

# Aron karaoan ao kamauan te kereboki:

Te boki ibukin buokaia taan akawa n te Betebeke



# **Aron karaoan ao kamauan te kereboki: Te boki ibukin buokaia taan akawa n te Betebeke**

Katauraoki ao n baarongaaki iroun: Steven W. Purcell, Southern Cross University  
Banna iaon aron karaoan te kereboki iroun: Jipe Le Bars, Secretariat of the Pacific Community

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## Taeka n Kakaaitau

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Te karabwarabwa nakon Chris Barlow, Ian Bertram, Aymeric Desurmont ibukin aia boutoka ao taeka n ibuobuoki ibukin te boki aei. A raweaki tamnei n kabane n te boki aei iroun Steven. Purcell ao a riai moa bubuti ibukin te kariaia iaon kabonganaan tamnei aikai n aanga aika a mwaiti n roko moa iroun Steven. Purcell. A reke rongorongon ma aron karaoan kereboki man ana ibuobuoki Theo Simos, Karibanang Tamuera ao Poasi Ngaluafe. Ti karabwaia taan karao kereboki ake a tia n anga rongorongon iaon aia anga ni karao kereboki ao riki Helmut Waicane, Malato, Fred Ho, Kuolong Chen ao Amanaaki Tukuafu. E karaoaki te boki aio man ana mwane ni buoka Australian Centre for International Agricultural Research (ACIAR) ao man aia boutoka ana taan rabakau te SPC. E rairaki te boki aio nakon te taetae n Kiribati iroun Dr Temakei Tebano ao ni manga rinanoaki iroun Karibanang Tamuera Aram.

## Aan karaoan te boki aei

---

E baarongaaki te boki aei ibukin buokaia taan kereboki n aban nako te Betebeke. Aekan kereboki ake a kaotaki n te boki aei bon ngaai ake a rang n akaakawaaki riki n aban te Betebeke.

*Te taeka ae Aron Karaoana* ke *Karaoana* ae nanonaki n te boki aei bon aanga ke mwakuri ake e oneaki iai te kereboki ae menaai nakon te kereboki are e a tia arona ni kamwauaki are e aranaki bwa te kamwau-n-kereboki ke te kereboki. Inanon waakin karaoan te kereboki ao bon iai te bwenabwena, taoronakina, kamwaana, kabweeariana ao ai te tataawa ibukin kamwauana.

Mwaitin boon te kereboki are ana anganaki taan akawa e bon nakon aeka ni kereboki ake a kaboonakoi, buburaraia ao nakoraoin aron karaoia. Bukin aio bwa taan kabo kereboki n aban Aatia a tangirii kereboki aika a tamaroa ao n katika te nano taraaia ma kangkangia ngkana a kamwaaki. Ma ngaia are, a bubura riki boon kereboki ake a karaoaki raoi ao a uarereke boon ake a aki rang n karaoaki raoi.

A mwaiti taan akawa aika a aki ataa raoi aron karaoan te kereboki nakon are e na rang n tamaroa iai. N tokina ao a kona n rangi ni uarereke boon aia kereboki mairouia taan boobwai.

A mwaiti aanga ake a kona n kabonganaaki ibukin karaoan te kereboki n te aro bwa e na rang n tamaroa. Ao te boki aei e bon anganiia taan akawa n aia kaawa nako te kabanea n tamaroa ibukin katauraon te kereboki.

# Moan Rongorongo

## Rinanin kereboki n te Betebeke aika a kakaawaki ibukin te iokinibwai

E raka iaon 1000 rinanin kereboki ma tii 20 ke e mwaiti riki aika a anaanaaki riki n aban nako te Betebeke. A toa ma araia n taetae aika a mwaiti ao iai naba araia n onoti-n-tiaienti, araia are te moan bon aran te utu ao te kauoua n ara e bon onoti nakon te aeka n kereboki teuana ma teuana.

Mwaitin boon te kereboki e bon nakon te aekaki teuana ma teuana, aron buburana, ao aron nakoraoin karaoana (e oti aei man matan kunna, boina, ao namakinana iaan te bai). A na kabwaranakoaki riki rongorongon aikai n mwakoro aika imwiina.

Tamnein kereboki n te mwakoro aei a kaotaki iai tamnein kereboki ake a rangi n tamaaroa aron karaoaia.

Tein boon te kamwau-n-kereboki n te Betebeke e bon irekereke ma buburan te kereboki ao nakoraoin karaoana.



Arana n kabuta:

**Tetanoika**

Arana n onoti-n-tiaienti:

*Holothuria scabra*

Boon ae mwau:

US\$16–45 n te kiro



Arana n kabuta:

**Teikakoora**

Arana n onoti-n-tiaienti:

*Holothuria lessoni*

Boon ae mwau:

US\$16–45 n te kiro



Arana n kabuta:

**Temaimamma**

Arana n onoti-n-tiaienti:

*Holothuria*

*fuscogilva*

Boon ae mwau:

US\$45–85 n te kiro

# Moan Rongorongo



Arana n kabuta:  
**Teromamma**  
 Arana n onoti-n-tiaienti:  
*Holothuria whitmaei*  
 Boon ae mwau:  
 US\$25–65 n te kiro



Arana n kabuta:  
**Teburaerae**  
 Arana n onoti-n-tiaienti:  
*Thelenota ananas*  
 Boon ae mwau:  
 US\$25–65 n te kiro



Arana n kabuta:  
**Tewaeura**  
 Arana n onoti-n-tiaienti:  
*Actinopyga mauritiana*  
 Boon ae mwau:  
 US\$25–40 n te kiro



Arana n kabuta:  
**Teikaatiibu**  
 Scientific name:  
*Actinopyga lecanora*  
 Boon ae mwau:  
 US\$25–55 n te kiro



Arana n kabuta:  
**Teroroo**  
 Arana n onoti-n-tiaienti:  
*Actinopyga palauensis*  
 Boon ae mwau:  
 US\$25–55 n te kiro

# Moan Rongorongo



Arana n kabuta:  
**Teburaeroroo**  
 Arana n onoti-n-tiaienti:  
*Actinopyga miliaris*  
 Boon ae mwau:  
 US\$25–55 n te kiro



Arana n kabuta:  
**Teikaura**  
 Arana n onoti-n-tiaienti:  
*Actinopyga echinites*  
 Boon ae mwau:  
 US\$25–65 n te kiro



Arana n kabuta:  
**Tetaika**  
 Arana n onoti-n-tiaienti:  
*Bohadschia argus*  
 Boon ae mwau:  
 US\$12–25 n te kiro



Arana n kabuta:  
**Tekare**  
 Arana n onoti-n-tiaienti:  
*Stichopus herrmanni*  
 Boon ae mwau:  
 US\$8–55 n te kiro



Arana n kabuta:  
**Tekiriin**  
 Arana n onoti-n-tiaienti:  
*Stichopus chloronotus*  
 Boon ae mwau:  
 US\$25–65 n te kiro



# Moan Rongorongo



Arana n kabuta:  
**Teraakon**  
 Arana n onoti-n-tiaienti:  
*Stichopus monotuberculatus*  
 Boon ae mwau:  
 US\$10–15 n te kiro



Arana n kabuta:  
**Tekanimnim**  
 Arana n onoti-n-tiaienti:  
*Bohadschia vitiensis*  
 Boon ae mwau:  
 US\$8–20 n te kiro



Arana n kabuta:  
**Terebanti**  
 Arana n onoti-n-tiaienti:  
*Holothuria fuscopunctata*  
 Boon ae mwau:  
 US\$6–8 n te kiro



Arana n kabuta:  
**Tetiaoka**  
 Arana n onoti-n-tiaienti:  
*Bohadschia marmorata*  
 Boon ae mwau:  
 US\$8–18 n te kiro



Arana n kabuta:  
**Tenaeta**  
 Arana n onoti-n-tiaienti:  
*Holothuria coluber*  
 Boon ae mwau:  
 US\$8–16 n te kiro

# Moan Rongorongo



Arana n kabuta:  
**Tentabanebane**  
 Arana n onoti-n-tiaienti:  
*Holothuria atra*  
 Boon ae mwau:  
 US\$4–15 n te kiro



Arana n kabuta:  
**Ntabanebanen teora**  
 Arana n onoti-n-tiaienti:  
*Holothuria atra*  
 Boon ae mwau:  
 US\$6–15 n te kiro



Arana n kabuta:  
**Tenautonga**  
 Arana n onoti-n-tiaienti:  
*Holothuria edulis*  
 Boon ae mwau:  
 US\$4–8 n te kiro



Arana n kabuta:  
**Teaintoa**  
 Arana n onoti-n-tiaienti:  
*Thelenota anax*  
 Boon ae mwau:  
 US\$8–18 n te kiro



Arana n kabuta:  
**Teuee**  
 Arana n onoti-n-tiaienti:  
*Pearsonothuria graeffei*  
 Boon ae mwau:  
 US\$3–5 n te kiro

## Bonganaia kereboki nakon te oo-tabwanin

A kakawakawa kereboki iaon te kariburibu ao aon rakai ao n kang amwarake aika uarereke ake a irengan ma te tano ao te riburibu. A kang man n aoraki, nimroona aika a mate ao maan aika a bingiingii ao n manga kaotinakoa te tano ae e itiaki.

