

Food Plants in Fiji and Their Utilization

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This is a note on the food plants produced in Fiji, including wild edible ones, and on their utilization in Fiji.

The food plants in Fiji were picked up from the literatures^{2,5,6,7)}, and several species were identified at the First Scientific Survey of the South Pacific by Kagoshima University. Some of them were native to Fiji, and the others were introduced, escaped or naturalized. For convenience, these food plants were classified into grain crops, oil crops, sugar crops, beverage crops, vegetable fruits (cucurbitaceous fruits, solanaceous fruits, other vegetable fruits), leguminous crops, root crops, Alliums, potherbs, cole crops, salad crops, ferns, fruit trees, herbs and spices.

Regardless of its yield, any kind of food plants in Fiji was listed here. Moreover, supply source of each crop for domestic consumption was supplemented, in other words, it was supplemented whether the food product of each crop was imported besides those of the domestic cultivation. The frequency of use, the edible parts, and cookery of the food plants were also supplemented.

The kinds and utilization of the food plants in Fiji are shown in Table 1. The botanical names in Table 1 were mainly based on those of 'Plants of the Fiji Islands⁷⁾.' The names of the food plants in Table 1 are those called commonly in Fiji. When the origins of these names are clear, the Hindustani names or the Fijian names were marked with (H) or (F), respectively.

1) Grain, oil, sugar, and beverage crops

In Fiji, the majority of the people are indigenous Fijians and Indians. Rice is grown and consumed by Indians traditionally (Fig. 1). The first of the Indians came from India to Fiji as indentured labourers in 1879, and then rice was introduced into Fiji in about 1902.

Sugarcane is the most important crop in Fiji, because it is the leading export item from Fiji. The commercial cultivation of sugarcane in Fiji began in the 1870's.

Cocoa is not a major crop, but it will become more important in Fiji because the improved cultivars are increasing in area under cultivation²⁾. Kava, *Piper methysticum*, is a small woody plant (Fig. 2), and the most traditional drink in Fiji is made from its roots. Indigenous Fijians did not have any alcoholic drink, and this kava drink appeared to be substituted for the alcoholic drink. This is always drunk at the ceremonies or at the formal greetings among the Fijians. Kava is called yaqona among Fijians, and it stands sixth of all the agricultural crops as regards area under cultivation in Fiji (Table 2).

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Table 1. Kinds and utilization of the food plants produced in Fiji.

| Botanical name | Name | S/F* | Edible part | Cookery |
|--|---------------------------|--------|-------------|-------------------|
| Grain Crops | | | | |
| <i>Oryza sativa</i> L. | Rice, Dhan | G/A | Grain | Boil |
| <i>Triticum aestivum</i> L. | Wheat | I/A | Grain | Bake |
| <i>Zea mays</i> L. | Maize | G, I/A | Grain | Boil, Bake, Roast |
| <i>Avena sativa</i> L. | Oat, Jai | /D | Grain | |
| <i>Eleusine coracana</i> (L.) Gaertn. | African millet, Finger m. | /D | Grain | |
| <i>Eragrostis abyssinica</i> Schrad. | Tef | /D | Grain | |
| <i>Coix lacryma-jobi</i> L. | Job's tear, Sila | /D | Grain | |
| <i>Sorghum bicolor</i> (L.) Moench | Sorghum | /D | Grain | |
| Oil Crops | | | | |
| <i>Elaeis guineensis</i> Jacq. | Oil palm | /D | Fruit | |
| <i>Gossypium arboreum</i> L. | Cotton | /D | Seed | |
| <i>G. barbadense</i> L. var. <i>barbadense</i> | Cotton | /D | Seed | |
| <i>G. hirsutum</i> L. var. <i>hirsutum</i> | Vauvau ni vavalagi (F) | /D | Seed | |
| <i>Cannabis sativa</i> L. | Indian hemp | /D | Seed | |
| <i>Helianthus annuus</i> L. | Sunflower | /D | Seed | |
| <i>Ricinus communis</i> L. | Caster oil, Caster bean | /D | Seed | |
| Sugar Crops and Sago | | | | |

| Botanical name | Name | S/F* | Edible part | Cookery |
|--|------------------|------|---------------------------------|------------------|
| <i>Saccharum officinarum</i> L. | Sugarcane | G/A | Stem, (Sugar) | |
| <i>Caryota urens</i> L. | Toddy palm | G/C | Sap from unopened inflorescence | Drink |
| <i>Metroxylon vitense</i> (H. Wendl.) Benth. & Hook f. | Sago | G/B | Starch in trunk | Fry |
| Beverage Crops | | | | |
| <i>Coffea arabica</i> L. | Arabian coffee | I/A | Bean | Drink |
| <i>C. canephora</i> Pierre ex Froehn | Robusta coffee | I/A | Bean | Drink |
| <i>C. liberica</i> Hiern | Liberian coffee | I/A | Bean | Drink |
| <i>Theobroma cacao</i> L. | Cocoa, Cacao | I/A | Bean | Drink |
| <i>Thea sinensis</i> L. | Tea | I/A | Young leaf | Drink |
| <i>Piper methysticum</i> Forst. f. | Yaqona (F), Kava | G/A | Root | Ceremonial drink |
| <i>Cymbopogon coloratus</i> Stapf | Lemon grass | G/C | Leaf | Drink |
| Vegetable Fruits | | | | |
| Cucurbitaceous Fruits | | | | |
| <i>Cucumis melo</i> L. | Melon | G/B | Fruit | Raw |
| <i>C. sativus</i> L. | Cucumber | G/A | Fruit | Raw |
| <i>Citrullus vulgaris</i> Schrad. | Watermelon | G/A | Fruit | Raw |
| <i>Cucurbita maxima</i> Duch. | Squash | G/A | Fruit | Fry, Boil |
| <i>C. moschata</i> Duch. | | | | |

