i>Cleistocalyx eugenioides</i> (210)            | Endemic      | Common              |
| Myrtaceae        | <i>Decaspermum vitiense</i> (174)                | Endemic      | Locally common      |
| Myrtaceae        | <i>Syzygium sp.</i> (203)                        |              | Uncommon            |
| Myrtaceae        | <i>Syzygium effusum</i> (197, 202)               | Indigenous   | Common              |
| Myrtaceae        | <i>Syzygium fijiense</i> (190, 195)              | Endemic      | Common              |
| Myrtaceae        | <i>Syzygium gracilipes</i> (175)                 | Endemic      | Uncommon            |
| Myrtaceae        | <i>Syzygium grayi</i> (198)                      | Endemic      | Uncommon            |
| Nyctaginaceae    | <i>Pisonia umbellifera</i> (148)                 | Endemic      | Uncommon            |
| Orchidaceae      | <i>Agrostophyllum aristatum</i> (41)             | Indigenous   | Common              |
| Orchidaceae      | <i>Appendicula bracteosa</i> (128)               | Endemic      | Uncommon            |
| Orchidaceae      | <i>Appendicula reflexa</i> (68)                  | Indigenous   | Common              |
| Orchidaceae      | <i>Calanthe ventilabrum</i> (52, 81)             | Indigenous   | Common              |
| Orchidaceae      | <i>Coelogyne macdonaldii</i> (71)                | Indigenous   | Uncommon            |

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (3)

| Family         | Botanical name (collection #)              | Distribution | Abundance           |
|----------------|--|--------------|---------------------|
| Orchidaceae    | <i>Cryptostylis arachnites</i> (142)       | Indigenous   | Common              |
| Orchidaceae    | <i>Dendrobium macrophyllum</i> (27)        | Indigenous   | Common              |
| Orchidaceae    | <i>Diplocaulobium tipuliferum</i> (24, 33) | Endemic      | Common              |
| Orchidaceae    | <i>Earina valida</i> (170)                 | Indigenous   | Common              |
| Orchidaceae    | <i>Eria robusta</i> (28)                   | Indigenous   | Uncommon            |
| Orchidaceae    | <i>Eria rostriflora</i> (34)               | Indigenous   | Common              |
| Orchidaceae    | <i>Flickingeria comata</i> (46b)           | Indigenous   | Common              |
| Orchidaceae    | <i>Malaxis platychlila</i> (145)           | Endemic      | Uncommon & rare     |
| Orchidaceae    | <i>Oberonia equitans</i> (153,154)         | Indigenous   | Common              |
| Orchidaceae    | <i>Phreatia micrantha</i> (146)            | Endemic      | Uncommon            |
| Orchidaceae    | <i>Robiquetia bertholdii</i> (87)          | Indigenous   | Uncommon            |
| Orchidaceae    | <i>Spathoglottis pacifica</i> (225)        | Indigenous   | Locally common      |
| Orchidaceae    | <i>Taeniophyllum smithii</i> (97)          | Endemic      | Uncommon            |
| Pandanaceae    | <i>Freycinetia caudata</i> (8, 127)        | Endemic      | Common              |
| Pandanaceae    | <i>Freycinetia imparvida</i> (25, 29, 162) | Indigenous   | Common              |
| Pandanaceae    | <i>Freycinetia pritchardii</i> (23, 32)    | Indigenous   | Common              |
| Pandanaceae    | <i>Freycinetia storckii</i> (35)           | Indigenous   | Common              |
| Pandanaceae    | <i>Freycinetia urvilleana</i> (24, 161)    | Indigenous   | Common              |
| Pandanaceae    | <i>Pandanus</i> sp. (196)                  |              | Locally common      |
| Peperomiaceae  | <i>Peperomia lasiostigma</i> (143)         | Endemic      | Common              |
| Piperaceae     | <i>Piper aduncum</i> (56)                  | Adventive    | Locally common      |
| Piperaceae     | <i>Piper insectifugum</i> (144)            | Endemic      | Common              |
| Pittosporaceae | <i>Pittosporum rhytidocarpum</i> (171)     | Endemic      | Common              |
| Podocarpaceae  | <i>Dacrycarpus imbricatus</i> (188)        | Indigenous   | Common              |
| Podocarpaceae  | <i>Dacrydium nidulum</i> (218)             | Indigenous   | Locally common      |
| Podocarpaceae  | <i>Decussocarpus vitiensis</i> (192)       | Indigenous   | Uncommon            |
| Podocarpaceae  | <i>Podocarpus affinis</i> (119)            | Endemic      | Locally uncommon    |
| Podocarpaceae  | <i>Podocarpus neriifolius</i> (7)          | Indigenous   | Common              |
| Polypodiaceae  | <i>Microsorium linguaeforme</i> (60, 160)  | Indigenous   | Common & widespread |
| Proteaceae     | <i>Turrillia ferruginea</i> (157)          | Endemic      | Common & widespread |
| Proteaceae     | <i>Turrillia ferruginea</i> (189)          | Endemic      | Very common         |
| Psilotaceae    | <i>Psilotum complanatum</i> (1)            | Indigenous   | Uncommon            |
| Rosaceae       | <i>Rubus moluccanus</i> (172)              | Indigenous   | Common              |
| Rubiaceae      | <i>Calycosia petiolata</i> (76)            | Endemic      | Uncommon            |
| Rubiaceae      | <i>Dolicholobium latifolium</i> (221)      | Endemic      | Common              |
| Rubiaceae      | <i>Gardenia gordonii</i> (15)              | Endemic      | Common              |
| Rubiaceae      | <i>Gardenia storckii</i> (205)             | Endemic      | Uncommon            |
| Rubiaceae      | <i>Ixora carewii</i> (113, 159)            | Endemic      | Uncommon            |
| Rubiaceae      | <i>Ophiorrhiza leptantha</i> (3)           | Indigenous   | Common              |
| Rubiaceae      | <i>Psychotria</i> sp. (63,85)              |              | Uncommon            |
| Rubiaceae      | <i>Psychotria amoena</i> (130)             | Endemic      | Common              |
| Rubiaceae      | <i>Psychotria broweri</i> (2)              | Endemic      | Common              |
| Rubiaceae      | <i>Psychotria parvula</i> (69)             | Endemic      | Common              |
| Rubiaceae      | <i>Psychotria st. johnii</i> (50)          | Endemic      | Uncommon            |
| Rubiaceae      | <i>Psychotria tephrosantha</i> (126)       | Endemic      | Common              |
| Rubiaceae      | <i>Sukunia longipes</i> (155)              | Endemic      | Uncommon            |
| Rubiaceae      | <i>Xanthophytum calycinum</i> (70)         | Indigenous   | Uncommon            |
| Rutaceae       | <i>Melicope vitiense</i> (102)             | Endemic      | Uncommon            |
| Sapotaceae     | <i>Burckella fijiensis</i> (19)            | Endemic      | Uncommon            |
| Sapotaceae     | <i>Palaquium vitilevuense</i> (216)        | Endemic      | Uncommon            |
| Sapotaceae     | <i>Palaquium fidjiense</i> (133)           | Endemic      | Common              |
| Sapotaceae     | <i>Palaquium hornei</i> (38)               | Endemic      | Common & widespread |
| Sapotaceae     | <i>Palaquium porphyreum</i> (117,158, 185) | Endemic      | Uncommon            |
| Saurauiceae    | <i>Saurauia rubicunda</i> (204)            | Endemic      | Common              |

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (4)

| <b>Family</b>     | <b>Botanical name (collection #)</b>     | <b>Distribution</b> | <b>Abundance</b>    |
|-------------------|--|---------------------|---------------------|
| Selaginellaceae   | <i>Selaginella breynioides</i> (5)       | Endemic             | Common              |
| Selaginellaceae   | <i>Selaginella viridangula</i> (6)       | Endemic             | Locally common      |
| Simaroubaceae     | <i>Amaroria soulameoides</i> (220)       | Endemic             | Common & widespread |
| Smilacaceae       | <i>Smilax vitiensis</i> (96)             | Indigenous          | Common              |
| Sterculiaceae     | <i>Heritiera ornithocephala</i> (21)     | Indigenous          | Uncommon            |
| Tiliaceae         | <i>Trichospermum calyculatum</i> (91)    | Endemic             | Uncommon            |
| Tiliaceae         | <i>Trichospermum richii</i> (74)         | Indigenous          | Common              |
| Ulmaceae          | <i>Gironniera celtidifolia</i> (94, 180) | Endemic             | Very common         |
| <b>Urticaceae</b> | <i>Dendrocnide harveyi</i> (99)          | Indigenous          | Locally common      |
| <b>Urticaceae</b> | <i>Elatostema humile</i> (135)           | Endemic             | Uncommon            |
| Urticaceae        | <i>Elatostema vitiense</i> (73)          | Endemic             | Uncommon            |
| Verbenaceae       | <i>Premna serratifolia</i> (181)         | Indigenous          | Common              |
| Vittariaceae      | <i>Antrophyum alatum</i> (103)           | Indigenous          | Common              |
| Vittariaceae      | <i>Vittaria elongata</i> (140, 152)      | Indigenous          | Common              |

Appendix 11-(1) Vegetation structure(forest profile diagram in site 1. ridge top forest – high elevation (520m asl))



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Figure 2 Vegetation structure. Forest profile diagram of a lowland rainforest high elevation ridge top. (site 1 - 420m asl) near Drill #3, Waivaka South, Namasi Province. Belt transect was 60x6m.

Symbols of tree over 10cm dbh: Agma. *Agathis macrophylla*; Buli. *Burckella fijiensis*; Caam. *Calophyllum amblyphyllum*; Cavi. *Calophyllum vitiense*; Cavi. *Canarium vitiense*; Daim. *Dacrycarpus imbricatus*; Devi. *Decussocarpus vitiensis*; Engl. *Endiandra gillespiei*; Gamy. *Garcinia myrsifolia*; Gice. *Girouneria celidifolia*; Gagn. *Gnemon gnemon*; Gopu. *Gonystylus punctatus*; Hafi. *Haplolobus floribundus*; Mygl. *Myristica gillespieana*; Mygr. *Myristica grandifolia*; Paho. *Palaquium hornei*; Pasp. *Pandanus sp.*; Pain. *Parinari insularum*; Pone. *Podocarpus neriifolius*; Syef. *Syzygium effusum*; Syfl. *Syzygium fijiense*



Appendix11-(2) Vegetation structure(forest profile diagram in site 2. slope forest type – mid elevation (350m asl))

