T. K. Lim

Edible Medicinal and Non-Medicinal Plants

Volume 10, Modified Stems, Roots, Bulbs

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Contents

Introduction

This book, volume 10, is a continuation of a multi-compendium, *Edible Medicinal and Non-Medicinal Plants*. It covers plants with edible modified storage subterranean stems (corms, rhizomes, stem tubers) and unmodified subterranean stem stolons, above-ground swollen stems and hypocotyls, storage roots (tap root, lateral roots, root tubers) and bulbs, which are eaten as conventional or functional food as vegetables and spices, and as herbal teas, and may provide a source of food additives or nutraceuticals. A list of such edible plant species from families Acanthaceae to Zygophyllaceae are presented in a tabular form and 32 such edible species from the families Alismataceae, Amaryllidaceae, Apiaceae, Araceae, Araliaceae, Asparagaceae, Asteraceae, Basellaceae, Brassicaceae and Campanulaceae have been covered in detail in the preceding volume. Volume 10 covers in detail 19 edible species in the families Amaranthaceae, Cannaceae, Cibotiaceae, Convolvulaceae, Cyperaceae, Dioscoreaceae, Euphorbiaceae and, Fabaceae. Other species in these families with similar edible plant parts are listed in Table 1. Many plants with edible plant parts, known for their edible fruits or flowers, have been covered in earlier volumes and for those that are better known for other non-reproductive plant parts will be covered in later volumes.

As in the preceding nine volumes, topics covered include: taxonomy (botanical name and synonyms); common English and vernacular names; origin and distribution; agro-ecological requirements; edible plant part and uses; plant botany; nutritive and medicinal/pharmacological properties with up-to-date research findings, traditional medicinal uses; other non-edible uses; and selected/cited references for further reading.

A corm or bulbotuber is defined as a short, vertical, swollen underground plant stem that serves as a storage organ used by some plants to survive unfavourable adverse periods. It bears membranous or scaly leaves and buds. Some examples of plants with edible corms are found in *Amorphophallus* spp., *Colocasia esculenta* (taro), *Eleocharis dulcis* (Chinese water chestnut), and *Sagittaria* spp. (arrowhead or wapato) and *Xanthosoma* spp. (cocoyam or tannia). Corms often give rise to many small secondary corms or cormlet called cormels at the end of very short stolons.

Rhizome is a modified subterranean stem of a plant that is usually found underground, producing roots and shoots. It is used by the plant as storage organ and whole rhizome or pieces of the rhizome serve as vegetative propagules to give rise to new plants. Examples of plants with edible rhizomes include gingers (*Zingiber* spp.), turmeric (*Cucurma longa*), greater galangal (*Alpinia galanga*), lesser galangal (*Alpinia officinarum*), sand ginger or kencur (*Kaempferia galanga*), lotus root (*Nelumbo nucifera*), *Typha* spp., finger root (*Boesenbergia rotunda*) and arrowroot (*Maranta arundinacea*).

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A stem tuber is a modified plant storage organ that is formed from thickened rhizome or stolon. The tops or sides of the tuber produce shoots that grow into typical stems and leaves and the undersides produce roots. The stem tuber has all the parts of a normal stem, including nodes (eyes) and internodes. A stem tuber may start off as an enlargement of the hypocotyls of the seedling and may include the epicotyl or upper section of the root as in the case of maca (*Lepidium meyenii*). More commonly, as in *Plectranthus esculenta* in the Lamiaceae family, numerous tubers are formed on short stolons that arise from the base of the stem or, as in potatoes, tubers are formed as enlarged stolons thickened and enlarged into storage organs. In some *Cyperus* species, e.g. tigernut or chufa (*C. esculentus*), the stolons end with the growth of tubers that can give rise to new plants. Other striking examples of plants with stem tubers include hog potato or groundnut (*Apios americana*), Jerusalem artichoke or sunchoke (*Helianthus tuberosus*), earthnut pea (*Lathyrus tuberosus*), oca or New Zealand yam (*Oxalis tuberosa*), Chinese artichoke or crosne (*Stachys affinis*), mashua or añu (*Tropaeolum tuberosum*) and ulluco (*Ullucus tuberosus*). In Botany, a stolon is a horizontal modified stem arising from the base of a plant that produces new plants from buds at its tip or nodes and forms adventitious roots at the nodes; it can be creeping above the ground surface or underground. An example of a plant with edible stolon is *Imperata cylindrica*. However, some botanists used the term stolons for stem branches that arise from the base of the stem that creeps above the ground and those that creep horizontally underground as rhizomes. An example of a plant with swollen, aboveground storage stem is the kohlrabi.

Tap root is the true main root of the plant and in some species the tap root is modified and fleshy, rich in stored nutrients; they may or may not be fused with the hypocotyl or basal stem tissues and maybe napiform, globose, conical, fusiform or cylindrical in shape. Notable examples of plants with edible tap roots are: *Abelmoschu*s spp., beet (*Beta vulgaris*), rutabaga, turnip, *Bunium persicum*, burdock, carrot, radish and daikon, celeriac, jicama and ahipa (*Pachyrhizus* spp.), parsnips, parsley, skirret (*Sium sisarum*), bush potato (*Vigna lanceolata*), salsify (*Tragopogon porrifolius*), black salsify (*Scorzonera hispanica*), tongkat Ali (*Eurycoma longifolia*) and many others. Examples of plants with edible root tubers or tuberous roots with enlarged root and lateral roots that function as storage organs, lacking nodes, internodes and adventitious buds include, notably, pignut or earthnut (*Conopodium majus*), sweet potato (*Ipomoea batatas*), desert yam (*Ipomoea costata*), cassava or yuca or manioc (*Manihot esculenta*), yams (*Dioscorea* spp.), mauka or chago (*Mirabilis expansa*), breadroot, tipsin, or prairie turnip (*Psoralea esculenta*), and yacón (*Smallanthus sonchifolius*).

Bulb is a much reduced underground stem bearing at its apex a growing or floral primordium surrounded by thick, fleshy modified scale leaves or leaf bases that serve as food storage organs during dormancy and enable the plant to survive through adverse periods. The fleshy leaves are arranged in a concentric manner. Bulbs can be tunicate, i.e. with membranous papery covering (scale leaves) or tunic that protects the inner fleshy scale leaves from drying and mechanical injury. Examples of tunicate bulbs are the Alliums, onions, leeks, hyacinth and tulips. In imbricate or non-tunicate bulbs, the fleshy scale leaves are not in concentric rings but are loosely arranged or spreading, overlapping one another at the margin. Such a bulb is not a compact body and not usually covered by a common tunic. Examples are the garlic (*Allium sativum*) and some *Lilium* lilies.