Ma ngaia are, a rang n boongana kereboki ibukin kakaraaunian menan amwarake ake a tiku iaon tano. Ao mimiia kereboki a bon kona naba ni buoka maiuraoin te nimroona/uteuten taari ma te ane.

Iai kereboki aika a taatauniia ibuakon te tano. Ni karaoan aei, ao a kakibea te tano n te aro are e tiku n itiaki ao n tamaaroa.

A kaakanaki naba kereboki irouia maan aika a mwaiti, ma ngaia are a rang n boongana ibukin te tiein n amwarake i taari. Iai iika tabeua, te aa, mwanai, oon ao mannikiba aika a kaakana te kereboki, riki inanon uareerekeia.

Anaakin kereboki n akea te katautau e na bon kona n roota aron mwaitiia ake a na manga bungiaiki nakon are i mwina. E na raka roroon aon tano ao man rootaki aron maiun te naa n nimroona/uteuten taari ao te naa n ane.





# Moan Rongorongo

## Anua aika a raraoi ibukin anaan te kereboki

A akawaaki kereboki n aban nako te Betebeke ma iai aaba tabeua aika a aki kariaia iokinibwaiana nako tinaniku.

Ko bon riai n iira tuan abam ibukin anaan ao kaboonaokoan te kereboki. Kai-ni-baaire aikai ana buoka kateimatoan mwaitin te kereboki ibukim ao ibukiia rooro aika a na roko.

Tuua ma anua aika moan te tamaroa:

- ✓ Tii rikoi buburan kereboki n aron rinaniia aika a kakaokoro. Katikui ake a uarereke n te aro bwa a na tiku n rikirake ao n manga rikoaki nakon ririki akana imwiina.



- ✓ Tii kabonganai baim ibukin rikoan te kereboki. Tai urua te ane ao te keang.
- ✓ Tii rikoi kereboki nakon te mwaiti are ko kainnanoi. Katikui tabeua bwa a na manga kaabung ibukin ririki aika a na roko.



- ✓ Katikui aeka n kereboki ake a rang ni karako mwaitiia ke n riaanibwai n iai i abara bwa e aonga n kaawakinaki teimatoan te reita-ni-maiu.
- ✗ Katoka anaan te kereboki n te bong ke kabonganaan te kaeti ngkana e katabuaki kamanenaia iaan tuan abam.

## Taabo ake a iokinibwaia te kereboki ao aron kabonganaana ibukin te amwarake

Ngkana a tia n kamwaaki ao n kamwauaki kereboki, ao a aranaki ngkanne bwa te 'kamwau-n-kereboki' ke te kereboki.

Angiin kereboki ake a kabooakinako man aban te Betebeke a bon iokinibwaiaki nako Tiaina. Te moan tabo bon Hong Kong, ma angiiia a uotaki nakon taabo n boobwai n kaawan Tiaina ake i nuukan te aba. Aaba riki ake a iokinibwaiaki nako iai kereboki man te Betebeke bon Taiwan, Korea ao Amerika (USA).

Te Kereboki bon te amwarake ae e rangi ni bobuaka ao man kangaanga aron reereken kanakiiia. A rang n boobuaka n taabo n boobwai i Atia. A kabooaki n te rawaawata irarikin te bai n bakoa ao amwarake riki tabeua ake a tia aroia n kamwauaki.



# Moan Rongorongo

Taan kabonganaa te kereboki i Aatia a tangira are e etiruru, akea ikuakin kunna, e turu matana (ibukiia aekaki ake a roroo), a aki boiboi ao man aki onrake n te taoro. A na bon rang n bubura boon kereboki ake iai bwaai aikai irouia.



Taan kang kereboki i Tiaina a kana te kereboki ae renganaki ma te tioti n taai n amwarake aika a kakaawaki. Te kereboki bon teuana mai buakon kanaia I-Tiaina man bwain taari aika kakaawaki n aia baka n amwarake ke n aia bootaki.



# Aron katauraoran ao karaoran te kereboki

## Ibukin tera bwa n na rang n katamaroa raoi aron karaoran te kereboki?

Boon te kereboki are e iokinibwaiaki nako tinaniku e na rangi n materaori ngkana e rangi n tamaroa aron karaoana. Are nanona bwa a riari taan boobwai n anganiko naba te boo ae tamaroa riki ibukin tararuana raori ao karaoran raori am kereboki.

A riari n itiaki raori kereboki ake a kamwauaki, n aki uruaki ao n taraa raori.



E na tangira riki aia tai kaain am utu ae maan ibukin katamaroan ao karaoran raori te kereboki. Ma uringnga bwa e na mwaiti riki am mwane n reke man am man are ko rikoia mai taari.

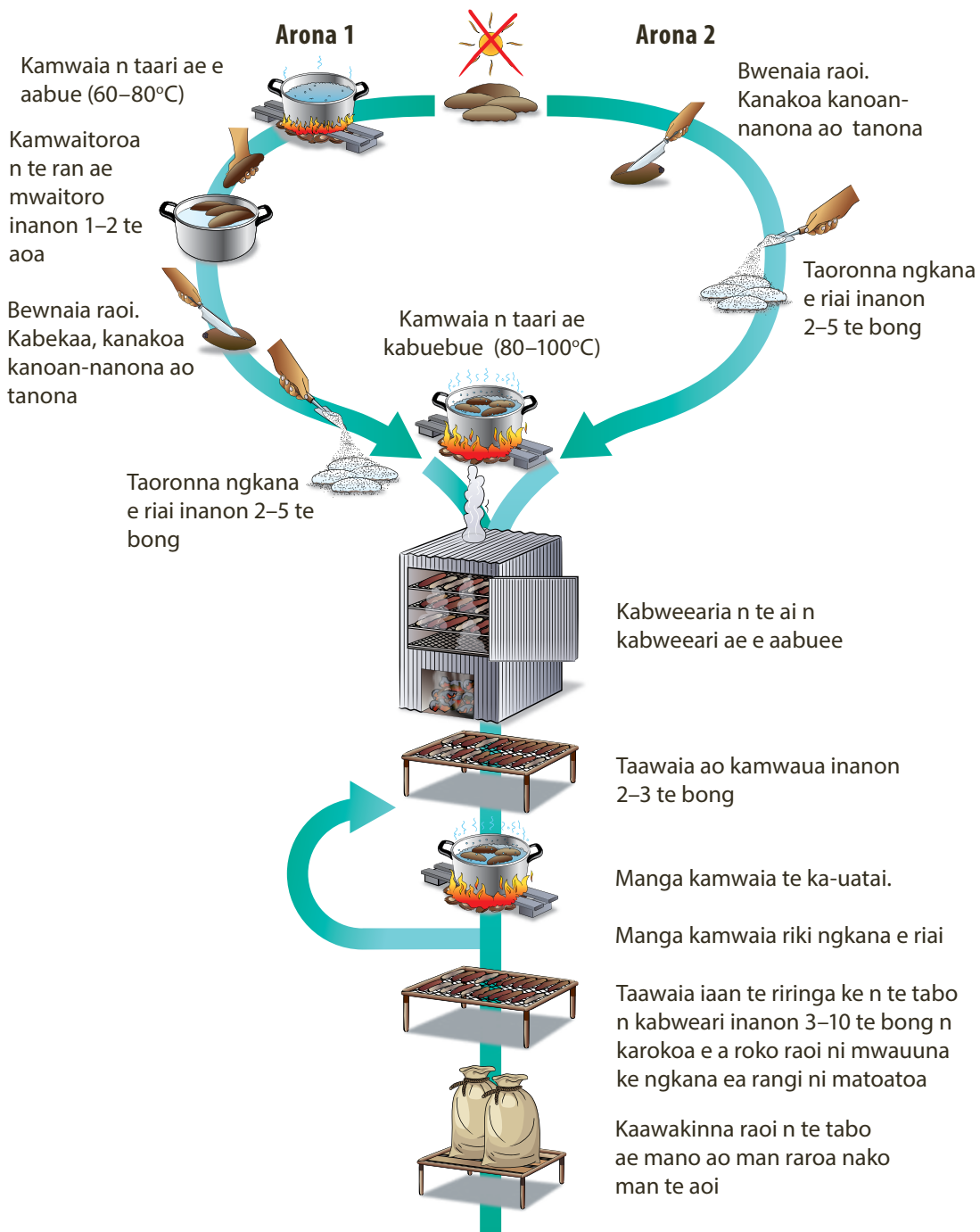
Rakan am mane n reereke man karaoran raori am kereboki e na bon kauareerekea naba am tai n nanako n akawa ma ea raka riki am kareke tainti nakon are ko bon tatane iai ni kakarekea.