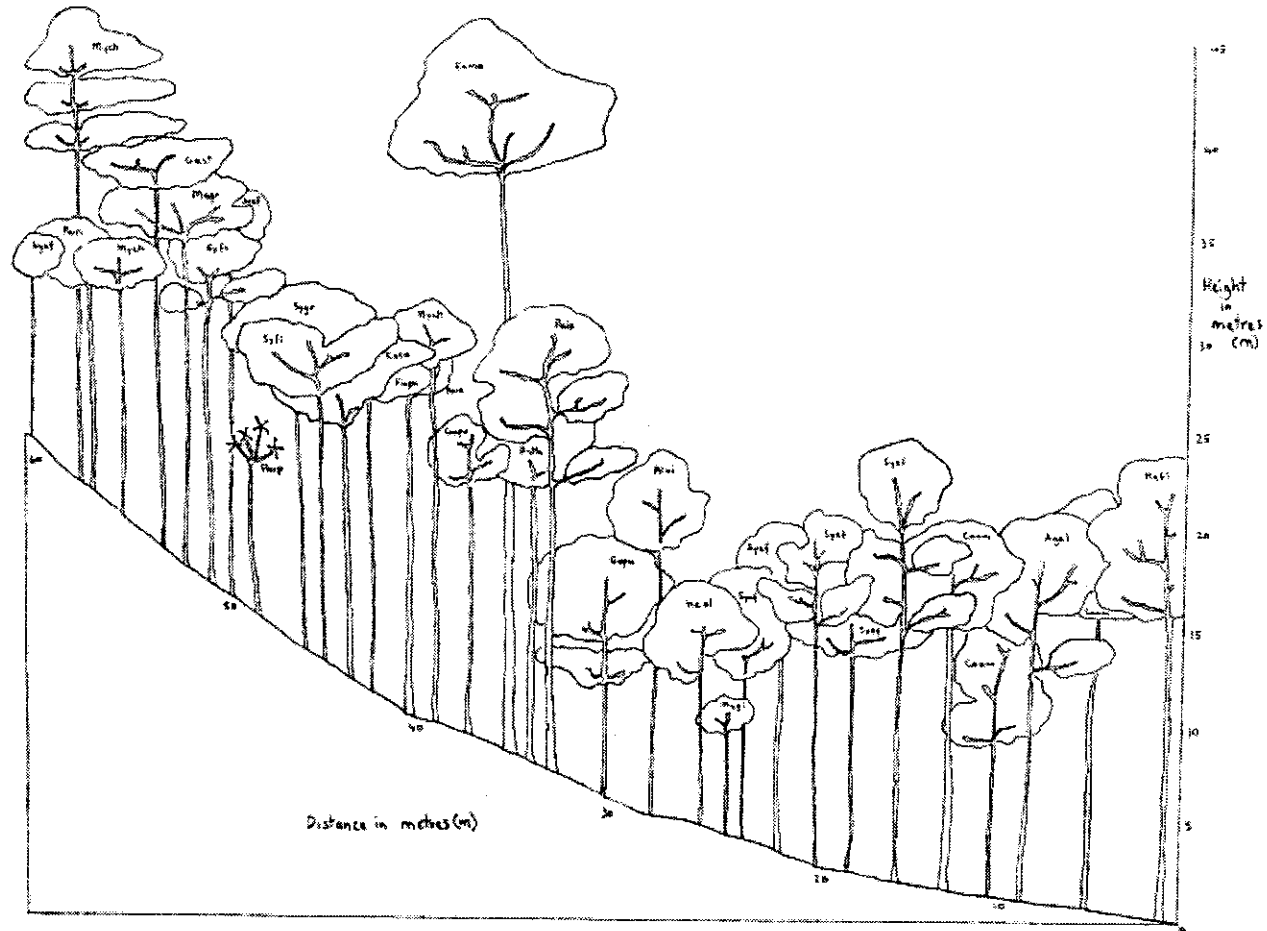


Figure 3 Vegetation structure. Forest profile diagram of a lowland rainforest on mid-elevation slope in Waivaka South (site 2-350m asl), Namosi Province. Belt transect was 60x6m.

Symbols of tree over 10cm dbh: Alvl. *Alstonia vitiensis*; Cnam. *Calophyllum amblyphyllum*; Cacc. *Calophyllum cerasiferum*; Enma. *Endospermum macrophyllum*; Gamy. *Garcinia myrtifolia*; Gaps. *Garcinia pseudoguttifera*; Gast. *Gardenia storekii*; Gopa. *Gonystylus punctatus*; Hapl. *Haplolobus floribundus*; Heol. *Hernandia olivacea*; Magr. *Maniltoa grandiflora*; Mych. *Myristica chartacea*; Mygl. *Myristica gillespieana*; Palm. *Parinari insularum*; Pasp. *Palaquium porphyreum*; Pasp. *Pandanus sp.*; Path. *Pogonanthus thurstonii*; Saru. *Saurauia rubicunda*; Syef. *Syzygium effusum*; Syfi. *Syzygium fijiense*; Xypa. *Xylocarpus*



Appendix11-(4) Vegetation structure(forest profile diagram in site 4. creek-flat forest (250m asl.))

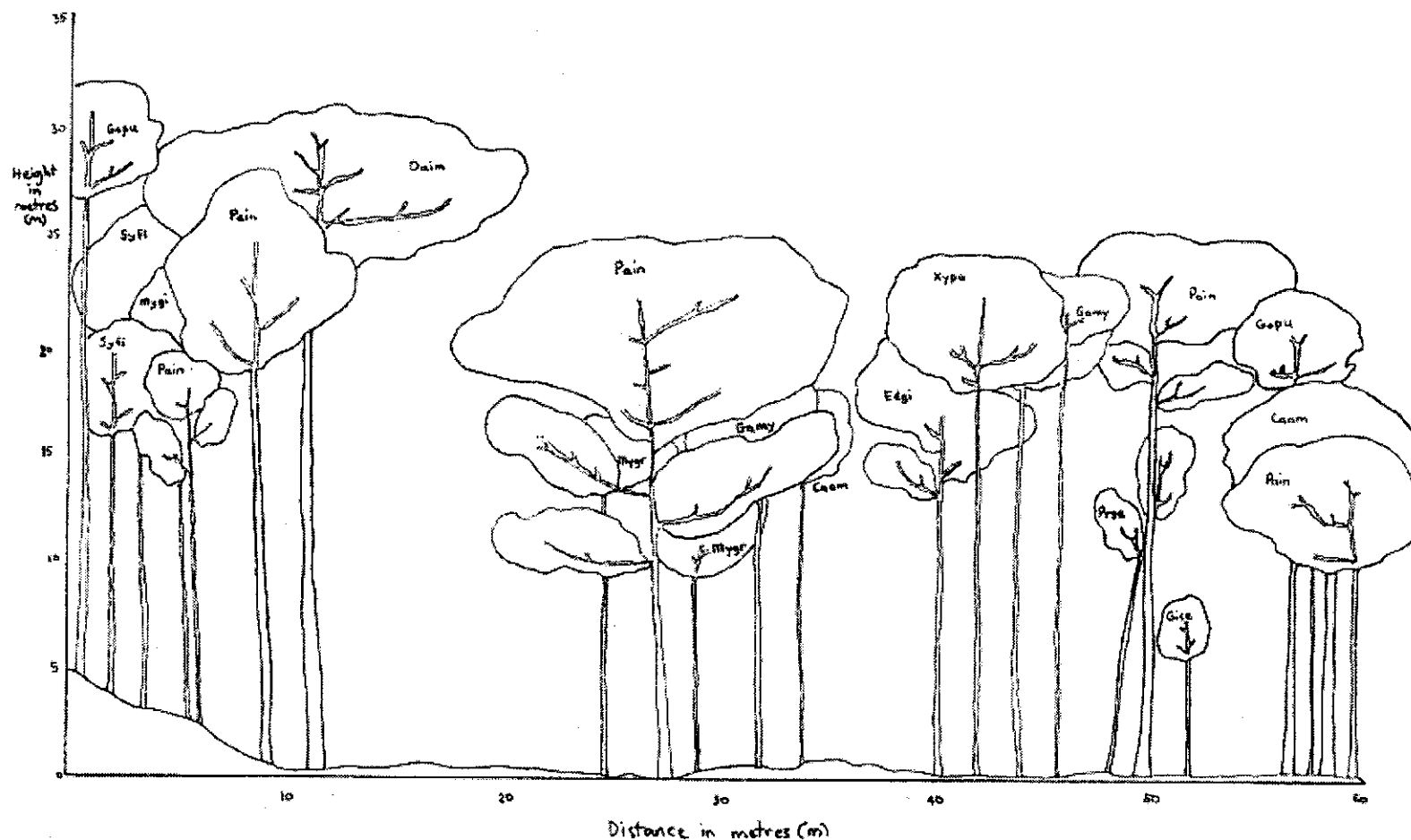


Figure 5 Vegetation structure. Forest profile diagram of a lowland rainforest on a creek flat (Site 4 250m asl) near Wainavuga creek in Waivaka South, Namosi Province. Belt transect was 60x6m.

Symbols of tree over 10cm dbh: Caam. *Catophyllum amblyphyllum*; Daim. *Dacrycarpus imbricatus*; Devl. *Decussocarpus vitiensis*; Engl. *Endiandra gillespiei*; Gamy. *Garcinia myrtifolia*; Gice. *Gironniera celtidifolia*; Gopu. *Gonystylus punctatus*; Hafl. *Haplolobus floribundus*; Mygi. *Myristica gillespieana*; Mygr. *Myristica grandifolia*; Pain. *Parinari insularum*; Path. *Pagiantha thurstonii*; Prse. *Premna serratifolia*; Syfi. *Syzygium fijiense*; Tuvi. *Turillia vitiensis*; Xypa. *Xylocarpus pacificus*

Appendix 12 List of archaeological sites (1)