Table 1 Plants with edible modified storage subterranean stems (corms, rhizomes, stem tubers) and unmodified subterranean stem stolons, above-ground swollen stems and hypocotyls and storage roots (tap root, lateral roots, root tubers) in the families: Amaranthaceae, Cannaceae, Cibotiaceae, Convolvulaceae, Cyperaceae, Dioscoreaceae, Euphorbiaceae and Fabaceae

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Amaranthaceae	*Beta vulgaris* Cicla Group	Swiss Chard, Spinach Beet, Foliage Beet Seakale Beet	Some cultivars of Swiss chard have edible root	Facciola (1990)
Amaranthaceae	*Beta vulgaris* cv Crassa Group	Beet, Beet Root, Sugar Beet, Mangel Wurzel	Globose root boiled or cooked as vegetables. Fermented beetroot juice is commercially available. Sugar beet is a source of sugar, syrup and molasses	Larkcom (1984), Facciola (1990)
Amaranthaceae	*Beta vulgaris* cv Group Garden Beet	Beet Root, Garden Beet, Field Beet	As above	Oyen (1994)
Amaranthaceae	*Beta vulgaris* cv. Group Spinach Beet	Foliage Beet, Leaf Beet	As above	Oyen (1994)
Amaranthaceae	*Beta vulgaris* L.	Beet, Beetroot, Garden Beet	Globose root boiled or cooked as vegetables	Oyen (1994)
Amaranthaceae	*Beta vulgaris L.* var. saacharifera = *Beta vulgaris* L.	Sugar Beet	Swollen, fleshy globose root processed for sugar	Codex (2014)
Amaranthaceae	*Beta vulgaris* L. var.*conditiva* = *Beta vulgaris* L.	Beetroot	As above	Codex (2014)
Amaranthaceae	*Beta vulgaris* var *esculenta* = *Beta vulgaris* L.	Beet Root, Garden Bee, Field Beet	Peeled and cooked before eating, can be roasted, added to soups and pickled. Pickled beet roots used in salads as side dish or as a condiment; slices used in hamburgers	Facciola (1990), van Wyk (2006), Santich et al. (2008), Phillips and Rix (1993)
Amaranthaceae	*Beta vulgaris* var. *rapa* Dumont	Garden Beet, Beet Root	As above	Hu (2005)
Amaranthaceae	*Beta vulgaris* var. *vulgaris* = *Beta vulgaris* L.	Beet, Garden Beet	Swollen, fleshy globose root processed for sugar	Phillips and Rix (1993)
Cannaceae	*Canna achiras* Gill. = *Canna indica* L	Indian Shot, Canna	Rhizome eaten; source of Indian arrowroot called *rous le mois* in Chile and Argentina	Hedrick (1972), Facciola (1990)
Cannaceae	*Canna bidentata* Bertol. = *Canna indica* L.	Indian Shot, Balisier	In West Africa, starchy rhizome eaten	Irvine (1952), Uphof (1968)

(continued)

Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Cannaceae	*Canna edulis* Ker Gawl.	Edible Canna, Queensland Arrowroot; Achira; Gruya, Par Baul Fauk, Nung Gum (Assamese)	Starch obtained from rhizome used to make translucent noodles in Vietnam. Rhizome eaten in Assam	Burkill (1966), Facciola (1990), Flores et al. (2003), Santich et al. (2008), Medhi and Borthakur (2012), Codex (2014)
Cannaceae	*Canna indica* L.	Indian Shot	As above	Ong and Siemonsma (1996)
Cannaceae	*Canna lutea* Mill. = *Canna indica* (L	K 'Uuwaap (Teenek)	In Yucatan, rhizome eaten as a famine food by the Huastec Maya	Alcorn (1984)
Cannaceae	*Canna orientalis* Rosc. = *Canna indica* L.	Indian Shot	Rhizome cooked and eaten as food	Burkill (1966)
Cibotiaceae	*Cibotium barometz* (L.) J.Sm.	Woolly Fern, Golden Chicken Fern, Golden Moss	Roots are eaten	Cui (1998), Dai et al. (2003), Cao et al. (2007), Yun et al. (2009a, b), Liu et al. (2012)
Convolvulaceae	*Calystegia japonica* (Thunb.) Choisy = *Calystegia pubescens* Lindl.	California Rose	In China, leafy shoots and roots eaten. Roots reported to be purgative	Read (1946)
Convolvulaceae	*Calystegia sepium* (L.) R. Br.	Large Bindweed, Hedge Bindweed	In China, root washed and steamed, or sun-dried, then broken into fragments. Eaten with rice or ground into a meal and steamed in the form of cakes.	Read (1946)
Convolvulaceae	*Convolvulus chinensis* Ker.-Gawl. = *Convolvulus arvensis* L.	Chinese Bindweed; Fu-Fu-Miao, Tian Xuan Hua (Chinese)	Rhizomes eaten in a gruel	Hu (2005)
Convolvulaceae	*Convolvulus erubescens* Sims	Australian Bindweed	Fibrous and not especially tasty roots	Low (1989, 1991)
Convolvulaceae	*Ipomoea graminea* R.Br.	Bush Potato	Large tubers roasted and eaten	Cribb and Cribb (1987)
Convolvulaceae	*Ipomoea racemosa* Poir. = *Turbina racemosa* (Poir.) D.F. Austin	Soh Lah	Tuber eaten in Meghalaya	Sawian et al. (2007)
Convolvulaceae	*Ipomoea aquatica* Forsk	Water Spinach, Kangkong, River Spinach, Water Morning Glory	Roots are occasionally cooked and eaten	Facciola (1990)

