

# MOTA

**Botanical name:** *Amaranthus spp.* (Amaranthaceae)

**Location specific common names:** te mota (Kiribati), mota (Tuvalu), moca, tubua, upa, bhaji, bayam

**Fakamatalaga ote Mota:** Se lakau foliki kae mafai o tai ola ite laukele e isi ne kaiao iei io mene fekau o puaka io mene kuli. E isi sena aka lasi (tap root) kae ko ona lau foliga pela mese taemani kae ko fuaga e fulufulu a ulu o latou. E uke vaega o ‘mota’ e uke foki e filigina kae toki mo fai a fuaga (grain), ko lau e fakaoga mo fakagaligali a matafale, kote lasiga o vaega ote motae ola vale pela mene mouku fakalavelave ki lakau kaina. Te vaega mota kote *A.tricolor* se vaega e toki ke fakaoga ona lau. Ate mota e ola lei laukele o fenua foliki kae fakaoga foki a kaiao.

**Fakaaogaaga:** A lau foliki ote lasiiga o ‘mota’ e mafai o kai, ko niisi e mafai o lasi kae malulu olotou lau, te vaega tenei e toki ke fakaoga ona lau i faiga o meakai. A lau e tau o fakavela malie, ko lau matua e tau o tai leva atu, io me e mafai fua o faopoopo atu ki niisi o meakai pela mo suupu, kale mo sua (stew). A lau ote mota seki fakapaku se tau o fakaoga, me ite aofaki o ‘osalate’ ite lau e mafai o fakafoliki neia te aofaki o te fiti (iron), zinc, calcium mote magnesium mafai ko tunu ate levolo o ‘oxalate’ i lau ko timomo. Tela a maga koi malulu e tau o fole te pakili koi tuai o kuka.

**Vailakau mo masaki:** A lau ote mota e lasi te fakaoga i fenua e uke ite fakaleiga o kiatolo, te fiva, mae tinae (sasana, sanatoto, fakafoa te puta –ulcers), kae fakafoliki te pokotia ki masaki ote fatu mote maluga ote suka ite toto. A vaega konei koa oti ne fakatalitonu ite faiga ote sukesukega ite polotieki tenei.

**Te mafai o maua:** A mota e mafai o toki i sose taimi ite tausaga i fenua foliki penei mo tou fenua, pela foki mo niisi fenua tai mokomoko olotou tau. E fai pela me ite mota kote toe lau-vesiapolu taua i Fiji, kae seki maketi i Kiribati io me i Tuvalu.

**Fakaolaaga:** A lakau foou e mafai o fakaola mai fuaga-kola e foliki kii, tela mafai e ola a tama-lakau se manakogina ke siki.

**E toki pefea:** Te mota e ola lei atu iI paketi (pots) lasi io me i moega fakaola lakau kae pulutaki mo kaiao. E ola lei mana tuku fakasau kite laa, na fua kote tutonu e tau o fakamalugina le lei te olaaga mote fakasologa o lau ote mota. Te se lei



## FACTSHEET 2 : MOTA

te fakatokaga ote koga e toki iei a lakau mote se lava te vai e mateagofie me a lakau ka se gasolo, ka foliki, kote foitino mo mag aka foliki foki telaa ka pula vave foki.

**Pokotiaga:** Te mota e se lasi te pokotia ne manu fakamasei, kae ko manu kola e masani o kai ne latou lau pela mo grasshopper ko mafai iei o pokotia a lau ote mota.

**Te tauuga o lau:** Te ola lei o lakau ka fakatumau ite paki saale o moe. A moe io me ko lau foliki e mafai ke oko kite 5 o lau foou kola e mafai o toe paki kae kofu kise pepa e siu. E tau o fai te tauga o lau ite taimi moko ote aso. Mafai koa oti ne paki a moe ote lakau ka toe faite moe e uke kola e mafai o toe paki i vaiaso mai tua.

**Te tauga o lau mote tausiga:** A lau e tau o fulu ke maa i vai maa io me i suatai. E mafai o kofu fakatasi kae fakatuu i loto i vai, ufi kise palasitiki kae mafai o tausi iloto ite tasi kite lua aso. Mafai e tuku ite aaisa e mafai o leva atu kite vaiaso. E mafai foki o fakapoloka a lau kona, ko leva atu te tausiga.

**Fakamatalaga ne maua ite sukesukega/Niutilisini:** A lau ne fakamaua mai i Kiribati mo Samoa (onoono kite taipola mai lalo). Te mota se lakau e maumea i minelolo mo nutulieni taua. E aofia iei ko polotini, ‘carotenoids’ mo minelolo pela mo (zinc, calcium, and magnesium). E 2 lima fonu (100gms) i lau ote mota e lava mose tino tokotasi i taimi e kai iei.

**Polotini:** Te vaega tenei e taua ite faitega o kano mo sua pela foki mo vaega ote toto, manu ote foitino e masani o teke atu ki masaki e pokotia iei te foitino, DNA mo RNA. Ite sukesukega tenei e tusa mote 19% te levolo o polotini lei i lau ote mota.

**Carotenoids:** Te ‘Lutein’ e taua mote tausiga o mata ke lei – e puipui ei ate mafuaga o (catacts), kote beta-carotene (provitamin A)e taua mote maate o mea, teke atu ki masaki ote mata, pela foki te tausiga o ivi.

**Siniki:** Te minelolo tenei e taua ite faitega o vaega ote foitino e teke atu ki manu o masaki masei, te fakatupu ote foitino, te fakaaogaaga o masoa, te DNA mote faitega o polotini (protein). Ate foitino e tusa mote 600 a vaega o sua mo polotini (protein) e isi ne siniki (zinc) iei.

**Makenisiamu:** Te minelolo tenei e taua ite faitega o ivi, enetise mote galue lei o uaua mo kano ote foitino.

**Kalasiamu:** Tenei te minelolo taua ite fakatupu ote foitino pela foki mote tausiiga o ivi mo nifo. E taua foki i ‘cellular physiology’.

This table compares selected mineral nutrients and carotenoids in leaves of amaranth and sweetpotato grown together at Lotofaga, Upolu, Samoa in 2012 and English cabbage (average of samples bought from Honiara market, Solomon Islands and Nukualofa market, Tonga in 2012) (concentration in mg/kg dry weight, except N: % dry weight). The amaranth sample collected on Tabiteuea North atoll, Kiribati was higher in Zn and Mn and lower in N, P & K than the Samoa sample.

	Mn	Zn	Ca	Mg	K	P	S	N %	lutein	alpha carotene	beta carotene
Amaranth	58	<b>64</b>	<b>15500</b>	<b>18800</b>	<b>45000</b>	6400	4400	<b>5.3</b>	<b>462</b>	8	<b>350</b>
Sweetpotato	75	23	5500	4600	15900	3600	3200	4.6	<b>457</b>	10	<b>317</b>
Cabbage	23	20	5700	1450	29000	3750	3750	2.8	5	0	2

Mn: manganese; Zn: zinc; Ca: calcium; Mg: magnesium; K: potassium; P: phosphorus; S: sulphur; N: nitrogen

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