| No. | Name                | Easting(m) | Northing(m) | Location               | Site type           | Map Reference | Map Name |
|-----|---------------------|------------|-------------|------------------------|---------------------|---------------|----------|
| 1   | Nadoi               | 1905746.25 | 3900240.91  | Nukuilau village       | Combination         | M28           | Keiyasi  |
| 2   | Navauvau Nakoro     | 1909201.97 | 3891403.86  | Nadadara Creek         | Combination         | M28           | Keiyasi  |
| 3   | Saroi               | 1908899.41 | 3891603.79  | Nadadara Creek         | Combination         | M28           | Keiyasi  |
| 4   | Togalevu            | 1906208.92 | 3900242.79  | Sigatoka River         | Combination         | M28           | Keiyasi  |
| 5   | Vusu Nakoro         | 1910502.54 | 3893119.02  | Vusu Creek             | Combination         | M28           | Keiyasi  |
| 6   | Wasivaro            | 1898309.33 | 3898702.00  | Sawene village         | Combination         | M28           | Keiyasi  |
| 7   |                     | 1900012.70 | 3900318.24  | Talenalewa trig        | Combination         | M28           | Keiyasi  |
| 8   |                     | 1897797.03 | 3901013.33  | Natuatuacoko village   | Combination         | M28           | Keiyasi  |
| 9   | Drenabukete         | 1896929.70 | 3896624.39  | Sawene                 | Hill fort           | M28           | Keiyasi  |
| 10  | Maiua               | 1901065.60 | 3898632.73  | Korovou village        | Hill fort           | M28           | Keiyasi  |
| 11  | Busabusa            | 1901846.86 | 3894491.92  | Busabusa Creek         | Koromakawa          | M28           | Keiyasi  |
| 12  | Muawai              | 1899045.88 | 3900616.06  | Sawene                 | Koromakawa          | M28           | Keiyasi  |
| 13  | Sawene              | 1897662.25 | 3899524.15  | Sawene village         | Koromakawa          | M28           | Keiyasi  |
| 14  | Tawaleka            | 1898885.77 | 3900414.25  | Sigatoka River         | Koromakawa          | M28           | Keiyasi  |
| 15  | Wala                | 1899115.86 | 3898242.60  | Korovou                | Koromakawa          | M28           | Keiyasi  |
| 16  | Nanagana            | 1898807.50 | 3899870.78  | Sawene village         | Naga                | M28           | Keiyasi  |
| 17  | Tunu                | 1898704.96 | 3900353.16  | Sawene                 | Naga                | M28           | Keiyasi  |
| 18  | Vatureba            | 1907624.97 | 3898297.27  | Sigatoka River         | Naga                | M28           | Keiyasi  |
| 19  | Wasivaro            | 1898309.33 | 3898702.00  | Sawene village         | Naga                | M28           | Keiyasi  |
| 20  | Kurimalawai         | 1899213.67 | 3898926.96  | Korovou village        | Ring ditch          | M28           | Keiyasi  |
| 21  | Lavatumali          | 1894472.98 | 3902186.74  | Nawamagi               | Ring ditch          | M28           | Keiyasi  |
| 22  | Matalevu terrace    | 1897326.06 | 3898094.51  | Matalevu Creek         | Ring ditch          | M28           | Keiyasi  |
| 23  | Waibasaga           | 1903302.52 | 3897656.11  | Lato Creek             | Ring ditch          | M28           | Keiyasi  |
| 24  |                     | 1908077.28 | 3900853.85  | Vitula Creek           | Ring ditch          | M28           | Keiyasi  |
| 25  |                     | 1886027.94 | 3901267.36  | Nagorosa Creek         | Stone flaking floor | M28           | Keiyasi  |
| 26  | Erege               | 1886501.44 | 3908430.95  | Nasivikoso village     | Unknown             | M28           | Keiyasi  |
| 27  | Matawalu            | 1900803.49 | 3903741.23  | Tuwalu Creek           | Unknown             | M28           | Keiyasi  |
| 28  | Nabourewa           | 1894126.66 | 3888405.37  | Nasogosewa Creek       | Unknown             | M28           | Keiyasi  |
| 29  | Nadruku             | 1923783.83 | 3891966.16  | Lase Creek             | Unknown             | M28           | Keiyasi  |
| 30  | Nakoto              | 1892027.98 | 3909841.33  | Nakoto Creek           | Unknown             | M28           | Keiyasi  |
| 31  | Nalaba              | 1909745.84 | 3906090.77  | Namoli village         | Unknown             | M28           | Keiyasi  |
| 32  | Nalesutale          | 1907364.03 | 3893206.82  | Lato Creek             | Unknown             | M28           | Keiyasi  |
| 33  | Natubarara          | 1897227.90 | 3887613.37  | Nasogolevu Creek       | Unknown             | M28           | Keiyasi  |
| 34  | Naviti              | 1906886.18 | 3901895.06  | Savua Creek            | Unknown             | M28           | Keiyasi  |
| 35  | Nubutolu            | 1898324.69 | 3894920.16  | Nasikawa Creek         | Unknown             | M28           | Keiyasi  |
| 36  | Qalisaivene         | 1888306.74 | 3884961.71  | Tawa Creek             | Unknown             | M28           | Keiyasi  |
| 37  | Ratalevulevu        | 1896791.00 | 3886223.54  | Nasogolevu Creek       | Unknown             | M28           | Keiyasi  |
| 38  | Ratidai             | 1902254.10 | 3898235.23  | Koroinadoko trig       | Unknown             | M28           | Keiyasi  |
| 39  | Vunivuga            | 1905852.27 | 3903862.25  | Korolevu village       | Unknown             | M28           | Keiyasi  |
| 40  |                     | 1905260.27 | 3891126.29  | Burotu Creek           | Unknown             | M28           | Keiyasi  |
| 41  |                     | 1908725.30 | 3904758.99  | Lolo Creek             | Unknown             | M28           | Keiyasi  |
| 42  |                     | 1909359.04 | 3897298.50  | Nasa Creek             | Unknown             | M28           | Keiyasi  |
| 43  |                     | 1910177.50 | 3893903.22  | Navakaruku Creek       | Unknown             | M28           | Keiyasi  |
| 44  |                     | 1897703.79 | 3899202.46  | Sawene village         | Unknown             | M28           | Keiyasi  |
| 45  |                     | 1910341.62 | 3893118.37  | Vusu Creek             | Unknown             | M28           | Keiyasi  |
| 46  |                     | 1892109.18 | 3865282.86  | Korolevu               | Graves              | M29           | Korolevu |
| 47  |                     | 1897528.12 | 3863474.66  | Namatakula village     | Hill fort           | M29           | Korolevu |
| 48  | Namahara            | 1891706.01 | 3865482.37  | Korolevu Bay           | Koromakawa          | M29           | Korolevu |
| 49  |                     | 1894696.78 | 3867104.07  | Naicobocobo Creek      | Koromakawa          | M29           | Korolevu |
| 50  |                     | 1902704.36 | 3861967.23  | Somosomo Bay           | Koromakawa          | M29           | Korolevu |
| 51  | Korolevuiwai        | 1891264.19 | 3865299.49  | Solosolo Creek         | Ring ditch          | M29           | Korolevu |
| 52  | Naggau              | 1894124.01 | 3864526.76  | Naggau Creek           | Ring ditch          | M29           | Korolevu |
| 53  |                     | 1886464.84 | 3868075.92  | Korolevu               | Ring ditch          | M29           | Korolevu |
| 54  |                     | 1893512.21 | 3866535.91  | Naqara                 | Ring ditch          | M29           | Korolevu |
| 55  |                     | 1892971.30 | 3865990.52  |                        | Ring ditch          | M29           | Korolevu |
| 56  | Nabotini            | 1910115.86 | 3864753.83  | Korovisilou Creek      | Unknown             | M29           | Korolevu |
| 57  | Tubarara            | 1894137.90 | 3870923.95  | Tubarara Creek         | Unknown             | M29           | Korolevu |
| 58  |                     | 1909914.70 | 3864752.90  | Toka Creek             | Unknown             | M29           | Korolevu |
| 59  |                     | 1894885.19 | 3870202.83  | Tutumana Creek         | Unknown             | M29           | Korolevu |
| 60  | Navuniivi           | 1934475.25 | 3884567.18  | Namosi village         | Agricultural        | N28           | Namosi   |
| 61  | Noco                | 1934877.55 | 3884568.82  |                        | Agricultural        | N28           | Namosi   |
| 62  |                     | 1934274.92 | 3884365.21  | Namosi                 | Agricultural        | N28           | Namosi   |
| 63  |                     | 1934274.92 | 3884365.21  | Namosi                 | Agricultural        | N28           | Namosi   |
| 64  |                     | 1934464.57 | 3887182.08  | Tavua                  | Agricultural        | N28           | Namosi   |
| 65  | Navunimolau         | 1934677.22 | 3884366.86  | Namosi                 | Cave/Rockshelter    | N28           | Namosi   |
| 66  | Nasalia             | 1934149.30 | 3885571.60  |                        | Combination         | N28           | Namosi   |
| 67  |                     | 1914701.13 | 3899472.59  | Monavatu trig          | Combination         | N28           | Namosi   |
| 68  |                     | 1914499.97 | 3899471.78  | Monavatu trig          | Combination         | N28           | Namosi   |
| 69  | Lomaivuna           | 1958279.54 | 3902243.98  | Lomaivuna farm         | Hill fort           | N28           | Namosi   |
| 70  |                     | 1959770.25 | 3901686.82  | Lomaivuna farm         | Hill fort           | N28           | Namosi   |
| 71  | Korotabu            | 1931942.39 | 3889082.71  | Wainaqare              | Ring ditch          | N28           | Namosi   |
| 72  |                     | 1953378.42 | 3890678.67  | Nabukaluka village     | Ring ditch          | N28           | Namosi   |
| 73  |                     | 1952391.35 | 3891036.71  | Nabukaluka village     | Ring ditch          | N28           | Namosi   |
| 74  | Bulibulinikuro      | 1932652.98 | 3887476.41  | Wainimala River        | Unknown             | N28           | Namosi   |
| 75  | Nabasau             | 1912173.97 | 3897631.79  | Wainimosi Creek        | Unknown             | N28           | Namosi   |
| 76  | Naduruloulou-i-colo | 1958086.80 | 3895223.47  | Korovou village        | Unknown             | N28           | Namosi   |
| 77  | Naduta              | 1912293.93 | 3897813.32  | Wainimosi Creek        | Unknown             | N28           | Namosi   |
| 78  | Naibili             | 1928979.61 | 3901139.71  | Waisomo Creek          | Unknown             | N28           | Namosi   |
| 79  | Naiteqeteqe         | 1930064.40 | 3910698.78  | Wainivono Creek        | Unknown             | N28           | Namosi   |
| 80  | Nakuruvakatini      | 1929786.66 | 3904763.71  | Matawailevu village    | Unknown             | N28           | Namosi   |
| 81  | Nalia               | 1928718.88 | 3890316.70  | Wainikoroiuva river    | Unknown             | N28           | Namosi   |
| 82  | Naloka              | 1917034.56 | 3899482.06  | Wainivau Creek         | Unknown             | N28           | Namosi   |
| 83  | Naqara              | 1926129.94 | 3908671.40  | Wainisavulevu Creek    | Unknown             | N28           | Namosi   |
| 84  | Nasau               | 1928509.29 | 3892387.71  | Wainikoroiuva river    | Unknown             | N28           | Namosi   |
| 85  | Nataubale           | 1931373.39 | 3905353.46  | Nakorokoroyawa village | Unknown             | N28           | Namosi   |
| 86  | Natodre             | 1956345.07 | 3893204.99  | Lomai village          | Unknown             | N28           | Namosi   |
| 87  | Navicila            | 1955899.69 | 3893907.17  | Vanuakula village      | Unknown             | N28           | Namosi   |
| 88  | Navisigasiga        | 1928238.09 | 3884903.75  | Wainikoroiuva river    | Unknown             | N28           | Namosi   |
| 89  | Ninive              | 1928432.51 | 3891482.22  | Naqarawai village      | Unknown             | N28           | Namosi   |
| 90  | Ronawa              | 1928133.40 | 3885909.08  | Wainikoroiuva river    | Unknown             | N28           | Namosi   |
| 91  | Rukuruku            | 1929434.07 | 3887583.96  | Wainikoroiuva river    | Unknown             | N28           | Namosi   |
| 92  | Tavua               | 1942902.96 | 3909443.08  | Naitauvoli village     | Unknown             | N28           | Namosi   |
| 93  | Vunibau             | 1934594.71 | 3884869.39  | Nacokula village       | Unknown             | N28           | Namosi   |
| 94  | Waikalou            | 1949710.84 | 3902229.41  | Waiwatu Creek          | Unknown             | N28           | Namosi   |
| 95  |                     | 1912077.50 | 3901574.12  | Monavatu trig          | Unknown             | N28           | Namosi   |

Appendix 12 List of archaeological sites (2)