Convolvulaceae	*Ipomoea batatas* (Linn.) Lam	Sweet Potato, Phan Karo (Meghalaya) Ruidok (Assamese)	Tuber eaten in Meghalaya; tuber eaten in Karbi Assam; sweet potatoes always eaten cooked – boiled, baked, roasted or fried. Work well in stews, soups, and braised dishes.	Burkill (1966), Facciola (1990), Phillips and Rix (1993), Takagi et al. (1996), Hu (2005), van Wyk (2006), Sawian et al. (2007), Walter and Lebot (2007), Kar and Borthakur (2008), Santich et al. (2008), Codex (2014)
Convolvulaceae	*Ipomoea cairica* (L.) Sweet	Morning Glory, Mile-A-Minute Vine, Messina Creeper, Cairo Morning Glory, Coast Morning Glory; Wu Zhao Jin Long (Chinese)	Roots used to extract starch in Yunnan	Hu (2005)
Convolvulaceae	*Ipomoea calobra* F.Muell.	Bush Potato, Goolabura	Large tubers roasted and eaten	Cribb and Cribb (1987), Low (1991)
Convolvulaceae	*Ipomoea costata* F.Muell. ex Benth.	Bush Potato, Desert Yam	As above	Low (1991)
Convolvulaceae	*Ipomoea digitata* L. = *Ipomoea cheirophylla* O'Donell	Spanish Woodbine	Oblong tubers eaten like sweet potatoes	Hedrick (1972), Tanaka (1976), Facciola (1990)
Convolvulaceae	*Ipomoea eriocarpa* R.Br.	B Tiny Morning Glory; Buta (Hindi); Mulli Balli (Kannada)	Large tubers roasted and eaten	Cribb and Cribb (1987)
Convolvulaceae	*Ipomoea gracilis* R.Br.	Almor-Ira	Large tubers roasted and eaten	Cribb and Cribb (1987)
Convolvulaceae	*Ipomoea mauritiana* Jacq.	Giant Potato; Qi Zhao Long (Chinese)	Roots used to extract starch	Hu (2005)
Convolvulaceae	*Ipomoea pandurata* (L.) G. Meyer	Wild Potato Vine, Man-Of-The-Earth	Huge, tuberous root weighing some times 20 lb	Saunders (1920)
Convolvulaceae	*Ipomoea pes-caprae* subsp. *brasiliensis*	Goat's Foot Convolvulus, Beach Morning Glory	Fleshy tap root eaten after baking and pounding	Cribb and Cribb (1987)
Convolvulaceae	*Ipomoea polpha* R.W. Johnson	Bush Potato, Wier Vine	Large tubers roasted and eaten	Low (1991)
Convolvulaceae	*Ipomoea polymorpha* Roem. & Schult.	Silky Cow Vine	Large tubers roasted and eaten	Cribb and Cribb (1987)
Convolvulaceae	*Ipomoea staphylina* Roem. & Schult.	Lesser Glory; Hai Nan Shu (Chinese)	Fleshy tubers eaten in Hainan island	Hu (2005)
Convolvulaceae	*Ipomoea velutina* R.Br.	Velvety Morning Glory	Large tubers roasted and eaten	Cribb and Cribb (1987)

(continued)

Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Convolvulaceae	*Ipomoea violacea* L.	Beach Moonflower, Sea Moonflower	Large tubers roasted and eaten	Cribb and Cribb (1987)
Convolvulaceae	*Merremia hungaiensis* (Lingels. & Borza) RC Fang	Huang Hua Tu Gua, Shan Tu Gua (Chinese)	Enlarged root eaten in Yunnan	Hu (2005)
Cyperaceae	*Bolboschoenus caldwellii* (V.J.) Soják	Sea Club Rush	Grape-sized, sweet, fibrous tubers eaten	Low (1989, 1991)
Cyperaceae	*Bolboschoenus fluviatilis* (Torr.) Soják	Marsh Club Rush	As above	Low (1991)
Cyperaceae	*Bolboschoenus maritimus* (L.) Palla	Sea Club Rush	Tubers eaten after treatment	Cribb and Cribb (1987)
Cyperaceae	*Carex* spp.	Ware Sedge	Sweet, enlarged underground stem eaten	Schofield (2003)
Cyperaceae	*Cyperus bifax* C.B.Clarke = *Cyperus rotundus* L.	Downs Nutgrass	Tubers produced on rhizomes are dried, coat removed, shaken with hot ashes, eaten raw or rubbed to a powder and eaten as porridge	Cribb and Cribb (1987), Harden (1993)
Cyperaceae	*Cyperus bulbosus* Vahl.	Nalgoo (Australia)	Tubers pleasantly starchy. In India (Bombay Presidency), bulbs dried and pulverized, then mixed with *jowar*, *bajra* (millet) or wheat flour to make bread	Gammie (1902), Paton and Dunlop (1904), Irvine (1957), Burkill (1966), Gupta and Kanodia (1968), Saxena (1979), Low (1991), Jansen and Aguilar (1996)
Cyperaceae	*Cyperus esculentus* L.	Chufa, Tiger Nut, Yellow Nutgrass	Chufa's hard tubers are sweet and tasty. In Zimbabwe, tubers eaten raw or cooked	Saunders (1920), Burkill (1966), Cribb and Cribb (1987), Zinyama et al. (1990), Jansen and Aguilar (1996), Codex (2014)
Cyperaceae	*Cyperus esculentus* L. *var. sativus* Boeckeler = *Cyperus esculentus* L.	Yellow Nut Grass, Chufa; You Sha Cao (Chinese)	Tubers eaten in China	Hu (2005)
Cyperaceae	*Cyperus jeminicus* Rottb.	NF	In India, tubers ground into flour.	Watt (1908)
Cyperaceae	*Cyperus papyrus* L.	Egyptian Reed, Paper Reed	Starchy rhizomes and culms are edible	Mahr (2011)

Cyperaceae	*Cyperus rotundus* L.	Nutgrass, Purple Nutgrass; Mothee, Motha (Rajasthan)	In France, root recommended as famine food. Can be eaten raw or cooked. Can be dried and reduced to a flour. In India (Jaisalmer district, Rajasthan), fibre and cuticle of root removed, root dried, ground and made into bread and sometimes mixed with other flour. In Western Rajasthan, tubers roasted; also boiled, outer skin peeled off, and the starchy rhizome eaten with spices	Parmentier 1781 (cited by Freedman (2009)), Saunders (1920), Burkill (1966), Saxena (1979), Cribb and Cribb (1987), Harden (1993), Jansen and Aguilar (1996)
Cyperaceae	*Eleocharis dulcis* (Burm.f.) Trinius ex Henschel	Water Chestnut, Ground Chestnut	Corms eaten raw or fresh or from canned material. Used in salad or as snack, pickled and as a condiment; also baked. Goes well in soups, stir fries, dumplings or as garnish for vegetable dishes. Starch obtained from tubers for domestic use, mixed with sugar to prepare a refreshing morning drink as well as for pastry	Cribb and Cribb (1987), Low (1989), Facciola (1990), Phillips and Rix (1993), Paisooksantivatana (1966), Hu (2005), van Wyk (2006), Santich et al. (2008), Codex (2014)
Cyperaceae	*Eleocharis kuroguwai* Ohwi	Kuro Gawai (Japanese)	Corm edible	Codex (2014)
Cyperaceae	*Eriophorum gracile* Koch	Mousenuts, Alaska Cotton, Swamp Cotton	Rootstock used raw or cooked	Schofield (2003)
Cyperaceae	*Fimbristylis kysoor* (Roxb.) Dalz. & Gibs.	NF	Root eaten in India	Watt (1908)
Cyperaceae	*Fimbristylis subbispicata* Nees = *Fimbristylis tristachya* var. *subbispicata* (Nees) T. Koyama	Sedge, Pond Onion	Shoots and roots eaten in China	Read (1946)
Cyperaceae	*Lepironia articulata* (Retz.) Domin	Grey Sedge	Underground stem eaten Rhizome edible	Cribb and Cribb (1987), Low (1989)