# Aron katauraoran ao karaoran te kereboki

## Taraia raoi bwa a na aki uruaki rabwatan am kereboki



# Aron katauraon ao karaon te kereboki

## Baikara au bwai n mwakuri aika N na kainnanoi?



Te bitu ae kakang

Te kai ibukin kakibean te kereboki n tain kamwaakina



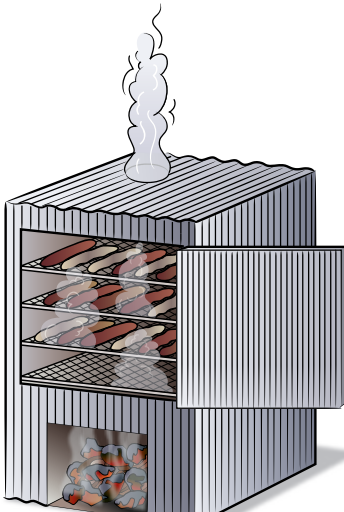
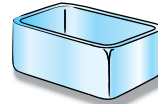
Te kai n aeaeaki ae ai aron tein te riena ibukin aekan te kereboki ngkana e mwai



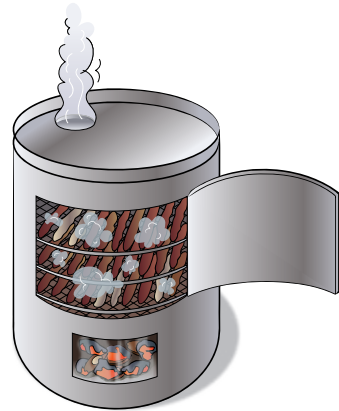
Te bwaata ae e buubura ke te turam ae te 200 n riita (44 te kaaran) ae koreaki mai nuukana ao n kaitiakaki raoi



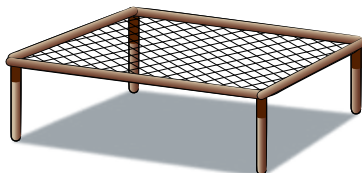
Te taoro ae e aki rang n mtemte ao am kaonteina ibukin am kereboki ake a na taoronaki



Te bwai n kabweeari ngkana iai



Te baobao n tataawa



Kaai aika a uarereke ibukin kaukan mwiin bwanaan te roo ao te mai mamma ao te tuain ibukin manga kainana

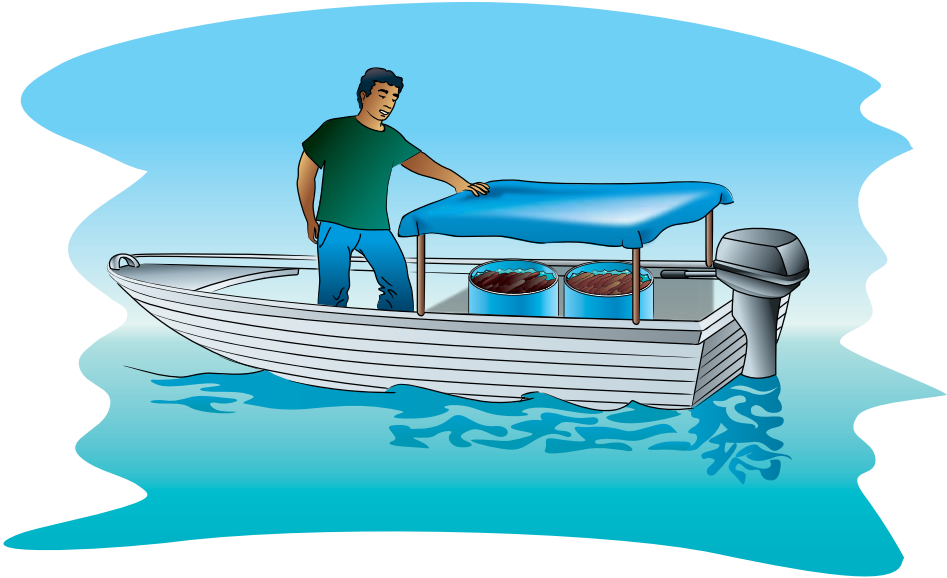


Te baeki ke baeki ibukin kawakinan am kereboki ngkana a mwau

# Aron katauraoran ao karaoran te kereboki

## Aron tararuan te kereboki man moan anakina mai taari

A riai n kaawakinaki raoi ao n kamwaitoroaki kereboki inanon te booti ke n te buua ae kakanoa n taari. Ngkana ko kaawakin n te booti ao katanii man te riringa!



Tai kataia n kaibetaotaoi, mwiina a na manamana ke n uruaki kuniia.

- Boota Teromamma (black teatfish) ma Temaimamma (white teatfish) n neia ae ti teuana.
- Booti utuu ake a roroo (Actinopyga) n neia ae ti teuana
- Boota teburaerae bon irouna ke n ikotia ma tewaeura
- Kaokoroa Tekare bon irouna n aki ikoikotia ma aeka ni kereboki ake tabuea

Taraia raoi bwa e na bon aki ikuaki ke n uruaki kunin am kereboki

A kakai rootaki ke n maranako rabataia aeka n kereboki tabuea riki ngkana a rootaki n te kabuebue ke n te mwautakataka. Kaawakin raoi aekaki aikai n te turam ae kakanoa n taari ae mwaitoro ao man tan raoi man te riringa iaon te booti ao man onoono-raniia.

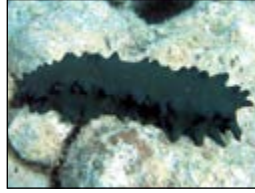
# Aron katauraoran ao karaoran te kereboki



Tekare



Teaintoa

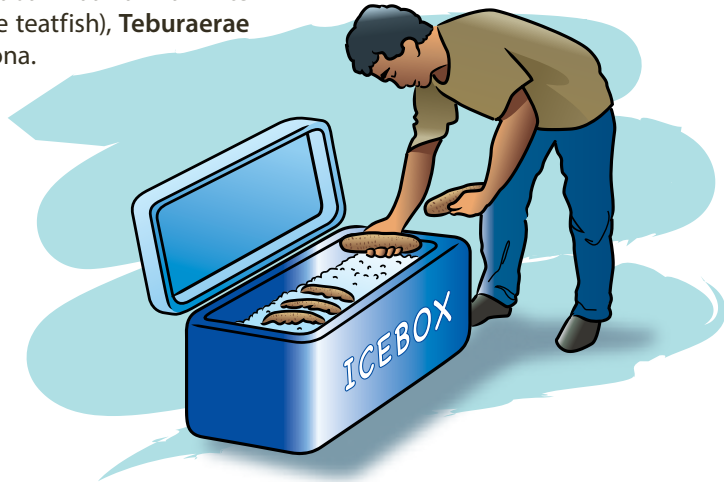


Tekiriin

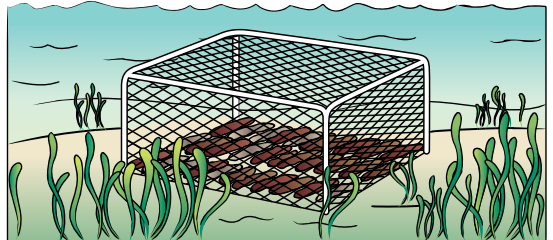


Teraakon

Ibukin **Tekare**, **Tekiriin** ao **Teraakon**, e tamaroa riki ngkana a kaawakinaki n te mwaitoro ke taari ae kamwaitoroaki n te aiti ke a nneaki n te aiti n karokoa te tai are a nang kamwaaki iai. Tai kabekai n karokoa te tai are a nang kamwaaki iai bwa mwiina ao a maenako naba rabwataia ao irikoia. A bon kona naba n kaawakinaki n te aiti tenaa ni mamma (te teatfish), **Teburaerae** ao **Tetaika**, ngkana a kona.



Ko riai ni karaoi naba konam ni kabekai ao ni kamwai imwiin okim n akawa n te bong naba anne. Ngkana ko aki kona n karaoi konam n te bong naba anne, ao e rangi n tamaroa ae ko katikui ni kaawakin konam i taari n te tairiki anne n te tabo ae ia bubuti ao n aki kona n takaroro n tain te ora ke ni kaawakin n te turam ae e kakanoa n taari.