| No. | Name               | Easting(m) | Northing(m) | Location                       | Site type        | Map Reference | Map Name |
|-----|--------------------|------------|-------------|--------------------------------|------------------|---------------|----------|
| 96  |                    | 1913102.89 | 3896750.47  | Nakaumama Creek                | Unknown          | N28           | Namosi   |
| 97  |                    | 1914776.97 | 3910556.70  | Solikana Creek                 | Unknown          | N28           | Namosi   |
| 98  |                    | 1928337.99 | 3909826.87  | Wainisavulevu Creek            | Unknown          | N28           | Namosi   |
| 99  |                    | 1960270.24 | 3902392.83  | Lomaivuna settlement           | Yavu             | N28           | Namosi   |
| 100 |                    | 1959684.25 | 3903054.21  | Lomaivuna settlement           | Yavu             | N28           | Namosi   |
| 101 | Nabou village      | 1986378.91 | 3882365.76  | Rewa Delta                     | Agricultural     | O28           | Nausori  |
| 102 |                    | 1974488.38 | 3888149.93  | Navuso agriculture school      | Agricultural     | O28           | Nausori  |
| 103 |                    | 1961195.24 | 3902456.90  | Navolau village                | Cave/Rockshelter | O28           | Nausori  |
| 104 |                    | 1984500.00 | 3893000.00  | Kubuna islet                   | Combination      | O28           | Nausori  |
| 105 |                    | 1974488.38 | 3888149.93  | Navuso agriculture school      | Combination      | O28           | Nausori  |
| 106 | Nakovekovevou      | 1960990.35 | 3903381.32  | Veidrodro trig                 | Hill fort        | O28           | Nausori  |
| 107 |                    | 1968877.99 | 3892753.13  | Nakini village                 | Hill fort        | O28           | Nausori  |
| 108 |                    | 1968965.71 | 3895911.29  | Natoaika village               | Hill fort        | O28           | Nausori  |
| 109 |                    | 1964197.67 | 3897641.78  | Viria village                  | Hill fort        | O28           | Nausori  |
| 110 |                    | 1976117.99 | 3883128.31  | Koronivia Agricultural Station | Ring ditch       | O28           | Nausori  |
| 111 |                    | 1976318.71 | 3883229.70  | Koronivia Agricultural Station | Ring ditch       | O28           | Nausori  |
| 112 |                    | 1976338.01 | 3883430.91  | Koronivia Agricultural Station | Ring ditch       | O28           | Nausori  |
| 113 |                    | 1967674.90 | 3881987.55  | Marshall mountain              | Ring ditch       | O28           | Nausori  |
| 114 |                    | 1980330.68 | 3895716.07  | Nadaro village                 | Ring ditch       | O28           | Nausori  |
| 115 |                    | 1980330.68 | 3895716.07  | Nadaro village                 | Ring ditch       | O28           | Nausori  |
| 116 |                    | 1969936.68 | 3879784.34  | Naigatugatu minor trig         | Ring ditch       | O28           | Nausori  |
| 117 |                    | 1971892.56 | 3883513.30  | Nasinu Cemetery                | Ring ditch       | O28           | Nausori  |
| 118 |                    | 1971992.79 | 3883594.17  | Nasinu cemetery                | Ring ditch       | O28           | Nausori  |
| 119 |                    | 1976126.48 | 3881056.70  | Naulu Road                     | Ring ditch       | O28           | Nausori  |
| 120 |                    | 1975421.86 | 3882365.76  | Naulu Road                     | Ring ditch       | O28           | Nausori  |
| 121 |                    | 1976325.30 | 3881620.68  | Naulu Road                     | Ring ditch       | O28           | Nausori  |
| 122 |                    | 1976606.80 | 3881641.95  | Naulu Road                     | Ring ditch       | O28           | Nausori  |
| 123 |                    | 1976224.32 | 3881720.84  | Naulu Road                     | Ring ditch       | O28           | Nausori  |
| 124 |                    | 1975289.22 | 3889058.29  | Navuso                         | Ring ditch       | O28           | Nausori  |
| 125 |                    | 1975296.61 | 3887248.14  | Rewa River                     | Ring ditch       | O28           | Nausori  |
| 126 |                    | 1976558.81 | 3888460.07  | Verata                         | Ring ditch       | O28           | Nausori  |
| 127 |                    | 1971876.93 | 3887334.76  | Vuniniudrovu village           | Ring ditch       | O28           | Nausori  |
| 128 |                    | 1975011.32 | 3888152.06  | Waimanu River                  | Ring ditch       | O28           | Nausori  |
| 129 |                    | 1975291.84 | 3888414.68  | Waimanu River                  | Ring ditch       | O28           | Nausori  |
| 130 |                    | 1974888.18 | 3888754.96  | Waimanu River                  | Ring ditch       | O28           | Nausori  |
| 131 |                    | 1972886.22 | 3889456.89  | Waisaravu                      | Ring ditch       | O28           | Nausori  |
| 132 |                    | 1974845.90 | 3889257.61  |                                | Ring ditch       | O28           | Nausori  |
| 133 | Matanikoroiwalu    | 1973218.00 | 3893900.00  | Dreketi Creek                  | Unknown          | O28           | Nausori  |
| 134 | Motonoko           | 1962173.68 | 3899262.80  | Navutu village                 | Unknown          | O28           | Nausori  |
| 135 | Nabulula           | 1969500.70 | 3902852.56  | Wainabua Creek                 | Unknown          | O28           | Nausori  |
| 136 | Nakorokoroloka     | 1973431.95 | 3900615.78  | Sote village                   | Unknown          | O28           | Nausori  |
| 137 | Nalolowa           | 1972716.89 | 3903348.28  | Sote village                   | Unknown          | O28           | Nausori  |
| 138 | Natavo             | 1984000.00 | 3901500.00  | Kumi village                   | Unknown          | O28           | Nausori  |
| 139 | Navuga             | 1975663.45 | 3915810.16  | Sawani Creek                   | Unknown          | O28           | Nausori  |
| 140 | Nukudamu           | 1970322.66 | 3903519.62  | Nadrasavu Creek                | Unknown          | O28           | Nausori  |
| 141 | Suva               | 1968286.00 | 3901140.00  |                                | Unknown          | O28           | Nausori  |
| 142 | Teyanuca           | 1977602.01 | 3913907.21  | Navitau trig                   | Unknown          | O28           | Nausori  |
| 143 | Vatugunu           | 1978344.98 | 3914211.89  | Lauci Island                   | Unknown          | O28           | Nausori  |
| 144 | Vuna               | 1966863.84 | 3913280.76  | Dakuivuna village              | Unknown          | O28           | Nausori  |
| 145 |                    | 1973588.62 | 3886828.91  | Davuilevu minor trig           | Unknown          | O28           | Nausori  |
| 146 |                    | 1982500.00 | 3910699.00  | Matacaucau village             | Unknown          | O28           | Nausori  |
| 147 |                    | 1978704.77 | 3885049.02  | Nadali village                 | Unknown          | O28           | Nausori  |
| 148 |                    | 1973023.56 | 3887299.21  | Vuniniudrovu village           | Unknown          | O28           | Nausori  |
| 149 | Vuniivivi          | 1976607.25 | 3886448.97  | Nausori                        | Yavu             | O28           | Nausori  |
| 150 | Narerega Naqavatau | 1932670.66 | 3883151.75  | Namosi                         | Cave/Rockshelter | N29           | Navua    |
| 151 |                    | 1935283.14 | 3883765.89  | Navurai                        | Cave/Rockshelter | N29           | Navua    |
| 152 | Namaramara         | 1935285.60 | 3883162.45  | Namosi Gorge                   | Hill fort        | N29           | Navua    |
| 153 | Narerega Yavu      | -          | -           | Narerega Naqarataurusara       | Hill fort        | N29           | Navua    |
| 154 |                    | 1946084.07 | 3869267.33  | Mau trig                       | Hill fort        | N29           | Navua    |
| 155 | Nabukavesi         | 1946033.25 | 3871841.77  | Queen's Road                   | Ring ditch       | N29           | Navua    |
| 156 | Nayavuinaamalo     | 1934881.66 | 3883563.10  | Namosi Gorge                   | Ring ditch       | N29           | Navua    |
| 157 |                    | 1935869.50 | 3863452.25  | Navua Delta                    | Ring ditch       | N29           | Navua    |
| 158 |                    | 1926829.73 | 3860498.14  | Karobo Bay                     | Stratified site  | N29           | Navua    |
| 159 | Daviko             | 1924424.65 | 3882816.27  | Nadoli village                 | Unknown          | N29           | Navua    |
| 160 | Laselase           | 1928747.05 | 3883417.31  | Wainikoroiuva River            | Unknown          | N29           | Navua    |
| 161 | Nadurumuqa         | 1917759.47 | 3864886.01  | Waivunu Creek                  | Unknown          | N29           | Navua    |
| 162 | Nasautate          | 1918709.06 | 3863884.15  | Waivunu                        | Unknown          | N29           | Navua    |
| 163 | Nukutabua          | 1929453.55 | 3882816.74  | Nakorowaiwai village           | Unknown          | N29           | Navua    |
| 164 | Ratanui            | 1931938.84 | 3875203.31  | Wainikovu Creek                | Unknown          | N29           | Navua    |
| 165 | Veinuqa            | 1917247.51 | 3881781.11  | Veinuqa Creek                  | Unknown          | N29           | Navua    |
| 166 | Wainiyavu          | 1924465.62 | 3882635.40  | Korovou village                | Unknown          | N29           | Navua    |
| 167 |                    | 1914446.60 | 3863363.63  | Yarawa sawmill                 | Unknown          | N29           | Navua    |
| 168 |                    | 1940484.10 | 3871215.49  |                                | Unknown          | N29           | Navua    |
| 169 | Koroimalu          | 1879732.43 | 3890941.73  | Koronisagana                   | Agricultural     | L29           | Sigatoka |
| 170 | Koroigara          | -          | -           | Volivoli valley                | Cave/Rockshelter | L29           | Sigatoka |
| 171 | Uluvatu            | 1864157.84 | 3872067.76  | Yadua village                  | Cave/Rockshelter | L29           | Sigatoka |
| 172 |                    | 1881541.18 | 3891391.69  | Sigatoka Valley                | Cave/Rockshelter | L29           | Sigatoka |
| 173 | Nabouciwa          | 1879250.68 | 3890678.24  | Toga village                   | Hill fort        | L29           | Sigatoka |
| 174 | Naruku             | 1866110.77 | 3871713.69  | Volivoli village               | Hill fort        | L29           | Sigatoka |
| 175 | Nokonoko           | 1870926.90 | 3879599.61  | Nakalavo village               | Hill fort        | L29           | Sigatoka |
| 176 | Qorogorovakatini   | 1880438.83 | 3890381.32  | Tawatawadi village             | Hill fort        | M28           | Sigatoka |
| 177 | Tavuni             | 1871832.36 | 3874654.35  | Naroro village                 | Hill fort        | L29           | Sigatoka |
| 178 | Mahevu             | 1872599.22 | 3878982.82  | Nawamagi                       | Koromakawa       | L29           | Sigatoka |
| 179 | Nalovo             | 1860289.56 | 3873419.86  | Rukulevu village               | Koromakawa       | L29           | Sigatoka |
| 180 | Togovere           | -          | -           |                                | Koromakawa       | L29           | Sigatoka |
| 181 | Naqarai            | 1868000.00 | 3870400.00  | West of Sigatoka Sand dunes    | Lapita           | L29           | Sigatoka |
| 182 | Sand Dunes         | 1867000.00 | 3870400.00  | Kulukulu Village               | Lapita           | L29           | Sigatoka |
| 183 | Koro ni velo       | 1873363.30 | 3880821.99  | Naduri village                 | Ring ditch       | L29           | Sigatoka |
| 184 | Lomolomo           | 1869999.26 | 3875230.23  | Lawai village                  | Ring ditch       | L29           | Sigatoka |
| 185 | Baunisoole         | 1882197.61 | 3878438.83  | Viro Creek                     | Unknown          | L29           | Sigatoka |
| 186 | Naimasi            | 1859850.27 | 3887360.03  | Tuva River                     | Unknown          | L29           | Sigatoka |
| 187 | Qeregere           | 1871427.86 | 3880084.49  | Nakalavo village               | Unknown          | L29           | Sigatoka |
| 188 | Vatutoka           | 1863916.20 | 3891802.64  | Vevelutu Creek                 | Unknown          | L29           | Sigatoka |
| 189 |                    | 1967098.71 | 3875347.75  | Nauluvatu                      | Cave/Rockshelter | O29           | Suva     |
| 190 |                    | 1967307.29 | 3873538.40  | Flagstaff                      | Combination      | O29           | Suva     |

### Appendix 12 List of archaeological sites (3)

| No. | Name | Easting(m) | Northing(m) | Location                        | Site type   | Map Reference | Map Name |
|-----|------|------------|-------------|---------------------------------|-------------|---------------|----------|
| 191 |      | 1965499.96 | 3872826.99  | Botanical Gardens Suva          | Combination | O29           | Suva     |
| 192 |      | 1967193.91 | 3876655.52  | Flagstaff                       | Combination | O29           | Suva     |
| 193 |      | 1973217.22 | 3879294.95  | Lagere Bridge                   | Ring ditch  | O29           | Suva     |
| 194 |      | 1970614.45 | 3876367.85  | Laucala Beach                   | Ring ditch  | O29           | Suva     |
| 195 |      | 1971514.19 | 3877678.91  | Nasinu                          | Ring ditch  | O29           | Suva     |
| 196 |      | 1973300.90 | 3883418.49  | Nasinu                          | Ring ditch  | O29           | Suva     |
| 197 |      | 1972695.45 | 3883918.85  | Nasinu                          | Ring ditch  | O29           | Suva     |
| 198 |      | 1967688.91 | 3878568.33  | Princes Road                    | Ring ditch  | O29           | Suva     |
| 199 |      | 1968287.29 | 3879797.70  | Tamavua hospital                | Ring ditch  | O29           | Suva     |
| 200 |      | 1966759.98 | 3879469.63  | Tamavua River                   | Ring ditch  | O29           | Suva     |
| 201 |      | 1966281.37 | 3878461.99  | Tamavua Road                    | Ring ditch  | O29           | Suva     |
| 202 |      | 1972193.68 | 3883655.33  |                                 | Ring ditch  | O29           | Suva     |
| 203 |      | 1972374.04 | 3883816.97  |                                 | Ring ditch  | O29           | Suva     |
| 204 |      | 1971116.05 | 3876671.61  | Kinoya Power Station            | Unknown     | O29           | Suva     |
| 205 |      | 1970792.99 | 3876971.98  | Kinoya Power Station            | Unknown     | O29           | Suva     |
| 206 |      | 1932785.81 | 3879591.86  | Lagere bridge                   | Unknown     | O29           | Suva     |
| 207 |      | 1974860.69 | 3885637.31  | Sarava village                  | Unknown     | O29           | Suva     |
| 208 |      | 1966712.57 | 3871424.03  | Suva Grammar School             | Unknown     | O29           | Suva     |
| 209 |      | 1966410.45 | 3871523.36  | Theological College, Suva Point | Unknown     | O29           | Suva     |
| 210 |      | 1966309.47 | 3871623.51  | Theological College, Suva Point | Unknown     | O29           | Suva     |
| 211 |      | 1971413.62 | 3877678.48  | Nasinu                          | Yavu        | O29           | Suva     |
| 212 |      | 1971413.62 | 3877678.48  | Nasinu                          | Yavu        | O29           | Suva     |
| 213 |      | 1971413.62 | 3877678.48  | Nasinu                          | Yavu        | O29           | Suva     |

Naga Site - stone wall formation (enclosure) associated with the Naga religion.