| Botanical name | Name | S/F* | Edible part | Cookery |
|--|-------------------------------|------|-------------|-------------------|
| <i>C. pepo</i> L. | Pumpkin, Vegetable marrow | G/A | Fruit | Fry, Boil |
| <i>Luffa cylindrica</i> Roem. | Vegetable sponge, Loofah | G/A | Fruit | Fry |
| <i>Lagenaria vulgaris</i> Ser. | Gourd, Vago (F), Lauki (H) | G/A | Fruit | Fry |
| <i>Momordica charantia</i> L. | Karala (H), Bittergourd | G/A | Fruit | Fry, Pickle |
| <i>Trichosanthes anguina</i> L. | Snake gourd | G/A | Fruit | Fry |
| <i>Benincasa cerifera</i> Savi | Wax gourd | G/B | Fruit | Fry |
| <i>Sechium edule</i> Swartz | Choko, Sumsum | G/B | Fruit | Fry |
| Solanaceous Fruits | | | | |
| <i>Lycopersicum esculentum</i> Mill. | Tomato | G/A | Fruit | Raw, Fry, Chutney |
| <i>Solanum melongena</i> L. | Eggplant | G/A | Fruit | Fry, Boil |
| <i>S. repandum</i> Forst. | Sou (F) | G/C | Fruit | Sauce |
| <i>S. uporo</i> Dunal | Sou bokola (F), Boro dina (F) | G/A | Fruit | |
| <i>Capsicum annuum</i> L. var. <i>annuum</i> | Hot pepper, Chilli, Boro (F) | G/A | Fruit | Raw, Fry, Pickle |
| <i>C. a. var. acuminatum</i> Fingerh. | Long cayenne | G/A | Fruit | Raw, Fry, Pickle |
| <i>C. a. var. cerasiforme</i> Irish | Cherry pepper | G/B | Fruit | Raw |
| <i>C. a. var. grossum</i> Sendt. | Sweet pepper | | | |
| <i>C. a. var. longum</i> Sendt. | Green chilli | G/A | Fruit | Raw, Fry, Pickle |
| <i>C. frutescens</i> L. | Bird's eye chili, Mircha (H) | G/A | Fruit | Raw, Fry, Pickle |
| <i>Physalis minima</i> L. | | G/ | | |
| <i>P. peruviana</i> L. | Cape gooseberry | G/D | | |
| Other Vegetable Fruits | | | | |

| Botanical name | Name | S/F* | Edible part | Cookery |
|---|-------------------------------|--------|-----------------|-------------------|
| <i>Abelmoschus esculentus</i> Moench | Okra, Bindi (H) | G/A | Fruit | Fry |
| <i>Moringa oleifera</i> Lam. | Horse radish tree, Saijan (H) | G/A | Leaf, Fruit | Fry, Boil |
| <i>Fragaria vesca</i> L. | Strawberry | | | |
| <i>Sesamum indicum</i> L. | Sesame, Til (H) | I/B | Seed | Roast |
| <i>Zea mays</i> L. var. <i>saccharata</i> | Sweet corn | G/A | Unripe seed | Boil, Roast, Bake |
| <i>Saccharum edule</i> L. | Duruka (F) | G/A | Unopened flower | Boil, Fry |
| <i>Chrysanthemum morifolium</i> Ramat. | | I/D | Flower, Leaf | |
| Leguminous Crops | | | | |
| <i>Cajanus cajan</i> Millsp. | Pigeon pea, Dahl | G, I/A | Seed | Boil, Fry, Soup |
| <i>Cicer arietinum</i> L. | Chick pea, Gram | I/B | Seed | Fry, Boil |
| <i>Canavalia ensiformis</i> DC. | Sword bean, Jack bean | G/B | Young Pod, Seed | Fry |
| <i>Cyamopsis psoraloides</i> DC. | Cluster bean, Guar (H) | G/B | Young Pod, Seed | Fry |
| <i>Dolichos lablab</i> L. | Hyacinth bean, Toba (F) | G/B | Young pod, Seed | Fry |
| <i>Glycine max</i> (L.) Merrill | Soybean | I/A | Oil from seed | Cooking oil |
| <i>Lens esculenta</i> Moench | Lentil | I/ | | Soup |
| <i>Phaseolus lunatus</i> L. | Lima bean, Sem | G/B | Young Pod, Seed | Fry |
| <i>P. mungo</i> L. | Black gram, Urd (H) | G/A | Seed | Boil, Fry |
| <i>P. aureus</i> Roxb. | Green gram, Mung | G/A | Seed | Boil, Fry |
| <i>P. calcaratus</i> Roxb. | Rice bean | G/D | | |
| <i>P. aconitifolius</i> Jacq. | Moth bean | G/ | | |
| <i>P. vulgare</i> L. | French bean, Kidney bean | G, I/A | Young Pod | Fry, Boil |
| <i>P. coccineus</i> L. | Scarlet runner bean | G, I/ | | |