# Aron katauraoran ao karaoran te kereboki

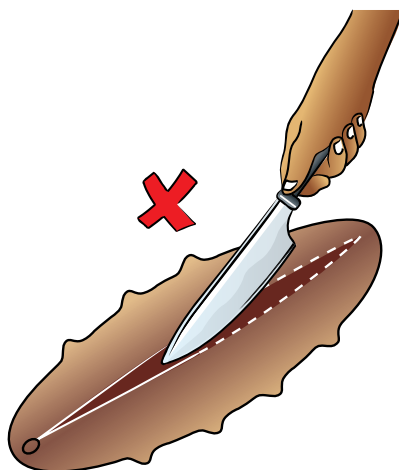
## Aron Te Kabekabeka

### *Kauring tabeua*

- ✓ Taratara raoi ngkana ko bwenai am kereboki. E tangiraki te kereboki ae e bon eti raoi aron koreana ao man koreaki raoi n nnena n aron utuun te kereboki irouia taan boobwai mai Aatia.
- ✓ Tai korokoro ni katabwena man wiina nakon kabekarana/kiina.
- ✓ E raoiroi riki te bwenabwena ae uareke nakon ae ananau.
- ✓ Taraia raoi bwa ko na kanakoi kanoannanona ni kabane ma tantanona. Katikui ana mwaatireti ke kokoranna.
- ✓ Ngkana e na raka iaon tebongina maanin am tai n akawa ao taoron am kereboki ke kamwaitoroi n te aitiburaoki ma tai kaburaoki bwa mwiina a na uruaki ao n buakaka.

### Aron kabekaan Temaimamma ao Teromamma

Bwenai raoi am kereboki mai akuuia. Kaeta raoi am korokoro ao man katuka 2 nakon 3 rababan te tabonibai (3–5 cm) ae e na aki koreaki i moan wiina ao bukina. Taraia bwa e na boorarabaua raoi moa imwaain koreakina.

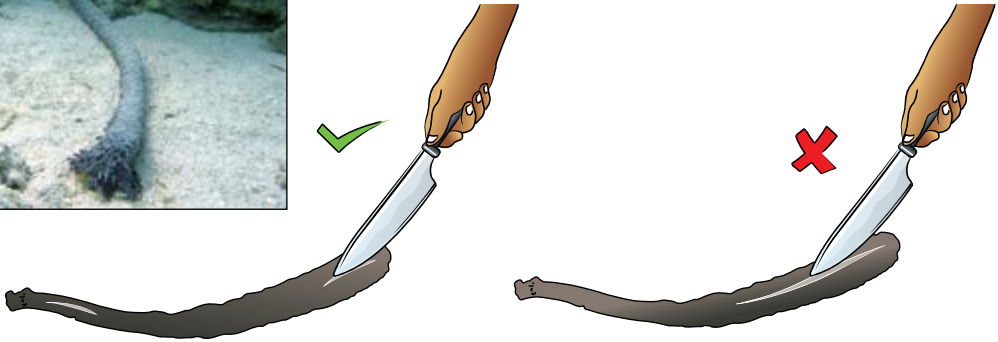


Tai bwenai man wiina nako bukina

# Aron katauraoran ao karaoran te kereboki

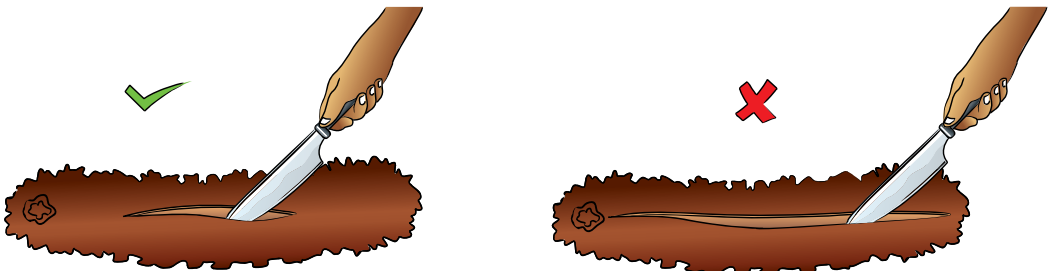
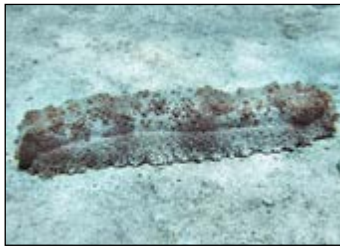
## Aron kabekaan Tenaeta

Ibukiiia utuu ake a ananau n aekan Tenaeta ao ko kona n bwenaiia n uoua te tabo mai iaan birotioia. E tamaroa riki ngkana e kabekaaki imwiin moan kamwaana n te aro are a na bon tiku n aron teeia n taraa raoui. Tai mwaninga n kanakoa raoui te tano mai nanoia.



## Aron kabekaan Teburaerae, Teaintoa ao Terebwanti

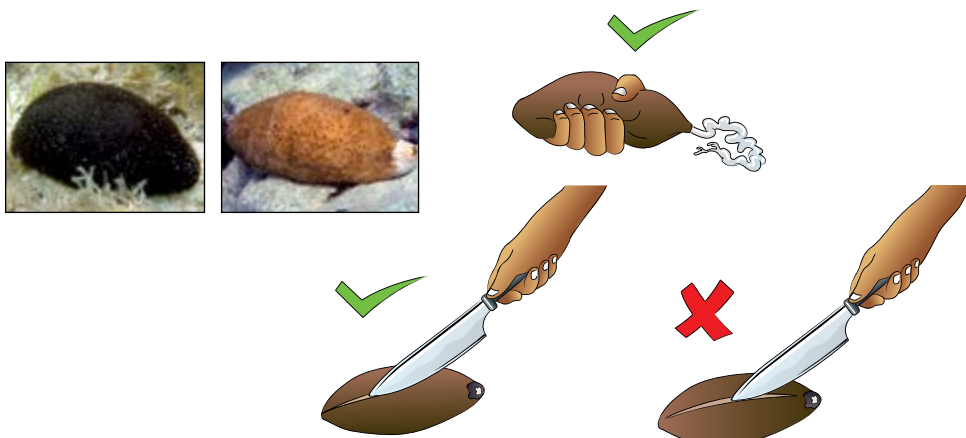
Karaoa te bwenabwena ae eti man abwabwaki nako aan biroton te man. Katuka tao 3 rababan te tabonibai (5 cm) are e na aki koreaki i moan wiina ao bukiina.



# Aron katauraoran ao karaoran te kereboki

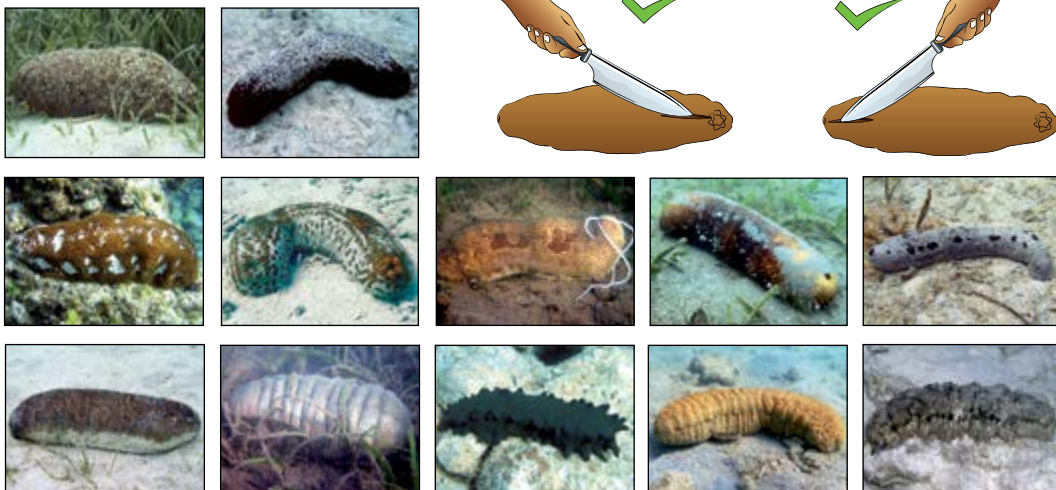
## Aron kabekaan Teburaeroro ao Teikatiibu

Ko a bon tii koon naba kereboki aikai ao a beka naba man otinako kanoan-nanoia, ao ko a kamwaii naba. Ma kereboki ake a aki koreaki a na aki rang n kakai-mwau. Te anga naba teuana kona bon kamwa moa am kereboki n te ran ae kabuebue, imwiina koa karaoa naba te korokoro ae e uarereke nako aan birotona irarikin kabekarana ao ko a kabekaa naba. E tangiraki riki ae e mronron taraana irouia kaain Aatia ma tiaki are e boo-rababaua



## Aron kabekaan Kereboki riki ake tabeua

Karaoa te korokoro ae tao 2-3 rababan te tabonibai iaan te man n wiina ke kiina, ma tiaki n kau-uatabo! Titiraki bwa te aekakira ae e tangiria riki am tia kaboobwai.



# Aron katauraoran ao karaoran te kereboki

## Aron te Taoro

E kanakoa te ran te taoro man rabwatan te kereboki. E na bon karawawata naba te kereboki imwiin kamwaana ao kamwauana, are nanona bwa e na reke riki am mwane ae e mwaiti ngkana e kaboakinako am kereboki n te rawaawata.

E riai n kabonganaaki te taoro are e aki rang n mte ke are e tanotano. E kona n urua kunin te kereboki te taoro are e rangi n mte. Te taoro are e aki n rangi n mte e bon karaurau rinnakona inanon irikon te kereboki, aei are e bon tangiraki riki.



