

TE MOTA

Botanical name: *Amaranthus spp.* (Amaranthaceae)

Arana n taabo ake a kuneaki iai: te mota (Kiribati), mota (Tuvalu), moca, tubua, upa, bhaji, bayam

Aron teina ao kinakina: Te mota bon te aroka ae tuakaroko, e wakauea ao man teimatoa aron maiuna, baana e korea tamnei te taiman ao ueena ai aron taraan te buraeniman are boni ngaia nnen atina. A maiti kurikuri utuun te aroka aio, angina a kawakinaki ao man unikaki ibukin kateimatoan reken atina, bon iai naba raoiroin baana ibukin te katamaroa kanga te ue ao tabeua ibuakoia a taraaki ba uteute. Utuna ae aranaki ba *A. tricolor* e kabonganaaki naba baenikaina ibukin te tuubu. Te mota e kakoauaaki ba e maeuraoi n tanon aaba aika a riki man te ane man raka riki maeuraoina mani kabonganaakin te kamkamka.

Bonganana: Angiin rinanin te mota a bane ni kanaki baaia aika a uarereke ke inanon uarerekeia ma iai naba utuuna aika a unikaki ti ibukin te amarake aika a kona n anga baaia aika a bubura riki man taraa ni kangkang. A rangi n tamaraa baana nte kamwaaki ke ni kabuaneaki: baana ake a bubura a tangira te tai ae maan ngkana a kabuaneaki ke a kona n renganaki ma kuuka n aron te tubu te kare ao te kabuane. Baana aika a aki kamaaki a bon aki tau ke n raoiroi ibukin te amarake kioina ba e kakanoa nte oxalate te aekaki ni kemikoro ae na kona ni kauarerekea raoiroin ao maitin amarake ake a kuneaki n te baanikai n aron te iron, zinc, calcium ao magnesium; kamwaia nte aro ba ena uarereke maitin te oxalate. Mwangana aika a bon taraa ni marau a na riai moa ni kuotaki kuniia imain kamwaakiia.

Te Bainoraki: Baan te mota e kakabonganaki n aaba aika a maiti ibukin bwain aorakian te baauraura, te kabuehue, te mariri, te maneka n nano (te bekanako, te maneka n abein) ao e ibuobuoki naba nakon aorakin te buroo ao te tioka man kauarerekeia reken te rietata n rara, kakerikaaka maitin te kiriiti ao maitin te tioka inanon te raraa. A tia ni kakoauaaki aikai mai imwin karoaakin kamatebwai ao taian kakae.

Aron rekena: Te mota e bon rangi ni kai maeu ni kabanina te ririki n aono aika a kabuehue ni uakaan ma te ekuetoa. E ribotinaki ba e korakora kabonakoana i Bitii ma e tuai rang tabangaki kinakina n te makete i Kiribati ao Tuvalu.

Karekean te aroka: Aroka a kona ni karekeaki man koorana ke atina aika a rangi ni uarereke ao mani konaa naba n kaweneakoaki inanon uarerekena

Aron unikakina: A konaa n kabwebweaki inanon taian boora ake nnen taian aroka ke boora ake a bubura ke inanon taian beera nte onaroka ma te tano ae bon tau mwaimwaina n reitaki ma te kamkamka. E roko raoi maiuna iaan te riringa ao nte tai marau ke te tanimaeao n taa ao anne ana tai ni kabatiaa baana. N taano aika a aki rangi ni maeuraoi ao mani kakoauaaki ba a aki taua te ran, a na bon karekeia te nimaoraki, te buroo ni kiika nakon baana ao te mmanibwerebwere ni mwangana ma ni karika te moan taa ni ue.



FACTSHEET 2 : TEMOTA

Kanganga: Te aroka aei iai irouna teutana te kona ni kaitarai aoraki ke maan aika a urubwai; ma maan aika grasshoppers boni ngaii aika a kona n riki ba te kanganga nakon te mota.

Tain kinikana: E rangi ni kaungaaki unikakin te aroka aio ibukin waekoan manga kabaitian taina. Kairan te iango, kataia kiniki baana ake man te kanimabaa nako taberana ao kaaki inanon te beebe ae mwaimwai. Te tai inanon maitoron te ngaina e totokoa te rai ao te mautakataka nakon baana. Iran nanon te kaetieti ke kairan te iango n te tai ao e na reitaki nako te maiu ao ni manga karekei teuana ke e maiti riki ae ena tauraoi ao man tai inanon tii tabeua te wiiki.