| Botanical name | Name | S/F* | Edible part | Cookery |
|--|-------------------------------|--------|----------------------|------------------------|
| <i>Psophocarpus tetragonolobus</i> DC. | Goa bean, Winged bean | G/B | Young Pod | Fry |
| <i>Vigna sinensis</i> Savi | Cowpea | G/A | Young Pod, Seed | Fry, Boil |
| <i>V. sesquipedalis</i> (L.) Fruw. | Long bean | G/A | Young Pod | Fry, Boil |
| <i>Arachis hypogaea</i> L. | Peanut, Ground nut | G/A | Seed, Seed oil | Fry, Boil, Roast |
| <i>Vicia fava</i> L. | Broad bean | G/A | Young pod, Seed | Fry, Cook |
| <i>Pisum sativum</i> L. | Green pea, Mattar (H) | G, I/A | Seed | Fry, Boil |
| Root Crops | | | | |
| <i>Pueraria thunbergiana</i> Benth. | Wa yaka | /D | | |
| <i>Alocasia indica</i> Schott | Via Mila (F) | G/B | Tuber | Boil |
| <i>Colocasia esculenta</i> Schott | Dalo (F) | G/A | Tuber, Leaf (rourou) | Boil, Fry, Lovo, Curry |
| <i>Cyrtosperma chamissonis</i> Merrill | Via kana (F) | G/B | Tuber | Boil, Lovo, Curry |
| <i>Xanthosoma sagittifolium</i> Schott | Dalo ni Tana (F) | G/A | Tuber | Boil, Lovo, Curry |
| <i>Dioscorea alata</i> L. | Yam | G/A | Tuber | Boil, Lovo, Curry, Fry |
| <i>D. bulbifera</i> L. | Kaile (F) | G/B | Tuber | Boil, Lovo |
| <i>D. esculenta</i> Burkill | Kawai (F) | G/A | Tuber | Boil, Lovo |
| <i>D. nummularia</i> Lamk. | Tivoli (F) | G/A | Tuber | Boil, Lovo |
| <i>D. pentaphylla</i> L. | Bulou (F), Kaile tokatolu (F) | G/C | Tuber | Boil, Lovo |
| <i>Ipomoea batatas</i> Lam. | Kumala (F), Sweet potato | G/A | Tuber | Boil, Lovo |
| <i>Manihot utilisima</i> Phol. | Cassava, Tapioca | G/A | Tuber | Boil, Lovo, Fry |
| <i>Tacca pinnatifida</i> Forst. | Yabia (F) | /D | Tuber | |

| Botanical name | Name | S/F* | Edible part | Cookery |
|--|-----------------------|--------|-------------|---------------------------------------|
| <i>Solanum tuberosum</i> L. | Potato | G, I/A | Tuber | Boil, Fry |
| <i>Maranta arundinacea</i> L. | West Indian arrowroot | /D | | |
| <i>Zingiber officinale</i> Roscoe | Ginger | G/A | Rhizome | Condiment |
| <i>Curcuma longa</i> L. | Turmeric | G/A | Rhizome | Food colouring |
| <i>Pachyrhizus erosus</i> Urban | Yam bean, Wakaya (F) | | | |
| <i>Cordyline terminalis</i> Kunth | Masave (F) | /D | | |
| <i>Amorphophallus campanulatus</i> Blume | Daiga (F), Suran | G/B | Tuber | Fry |
| <i>Raphanus sativus</i> L. | Radish | G/A | Tuber, Leaf | Raw, Fry |
| <i>Daucus carota</i> L. | Carrot | G, I/A | Tuber | Raw |
| Alliums | | | | |
| <i>Allium ascalonicum</i> L. | Shallot | G, I/B | Leaf | Raw |
| <i>A. cepa</i> L. | Onion | G, I/A | Bulb | Raw, Fry, Added for flavour, Boil |
| <i>A. fistulosum</i> L. | Spring onion | G, I/B | Leaf | Raw |
| <i>A. sativum</i> L. | Garlic | G, I/A | Bulb | Added in food preparation for flavour |
| Potherbs | | | | |
| <i>Spinacia oleracea</i> L. | Spinach | G, I/D | Leaf | |
| <i>Abelmoschus manihot</i> Medic. | Bele (F), Vauvau (F) | G/A | Leaf | Boil, Fry |
| <i>Hibiscus sabdariffa</i> L. | Roselle | G/B | Leaf | Fry, Curry |