## *lai uaaekaki aron taoronakin te kereboki:*

### **Te taoro ae mwaimwai:**

Nnei kereboki inanon te turam ke te bwaoki ae e in ao n karemarenai n te taoro. A na bon nako ranin rabwataia kereboki n te aro ae e mwaiti, n tokin te tai ao a na bon neinei n te taoro. Kabonganaa 1 te kiro te taoro n katoa 3 te kiro te kereboki. E tikiraoui te kawai aei ngkana ko aki kona n kamwai am kereboki n te tai ae waekoa imwiin rikoiaia.

### **Te taoro ae mwau:**

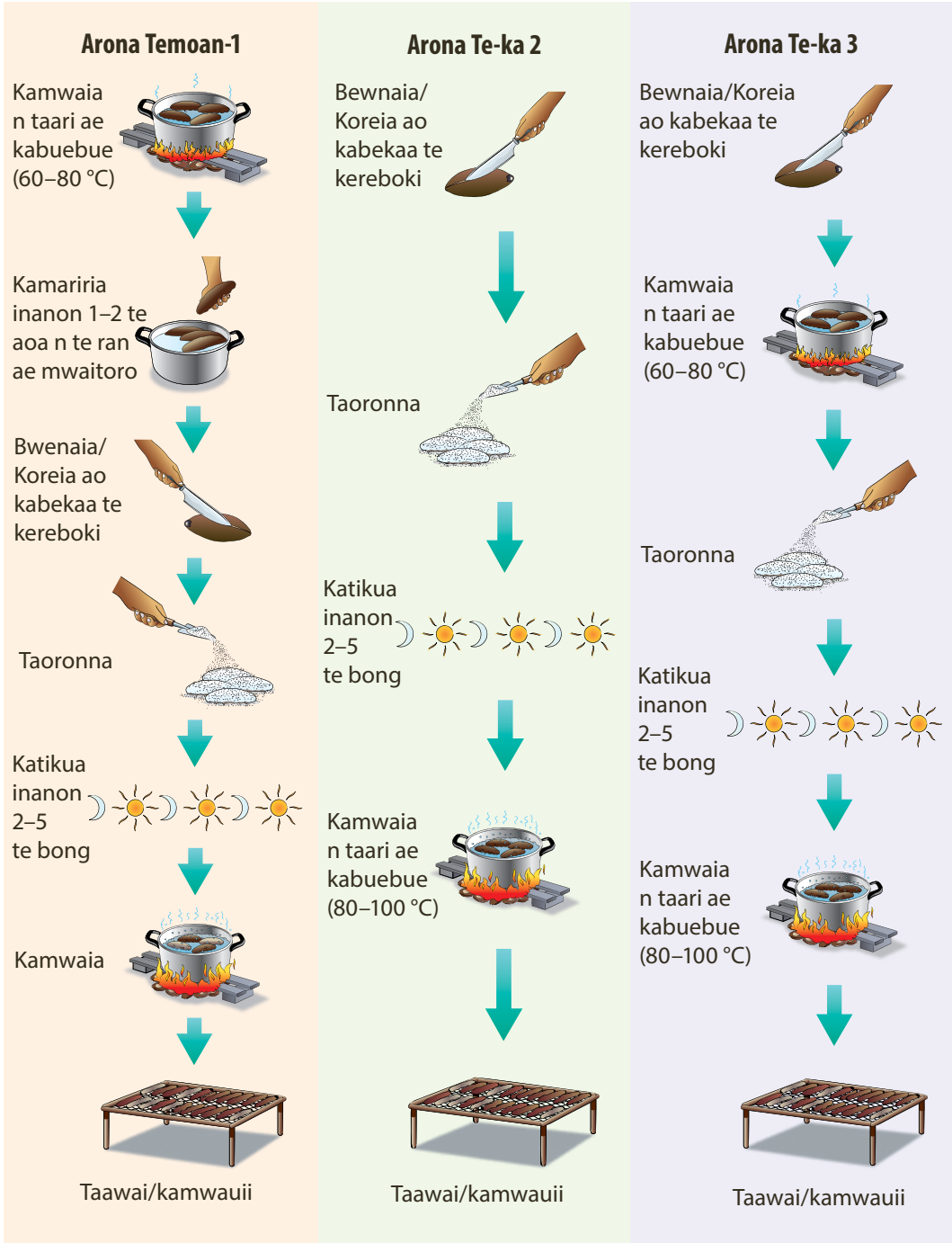
Imwiin kamwaan ao kabekaan am kereboki, katokai iaon te taoro inanon te bwaoki ae iai bwangabwangan aana. Kabaraakii iaon mwiin koreaia. Taoron marenan kereboki. E na timtim ranin rabwataia n bwangabwangan te bwaoki ao n aki rangi n mwaimwai rabawatan kereboki. Kabonganaa 1 te kiro te taoro n katoa 1 naba te kiro te kereboki. Imwiin kabonganaan te taoro iraua te tai, kaitiakia ao manga kabonganaa.

Ngkana ko taoron kereboki imwiin kabekaaia ao imwaain moan kamwaakii, waekoa nnei inanon te turam ma te taoro imwiin rikoiaia.

N angiin te tai ao taan karao kereboki a taorona te kereboki imwiin moan kamwaakii, aei are e totokoa kabonganaan te taoro ae e mwaiti. Ngkana kona karaoa aei, ao tataningaa moa maririn te kereboki imwaain ae ko taoronii.

# Aron katauraoran ao karaoran te kereboki

## Aron taoronakin te kereboki





# Aron katauraoran ao karaoran te kereboki

Tai booti n taoron kereboki aika a kaokoro! Bon tii booti n taoron kereboki ake tii teboo inanon nneia ae ti teuana.

Ma ko bon kona naba ni booti n taoronii aekaki ake tabeua.

- Booti n **taoron Teromamma ao Temaimamma**. Ko riai n kanoai rabwatan maan aikai n te taoro. Karau nnei n te taoro ao kabaraakii iaon mwiin bwenaakia.



- Booti taoron tenaa n kereboki ake a roroo (*Actinopyga*) ao tai renganii ma aekaki ake tabeua bwa a kona n bitii matan ake tabeua n karorooi. Ngkana ko kabongana te taoro ae mwau ao, kararai ni barakii iaon mwiin bwenakia.



# Aron katauraoran ao karaoran te kereboki

- Taorona Teburaerae n tii ngaia ke n ikotia ma Tewaeura.



Kaawakin kereboki n te taoro inanon 2-5 te bong

Tai taorona Tekiriin bwa e na tae matana n te taoro ao ma ni bua matana are e roo. A aki taorona naba Tekare taan karao kereboki tabeman, ma e bon kona n taoronaki imwiin kamwaana.



Tii taorona Tekare imwiin kamwaana!

Ibukin Teaintoa, tii taoron inanon 2 te bong tokin maanna bwa mwiina a na bua mataia ke aia kara.



Tii uabong (2 te bong) n taoronaki

## ***Tera ae ko na karaoia ngkana akea am taoro?***

Ngkana akea am taoro are e kiritanotano, ao an kamwai naba am kereboki. Ma ngkana akea te taoro ao e na abwabwaki riki tain kamwauaia kereboki ao a na beebete riki nakon are a taoronaki, ao e na uareereke riki am mwane ni kona n reke.

# Aron katauraoran ao karaoran te kereboki

## Aron Kamwaan te Kereboki

A mwaiti aanga ibukin kamwaan te kereboki.

E kona n uruaki kunin te kereboki ngkana e rang n kabuebue aina.

Te kabanea n tamaroa n anga e na bon kamwaaki moa 1 te tai, ao e a kamwauaki naba inanon 2–3 te bong, manga kamwai riki te kauatai ao te katentai ngkana e riai.

### *Kauring tabeua:*

- ✓ Ibukin moan kamwaakiia ao ko kona n kamwai n te ran ae e kabuebue
- ✓ Kabwakai moa am kereboki n te ran ae e aabue imwaain ae ko kaburoa ranna.
- ✓ Kabonganaa taari ibukin te kaburoburo ao tiaki te ran ae mam.
- ✓ Kaokoro i kamwaii aeka n kereboki n aron utuuia nako.
- ✓ Kauarerekea riki tain kamwaan kereboki ake a uarereke nakon ake a buubura.
- ✓ Kaboonganaa te kuro/kamwaa ke te bwaata ae bubura ma kanaana ae mwaiti.
- ✓ Taraia bwa a na aki uruaki kunin kereboki inanon tain kakibekibeana ke n tain aekakina.
- ✓ Teboki kereboki n te ran n kanakoi taoroia imwiin kamwaakiia.

Ko kona n kabonganaa te ewanin ibukin am aia ibukin kamwaan am kereboki. Tai aiana te tongo bwa e kakaawaki ibukin te otabwanin.

### *Te aekakira te ran ae I riai n kabonganaa?*

Kataia kaboganaa taari ibukin kamwaan am kereboki ao tiaki te karau ke te ran ae mam. E na bon tiku aron matan te kereboki n taari ao n kateimatoaa naba kunin te kereboki bwa e na aki kakai-uruaki.