Ring ditch - fortification built in low lying areas using a ring formation. This is particularly prevalent in damp, marshy areas.

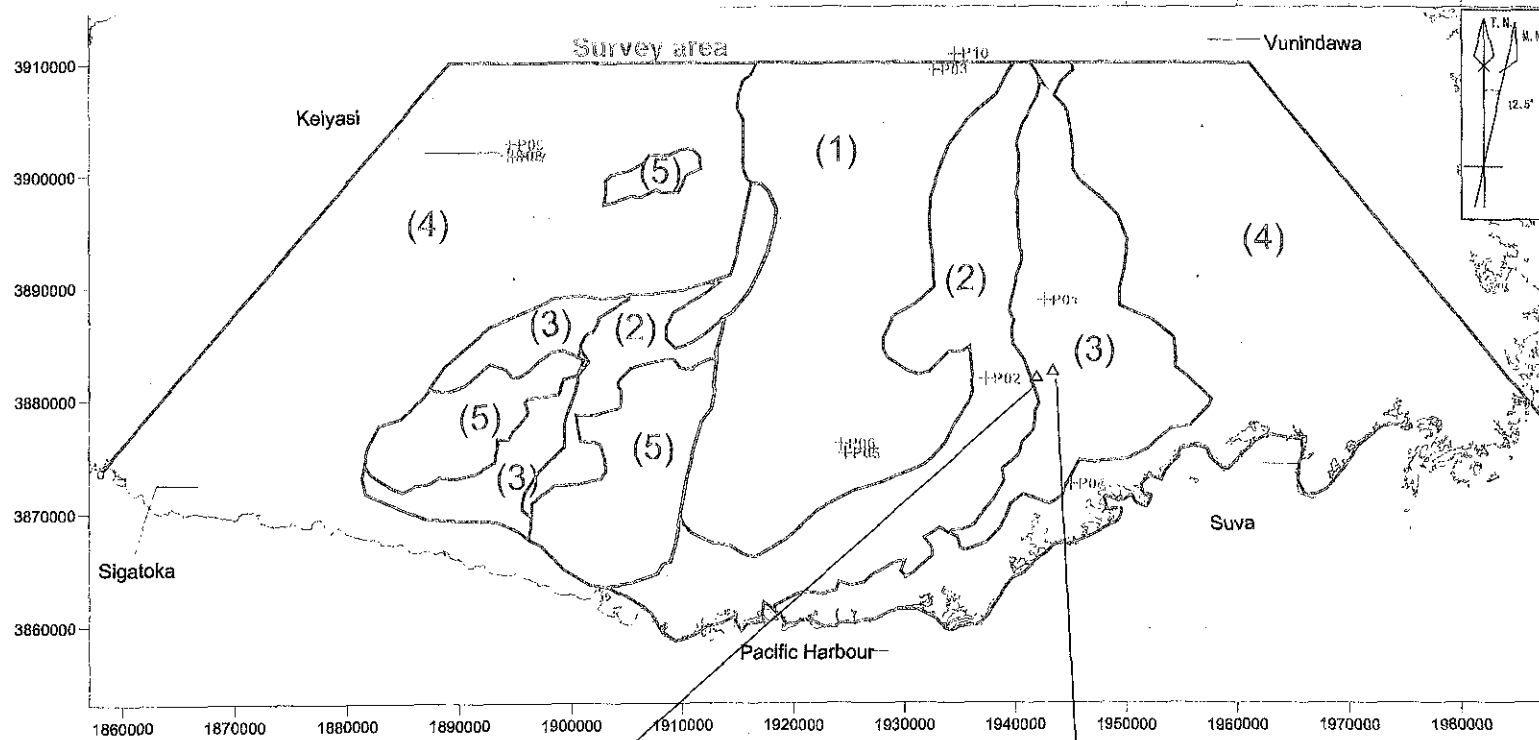
Yavu - old house mound

Hill Fort - fortification common in mountainous or hilly ridges.

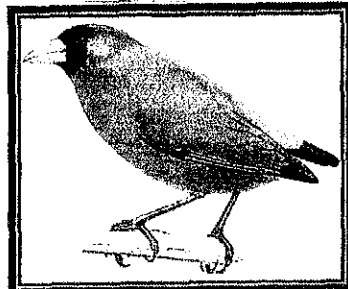
Koromakawa - old Fijian village site.

Appendix 13 Field data and chemical composition of the surface water(wet season)