| Botanical name | Name | S/F* | Edible part | Cookery |
|--|-------------------------------|--------|-------------|-------------------|
| <i>Amaranthus paniculatus</i> L. | Marsa (H) | G/D | | Curry |
| <i>A. spinosus</i> L. | Spiny amaranthus | /D | | |
| <i>A. tricolor</i> L. | Driti damudamu (F) | /D | | |
| <i>A. viridis</i> L. | Tubua (F) | G/A | Leaf | Fry, Boil |
| <i>Ipomoea aquatica</i> Forsk. | Karamua (H) | G/B | Leaf | Fry, Boil |
| <i>Basella alba</i> L. | Poi (H) | G/C | Leaf | Fry, Boil |
| <i>Portulaca oleracea</i> L. | Taukuku ni vuaka (F), Amlonia | G/C | Leaf | Boil |
| <i>Sesbania grandiflora</i> Pers. | Argathi (H) | G/C | Young leaf | Fry |
| <i>Oxalis corniculata</i> L. | Tinpatia (H) | /D | | |
| <i>Ocimum basilicum</i> L. | Basil | G/B | Leaf | |
| <i>Centella asiatica</i> Urban | Tinpatia (H), Totodro (F) | /D | Leaf | |
| <i>Coleus amboinicus</i> Lour. | Sage | /D | Leaf | |
| <i>Gnetum gnemon</i> L. var. <i>gnemon</i> | Sikau (F) | /D | | |
| <i>Solanum nigrum</i> L. | Black-night-shade | /D | | |
| Cole Crops | | | | |
| <i>Brassica campestris</i> L. | Rape, Muraya | I/ | Leaf | |
| <i>B. chinensis</i> L. | Chinese cabbage | G/A | Leaf | Fry, Boil |
| <i>B. juncea</i> Czern & Cosson | Mustard | I/ | Mustard oil | |
| <i>B. nigra</i> Koch | Mustard, Saiso | G, I/A | Leaf, Seed | Fry, Food flavour |
| <i>B. oleracea</i> L. var. <i>botritis</i> | Cauliflower | G/A | Flower | Fry |
| <i>B. o. l.</i> var. <i>capitata</i> | English cabbage | G/A | Leaf | Fry, Boil |

| Botanical name | Name | S/F* | Edible part | Cookery |
|---|------------------|--------|-------------|--------------|
| Salad Crops | | | | |
| <i>Petroselinum crispum</i> Nym. | Parsley | G, I/C | Leaf | Salad |
| <i>Lactuca sativa</i> L. | Lettuce | G/A | Leaf | Raw in salad |
| <i>Nastrutium officinale</i> R. Br. | Water cress | G/B | Leaf | Fry, Boil |
| <i>Rorippa sarmentosa</i> Macbride | Rogomi | G/C | Leaf | Boil |
| Ferns | | | | |
| <i>Adiantum lunulatum</i> Burm. f. | Tuku (F) | | | |
| <i>Asplenium adiantoides</i> C. Chris. | Lemaru loa (F) | | | |
| <i>Athyrium acedens</i> Milde | Lalabe (F) | | | |
| <i>A. esculentum</i> Copel. | Ota (F) | G/A | Young frond | Boil |
| <i>A. maxima</i> Copel. | Ota balabala (F) | | | |
| <i>A. melanocaulon</i> Milde | Ota loa (F) | | | |
| <i>Campium palustre</i> Copel. | | | | |
| <i>Coniogramme fraxinea</i> Diels | Ota kalasei (F) | G/B | Yound frond | Boil |
| <i>Cyathea affinis</i> Swartz | Balabala sa (F) | | | |
| <i>Marattia smithii</i> Mett. | Dibi (F) | | | |
| <i>Pteridium esculentum</i> Cockayne | Mata (F) | | | |
| <i>Tectaria decurrens</i> Copel. | Ota loa (F) | | | |
| <i>T. degeneri</i> Copel. | Turaso | | | |

| Botanical name | Name | S/F* | Edible Part | Cookery |
|--------------------------------------|-----------------------------------|--------|-----------------------|--------------------------------------|
| Fruit Trees | | | | |
| <i>Artocarpus communis</i> Forst. | Breadfruit, Uto (F) | G/A | Fruit, Seed | Boil, Roast, Madrai |
| <i>A. integra</i> Merrill | Jackfruit, Uto ni India (F) | G/A | Fruit, Seed | Fry, Raw, Boil |
| <i>Macadamia tetraphylla</i> Johnson | Queensland nut | G, 1/B | Kernel | Roast |
| <i>Annona muricata</i> L. | Soursop, Sarifa (H), Seremaia (F) | G/A | Fruit | Raw, Sweets, Drink, Jelly, Ice cream |
| <i>A. reticulata</i> L. | Bullock's heart | G/B | Fruit | Raw |
| <i>A. squamosa</i> L. | Sugar apple, Sweet sop | G/B | Fruit | Raw |
| <i>Persea americana</i> Mill. | Avocado pear | G/A | Fruit | Raw |
| <i>Davidsonia pruriens</i> F. Muell. | | /D | | |
| <i>Chrysobalanus icaco</i> L. | Coco plum | /D | | |
| <i>Eriobotrya japonica</i> Lindl. | Loquat | G/B | Fruit | Raw |
| <i>Rubus tiliaceus</i> L. | Wild raspberry, Wagadrogadro (F) | | Red succulent berries | Raw |
| <i>Cynometra cauliflora</i> L. | | | | |
| <i>Inocarpus edulis</i> Forst. | Ivi (F), Tahitian chestnut | G/A | Kernel | Boil, Roast |
| <i>Pithecellobium dulce</i> Benth. | Madras thorn | | | |
| <i>Tamarindus indicus</i> L. | Tamarind | G/A | Fruit | Chutney, Curry, Sherbet |
| <i>Averrhoa bilimbi</i> L. | Cucumber tree, Bilimbi | G/C | Fruit | Pickle |
| <i>A. carambola</i> L. | carambola, Kamrakh (H) | G/A | Fruit | Drink, Preserve, Pickle |
| <i>Aegle marmelos</i> Corr. | Bael, Bel (H) | G/C | Fruit | Sharbet, Drink |
| <i>Citrus aurantifolia</i> Swingle | Lime | G/A | Fruit | Pickle, Drink |
| <i>C. aurantium</i> L. | Seville orange, Moli jamu | G/A | Fruit | Raw, Drink |