(continued)

Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Cyperaceae	*Mariscus sieberianus* Nees ex C.B.Clarke = *Cyperus cyperoides* (L.) Kuntze	Tall Sedge	In China, roots and seeds made into flour	Read (1946)
Cyperaceae	*Schoenoplectus litoralis* (Schrad.) Palla	Daly River Club Rush	Edible roots	Cribb and Cribb (1987)
Cyperaceae	*Scirpus americanus* Pers. = *Schoenoplectus americanus* (Pers.) Volkart.	Bulrush	Rootstock eaten raw, boiled, baked or roasted, also pounded into flour	Schofield (2003)
Cyperaceae	*Scirpus californicus* (C.A.Mey.) Steud. = *Schoenoplectus californicus* (C.A.Mey.) Soják.	California Bulrush, Totora	Rhizomes peeled, baked and eaten	Facciola (1990)
Cyperaceae	*Scirpus grossus* L. f. = *Actinoscirpus grossus* (L.f.) Goetgh. & D.A.Simpson.	Giant Bulrush, Greater Club Rush	India and Kumaon region, Western Himalayas roots burnt, then ground into flour from which bread is prepared	Paton and Dunlop (1904), Bhargava (1960)
Cyperaceae	*Scirpus lacustris* L. = *Schoenoplectus lacustris* (L.) Palla.	Tule, Great Bulrush	In China: shoots and roots eaten.	Saunders (1920), Read (1946), Uphof (1968), Harrington (1974), Gibbons and Tucker (1979), Facciola (1990)
			Rootstock can be processed into syrup or flour	
Cyperaceae	*Scirpus microcarpus* J.Presl & C.Presl	Bulrush	Rootstock eaten raw, boiled, baked or roasted	Schofield (2003)
Cyperaceae	*Scirpus paludosus* A.Nelson = *Bolboschoenus maritimus* subsp. *paludosus* (A.Nelson) T. Koyama.	Alkali Bulrush, Nutgrass	Rhizome eaten raw or made into flour for bread	Uphof (1968), Fernald et al. (1985), Facciola (1990)
Cyperaceae	*Scirpus subterminalis* Torr. = *Schoenoplectus subterminalis* (Torr.) Soják.	Bulrush	Rootstock eaten raw, boiled, baked or roasted	Schofield (2003)
Cyperaceae	*Scirpus tuberosus* Roxb. (illeg.) = *Eleocharis dulcis* (Burm.f.) Trin. ex Hensch.	Chechur (Assamese); Khitro (Bodo)	Root tubers are sweet and eaten fresh especially in Upper Assam, also can be cooked as vegetable with potato and chicken	Patiri and Borah (2007)

Cyperaceae	*Scirpus validus* Vahl = *Schoenoplectus tabernaemontani* (C.C. Gmel.) Palla	Bulrush, Tule, River Club Rush	White underground shoots after boiling are of excellent flavour; roots eaten cooked or preserved in rice bran	Tanaka (1976), Cribb and Cribb (1987), Fernald et al. (1985), Facciola (1990), Schofield (2003)
Dioscoreaceae	*Dioscorea daunea* Prain & Burkill	Suna (Thai Sakai)	Tuber used as substitute *Dioscorea* food species during famine	Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea membranacea* Pierre	Chatong (Thai Sakai)	Tuber used as substitute *Dioscorea* food species during famine	Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea stemonoides* Prain & Burkill	Kungkwad (Thai Sakai)	Tuber main source of carbohydrate for the Sakai tribe in Peninsular Thailand	Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea transversa* R.Br.	Long Yam	Tuber eaten raw or roasted, also aerial bulbils	Cribb and Cribb (1987), Wightman and Andrews (1989), Low (1989), Harden (1993)
Dioscoreaceae	*Dioscorea aculeata* Balb. ex Kunth = *Dioscorea cayennensis* Lam.	Fancy Yam, Potato Yam, Lesser Yam, Lesser Asiatic Yam, Igname; Man-Alu (Kumaon Region, Western Himalayas)	Roots cut, boiled prior to eating	Bhargava (1960), Ochse and van den Brink (1980)
Dioscoreaceae	*Dioscorea alata* L.	Purple Yam, Greater Yam, Winged Yam, Water Yam, White Yam; Kath Alu (Assamese); Yams Kalung. (Tamil); Niluva Pendalum (Telugu)	Tubers are eaten cooked as vegetable. In China, tubers are used in soups. In Oceania, tuber cut into pieces and baked or roasted whole or boiled in marmite or grated and used for *lap-lap*	Burkill (1966), Ochse and van den Brink (1980), Low (1991), Onwueme and Ganga (1996), Onwueme (1996a), Hu (2005), Patiri and Borah (2007), Walter and Lebot (2007), Codex (2014)
Dioscoreaceae	*Dioscorea anguina* Roxb. = *Dioscorea pubera* Blume	Kakalu (Bengali); Savida Dumpa (Telugu)	Tuber eaten in India	Watt (1908)
Dioscoreaceae	*Dioscorea belophylla* (Prain) Voigt ex Haines	Spear-Leaved Yam	In India (Garhwal Himalayas), tuber eaten after repeated boiling, washing and baking	Gupta (1962)

(continued)

Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Dioscoreaceae	*Dioscorea bulbifera* L.	Aerial Yam, Air Potato, Air Yam, Bitter Yam, Cheeky Yam, Potato Yam, Wild Yam; Gosh Alu (Assamese); Ho (Hawaiian); Genthi (Kumaon Region, Western Himalayas); Kapuang (Thai Sakai)	Root tubers are eaten cooked as vegetable during winter India (Kumaon region, Western Himalayas): axillary tubers cut into pieces, steeped in water, and boiled prior to eating. Hawaii: aerial bulbils eaten. Yams baked, boiled or fried slices of tuber or pureed tuber may be added to soups, stew, soufflés, fritter and various sweet dishes	Patiri and Borah (2007), Cribb and Cribb (1987), Wightman and Andrews (1989), Low (1989), Facciola (1990), Bhargava (1960), Hu (2005), Onwueme (1996a), Walter and Lebot (2007)
Dioscoreaceae	*Dioscorea calcicola* Prain & Burkill	Bayae (Thai Sakai)	Tuber main source of carbohydrate for the Sakai tribe in Peninsular Thailand	Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea cayenensis* Lam.	Yellow Guinea Yam, Yellow Yam, White Yan	Yams used to make fufu, may also be used in same way as potatoes or sweet potatoes	Burkill (1966), Facciola (1990), van Wyk (2006), Codex (2014)
Dioscoreaceae	*Dioscorea cumingii* Prain & Burkill	Lima-Lima (Tagalog, Kasi (Igorot), Pari (Bagobo)	Tuber used as food in Luzon (Philippines)	Groen et al. (1996)
Dioscoreaceae	*Dioscorea deltoidea* Wall. ex Griseb.	Nepal Yam; Gun (Kumaon Region, Western Himalayas)	Tubers cut into pieces, steeped in water, and boiled and/or baked prior to eating	Bhargava (1960), Gupta (1962)
Dioscoreaceae	*Dioscorea divaricata* Blanco	Pakit, Kiroi (Tagalog), Sulian (Iloko), Baklaiakang (Bisaya)	Tuber used as food in the Philippines, baked, boiled or fried	Groen et al. (1996)
Dioscoreaceae	*Dioscorea dumetorum* Kunth (Pax)	Cluster Yam; Ma-Nyeny, E-Dyeny (Bedik, Gold Coast); Rogon Biri (Hausa, Nigeria)	In Gold Coast, tuber used as a famine food. The tuber is boiled, peeled, sliced, pounded and steeped in running (preferably salt) water	Irvine (1952), Burkill (1966), Ferry et al. (1974), Mortimore (1989)

Dioscoreaceae	*Dioscorea esculenta* (Lour.) Burkill	Lesser Asiatic Yam, Sweet Yam, Potato Yam; Ruipheng Selu (Assamese)	Tuber eaten in Karbi Assam. Yams baked, boiled or fried slices of tuber or pureed tuber may be added to soups, stew, soufflés, fritters and various sweet dishes	Burkill (1966), Ochse and van den Brink (1980), Facciola (1990), Onwueme (1996a, b), Hu (2005), van Wyk (2006), Walter and Lebot (2007), Kar and Borthakur (2008), Codex (2014)
Dioscoreaceae	*Dioscorea esculenta* (Lour.) Burkill var. *fasciculata* (Roxb.) Prain & Burkill = *Dioscorea esculenta* (Lour.) Burkill	Moa Alu (Assamese)	Tubers are used as vegetable	Patiri and Borah (2007)
Dioscoreaceae	*Dioscorea filiformis* Blume	Wauh (Malaysia); Aroi Huwi Curuk (Sumatra); Dudung (Java); Balun (Thai Sakai)	Tubers boiled and eaten in Malaysia. Tuber main source of carbohydrate for the Sakai tribe in Peninsular Thailand	Groen et al. (1996), Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea gibbiflora* Hook.f. = *Dioscorea filiformis* Blume	Wild Yam	Tuber eaten	Burkill (1966)
Dioscoreaceae	*Dioscorea glabra* Roxb.	Mandong (Thai); Luntak (Thai Sakai)	Tubers (glutinous and starchy) used as food in Peninsular Malaysia and Andaman Islands. Tuber main source of carhohydrate for the Sakai tribe in Peninsular Thailand	Groen et al. (1996), Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea hastifolia* Nees	Warrine	Tuber eaten	Low (1989)
Dioscoreaceae	*Dioscorea hemsleyi* Prain & Burkill	Glutinous; Nian-Shan-Yao (Chinese)	Tuber eaten	Hu (2005)
Dioscoreaceae	*Dioscorea hirtiflora* Benth.	Mng'oko (Tanzania)	Sierra Leone; Nigeria (northern): eaten as a famine food	Irvine (1952)
Dioscoreaceae	*Dioscorea hispida* Dennst.	Intoxicating Yam, Asiatic Bitter Yam; Gadog, Gadong, Gadong Lilin, Gadong Mabuk, Gadung (Malay)	Tuber eaten	Burkill (1966), Onwueme (1996c), Ochse and van den Brink (1980), Codex (2014)
Dioscoreaceae	*Dioscorea japonica* Thunb.	Glutinous Yam, Chinese Yam, Japanese Yam, Taiwanese Yam, Yama-No-Imo	Tuber eaten in China	Read (1946), Facciola (1990), Burkill (1966), Hu (2005), Codex (2014)

(continued)

Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Dioscoreaceae	*Dioscorea laurifolia* Wall. ex Hook.f.	Clangporn (Thai Sakai)	Tubers eaten in Peninsular Malaysia	Burkill (1966), Groen et al. (1996)
Dioscoreaceae	*Dioscorea luzonensis* Schauer	Pakit, Mayabang (Tagalog) Kamengeg (Iloko)	Tubers used for food	Groen et al. (1996)
Dioscoreaceae	*Dioscorea macrostachya* Benth. = *Dioscorea mexicana* Scheidw.	Panil Book	Tuber cooked and eaten in Mexico	Alcorn (1984), Kunkel (1984), Facciola (1990)
Dioscoreaceae	*Dioscorea macroura* Harms = *Dioscorea sansibarensis* Pax	Zanzibar Yam	Tropical Africa: eaten as a famine food	Irvine (1952), Uphof (1968)
Dioscoreaceae	*Dioscorea minutiflora* Engl.	Aha Bayere (Twi, Gold Coast); Magoraza, Hazara (Hausa, Nigeria)	Gold Coast: eaten as a famine food. Nigeria (Kano State, northern): tuber eaten	Irvine (1952), Mortimore (1989)
Dioscoreaceae	*Dioscorea nummularia* Lam.	Prickly Yam	Tubers eaten	Low (1991), Onwueme (1996a), Walter and Lebot (2007)
Dioscoreaceae	*Dioscorea opposita* Thunb = *Dioscorea oppositifolia* L.	Chinese Yam, Korean Yam, Japanese Mountain Yam, Nagaimo, Yamaimo	Tuber eaten	Burkill (1966), Facciola (1990), Hu (2005), van Wyk (2006), Codex (2014)
Dioscoreaceae	*Dioscorea oppositifolia* L.	As Above	India (Deccan): tuber eaten	Watt (1908), Facciola (1990)
Dioscoreaceae	*Dioscorea orbiculata* Hook.f.	Ubi Garam (Indonesia), Takob, Ubi Garam (Malaysia) Man Tayong (Thai), Takob (Thai Sakai)	Tubers eaten in Peninsular Malaysia. Tuber main source of carbohydrate for the Sakai tribe in Peninsular Thailand	Burkill (1966), Groen et al. (1996), Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea owenii* Prain & Burkill	NF	Tubers eaten	Burkill (1966)
Dioscoreaceae	*Dioscorea pentaphylla* L.	Five-Leaf Yam; Pi'A (Hawaiian); Ser (Thai Sakai); Pachpotia Alu, Ruipheng (Assamese); Chai, Chavi, Alshi, Shahada, Kala Kand, Jaglia Che Kand, Kadu Kand (Bombay Presidency); Taigun, Takuli (Kumaon Region, Western Himalayas); Kanta-Alu (Western Rajasthan	In India, tubers cut into pieces, steeped in water, and boiled or baked prior to eating, In Hawaii, tuber steamed and eaten warm. In Oceania, tubers boiled baked or used in *lap-lap*. In Peninsular Thailand, tubers main source of carbohydrate for the Sakai	Gammie (1902), Watt (1908), Handy (1940), Bhargava (1960), Gupta (1962), Gupta and Neal (1965), Burkill (1966), Gupta and Kanodia (1968), Low (1989), Onwueme (1996a), Patiri and Borah (2007), Walter and Lebot (2007), Ochse and van den Brink (1980), Maneenoon et al. (2008), Kar and Borthakur (2008)
Dioscoreaceae	*Dioscorea persimilis* Prain & Burkill = *Dioscorea hamiltonii* Hook f.	Khoai Mai, Ciu Mai (Vietnamese)	Tuber eaten, boiled in soups	Tanaka and Nguyen (2007)