|     | atomos | water te | pH   | Electric | DO   | Turb | Flow rat | T DS | Hardness | Ca   | Mg   | Na   | K    | CO <sub>3</sub> | HCO <sub>3</sub> | SO <sub>4</sub> | Cl   | B    | Fe   | Se    | Ag     | Al    | As     | Ba    | Cr     | Cu     | Mn    | Mo     | Ni     | Pb     | Sb      | Zn      | Hg      | T-CN   | F     | N(Ammonia) | N(Nitrite) | N(Nitrate) | P     | Sulphide | COD  |      |      |
|-----|--------|----------|------|----------|------|------|----------|------|----------|------|------|------|------|-----------------|------------------|-----------------|------|------|------|-------|--------|-------|--------|-------|--------|--------|-------|--------|--------|--------|---------|---------|---------|--------|-------|------------|------------|------------|-------|----------|------|------|------|
|     | Wet    | Wet      | Wet  | Wet      | Wet  | Wet  | Wet      | mg/L | mg/L     | mg/L | mg/L | mg/L | mg/L | mg/L            | mg/L             | mg/L            | mg/L | mg/L | mg/L | mg/L  | mg/L   | mg/L  | mg/L   | mg/L  | mg/L   | mg/L   | mg/L  | mg/L   | mg/L   | mg/L   | mg/L    | mg/L    | mg/L    | mg/L   | mg/L  | mg/L       | mg/L       | mg/L       | mg/L  | mg/L     | mg/L | mg/L | mg/L |
| 1W  | 29.0   | 27.0     | 7.33 | 5.2      | 8.71 | 9    | 24.433   | 40   | 18       | 5    | 2    | 6    | <1   | <1              | 24               | 3               | 4    | <0.1 | 0.05 | <0.01 | <0.002 | 0.02  | 0.003  | 0.004 | <0.001 | <0.001 | 0.013 | <0.001 | <0.001 | <0.001 | <0.001  | 0.062   | <0.0001 | <0.001 | <0.1  | 0.05       | <0.01      | <0.01      | <0.01 | <0.1     | 3    |      |      |
| 2W  | 29.0   | 27.3     | 7.12 | 5.7      | 7.95 | 7    | 47.15    | 41   | 22       | 6    | 2    | 6    | <1   | <1              | 30               | 3               | 4    | <0.1 | 0.06 | <0.01 | <0.001 | <0.01 | 0.003  | 0.005 | <0.001 | <0.001 | 0.019 | <0.001 | <0.001 | <0.001 | <0.001  | 0.033   | <0.0001 | <0.001 | <0.1  | 0.03       | <0.01      | <0.01      | <0.01 | <0.1     | 3    |      |      |
| 3W  | 28.0   | 26.5     | 6.85 | 5.9      | 7.65 | 15   | 31.668   | 42   | 23       | 6    | 2    | 5    | <1   | <1              | 28               | 4               | 5    | <0.1 | 0.08 | <0.01 | <0.001 | 0.08  | <0.001 | 0.007 | 0.001  | 0.004  | 0.03  | <0.001 | <0.001 | <0.001 | 0.489   | <0.0001 | <0.001  | <0.1   | 0.02  | <0.01      | <0.01      | 0.06       | <0.1  | 2        |      |      |      |
| 4W  | 26.5   | 24.3     | 6.70 | 3.4      | 7.51 | 12   | 0.26     | 53   | 12       | 3    | 1    | 4    | <1   | <1              | 16               | 1               | 5    | <0.1 | 0.14 | <0.01 | <0.001 | 2.27  | 0.003  | 0.005 | 0.1    | 0.004  | 0.005 | <0.001 | 0.007  | 0.013  | <0.001  | 0.008   | <0.0001 | <0.001 | <0.1  | 0.02       | <0.01      | <0.01      | 0.05  | <0.1     | 2    |      |      |
| 5W  | 28.5   | 24.6     | 7.40 | 5.0      | 8.10 | 2    | 0.2      | 31   | 16       | 4    | 1    | 5    | <1   | <1              | 20               | 1               | 5    | <0.1 | 0.05 | <0.01 | <0.001 | 0.03  | <0.001 | 0.008 | <0.001 | 0.001  | 0.002 | <0.001 | <0.001 | 0.003  | <0.001  | 0.003   | <0.0001 | <0.001 | <0.1  | 0.02       | <0.01      | <0.01      | 0.02  | <0.1     | <1   |      |      |
| 6W  | 28.7   | 25.5     | 7.40 | 11.0     | 9.50 | 5    | 1.33     | 64   | 36       | 10   | 3    | 7    | <1   | <1              | 40               | 9               | 5    | 0.1  | 0.05 | <0.01 | <0.001 | <0.01 | 0.002  | 0.007 | <0.001 | <0.001 | 0.011 | <0.001 | <0.001 | <0.001 | <0.001  | 0.002   | <0.0001 | <0.001 | <0.1  | 0.02       | <0.01      | 0.01       | 0.03  | <0.1     | 2    |      |      |
| 7W  | 28.9   | 24.7     | 6.90 | 7.3      | 7.60 | 6    | 1.43     | 47   | 26       | 7    | 2    | 6    | <1   | <1              | 33               | 4               | 5    | <0.1 | 0.07 | <0.01 | <0.001 | 0.03  | <0.001 | 0.004 | <0.001 | <0.001 | 0.009 | <0.001 | <0.001 | <0.001 | <0.001  | 0.009   | <0.0001 | <0.001 | <0.1  | 0.02       | <0.01      | 0.02       | <0.1  | 16       |      |      |      |
| 8W  | 29.0   | 24.6     | 7.00 | 6.2      | 7.60 | 30   | 6.26     | 42   | 23       | 6    | 2    | 6    | <1   | <1              | 30               | 4               | 4    | <0.1 | 0.03 | <0.01 | <0.001 | 0.02  | 0.002  | 0.003 | 0.001  | <0.001 | 0.002 | <0.001 | <0.001 | <0.001 | 0.008   | <0.0001 | <0.001  | <0.1   | 0.01  | <0.01      | <0.01      | 0.03       | <0.1  | 12       |      |      |      |
| 9W  | 31.0   | 25.0     | 5.87 | 4.9      | 6.10 | ?    | 0.79     | 49   | 19       | 5    | 2    | 4    | <1   | <1              | 15               | 7               | 4    | <0.1 | 0.04 | <0.01 | <0.001 | 0.02  | 0.003  | 0.005 | 0.002  | 0.005  | 0.005 | <0.001 | <0.001 | <0.001 | 0.008   | <0.0001 | <0.001  | <0.1   | 0.02  | <0.01      | <0.01      | 0.03       | <0.1  | 5        |      |      |      |
| 10W | 32.0   | 25.2     | 6.20 | 5.6      | 5.30 | 41   | 4.23     | 41   | 22       | 6    | 2    | 5    | <1   | <1              | 29               | 3               | 4    | <0.1 | 0.35 | <0.01 | <0.001 | 0.02  | 0.002  | 0.009 | 0.002  | 0.001  | 0.024 | <0.001 | <0.001 | 0.002  | <0.0001 | <0.001  | <0.1    | 0.02   | <0.01 | <0.01      | 0.03       | <0.1       | 8     |          |      |      |      |
| 11W | 29.0   | 24.8     | 7.64 | 9.8      | 7.86 | 5    | 1.3353   | 53   | 30       | 8    | 3    | 6    | <1   | <1              | 33               | 8               | 5    | <0.1 | 0.05 | <0.01 | <0.002 | <0.01 | 0.001  | 0.005 | <0.001 | 0.001  | 0.005 | <0.001 | <0.001 | <0.001 | 0.076   | <0.0001 | <0.001  | <0.1   | 0.02  | <0.01      | <0.01      | 0.03       | <0.1  | 5        |      |      |      |
| 12W | 35.0   | 25.7     | 4.37 | 4.1      | 7.20 | 1    | 0.77     | 27   | 13       | 3    | 1    | 4    | <1   | <1              | 13               | 3               | 4    | <0.1 | 0.03 | <0.01 | <0.001 | 0.02  | <0.001 | 0.003 | <0.001 | 0.005  | 0.003 | <0.001 | <0.001 | 0.003  | <0.001  | 0.002   | <0.0001 | <0.001 | <0.1  | 0.1        | <0.01      | <0.01      | 0.01  | <0.1     | 5    |      |      |
| 13W | 32.0   | 25.4     | 7.26 | 7.3      | 8.31 | 1    | 0.4814   | 46   | 24       | 6    | 2    | 7    | <1   | <1              | 29               | 6               | 3    | <0.1 | 0.05 | <0.01 | <0.001 | 0.02  | <0.001 | 0.006 | <0.001 | 0.001  | 0.004 | <0.001 | <0.001 | <0.001 | 0.003   | <0.0001 | <0.001  | <0.1   | 0.03  | <0.01      | <0.01      | 0.04       | <0.1  | 9        |      |      |      |
| 14W | 29.5   | 23.0     | 7.35 | 6.5      | 7.88 | 4    | 0.122    | 35   | 21       | 4    | 2    | 7    | <1   | <1              | 25               | 3               | 4    | <0.1 | 0.03 | <0.01 | <0.001 | 0.01  | 0.001  | 0.006 | 0.001  | 0.001  | 0.003 | <0.001 | <0.001 | <0.001 | 0.003   | <0.0001 | <0.001  | <0.1   | 0.03  | <0.01      | <0.01      | 0.04       | <0.1  | 2        |      |      |      |
| 15W | 25.0   | 22.2     | 7.05 | 9.4      | 8.32 | 45   | 0.3287   | 45   | 24       | 6    | 2    | 6    | <1   | <1              | 23               | 9               | 4    | <0.1 | 3.37 | <0.01 | <0.001 | 2.8   | 0.004  | 0.02  | <0.001 | 0.037  | 0.098 | <0.001 | 0.001  | 0.003  | <0.001  | 0.241   | <0.0001 | <0.001 | <0.1  | 0.02       | <0.01      | <0.01      | 0.13  | <0.1     | 7    |      |      |
| 16W | 26.0   | 24.2     | 7.43 | 8.1      | 8.11 | 0    | 0.872    | 45   | 24       | 6    | 2    | 6    | <1   | <1              | 26               | 7               | 3    | <0.1 | 0.05 | <0.01 | <0.001 | <0.01 | 0.003  | 0.007 | <0.001 | <0.001 | 0.009 | <0.001 | <0.001 | <0.001 | 0.288   | <0.0001 | <0.001  | <0.1   | 0.02  | <0.01      | <0.01      | 0.01       | <0.1  | 5        |      |      |      |
| 17W | 27.0   | 24.0     | 7.70 | 4.6      | 7.80 | 2    | 0.5638   | 33   | 16       | 4    | 1    | 5    | <1   | <1              | 26               | <1              | 4    | <0.1 | 0.01 | <0.01 | <0.001 | 0.03  | 0.001  | 0.009 | 0.008  | <0.001 | 0.001 | 0.001  | <0.001 | 0.002  | <0.001  | 0.003   | <0.0001 | <0.001 | <0.1  | 0.01       | <0.01      | <0.01      | <0.01 | <0.1     | 8    |      |      |
| 18W | 29.0   | 26.4     | 7.86 | 8.8      | 7.34 | 3    | 1.2066   | 53   | 30       | 7    | 3    | 8    | <1   | <1              | 39               | 5               | 4    | <0.1 | 0.11 | <0.01 | <0.001 | 0.01  | 0.002  | 0.001 | <0.001 | 0.001  | 0.011 | <0.001 | <0.001 | 0.021  | <0.0001 | <0.001  | <0.1    | 0.02   | <0.01 | <0.01      | 0.01       | <0.1       | 17    |          |      |      |      |
| 19W | 30.0   | 26.9     | 7.89 | 9.7      | 7.40 | 2    | 7.8954   | 55   | 32       | 8    | 3    | 7    | <1   | <1              | 43               | 3               | 4    | <0.1 | 0.04 | <0.01 | <0.001 | 0.03  | 0.002  | 0.001 | <0.001 | <0.001 | 0.004 | <0.001 | <0.001 | 0.015  | <0.0001 | <0.001  | <0.1    | 0.02   | <0.01 | <0.01      | 0.02       | <0.1       | 11    |          |      |      |      |
| 20W | 29.0   | 24.1     | 7.94 | 9.9      | 7.62 | 2    | 2.7184   | 62   | 37       | 10   | 3    | 8    | <1   | <1              | 47               | 3               | <1   | <0.1 | 0.02 | <0.01 | <0.001 | 0.03  | 0.003  | 0.008 | <0.001 | 0.002  | 0.002 | <0.001 | <0.001 | 0.003  | <0.0001 | <0.001  | 0.1     | 0.02   | <0.01 | <0.01      | 0.07       | 0.03       | <0.1  | 12       |      |      |      |
| 21W | 30.0   | 25.0     | 7.57 | 7.0      | 7.59 | 1    | 2.1453   | 42   | 23       | 5    | 2    | 7    | <1   | <1              | 33               | 2               | 2    | <0.1 | 0.04 | <0.01 | 0.003  | <0.01 | 0.004  | 0.001 | <0.001 | <0.001 | 0.002 | <0.001 | <0.001 | <0.001 | 0.037   | <0.0001 | <0.001  | <0.1   | 0.02  | <0.01      | <0.01      | 0.01       | <0.1  | 3        |      |      |      |
| 22W | 28.0   | 26.1     | 7.83 | 8.3      | 7.43 | 2    | 7.5253   | 64   | 32       | 8    | 3    | 8    | <1   | <1              | 42               | 3               | 3    | <0.1 | 0.02 | <0.01 | <0.001 | <0.01 | 0.002  | 0.002 | <0.001 | <0.001 | 0.003 | <0.001 | <0.001 | 0.015  | <0.0001 | <0.001  | <0.1    | 0.01   | <0.01 | <0.01      | <0.01      | <0.1       | 9     |          |      |      |      |
| 23W | 29.0   | 24.2     | 7.90 | 11.1     | 9.70 | 44   | 29.1     | 86   | 40       | 10   | 4    | 6    | <1   | <1              | 49               | 2               | 4    | <0.1 | 0.05 | <0.01 | <0.001 | 0.02  | 0.002  | 0.002 | <0.001 | <0.001 | 0.017 | <0.001 | <0.001 | 0.002  | <0.0001 | <0.001  | <0.1    | 0.02   | <0.01 | 0.01       | 0.02       | <0.1       | 26    |          |      |      |      |
| 24W | 29.0   | 24.3     | 7.81 | 8.9      | 8.70 | 50   | 43.7     | 66   | 39       | 10   | 4    | 7    | <1   | <1              | 48               | 2               | 3    | <0.1 | 0.1  | <0.01 | <0.001 | 0.51  | 0.002  | 0.002 | 0.15   | 0.002  | 0.017 | <0.001 | 0.008  | <0.001 | 0.003   | <0.0001 | <0.001  | <0.1   | 0.02  | <0.01      | 0.03       | 0.03       | <0.1  | 19       |      |      |      |
| 25W | 26.0   | 24.3     | 7.65 | 7.1      | 8.12 | 97   | 142.47   | 55   | 31       | 7    | 3    | 6    | <1   | <1              | 28               | 13              | 2    | <0.1 | 0.09 | <0.01 | <0.001 | 0.1   | 0.002  | 0.004 | 0.002  | 0.001  | 0.018 | <0.001 | 0.003  | 0.002  | <0.001  | 0.053   | <0.0001 | <0.001 | <0.1  | 0.03       | <0.01      | <0.01      | 0.05  | <0.1     | 23   |      |      |
| 26W | 25.0   | 23.7     | 7.79 | 6.8      | 8.41 | 70   | 18.564   | 50   | 30       | 7    | 3    | 5    | <1   | <1              | 38               | 2               | 1    | <0.1 | 2.48 | <0.01 | <0.001 | 2.36  | 0.002  | 0.008 | 0.003  | 0.004  | 0.087 | <0.001 | 0.004  | 0.005  | <0.001  | 0.087   | <0.0001 | <0.001 | <0.1  | 0.02       | <0.01      | 0.04       | 0.07  | <0.1     | 16   |      |      |
| 27W | 27.0   | 23.9     | 7.74 | 7.0      | 8.26 | 93   | 106.28   | 52   | 30       | 7    | 3    | 6    | <1   | <1              | 28               | 10              | 3    | 0.2  | 0.19 | <0.01 | <0.001 | 0.75  | 0.006  | 0.003 | 0.18   | 0.002  | 0.014 | <0.001 | 0.009  | 0.028  | <0.001  | 0.134   | <0.0001 | <0.001 | <0.1  | 0.02       | <0.01      | 0.09       | 0.04  | <0.1     | 33   |      |      |
| 28W | 25.0   | 23.0     | 7.73 | 9.1      | 8.09 | 12   | 26.928   | 66   | 41       | 9    | 4    | 7    | <1   | <1              | 52               | 2               | 3    | 0.2  | 0.06 | <0.01 | <0.001 | 0.04  | 0.002  | 0.002 | 0.004  | 0.001  | 0.007 | <0.001 | <0.001 | <0.001 | 0.11    | <0.0001 | <0.001  | <0.1   | 0.02  | <0.01      | 0.03       | 0.01       | <0.1  | 6        |      |      |      |
| 29W | 27.0   | 24.2     | 7.65 | 9.8      | 7.69 | 13   | 9.4352   | 74   | 46       | 11   | 5    | 7    | <1   | <1              | 57               | 2               | 4    | 0.2  | 0.04 | <0.01 | <0.001 | 0.02  | <0.001 | 0.002 | <0.001 | 0.001  | 0.006 | <0.001 | <0.001 | 0.02   | <0.0001 | <0.001  | <0.1    | 0.02   | <0.01 | 0.03       | 0.04       | <0.1       | 2     |          |      |      |      |
| 30W | 27.0   | 24.3     | 7.58 | 7.7      | 7.96 | 2    | 0.7527   | 55   | 29       | 5    | 4    | 8    | <1   | <1              | 32               | 7               | 7    | <0.1 | 0.02 | <0.01 | <0.001 | 0.06  | 0.002  | 0.001 | 0.005  | <0.001 | 0.003 | <0.001 | <0.001 | 0.038  | <0.0001 | <0.001  | <0.1    | 0.02   | <0.01 | <0.01      | <0.01      | <0.1       | 2     |          |      |      |      |
| 31W | 27.0   | 24.3     | 7.28 | 7.4      | 8.09 | 5    | 1.3331   | 50   | 31       | 7    | 3    | 5    | <1   | <1              | 37               | 2               | <1   | 0.1  | 0.07 |       |        |       |        |       |        |        |       |        |        |        |         |         |         |        |       |            |            |            |       |          |      |      |      |



- (1) Upland rain forest cloud forest  
Lowland rain forest
- (2) Lowland rain forest
- (3) Grassland vegetation
- (4) Fresh water werland vegetation
- (5) Cloud



Pink-billed Parrotfinch  
(*Enythrura kleinschmidti*)

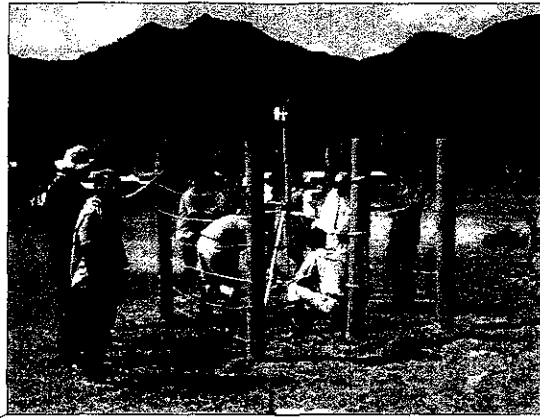


Fotified skink  
(*Emoia mokosariniveikan*)

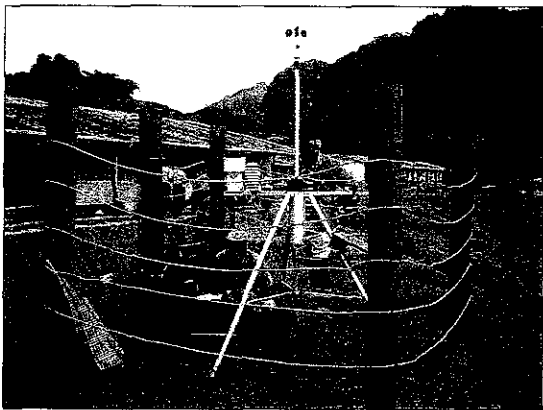
Appendix 14 Vegetation distribution map of the survey area indicating the location of fauna and flora survey.