| Botanical name | Name | S/F* | Edible part | Cookery |
|---|------------------------------|--------|-------------|--------------------|
| <i>C. grandis</i> Osbeck | Shaddock, Moli kana, Pummelo | G/A | Fruit | Raw |
| <i>C. Limon</i> Burm. f. | Lemon, Moli Karokaro | G/A | Fruit | Drink |
| <i>C. medica</i> L. | Citron | G/B | | Drink, Raw, Pickle |
| <i>C. Paradisi</i> Macq. | Grapefruit | G/B | Fruit | Raw |
| <i>C. reticulata</i> Blanco | Mandarin, Moli madarini | G/A | Fruit | Raw |
| <i>C. sinensis</i> Osbeck | Sweet orange | G/A | Fruit | Raw |
| <i>Feronia limonia</i> Swingle | Wood apple, Vakadra | G/ | | Preserve, Pickle |
| <i>Fortunella japonica</i> Swingle | Kumquat | G/A | | Drink |
| <i>Triphasia trifolia</i> P. Wilson | Lime berry | G/B | Fruit | Pickle, Drink |
| <i>Canarium indicum</i> L. | Galip nut | G/B | Seed | Roast, Raw |
| <i>C. vulgare</i> Leenhouts | Java almond | G/B | Nut | Roast, Raw |
| <i>Malpighia puniceifolia</i> L. | Acerola | G/B | Fruit | Raw, Pickle |
| <i>Aleurites moluccana</i> Willd. | Candle nut, Lauci | /D | | |
| <i>Anacardium occidentale</i> L. | Cashew nut | G, 1/B | Seed | Roast |
| <i>Dracontomelon vitiense</i> Engl. | Tarawau (F), Tarau (F) | G/A | Fruit | Raw |
| <i>Mangifera indica</i> L. | Mango | G/A | Fruit, Leaf | Raw, Pickle, Drink |
| <i>Spondias dulcis</i> Forst. | Wi (F), Amra (H) | G/A | Fruit | Jelly, Jam, Pickle |
| <i>Litchi chinensis</i> Sonner | Litchi | /B | Fruit | Raw |
| <i>Pometia pinnata</i> J.R. & G. Forst. | Dawa (F) | G/A | Fruit | Raw |
| <i>Zizyphus jujuba</i> Lam. | Ber (H) | G/A | Fruit | Preserve, Raw |
| <i>Elaeocarpus chelonimorphus</i> Gillespie | Kabi, Sivia | | Kernel | |
| <i>Muntingia calabura</i> L. | | | | |

| Botanical name | Name | S/F* | Edible part | Cookery |
|---|------------------------------------|--------|-------------|-----------------|
| <i>Sterculia vitiensis</i> Seem. | Waciwaci (F) | | Kernel | |
| <i>Garcinia mangostana</i> L. | Mangosteen | G, I/B | Pulp | Raw, Juice |
| <i>G. xanthochymus</i> Hook. f. | Sour mangosteen | G, I/C | Pulp | Raw, Juice |
| <i>Mammea americana</i> L. | Mammey apple | G/B | Fruit | Raw |
| <i>Dovyalis hebecarpa</i> Warb. | Ceylon gooseberry | G/C | Leaf | Cook, Fry |
| <i>Flacourtia inermis</i> Roxb. | | | | |
| <i>F. rukam</i> Zoll. & Mor. | Governer's plum | | | |
| <i>Passiflora edulis</i> Sims. | Passionfruit | G/A | Pulp | Drink |
| <i>P. laurifolia</i> L. | Bell apple | G/C | Fruit | Raw |
| <i>P. quadrangularis</i> L. | Granadilla | G/B | Pulp | Drink, Curry |
| <i>Carica papaya</i> L. | Pawpaw, Papaya | G/A | Fruit, Leaf | Raw, Curry |
| <i>Punica granatum</i> L. | Pomegranate | G/C | Fruit | Raw |
| <i>Terminalia catappa</i> L. | Tavola (F), Fiji (or Beach) almond | G/B | Kernel | Raw |
| <i>Barringtonia edulis</i> Seem. | Vutu Kana (F) | G/B | Kernel | Boil, Raw |
| <i>Eugenia brasiliensis</i> Lam. | Brazil cherry | | | |
| <i>E. caryophyllus</i> Bullock & Harrison | Clove tree | I/B | Flower bud | Food Flavour |
| <i>E. cumini</i> Merr. | Jaman (H), Jambolan | I/B | Seed | Condiment |
| <i>E. Jambos</i> L. | Rose apple | G/B | Fruit | Raw |
| <i>E. malaccensis</i> L. | Malay apple, Kavika (F) | G/A | Fruit | Raw |
| <i>Psidium guajava</i> L. | Guava, Armut | G/A | Fruit | Raw, Jam, Jerry |
| <i>Cryosophyllum cainito</i> L. | Star apple | G/B | Fruit | Raw |
| <i>Minusops elengi</i> L. | | | | |