Dioscoreaceae	*Dioscorea piscatorum* Prain & Burkill	Fish Poison Yam, Tuba Gunjo (Indonesia), Tuba Ubi (Malaysia); Kiyak (Thai Sakai)	Tubers eaten boiled, baked or roasted. Tuber used as substitute *Dioscorea* food species during famine in Peninsular Thailand	Burkill (1966), Groen et al. (1996), Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea polyclados* Hook.f.	Kedut (Sumatra), Kedut (Malaysia)	Tubers eaten after several boilings or baked in Peninsular Malaysia	Burkill (1966), Groen et al. (1996)
Dioscoreaceae	*Dioscorea polystachya* Turz.	Chinese Yam	Tubers eaten	Codex (2014)
Dioscoreaceae	*Dioscorea prainiana* R. Kunth	Ubi Kelonak, Kelunoh, Kelana (Malaysia)	Tubers eaten in Peninsular Malaysia	Burkill (1966)
Dioscoreaceae	*Dioscorea prazeri* Prain & Burkill	Sehod (Thai Sakai)	Tubers used as substitute *Dioscorea* food species during famine in Peninsular Thailand	Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea preussii* Pax.	Preuss' Dioscorea	In tropical, Central Africa, tuber eaten in times of famine	Irvine (1952)
Dioscoreaceae	*Dioscorea pubera* Blume	Rui-Chilong	Bubils and tubers eaten in Karbi, Assam	Groen et al. (1996), Kar and Borthakur (2008)
Dioscoreaceae	*Dioscorea pyrifolia* Kunth	Ubi Babi, Badak, Akar Kemnyan Paya, Huwi Upas (Sundanese), Ilus (Javanese); Hngo (Tahi Sakai)	Tubers eaten after several boilings or baked in Peninsular Malaysia. Tuber main source of carbohydrate for the Sakai tribe in Peninsular Thailand	Burkill (1966), Groen et al. (1996), Maneenoon et al. (2008)
Dioscoreaceae	*Dioscorea quinata* Walter = *Dioscorea villosa* L.	Magiya, Munia (Kumaon Region, Western Himalayas India)	Tubers cut into pieces, steeped in water and boiled, prior to eating	Bhargava (1960)
Dioscoreaceae	*Dioscorea rotundata* Poir = *Dioscorea cayennensis* subsp. *rotundata* (Poir.) J. Miege	Eight Month Yam, Round White Yam, White Yam, White Guinea Yam	Yams used to make fufu, may also be used in same way as potatoes or sweet potatoes	Akinwande et al. (2007), Codex (2014)
Dioscoreaceae	*Dioscorea sagitata* Poir.	Five-Leaved Yam; Tarur (Kumaon Region, Western Himalayas, India)	Axillary tubers cut into pieces, steeped in water, and boiled prior to eating	Bhargava (1960)

(continued)

Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Dioscoreaceae	*Dioscorea sativa* L. = *Dioscorea villosa* L.	Kath Alu (Assamese); Kadia Kand, Mano Kand, Vaj Kand, Kadawa Kand, Kedvo Kand (Bombay Presidency)	Tubers are eaten cooked as vegetable by boiling or toasting. After neutralizing toxic substances, the tuber may be mixed with *konda,* or some other flour, and then eaten	Gammie (1902), Patiri and Borah (2007)
Dioscoreaceae	*Dioscorea schimperiana* Hochst. ex Kunth.	Yagniat (Kipsigis, Kenya)	Root tubers eaten	Kabuye (1986)
Dioscoreaceae	*Dioscorea trifida* L.f.	Indian Yam, Cush-Cush, And Yampee	Tubers eaten boiled, baked	Facciola (1990), Walter and Lebot (2007), Codex (2014)
Dioscoreaceae	*Dioscorea triphylla* L. = *Dioscorea pentaphylla* L.	See *D. Pentaphylla*	Tubers eaten in India (Deccan)	Watt (1908)
Dioscoreaceae	*Dioscorea tuberosa* Vell. = *Dioscorea cinnamomifolia* Hook.	NF	India (Garhwal Himalayas): tuber eaten after repeated boiling, washing and baking	Gupta (1962)
Dioscoreaceae	*Dioscorea wallichii* Hook.f.	Rui Nihang (Assamese); Yarex (Thai Sakai)	Tuber main source of carbohydrate for the Sakai tribe in Peninsular Thailand	Maneenoon et al. (2008)
Dioscoreaceae	*Tacca involucrata* Schumach. & Thonn. = *Tacca leontopetaloides* (L.) O Kuntze	As Below	In Nigeria, the Munshi first boil the tuber to remove the toxic element. A coarse flour, called *amara*, is prepared from it.	Irvine (1952)
Dioscoreaceae	*Tacca leontopetaloides* (L.) O Kuntze	Polynesian Arrowroot, East Indian Arrowroot, Salep	Root tuber grated, pounded, soaked and baked	Cribb and Cribb (1987), Wightman and Andrews (1989), Low (1989, 1991), Facciola (1990), Jukema and Paisooksantivatana (1996), Hu (2005), Codex (2014)
Dioscoreaceae	*Tacca pinnatifida* J.R. Forst & G. Forst. = *Tacca leontopetaloides* (L.) O Kuntze	As Above	Tubers usually eaten after preparation ; bitter when raw	Burkill (1966)