Imwin kinikana ao aron kawakinana: Baan te mota a na riai ni karauaki ni kaitiakaki raoi ma te ran ae raoiroi ke bon taari ae itiaki. A kona ni buabuataki raoi ma kaina ake a tia ni koreaki ao ni kateaki raoi inanon te ran ae itiaki. Ngkana a kawakinaki inanon te buratitiki ae itiaki ao mani kakaoaki nte tabo ae maitoro ao man tiku iaii nanon teuana ke uoua te bong. Ngkana a kawakinaki inanon te konteina ae e in raoi inanon te tabo ni kamaitoro ao e na kona n tiku n raoiroi nakon te maan ae e reke wiikina. Baanikai aika a rokoraoi taia ke a matoa a kona ni kawakinaki ni kaburaokaki.

Taian kukune man karikirake/kanoan taian amarake: A tia n anaaki katoto ibukin tuoia mai Kiribati ao Tamoa (noora te taibora inano). Te mota bon te aroka ae tamaraa ibukin te amarake ao e teimaan man teimatoa ibukin karekean te protein, carotenoids ao tabeua minerals moararariki te zinc, calcium ao te magnesium. E nakon uoua te abuta ni bai ke 100 grams e rangi n tau ao mani bongana ke ni kamarurung ibukin kanan temanna te aomata.

Protein: Te protein ke te tanna e rangi ni kakawaki ibukin buokan te matireti, bain nako te rabata, karekean te raraa, tautian te rabata ao ai te DNA ma te RNA. Te nuukani ware imwin tutuo iaon taian katooto ao e katerei raoiroin maitin te protein nte maiti ae 9 %.

Carotenoids: Lutein e rangi ni bongana ibukin marurungin te mata (e.g. e kauarerekea te kanganga are ena kona ni karekea te kabuanibwai nakon te mata) ao te beta-carotene (pro-vitamin A) ngaia ae bongana ibukin te taratara, kamarurungan te rabata ni kaitarai aoraki ao ai marurungin taian rii.

Zinc: E bongana ibukin kamarurungan te rabata ni kaitarai aoraki, rikirakena ao ai te korakora n reitaki ma aron makurin taian DNA ao proteins. Aomata nako a na riai ni iai ke n reke irouia n taai nako 600 rinanin taian zinc aika a kakanoa n taian proteins/enzymes.

Magnesium: Rinanin te minero ae bongana ibukin te rii, karekean te korakora ao te namakin ma makurin taian mwatireti.

Calcium: Te rinan ni minero ae rangi ni bongana ibukin rikiraken ao kamaoaan te rii ao te wii. Calcium e bongana naba ibukin kateiraaoan bain te rabata aika a uarereke.

Te taibora ni kabotau iaon mineroo ao karetenoitaki ake a rineaki ibukin baanikai aika te mota ao te kumara ake a kaai ni unikaki iaon Lotofaga, Upolu, Tamoa nte ririki 2012 ao te tekabiti ni imatang (te katoto ae kabooaki man te makete I Honiara, Toromon ao Nukualofa Tamoa nte ririki 2012) (maitina ke korakorana e warekaki ke n anaaki te mg/kg man rarawatan ae mwau n aki warenaki te naiturotin, N %). Katooton te mota are e karekea man te abamakoro ae Tabiteuea Meang I Kiribati e rangi ni korakora ni maiti riki iai te zinc ao te magnesium ao e karako ke ni uarerekemaitin te naiturotin N ao te botatiem K nakonkatotomai Tamoa.

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	64	15500	18800	45000	6400	4400	5.3	462	8	350
Sweetpotato	75	23	5500	4600	15900	3600	3200	4.6	457	10	317
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

Analyses conducted by Waite Analytical Services and the Mares Laboratory, University of Adelaide, South Australia

This fact sheet is one of a series produced for the Australian Centre for International Agricultural Research (ACIAR) funded activity "Improving soil health, agricultural productivity and food security on atolls: SMCN2014/089". It is based on fact sheet no.11 in the series produced during the project ACIAR PC/2010/063

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