| Botanical name | Name | S/F* | Edible part | Cookery |
|--|--------------------------------------|------|-------------------------|----------------------|
| <i>Manilkara zapota</i> (L.) P. Van Royan | Sapodilla | G/B | Fruit | Raw |
| <i>Pouteria sapota</i> (Jacq.) H. E. Moore & Stearn | Mammey sapote | | | |
| <i>Corida dichotoma</i> Forst. f. | Sebastian plum | G/B | Fruit, Bark | Pickle |
| <i>C. subcordata</i> Lam. | Nawanawa | | | |
| <i>Morinda citrifolia</i> L. | Kura (F) | G/ | Fruit, Leaf | |
| <i>Areca catechu</i> L. | Areca, Areca nut | G/C | Kernel | Raw |
| <i>Cocos nucifera</i> L. | Coconut | G/A | Fruit, Crown | Raw, Oil, Drink, Fry |
| <i>Phoenix dactylifera</i> Buch-Ham ex Roxb. | Date palm, Kajoor | I/A | Fruit, Sap of flower | Raw, Drink |
| <i>Monstera deliciosa</i> Liebm. | Fruit salad plant | | | |
| <i>Ananas comosus</i> Merr. | Pineapple | G/A | Fruit | Raw, Drink |
| <i>Musa balbisiana</i> Colla | Plantain, Vudi (F), Vudi dina (F) | G/A | Fruit | Boil, Curry |
| <i>M. fehi</i> Bert. ex Vieill. | Soaga, Fay banana | G/B | Fruit | Boil |
| <i>M. nana</i> Lour. | Banana, Veimama | G/A | Fruit | Raw, Boil, Curry |
| <i>Cycas rumphii</i> Miq. forma <i>seemannii</i> | Logologo (F), Roro (F) | | Seed | |
| <i>Bryophyllum calycinum</i> Salisb. | Cakamana (F) | | | |
| Herbs and Spices | | | | |
| <i>Foeniculum vulgare</i> Mill. | Fennel | I/B | Seed | Food spice |

| Botanical name | Name | S/F* | Edible part | Cookery |
|---|--------------|--------|--------------|------------------------------|
| <i>Coriandrum sativum</i> L. | Coriander | G/A | Seed, Leaf | Food flavour, Spice, Chutney |
| <i>Murraya Koenigii</i> Spreng. | Curry leaf | G/B | Leaf | Food flavour |
| <i>Mentha arvensis</i> L. | Mint | G/B | Leaf | Food flavour, Chutney |
| <i>Elettaria cardamomum</i> Maton | Cardamon | G, I/A | Seed | Food flavour |
| <i>Pimenta officinalis</i> Lind | Allspice | G/B | Leaf | Condiment |
| <i>Piper belle</i> L. | Betel pepper | G/B | Leaf | Raw |
| <i>P. nigrum</i> L. | Black pepper | G, I/B | Seed | Food spice |
| <i>Trigonella foenum-graecum</i> L. | Fenugreek | I/B | Seed, Sprout | Spice, Vegetable |
| <i>Vanilla fragrans</i> Ames | Vanilla | I/B | Pod | Food flavour |
| <i>Ocimum basilicum</i> L. | Basil | G/C | Leaf | Added to ceremonial food |
| <i>O. gratissimum</i> L. | Basil | G/C | Leaf | Added to ceremonial food |
| <i>Myrsica castaneifolia</i> A. Gray | Male | | | |
| <i>Cinnamomum pedatinervium</i> Meissn. | Macou | I/B | Bark | Spice |
| <i>Jasminum officinale</i> L. | Jasmine | | | |
| <i>Gardenia jasminoides</i> Ellis | Gardenia | | | |

(F); Fijian name, (H); Hindustani name

S/F*; Supply source / Frequency of use

G; Plants are grown and consumed in Fiji in different forms.

I; Plant Products are imported and consumed locally.

G, I; Plants are sometimes grown in Fiji as well as imported.

A; Frequently used, B; sometimes used, C; Rarely used, D; Not used as food plant.

Table 2. Area under cultivation of principal food plants in Fiji (cited from CENSUS OF AGRICULTURE 1978, FIJI).

| Crops | Area | Crops | Area |
|---|-----------|-------------------------------------|------|
| Coconuts | 66,630 ha | Duruka (<i>Saccharum edule</i>) | 66 |
| Sugarcane | 54,415 | Dalo ni Tana (<i>Xanthosoma</i>) | 63 |
| Rice | 9,869 | Bele (<i>Abelmoschus manihot</i>) | 58 |
| Cassava | 6,934 | Okra | 57 |
| Dalo (<i>Colocasia esculenta</i>) | 2,874 | Chillies | 52 |
| Yaqona (<i>Piper methysticum</i>) | 2,463 | Pawpaw (Papaya) | 48 |
| Cowpeas, Mung* ¹ , Urd* ² | 877 | Cabbage | 42 |
| Yams | 683 | Chinese cabbage | 40 |
| Maize | 633 | Vudi (<i>Musa balbisiana</i>) | 39 |
| Cocoa | 459 | Passionfruit | 32 |
| Watermelon | 439 | <i>Amaranthus</i> | 29.5 |
| Beans* ³ | 394 | Pumpkin | 23 |
| Pigeon peas | 371 | Lemon | 16 |
| Ground nuts | 329 | Potato | 12 |
| Kumala (Sweet potato) | 283 | Grapefruit | 7 |
| Pineapples | 253 | Lettus | 6 |
| Banana (<i>Musa nana</i>) | 182 | Gourds* ⁴ | 5 |
| Sorghum | 177 | Mandarin | 4 |
| Tomato | 168 | Rourou (Dalo leaves) | 2.5 |
| Via (<i>Alocasia</i> & <i>Cyrtosperma</i>) | 153 | Carrot | 2 |
| Eggplant | 136 | Lime | 2 |
| Zinger | 123 | Macadamia nuts | 1 |
| Cucumber | 101 | Spinach | 0.9 |
| Sweet orange | 96 | Onion | 0.5 |

Mung*¹: Green gram (*Phaseolus aureus*)Urd*²: Black gram (*Phaseolus mungo*)Beans*³: Mainly cowpeas harvested in green pods.Gourds*⁴: Squash, Lauki (*Lagenaria vulgaris*), Loofah, Bittergourd, Snake gourd, Wax gourd, and Choko (*Sechium edule*).