Euphorbiaceae	*Manihot esculenta* Crantz	Cassava, Manioc, Tapioca, Yuca	Tuberous roots eaten boiled, fried, baked, roasted and also processed into flour, farina, sweetmeats, bread, syrup, pasties, fufu, chips pastries and cakes. Flour also used for thickening soups and sauces. Root sap boiled to make the condiment cassareep or fermented into chicha and other alcoholic beverages	Burkill (1966), Uphof (1968), Hedrick (1972), Tanaka (1976), Ochse and van den Brink (1980), Facciola (1990), Veltkamp and De Bruijn (1996), Hu (2005)
Euphorbiaceae	*Manihot glaziovii* Müll.Arg = *Manihot carthaginensis* subsp. *glaziovii* (Müll.Arg.) Allem	Manicoba, Mandioca Brava, Cerea Rubber	Tubers eaten sometimes, also a source of starch	Tanaka (1976), Facciola (1990)
Euphorbiaceae	*Manihot utilissima* Pohl.= *Manihot esculenta* Crantz	Cassava, Bitter Cassava; Ingwese, Aloti (Gabon); Bafra (Arabic, Sudan)	As for *M. esculenta*	Ochse and van den Brink (1980), Abdelmuti (1991), Burkill (1966), Codex (2014)
Fabaceae	*Acacia bidwillii* Benth.	Corkwood Wattle	Young roots cooked as food by the aborigines	Cribb and Cribb (1982, 1987)
Fabaceae	*Acacia crassicarpa* Benth.	Northern Wattle, Thick-Podded Salwood, Brown Salwood, Papua New Guinea Red Wattle, Red Wattle	As above	Cribb and Cribb (1982, 1987)
Fabaceae	*Acacia holosericea* G. Don	Silver Leaf Wattle	As above	Cribb and Cribb (1987)
Fabaceae	*Apios fortunei* Maxim.	Potato Bean, Groundnut	Thick tubers eaten as emergency food in China	Read (1946), Hu (2005)
Fabaceae	*Apios tuberosa* Moench. = *Apios americana* Medik.	Groundnut, Wild Bean, Potato Bean, American Potato Bean, Indian Potato	Starchy tuber eaten	Saunders (1920)
Fabaceae	*Argyrolobium marginatum* Bolus	Izi Ntondo (Zulu)	In Zululand (Ubombo district), roots eaten cooked or uncooked	Hely-Hutchinson (1898)

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Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Fabaceae	*Astragalus fraxinifolius* DC	Astragal Yasenelistnyi (Russian)	Starch of root recommended as a famine food for extending bread flour, after removal of bitter element	Parmentier (1781) (cited by Freedman (2009))
Fabaceae	*Astragalus membranaceus* (Fisch.) Bunge = *Astragalus propinquus* Schischkin	Astragalus; Huangchoy (Chinese)	Dried root slices used in combination with Codonopsis (Dan shen) goji berries for a tonic soup with spare ribs	Hu (2005)
Fabaceae	*Atylosia reticulata* (Dryand.) Taubert ex Ewart & Davies = *Cantharospermum reticulatum* (Dryand.) Taubert ex Ewart & Davies.	NF	Roots roasted	Cribb and Cribb (1987)
Fabaceae	*Bauhinia hupehana* Craib = *Bauhinia glauca* subsp. *hupehana* (Craib) T.Chen	Shen Zi Ye, Hubei Yang Ti Jia (Chinese)	Root and stem stewed with pig kidneys, intestines or cooked with pork as special health food in Huber and Sichuan	Hu (2005)
Fabaceae	*Butea frondosa* Roxb. = *Butea monosperma* (Lam.) Taub.	Dangs (Bombay)	In India, roots toasted and eaten	Gammie (1902), Watt (1908)
Fabaceae	*Butea monosperma* (Lam.) Taub.	Dhak, Pala (Rajasthan, Western India)	Succulent young roots roasted or boiled and eaten with salt	Gupta and Kanodia (1968), Shankarnarayan and Saxena (1987)
Fabaceae	*Dalea candida* (Michx.) Willd.	White Prairie Clover	Root eaten raw or chewed, eaten as delicacy by children	Yanovsky (1936), Tanaka (1976), Facciola (1990)
Fabaceae	*Dalea gattingeri* (A. Heller) Barneby	Purpletassels	Root eaten raw or chewed	Yanovsky (1936), Uphof (1968), Tanaka (1976)
Fabaceae	*Dalea purpurea* Vent	Purple Prairie Clover	Root eaten raw or chewed	Facciola (1990)
Fabaceae	*Dolichos biflorus* L.= *Vigna unguiculata* (L.) Walp.	Horse Gram	In Australia (North Queensland), rootstock roasted and eaten	Watt (1908), Irvine (1957)
Fabaceae	*Eriosema chinense* Vogel	Chinese Eriosoma; Katil (Indonesia)	Tubers eaten cooked, enlarged fleshy tuberous roots used in tonifying broth with pork	Cribb and Cribb (1987), Groen et al. (1996), Hu (2005)
Fabaceae	*Erythrina vespertilio* Benth.	Bat's Wing Coral Tree	Roots eaten raw by aborigines	Cribb and Cribb (1987)