Setting weather station

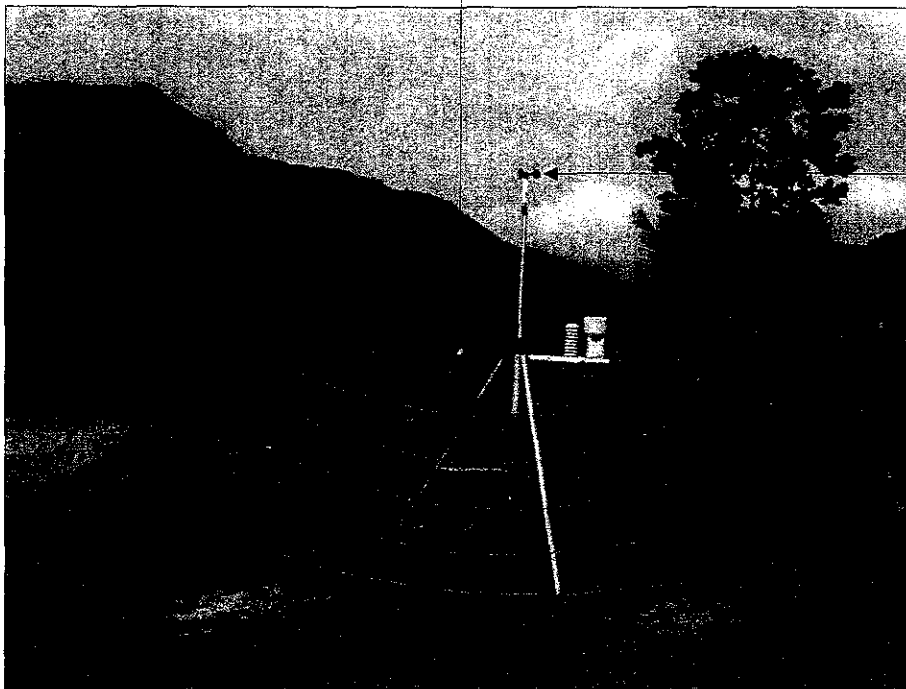


Downloading the meteorological data



Wind direction meter

Solar radiation meter



Solar panel

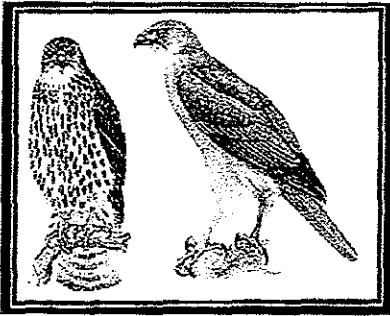
Anemometer

Rain gauge

Hygrometer  
Thermometer

PH-1 Weather station set in Namosi village

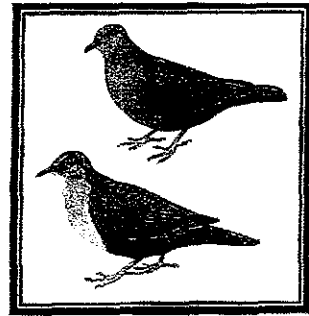
Photographs



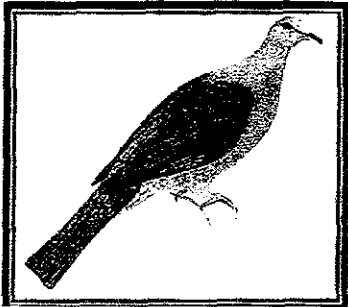
Accipiter rufitorques (Left)  
Circus approximans (Right)



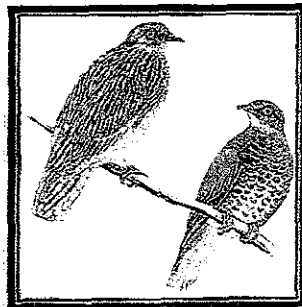
Falco peregrinus



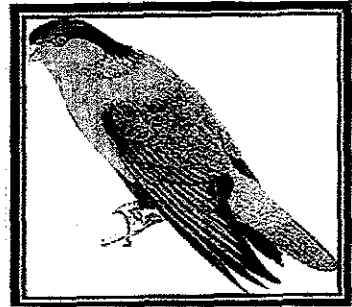
Streptopelia chinensis (Top)  
Gallicolumba stairii (Bottom)



Ducula latrans



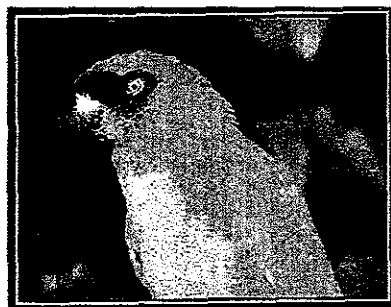
Ptilinopus perousii (Left)  
Chrysoenas luteovirens (Right)



Phigys solitarius



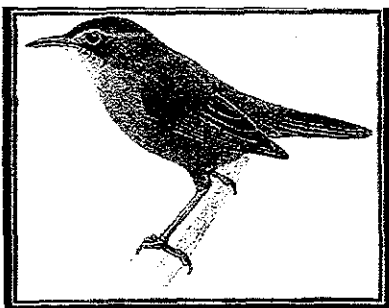
Chamosyna amabilis



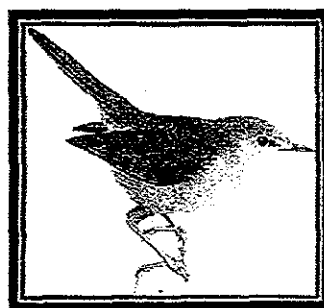
Prosopeia personata



Artamus mentalis



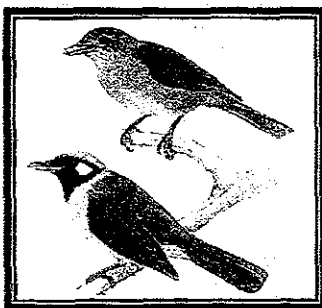
Trichocichla rufa



Cettia ruficapilla



Mayrornis lessoni



Myiagra nigrigularis (Top)  
Myiagra vanikorensis (Bottom)

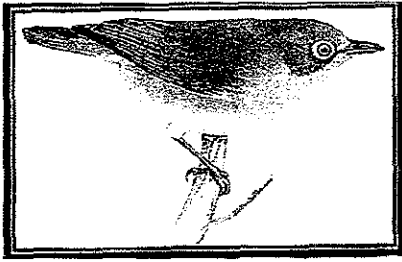


Myiagra azureocapilla

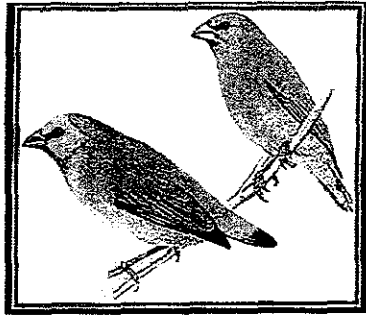


Pachycephala pectoralis

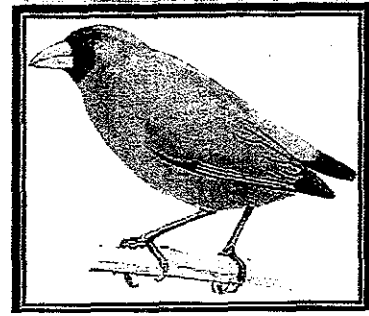
Photographs



Zosterops explorer



Zosterops Lateralis (Left)  
Erythrura pealii (Right)



Erythrura kleinschmidti



Gymnomyza viridis

Photographs



*Candoia bibronii*



*Ogmodon vitiensis*



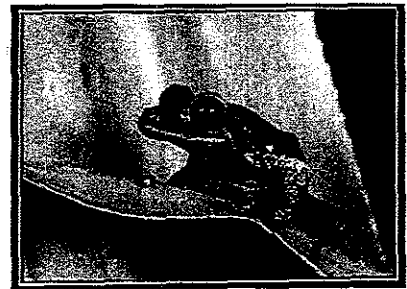
*Lepidodactylus manni*



Unidentified Skink— possibly *E  
moia mokosariniveikau*



*Emoia parkeri*



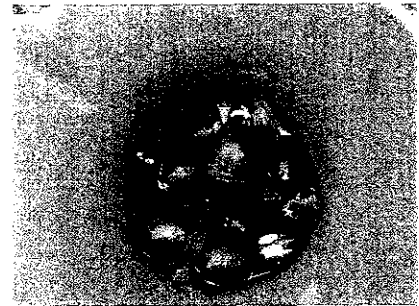
*Bufo marinus*



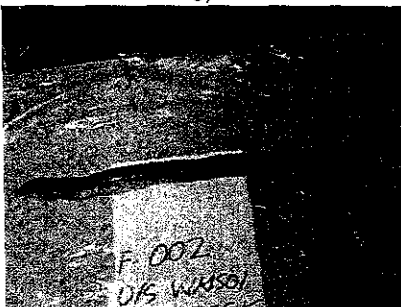
*Platymantis vitiensis* (endemi  
c)



*Notopteris macdonaldi*



*Batissa violacea*



*Anguilla marmorata*



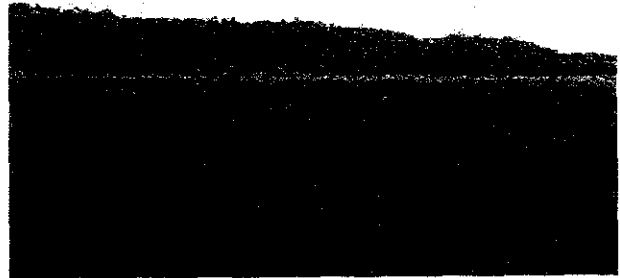
(1). Smaller island vegetation(Nasoata Island)



01a. Coastal strand vegetation



01b. Mangrove stand on a small Island



04b. Melimeli swamp, Namosi



04a. Rewa River mangrove forest



05a. Gymnostoma\_Dacrydium dominated forest near Wainiqanake,Namosi

PH-3 Photographs of the principal flora in Viti Levu South Area (1)



05b. Lowland rain forest.(Pandanus-Dacrydium-Fragraea dominated forest in Waisoi, Namosi)



05c. Pandanus-Dacrydium-Fragraea dominated forest in Waisoi, Namosi



05d. Lowland rain forest(Peak south of Wainikatama Camp)



05e. Lowland rain forest(Forest in the Waikava Catchment)



05f. Lowland rain forest(Forest in the Waikava Catchment)

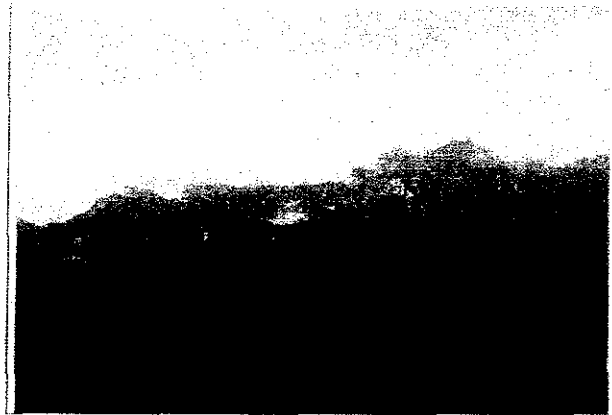


05g Lowland rain forest(Wainikatama Camp)