Ma ngkana arona bwa ko aki kona n kabonganaa taari ibukin kamwaan am kereboki ao an kaboganaa ngkanne te ran ae mam.



# Aron katauraoran ao karaoran te kereboki

## Kakaaiwenean te kaburoburo/kamwai ao te tataawa



Kabuebuea te ran



Kabwakai kereboki



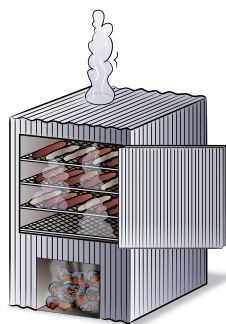
Kaburoa am ran ke karokoa ni kabuebuena are e tangiraki



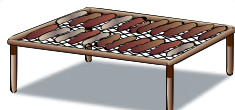
Kakibea n katoa 5 te miniti. Taratara raoi bwa e na aki uruaki kunin te kereboki.



Aekii imwiin te maan are e baaireaki



Kabweearii



Kamwauii inanon 2–3 te bong



Manga kamwau te ka-uatai



Manga kamwau riki ngkana e kainanoaki



Taawai iaan te riringa ke kamwau n te tabo n kamwau-kereboki inanon 3–10 te bong n karokoa a roko raoi ni mwauia ao n rang n matoatoa.



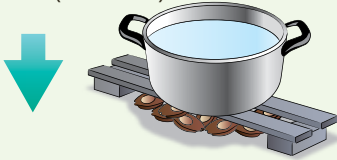
# Aron katauraoran ao karaoran te kereboki

## Tao kabuebuera te ran ae e riai ibukin kamwaan te kereboki?

*lai uoua kawai aika ko kona n katai.*

### Te Moan Kawai - A

Moanna ma taari ae  
mwaitoro (20–30 °C)



Nnei am  
kereboki



Kaburoa ke karokoa  
n te kabuebue are e  
tangiraki



Kamwaia nakon te maan are e  
tangiraki. Ibukin kamwaakina are te  
kauoua ao te kateniua ko a kona ni  
kaburoa rai ranna.

### Te Ka-Uoua n Kawai - B

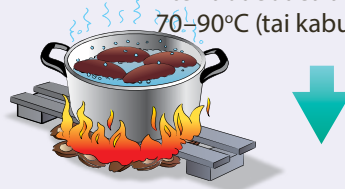
Moanna ma taari ae  
e aabuee (40 °C)



Nnei am  
kereboki



Karaka aiana ni karokoa n  
te kabuebuea ae e nakon  
70–90°C (tai kaburoa ranna)



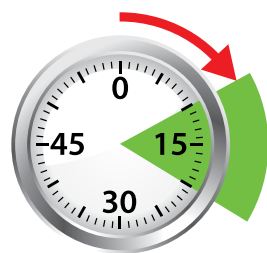
Kamwaia nakon te maan ae tangiraki.  
Ibukin kamwaakina are te kauoua ao  
te kateniua ko a kona ni kaburoa rai  
ranna.

# Aron katauraoran ao karaoran te kereboki

## Tao e na maannra tain kamwaan te kereboki?

### Maanin Temaimamma ao Teromamma

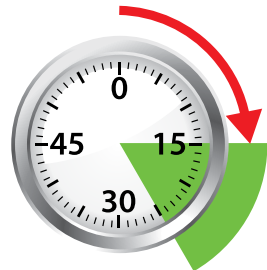
Kamwaii n te maan ae 10–20 te miniti n te moan kamwai, maanin taina e na tauaki mangke e moan buro te ran ke ngkana e a roko n kabuebuena. A mwai ngkana a mronron n aekan te ben.



10–20 te miniti

### Kereboki ake a roro (*Actinopyga*) ma utuuna nako

Kamwaii n te maan ae 15–25 te miniti n te moan kamwai, maanin taina e na tauaki mangke e moan buro te ran ke ngkana e a roko n kabuebuena. Ngkana ko aki bwena Teikatiibu ao Teburaeroroo (hairy blackfish) imwaain kamwaakiia, ao karaua kakibekibea bwa a aonga n aki rebwetaua ao n uruaki.



15–25 te miniti

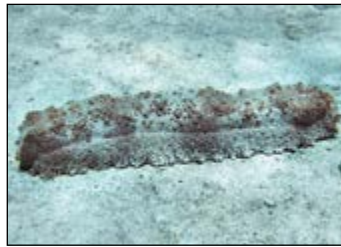
# Aron katauraoran ao karaoran te kereboki

## Aron kamwaan kereboki ake a buuburakaei

Kamwaii n te maan ae 20–30 te miniti n te moan kamwai, maanin taina e na tauaki mangke e moan buro te ran ke ngkana e a roko n kabuebuena.



20–30 te miniti



## Aron kamwaan aekaki n kereboki riki ake tabeua

Kamwaii n te maan ae 15–30 te miniti n te moan kamwai, maanin taina ena tauaki mangke e moan buro te ran ke ngkana e a roko n kabuebuena. Rangi ni karauraua aron kakibean Tekare ke bon tai kakibea n tain kamwaakina bwa a rang n kai uruaki kuniia.

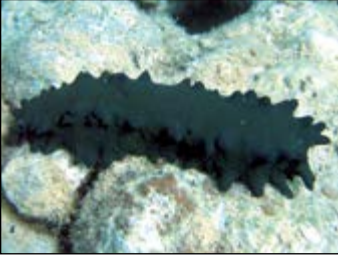


15–30 te miniti

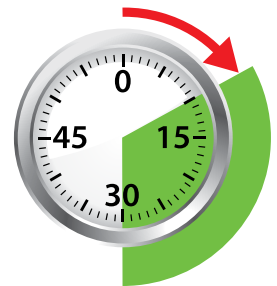




# Aron katauraoran ao karaoran te kereboki



Ko riai n kamwarii kereboki te kauatai ngkana ko kona. Te kauoua ni kamwai e na riai ni karaoaki 2–3 te bong imwiin kamwauaia. Te aro aei are a kona n waekoa n nako iai ranin kereboki man irikoia ao n konaa riki n kakai-mwauu. Manga kamwaan te kereboki e bon anganiko am tai n katamaaroua aron tein am kereboki bwa ko kona n manga kaetii raoi aron teia. Imwiin manga kamwaakiia ao kaetii raoi teia inanon marauraiia. Bon tii 10–30 te miniti maanin tain kamaakiia te ka-uatai mangke e moan buro ranna.



10–30 te miniti

N tabetai ao e tangiraki ae a na manga kamwaaki riki am kereboki te katentai. E kainnanaoki aei ngkana e tuai baabane raoi te taoro man am kereboki ke ngkana a bon tiku naba n ninibwaoua. Kamwauii raoi moa inanon 2–3 te bong imwaain kamwaakiia te katentai. Tii 5–10 te miniti maanin taina mangke e moan buro ranna.



5–10 te miniti

# Aron katauraoran ao karaoran te kereboki

## Kanakoan kiritanotanon Tetanoika (Sandfish) ao te Teikakoora (goldenfish)

lai te kiritanotano ae e riai ni kanakoaki man rabwataia aeka ni kereboki aikai imwiin kamwaakiia.



lai aanga tabeua ibukin kanakoan kiritanotanon rabwataia kereboki aikai imwiin moan kamwaakiia. Aanga aikai a bon kamkaa teutana kunin te kereboki n te aro bwa a kona n waekoa ni kounako kiritanotano aikai.

1. Taun am kereboki ao kabwaroa te ranbue iaolia. Rabuna am tabo anne n te baeki bwa e aonga n teimaan kabuebuen te tano, katikuii nakon te bong are i mwiina. Katararakei am kereboki ngkana ko taunii.
2. Booti nnei kereboki n te bwaaki (container) ke te bwai teuana, taotaona matana n te bwai ae e rawaawata ao, katikuii kereboki inanona teuana te tairiki; ke
3. Kaawakin n ranna ae taari (itia ranna mai taari) n te tairiki anne.

Kabonganaa te burati ae matoa wiina ao buratin n kanakoi tantanoia n te bong are imwiina. Taraia raoi bwa a na bon baabane raoi tantanoia n nako



Te anga naba teuana bon kabwakaan baan te mwemweraa aika a kammantiitaki inanon te ran n te moan tai are a kamwaaki iai kereboki. Aei e onea mwiin taunakin kereboki inanon teuana te tairiki ao are a kona ngkanne n kaaraki tantanoia man rabwataia imwiin kamwaakiia.

# Aron katauraoran ao karaoan te kereboki

## Aron Kabweearian te kereboki

A aki bane n kaakaraoa te kabweeari kaain te Betebeke ibukin kamwauan aia kereboki. Ko kona n kaboonganaa te kai ke te eewanin ibukin aian am kabweeari.