Fabaceae	*Flemingia procumbens* Roxb.	Sohplong (India)	Starch rib tubers eaten raw	Groen et al. (1996)
Fabaceae	*Flemingia vestita* Baker = *Flemingia procumbens* Roxb.	Soh Phlang	Tuber eaten in Meghalaya	Sawian et al. (2007)
Fabaceae	*Galactia tenuiflora* (Willd.) Wight & Arn.	Florida Hammock Milkpea	Root eaten after treatment	Cribb and Cribb (1987)
Fabaceae	*Glycyrrhiza glabra* L.	Licorice, Liquorice	Pieces of rhizomes used as flavourant or sweetener, can be chewed as sweet snack used in confectionery, sweets, drinks, dark beers (stouts) and liqueurs	van Wyk (2006)
Fabaceae	*Glycyrrhiza lepidota* Pursh	American Licorice	Roots chewed, added to foods for flavouring, or dried and brewed in tea	Uphof (1968), Fernald et al. (1985), Facciola (1990)
Fabaceae	*Hardenbergia retusa* Benth. = *Vandasina retusa* (Benth.) Rauschert	Sarsaparilla Vine	Roots roasted	Cribb and Cribb (1987)
Fabaceae	*Hedysarum boreale* Nutt.	Licorice-Root, Sweet-Root	Young sweet root have a licorice flavour and are eaten raw, boiled, baked or added in soups	Uphof (1968), Gibbons and Tucker (1979), Fernald et al. (1985), Facciola (1990)
Fabaceae	*Hedysarum mackenzii* Richardson = *Hedysarum boreale* subsp. *mackenzii* (Richardson) S.L. Welsh	Licorice-Root, Sweet Broom	Young sweet root have a licorice flavour and are eaten	Uphof (1968), Hedrick (1972), Fernald et al. (1985), Facciola (1990)
Fabaceae	*Hedysarum occidentale* Greene	Licorice Root, Sweet Vetch	As above	Facciola (1990)
Fabaceae	*Labichea buettneriana* F. Muell.	NF	Roots roasted	Cribb and Cribb (1987)
Fabaceae	*Lablab purpureus* (L.) Sweet	Bonavista Bean, Hyacinth Bean, Dolichos Bean, Seim Bean, Lablab Bean	Large, starchy root edible	Hedrick (1972), Facciola (1990)
Fabaceae	*Lathyrus tuberosus* L.	Earthnut Pea, Tuberous Pea	France: root tuber recommended as a famine food cooked, or dried and reduced to flour for use in baking bread	Parmentier (1781) (cited by Freedman (2009)), Hedrick (1972), Fernald et al. (1985), Facciola (1990), Codex (2014)

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Table 1 (continued)

Family	Scientific Name	Common/Vernacular Names	Edible Part Use	Reference
Fabaceae	*Lotus siloquosus* L.	NF	France: farinaceous root recommended as a famine food	Parmentier (1781) (cited by Freedman (2009))
Fabaceae	*Lupinus arcticus* S. Watson	Arctic Lupine	Roots used as survival food after roasting	Schofield (2003)
Fabaceae	*Lupinus nootkatensis* Sims	Nootka Lupine	As above	Schofield (2003)
Fabaceae	*Macrotyloma uniflorum* (Lam.) Verd.	Madras Gram, Horse Gram	Fleshy root roasted and eaten by Aborigines in Australia	Cribb and Cribb (1987), Facciola (1990)
Fabaceae	*Melilotus albus* Medik.	Sweet Clover	Roots prized as food by some native groups in North America	Schofield (2003)
Fabaceae	*Melilotus officinalis* (L.) Pall.	Yellow Sweet Clover	As above	Facciola (1990), Schofield (2003)
Fabaceae	*Millettia speciosa* Champ.ex Benth.	Showy Millettia; Shan Lian Ou (Chinese)	Root fresh or dried boiled with pork for soup that strengthens bones; used in southern China and Hong Kong	Hu (2005)
Fabaceae	*Moghania philippinensis* (Merr. & Rolfe) Li = *Flemingia prostrata* Roxb.	Southern Astragalus; Qian Jin Ba (Chinese)	Sliced roots cooked with pigfeet in water and cooking wine, a special southern Chinese cuisine	Hu (2005)
Fabaceae	*Mucuna glabra* (Reinecke) Wilmot-Dear	Tupe	Brazil (northeast): flour is made from both the seeds and roots. The flour or starch thus obtained is made into a variety of Brazilian foods including *farofa*, in which the meal is sautéed and mixed with bits of meat, crisp fat, chopped egg, etc.; *boijus*, which are small, sweet cakes; and *angus*, which are dumplings, the flour being merely boiled in water	De Castro (1952)

Fabaceae	*Orobus tuberosus* L. = *Lathyrus linifolius* (Reichard) Bassler.	Tuberous Bitter Vetch	In France, boiled root eaten as a famine food	Parmentier (1781) (cited by Freedman (2009))
Fabaceae	*Pachyrhizus ahipa* (Wedd.) Parodi	Ahipa, Yam bean	The roots are sweet and crispy; when eaten raw it can be peeled like banana or eaten as snacks or in green and fruit salads or prepared as juice	Popenoe et al. (1989), Sørensen et al. (1997), Hermann and Heller (1997), Codex (2014)
Fabaceae	*Pachyrhizus angulatus* Rich. ex DC. = *Pachyrhizus erosus* (L.) Urb.	As Below	In India, root eaten	Watt (1908)
Fabaceae	*Pachyrhizus erosus* (L.) Urban	Yam bean, Jicama, Sengkuang, Bangkwaun	Sweetish, subglobose tuberous root eaten fresh raw as a snack, or cooked, stir fried, stewed and in other dishes	Burkill (1966), Facciola (1990), Sørensen (1996), Sørensen and van Hoof (1966), Santich et al. (2008), van Wyk (2006), Codex (2014)
Fabaceae	*Pachyrhizus tuberosus* (Lam.) Spreng.	Amazonian Yam Bean, Jicama, Jactupe	As above	Hedrick (1972), Sørensen (1996)
Fabaceae	*Pediomelum cuspidatum* (Pursh) Rydb. = *Psoralea cuspidata* Pursh	Indian Turnip, Largebract Indian Breadroot	As for *P. esculenta*	Yanovsky (1936), Harrington (1974)
Fabaceae	*Pediomelum esculentum* (Pursh) Rydb. = *Psoralea esculenta* Pursh	Prairie Turnip, Indian Breadroot, Tipsin, Scurfpea; Timpsula	Tuber edible, eaten raw or in stews, grind to flour for soups and bread	Yanovsky (1936), Kaldy et al. (1980)
Fabaceae	*Pediomelum hypogaeum* var. *hypogaeum* (Nutt.) Rydb. = *Psoralea hypogaea* Torr. & A. Gray	Little Indian Breadroot, Subterranean Indian Breadroot	As above	Yanovsky (1936), Harrington (1974)
Fabaceae	*Pediomelum tenuiflorum* (pursh) A.N. Egan	Slimflower Scurfpea	As above	Yanovsky (1936)
Fabaceae	*Pediomelum subacaule* (Torr. & A. Gray) Rydb.	Whiterim Scurfpea	As above	Yanovsky (1936)
Fabaceae	*Petalostemon candidum* (Willd.) Michx. = *Dalea candida* Willd.	White Prairie Clover	Roots eaten or chewed for the sweet flavour	Yanovsky (1936), Uphof (1968), Facciola (1990)
Fabaceae	*Phaseolus adenanthus* G. Mey. = *Vigna adenantha* (G. Mey.) Marechal & al.	Adzuki Bean, Moth Bean, Wild Pea Adzuki Bean, Moth Bean, Wild Pea	In India, root eaten cooked	Watt (1908), Hedrick (1972), Facciola (1990)

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