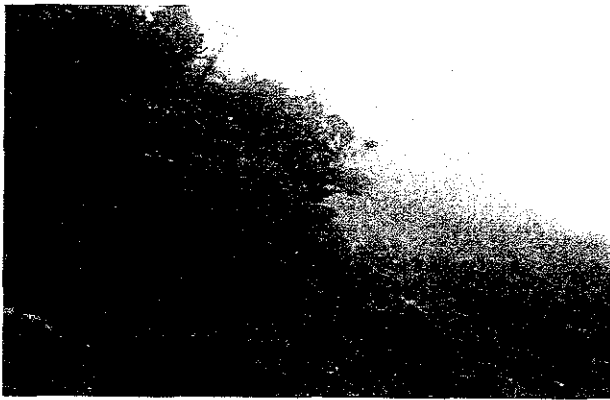
PH-3 Photographs of the principal flora in Viti Levu South Area (2)



06a. Upland rain forest(Korobasabasaga Range)



06b. Upland rain forest(Korobasabasaga Range)



07. Montane cloud forest Korobasabasaga range, Namosi



08a. Gully forest in grassland vegetation, near Yalavou, Navosa



08b. Gully forest in grassland vegetation, near Yalavou, Navosa

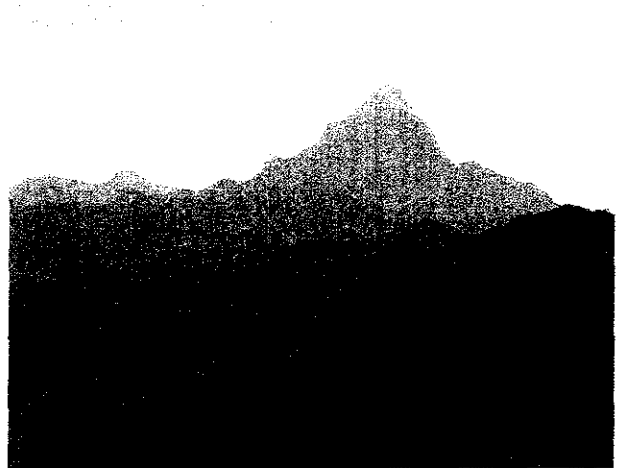


09. One of the few remaining natural sago (*Metroxylon vitiense*) palm swamp near Vunivia village, Serua - South Viti Levu.

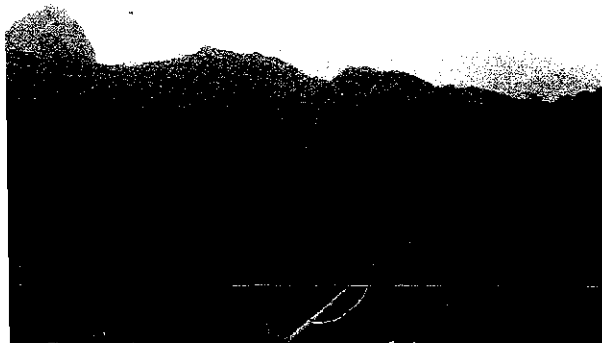




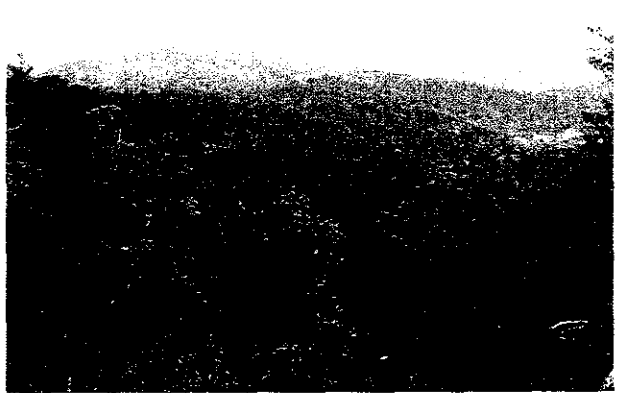
10



11. Intact Forest system to the east Mt. Nauluvatu in Naitasiri Province



12. Mt. Voma and the Korobasabasaga range in the background—areas of high biodiversity



13. View towards drill site 4



4. View through a creek flat forest near Wainavuga base camp

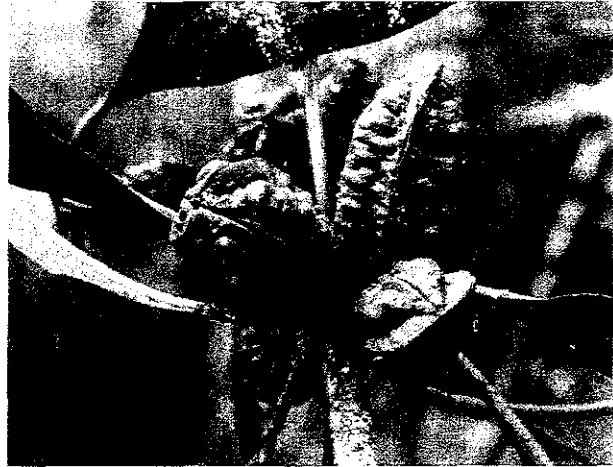


15. Profile structure of a creek flat forest at Wainavuga camp site

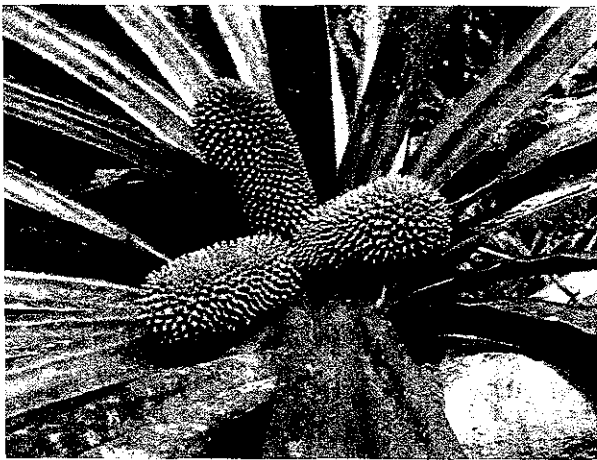
PH-3 Photographs of the principal flora in Viti Levu South Area (4)



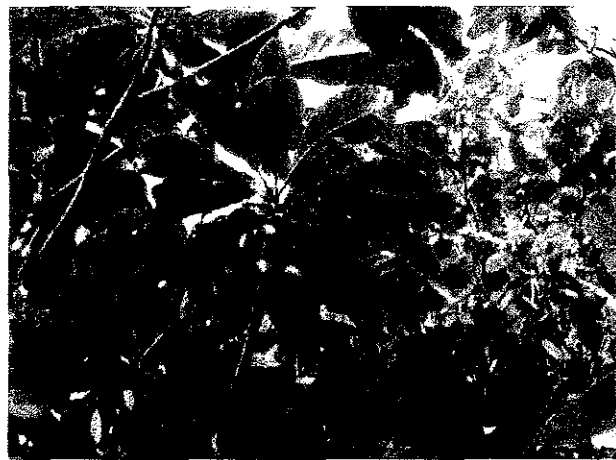
16. Agathis – Dacrydium dominated forest on a high elevation



17. Pittosporum rhytidocarpum– It is a shrub, endemic sub-canopy tree



18. Freycinetia impervida– An indigenous climbing liana belonging to the Pandanus family and common in all forest types



19. Palaquium porphyreum– An endemic canopy tree and also an important timber tree



20. Schefflera seemanniana– An endemic sub-canopy tree in the umbrella tree family



21. Parinari insularum– It is an indigenous canopy tree dominant on creek/river flats with a sweet smelling fruit



22. *Syzygium gracillipes* – An endemic sub-canopy shrub



23. *Richella monosperma* – A relatively common endemic



24. *Calanthe ventilabrum* – An indigenous common orchid



25. *Macaranga magna* – An endemic common subcanopy tree



26. *Baccaurea pulvinata* – Common endemic sub-canopy tree



27. *Alpinia boia* – An endemic common widespread large ginger plant

PH-3 Photographs of the principal flora in Viti Levu South Area (6)



28. *Myristica castaneifolia* - A very common endemic important timber tree



29. *Trichospermum calyculatum* - An endemic common timber tree species



30. *Melicope vitiensis* - An endemic uncommon sub-canopy tree



31. *Psychotria brownei* - An endemic sub-canopy tree



32. *Pleandra insolita* - An endemic, common sub-canopy tree



33. *Sukania longipes* - An endemic uncommon subcanopy tree



34. *Palaquim porphyreum* – An uncommon canopy timber tree



35. *Turrillia ferruginea* – A very common endemic tree



36. *Microsorium linguaeforme*



37. *Ixora carewii* – An endemic sub-canopy tree



38. *Astronidium saulae* – An endemic sub-canopy tree common



39. *Hoya diptera* – An endemic uncommon climber

PH-3 Photographs of the principal flora in Viti Levu South Area (8)



40. *Freycinetia impavida* – An endemic locally common plant with



41. *Pandanus sinicola*



42. *Maesa insularis* – An endemic scandent shrub



43. *Mussaenda raiateensis* – An endemic common shrub



44. *Elaeocarpus chionathus* – An endemic and rare sub-canopy tree



45. *Cynorkis fastigiata*

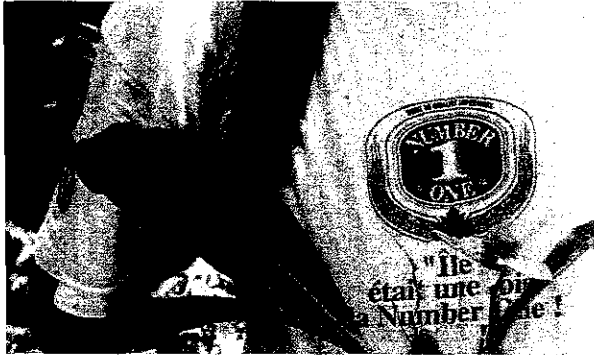
PH-3 Photographs of the principal flora in Viti Levu South Area (9)



46. *Veitchia vitiensis* – An endemic



47. *Hydnophytum longiflorum* – An endemic common epiphyte



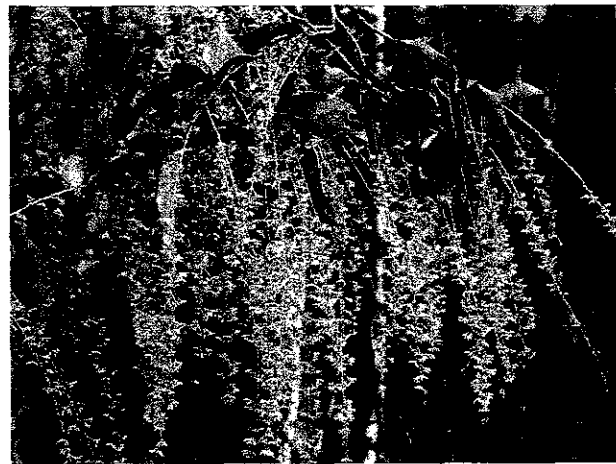
48. *Coelogyne macdonaldii*



49. *Podocarpus neriifolius* – Indigenous common important timber tree

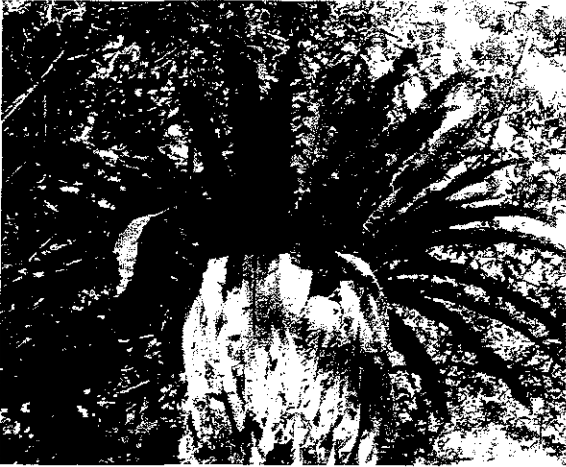


50. *Acalypha rivularis* – An endemic locally common plant



51. *Homalium nitens* – An endemic common sub-canopy tree

PH-3 Photographs of the principal flora in Viti Levu South Area (10)



52. *Asplenium australasicum* – An indigenous common epiphyte



54. *Collospermum montana* – An endemic common plant



55. *Elatostema humile* – An endemic rare herbaceous shrub



56. *Astronidium robustum* – An endemic locally common plant



57. *Cyathea harvei* – An indigenous tree fern with redundant fronds

PH-3 Photographs of the principal flora in Viti Levu South Area (11)