2) Vegetables

Abundant kinds of cucurbits, solanaceous fruits and leguminous crops are due to Indians.

Gourd, *Lagenaria vulgaris*, of cucurbits is frequently used at the Indian's breakfast in Fiji (Fig. 3). The cultivars of gourd used as vegetable were probably introduced into Fiji⁷⁾. However, wild gourds are sometimes observed at the roadside in Fiji. These must be the progenies of those that Seemann saw³⁾. Seemann⁸⁾ also reported "The fruits of vago, or bottlegourd (*Lagenaria vulgaris* Ser.), are readily converted into flasks for holding oil and other fluids, by allowing their pulp to undergo decomposition." The gourd was not used as vegetable by indigenous Fijians presumably.

Young leaves of *Capsicum annuum* are used as spinach.

These cucurbitaceous and solanaceous vegetables are mostly grown in Sigatoka Valley of Viti Island.

Duruka, *Saccharum edule*, is a closely related species of sugarcane, and its unopened flowers are used as a popular vegetable in Fiji, especially among indigenous Fijians (Fig. 4).

Edible root crops or tuber crops such as cassava, dalo (taro, *Colocasia esculenta*), yams (Fig. 5), sweet potato, are the basic foods for Fijians. However, dalo is also much used by Indians (Fig. 6). These crops are frequently used for lovo, a native pit oven, by Fijians. The Fijians distinguish numerous 'varieties' of dalo, and the leaves of one 'variety' are particularly esteemed as a green vegetable called rourou⁷⁾ (Fig. 7). Rourou is usually cooked with coconut oil. The leaf petioles are also cooked and eaten. Dalo ni Tana, *Xanthosoma sagittifolium*, was introduced and most commonly cultivated by Indians. It is often found naturalized along stream banks (Fig. 8). Ginger is frequently used in Fiji, and it became a new export. Dalo and ginger are often grown in the swidden, or burnt field. Wild turmeric is sometimes seen in the mountainous area of Fiji (Fig. 9).

The leaves of bele, *Abelmoschus manihot*, are consumed abundantly, and the taste of the leaves resembles that of okra (Fig. 10). Of the green vegetables in Fiji, rourou, bele, and tubua (*Amaranthus viridis*) may possibly become good summer crops in Japan.

Ferns are also utilized as vegetables, and most of them are used by Fijians. Parham⁶⁾ stated "Leaves of certain species of *Asplenium*, *Athyrium* and many others are used as spinach — and may possibly be good sources of vitamin B. There are over 20 species of edible ferns in Fiji, many of which are in daily use."

3) Fruit trees

Breadfruit is a very important fruit in Fiji (Fig. 11). According to the Census of Agriculture of Fiji 1968¹⁾, there were 177, 686 trees of breadfruit in Fiji. There are also many 'varieties' recognized by the Fijians⁷⁾. In some places, the fruit is still preserved underground for months to make madrai, the Fijian bread⁷⁾. Jackfruit was introduced and naturalized in Fiji, and it is not so important as breadfruit. There were 11, 123 trees of Jackfruit in 1968¹⁾. Its fruit is cooked and eaten as curry⁷⁾.

Avocado pear was probably introduced into Fiji between 1880 and 1886⁷⁾. Big trees of avocado pear are often seen in Viti island.

Ivi, *Inocarpus edulis*, is one of the most common trees in Fiji (Fig. 12). It is often found growing along the banks of streams, and its fruits are sold in the markets. The kernel of the fruit is cooked and eaten by Fijians.

Seville orange was suggested to be indigenous in Fiji by Seemann⁷⁾. Sometimes this is seen in the markets. Shaddock, *Citrus grandis*, is indigenous in Fiji, and it is commonly seen in the forest and along river banks.

Mango was introduced into Fiji very early and it is naturalized. Mango is often found in large groves and also along roads. It is one of the important food plants in Fiji. There are some varieties of mango distinguished by Indians.

Wi, *Spondias dulcis*, is one of the popular fruits in Fiji, and this is grown around both the Fijians and the Indians (Fig. 13).

Dawa, *Pometia pinnata*, bears a large crop of fruit, and great quantities of fruits are consumed in season⁸⁾. The taste of this fruit is somewhat similar to that of litchi.

Ber, *Zizyphus jujuba*, is found near Indian homes.

All of the three *Passiflora* species were introduced and cultivated. In some places, these are naturalized.

Papaya is usually called pawpaw in Fiji, and it is frequently used for food by both Indians and Fijians.

Plantain, or cooking banana, is commonly called vudi by Fijian people, and it is often seen in the markets (Fig. 14). Soaqa, or fay banana, is occasionally found growing wild in the forests and it is sometimes cultivated⁷⁾.

Cycas rumphii is indigenous in Fiji, and its kernels were formerly used to make a kind of bread, 'madrai', by Fijians.

Bryophyllum calycinum is used medicinally by Fijians⁵⁾.