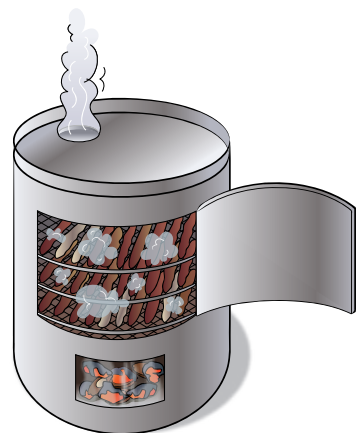
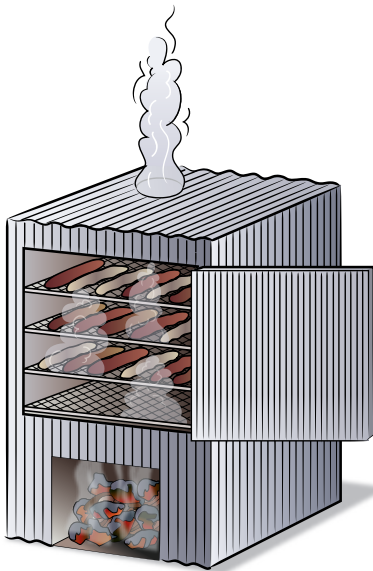
E rang n tikiraoi kabonganaan te kabweeari ngkana ko aki kabonganaa te taoro. E ibuobuoki naba te kabweeari n kamwau am kereboki riki n tain te kakarau.

### *Kauring tabeua:*

- ✓ E tikiraoi te kabweeari ngkana ko aki kabonganaa te taoro.
- ✓ E tikiraoi boin te kabweeari ae beebete ma e a manga aki raoiroi are e katong boina. Ma ngaia are tai kabweearii am kereboki inanon te tai ae maan.
- ✓ Kabognanaa te ai n kabweeari ae uarereke ibukin kabweearian am kereboki.
- ✓ Kararoai am kereboki mai irarikin ain te kabweeari bwa a aonga n aki rang n kai rootaki n te kabuebue.
- ✗ Tai rang n kabatiaa kanaan am ai bwa e aonga n aki rang n kabuebue. Ngkana e rang n kabuebue ao e na bon kamatoatoaa kunin am kereboki (bwatakataka) ao n kawaeremwea mwauna.

Ko kona n bon karaoa am ai n kabweeari ibukin kabweearian am kereboki. Karietai teutana am kai n tataawa aika a warawara maiaon te ai ao karaoa Teikakoora bwangabwangan aon am ai n kabweeari n te aro bwa e na kai otinako te bubu maiai.

Ko kona n kabweearii am kereboki imwiin te moan ke te ka-uoua n kamwai.



# Aron katauraoran ao karaoran te kereboki

## Aron kamwauan te Kereboki

A bon riai n kamwauaki raoi keraboki imwiin kamwaakiia.

### *Kauring tabeua:*

- ✓ Taraia raoi bwa a na aki uruaki kunin kereboki ngkai a maraurau ao riki ngkana a wmena iaon te bao n tataawa.
- ✓ E riai n kamwauaki raoi te kereboki inanon tabeua te bong, ma e bon nakon kanoan te bong ao aron kamwauana are ko karaoia nako iai.
- ✓ Ngkana a aki rangi n mwau raoi am kereboki, manga kamwaii riki n aron kawai akana a kabwarabwaraaki mai moana.
- ✓ A bon riai n kamwauaki raoi kereboki n te aro ae a na rang ni matoatoa bwa e aonga n materaioi booia ao n totokoa naba te bwebwe inanon tain kaawakinaia.
- ✗ Tai kamwaua te kereboki n te kabuebue ae e rang n korakora bwa mwiina e na rang n matoatoa kunna ao n kiriaria n mwau nanona.

Karin mwakoro n kai aika a uareke n Temaimamma ao Teromamma ao n kereboki naba ake a bubuubura bwa a aonga n uki nako rabwataia ao n waekoa ni mwau. A kona n tiku kaai i nanon te kereboki n tain kamwaakiia te kauatai ao te katentai. Imwiin kabanean kamwaakiia ao kanakoi kaai ao kaina rabwatan te kereboki inanon ana tai n mwau.



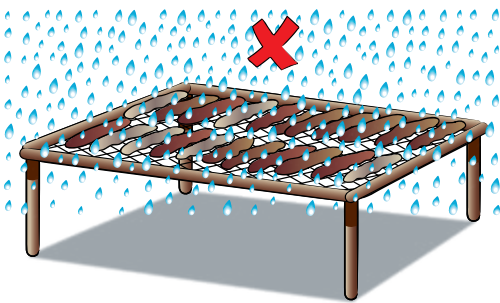
Kabonganaa te biti n katinakoi ranin taabo ake a kakanoa n te ran mai nanon rabwatan Temaimamma ao Teromamma imwiin kamwaakia bwa a aonga n mwau raoi.

Taawai iaan te riringa iaon te baobao n tataawa. Rabuna am kereboki ngkana e bwaka te karau ke kamwaei nakon te tabo ae e mano.



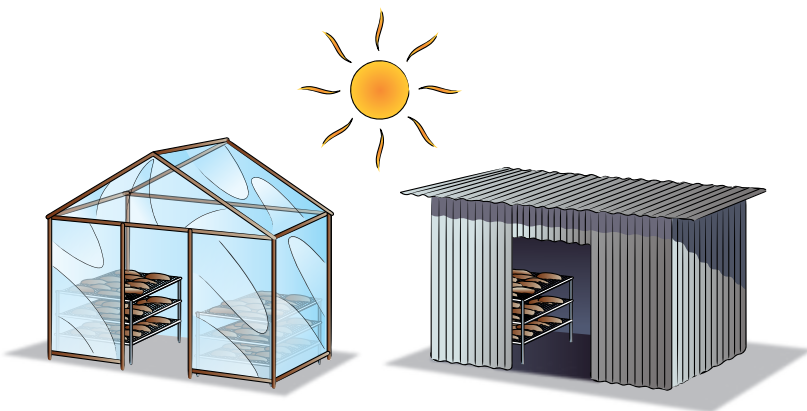
# Aron katauraoran ao karaoan te kereboki

E na bon kabuakakai kunin kereboki te karau. Ma ngaia are ko riai n taratara raoi bwa e na akea naba te timtim ni karau ae e na roko iaon te kereboki!



Ngkana ko maeka n te tabo ae kakabuebue ao n aomwaimwai ao e riai bwa ko na raarabun am kereboki n te bong. N tain te kakarau, manga kamwai ao taawai am kereboki n te aro bwa a na kakai mwau raoi riki.

Ko kona n kabonganaa te auti n tataawa ae e ooaki ao e rabunaki n te buratitiki (plastic) ke te kaabwa. Te auti n tataawa e bon taua kabuebuen taai ao e kamanoi kereboki man te karau



E bon riai n mena te kabuebue imarenan 35 ao 45 °C. Ngkana e raka kabuebuen am tabo n tataawa iaon te kabuebue aio ao a kona n kiri bwabwaoua rabwataia ibukina bwa a waekoa n kui. E bon kona naba ni manga otinako taoron rabwatan te kereboki iai.

# Rongorongo riki tabeua

## Katootoon tein kereboki ake a karaoaki raoi ao ake a aki karaoaki raoi



*Actinopyga mauritiana*

### Tein ae e tamaaroa karaoana



Akea uruakina



Tikiraoi bwenaana

### Tein ae e buaakaka karaoana



E bure koreana bwa  
e koreaki mai aona



E rangi n abwabwaki  
koreana



*Holothuria lessoni*

### Tein ae e tamaaroa karaoana



Wai-eti. Akea uruakina



E uarereke koreana mai  
iaana

### Tein ae e buaakaka karaoana



E aki kaitiakaki raoi E aki  
babane raoi kiriwakawakana



E riao aron bwenakina  
mai bukina

# Rongorongo riki tabeua

## Katootoon tein kereboki ake a karaoaki raoi ao ake a aki karaoaki raoi



*Holothuria fuscogilva*

### Tein ae e tamaaroa karaoana



Wai eti



Tikiraoi bwenaana

### Tein ae e buaakaka karaoana



E bwaoua aron  
Koreana



E maan n tiku iaan te riringa  
imwaain kamaakina E uruaki kunna



*Holothuria whitmaei*

### Tein ae e tamaaroa karaoana



Akea uruakina  
E tikiraoi bwenaana



Akea uruakina

### Tein ae e buaakaka karaoana



E rangi n abwabwaki bwenaana.  
ao e kiribwabwaoua



E bwatata n tain  
kabweeariana

# Rongorongo riki tabeua

## Katootoon tein kereboki ake a karaoaki raoi ao ake a aki karaoaki raoi



*Holothuria fuscopunctata*

Tein ae e tamaaroa karaoana



Waieti.  
Akea uruakina



Tikiraoi bwenaana

Tein ae e buaakaka karaoana



E riao bwenaana



E uruaki inanon karaoana



*Bohadschia argus*

Tein ae e tamaaroa karaoana



E uareereke bwenaana



Tikiraoi matana (karana)