4) Several interesting food plants shown in the Census of Agriculture, Fiji.

Table 2 shows all the food plants reported in the Census of Agriculture 1978, Fiji, and their areas under cultivation²⁾.

Coconuts hold the first rank for area under cultivation in Fiji, but they are frequently interplanted with other crops such as cocoa, bananas, yaqona, dalo, cassava, or yams. Coconuts are mostly grown for copra, but they are also used as food. The water in the fruits makes a refreshing drink under the burning sun. The coconut milk is frequently used for cooking.

Cassava is cultivated more than dalo, though Fijians prefer dalo to cassava (Fig. 15). The reason of cassava cultivating is that cassava is easier to be grown than dalo, and that it is useful when there is not much rain and dalo does not grow well⁴⁾.

Many leguminous crops such as cowpeas, mung, urd, groundnuts, beans, pigeon peas, are mainly grown by Indian farmers.

It appears that watermelon is not so sweet as we can enjoy its taste. Probably it may be eaten as a substitute for water.

Almost all bananas and vudi, cooking banana, are grown by Fijian farmers.

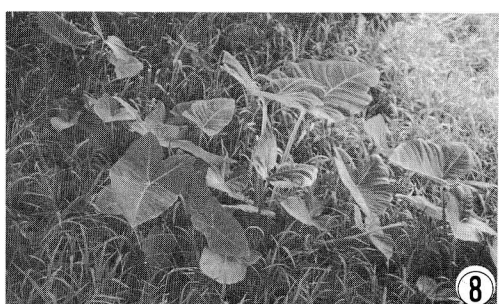
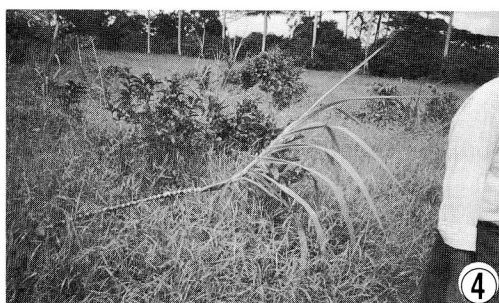


Fig. 1 Harvest of rice by Indian farmers at Navua in Viti Levu.

Fig. 2 Kava growing near Lakha Singh RD. in Viti Levu.

Fig. 3 Gourd at Dreketi in Vanua Levu.

Fig. 4 Duruka at Wainibokasi in Viti Levu.

Fig. 5 *Dioscorea alata* (left) and *D. esculenta* (right) growing at Toga in Viti Levu.

Fig. 6 Dalo at the market of Suva in Viti Levu.

Fig. 7 Rourou at the market of Suva.

Fig. 8 *Xanthosoma* at Toga.

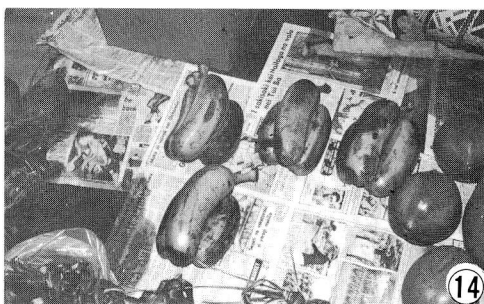
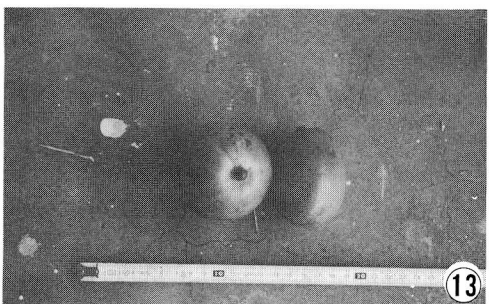
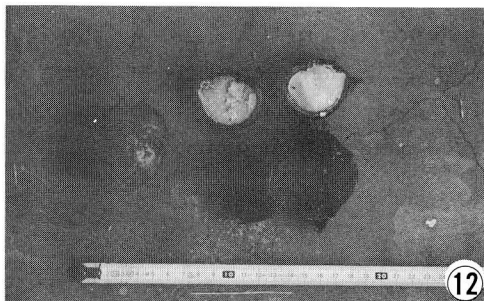


Fig. 9 Wild turmeric at Nayarailaga in Vanua Levu.

Fig. 10 Leaves of bele at the market of Suva.

Fig. 11 Breadfruit at Suva.

Fig. 12 Ivi at the market of Labasa in Vanua Levu.

Fig. 13 Wi at the market of Labasa.

Fig. 14 Vudi at the market of Suva.

Fig. 15 Cassava at the market of Suva.

Fig. 16 *Cyrtosperma* growing at Koronivia Research Station of Agriculture in Viti Levu.

Sorghum is mainly produced as a fodder crop.

A large amount of tomato is produced in Fiji, and the cherrytomato bearing small fruits is also largely grown. Via in the Census of Agriculture is likely to include *Alocasia* and *Cyrtosperma* (Fig. 16).

All the cultivars of egg plant seem to belong to var. *esculentum* Nees which bears bigger fruits than Japanese egg plant.

The area under cultivation of sweet orange includes 77 hectares at the Batiri Citrus Project in Macuata province.

Chinese cabbage is probably grown for the Chinese who account of 0.7 % of the population in Fiji.

It seems that the variety and the yield of food plants in Fiji coincide with the ethnic distribution of the population in Fiji, and that the immigrant people have hardly changed their dietary lives.

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