Tein ae e buaakaka karaoana



E riao aron bwenaan



E bwatata ao e uruaki kunna

# Rongorongo riki tabeua

## Katootoon tein kereboki ake a karaoaki raoi ao ake a aki karaoaki raoi



*Stichopus chloronotus*

### Tein ae e tamaaroa karaoana



E tokatoka matana.  
Akea uruakina



E tikiraoui bwenaana.  
E tokatoka matana

### Tein ae e buaakaka karaoana



E riao aron bwenaana.  
E tae matana



E uruaki kunna



*Thelenota ananas*

### Tein ae e tamaaroa karaoana



E tokatoka matana



E tikiraoui bwenaana

### Tein ae e buaakaka karaoana



E mwaii mwin te taoro  
n tiku iaona



E rangi n riao bwenaana.  
E kainanoa ae e na manga kabaekiki



# Rongorongo riki tabeua

## Katootoon tein kereboki ake a karaoaki raoi ao ake a aki karaoaki raoi



*Holothuria scabra*

### Tein ae e tamaaroa karaoana

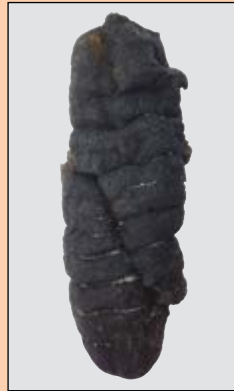


E roo ao n toka matana,  
Akea uruakina



E uareereke bwenaana  
mai aana

### Tein ae e buaakaka karaoana



Mwiin te bewnabwena  
ae e aki nako raoi



E uruaki kunna man aki  
nakoraoin te taoro



*Holothuria coluber*

### Tein ae e tamaaroa karaoana

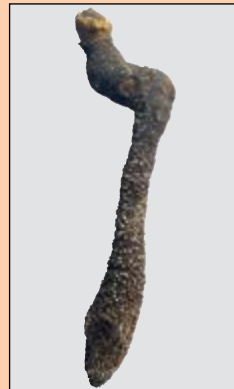


E uareereke bwenaana.  
Akea uruakina



Waieti ao e uareereke  
bwenaana

### Tein ae e buaakaka karaoana



E aki babane raoi tanona. Imwiin  
kabekaana E kiribwabwaoua



E riao bwenaana

# Rongorongo riki tabeua

## Kaawakinan te kereboki ngkana e a tia ni mwauu

A riai n kaawakinaki raoi kereboki n te tabo ae e mwau, mwiina a na manga rootaki n te bwebwe ao n manga maraurau.

Kaawakin am kereboki n te baeki ae e mwau ao rabun bwa a na aki aoi. Ngkana akea am tabo ae e tan ibukin kaawakinan am kereboki ao katokai ieta ni kararoai ma aontano bwa a aonga n tiku n aroia.



Kamanoi am kereboki mairouia kimoa.

# Rongorongo riki tabeua

## Kaboonakoan am kereboki

Titirakinia aobitia man te Bootaki n Akawa ibukin rongorongoia taan kaboo kereboki.

Te kabanea n tamaaroa ibukin karekean te boo ae materaoi bon karekeiaia am taan boobwai aika a mwaiti are ko kona ngkanne n rinea ae e na anganiko te kabanea n tamaaroa n boo.

Ko na bon karekea te mwane ae e mwaiti ibukin am kereboki ake a karaoaki raoi. Are nanona bwa a na riai am kereboki n:

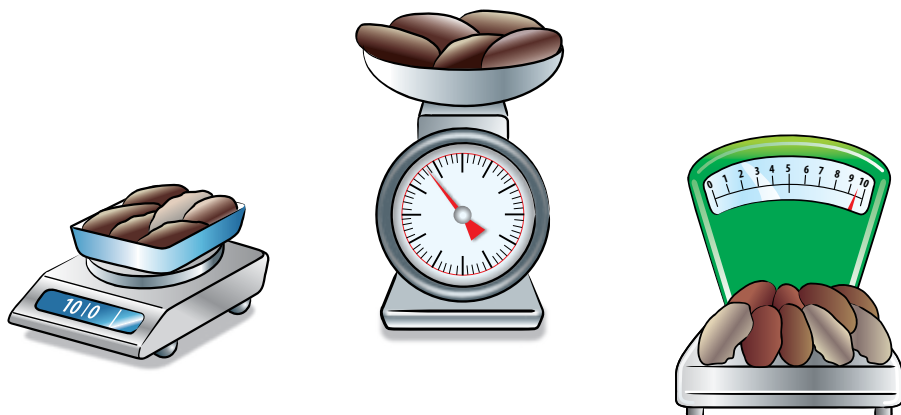
- ✓ Bwenaaki raoi n taabo ake a bon riai ao n kanakoaki tanotanoia.
- ✓ Aki uruaki
- ✓ A na eti raoi teia ao man aki bwabwaoua
- ✓ Akea menan te taoro i tinanikuuia
- ✓ A na mwau raoi
- ✓ Tikiraoi mataia ke aia kara

Tai kantaningaa te boo ae e materaoi ibukin am kereboki ngkana e aki eti aron bwenaakina, a uruaki, a kiribwabwaoua, e mwaiti mwin te taoro n rabwataia, a tae mataia, ke a aki rang n mwau.

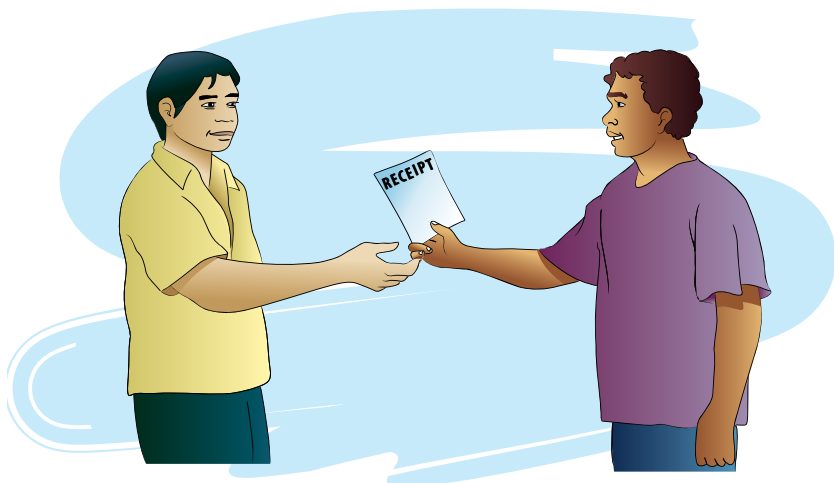


Tuatua te boo ae e materaoi mairoun am tia kaboobwai ngkana e bon rangi n tamaaroa aron karaoan am kereboki.

# Rongorongo riki tabeua



Tuanga am tia kaboo kereboki bwa e na kabooa am kereboki n te kiro (kilogram) ao n kakoauaa naba rawatan am kereboki.



Ko kona naba n tuatua am ritiiti ibukin mwiiin am katine kereboki. E na riai n oti rawaawatan am katine ma boon am kereboki nakon utuuia aika a kakaokoro.











# Aron karaoan ao kamauan te kereboki: Te boki ibukin buokaia taan akawa n te Betebeke

**E** karaoaki te boki aei ibukin buokaia taan akawa n aban te Betebeke bwa a aonga n oota ao n ataa aron karaoan te kereboki ae menaai nakon te kamwau ibukin te iookinibwai. E baarongaaki te boki aei ri-nanon te ACIAR project FIS/2010/096 – Evaluating the impacts of improving postharvest processing of sea cucumbers in the Western Pacific, bwa te bwai n mwakuri ao are e katurua riki iai te taratara iaoia taan akawa i Biti, Kiribati ao Tonga.

A kang kereboki kaain Aatia bwa amwarake aika a raka aroia ao riki n taian boobootaki ke ibukin naba te amwarake n bwai-n-aoraki. A riain karaoaki raoi kereboki imwiin rikoia n karokoa a mwau n te aro bwa a na rangi n tamaroa mataia (karaia), teiia ao taraaia ibukiia taan boobwai mai Aatia. A na rang n materaoi boon kereboki ake a karaoaki raoi ma a na materaa boon ake a aki karaoaki raoi ibukiia taan akawa ao te iookinibwai.

E katangainai ao n kaoti te boki aei aanga ao aron karaoan te kereboki nakon te kabanea n tamaaroa iaon tararuana, aron te bwenabwena, aron kamwaakina, aron kabweeariana, aron kamwauana, aron kaawakinana ao ai kabonakoana. Iai naba tamnein maan aikai ngke a maiu ao ngke a mwau n aron utuuia ma rinaniia nako ao riki ake a ioiokinibwaiaki man aban nako te Betebeke, n ikotaki naba ma kaairua aika a aki toki n reke n tain karaoan te kereboki.



Australian Government  
Australian Centre for  
International Agricultural Research



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of the Pacific  
Community