Hausa
First edition July 2011

Koyar Da Kiwon Kudar Zuma Littafi na Daya 1

Mun sadaukar da wannan littafin tare da godiya zuwa ga masu kiwon kudar zuma dake daukacin fadin nahiyar Afurka wadanda da suka taimaka wajen hada bayanan da aka wallafa a ciki, masaman wanda suke Nhata-Bay Copiratin, a kasar Malawi.

Mawallafiya itace Mallama Pam Gregory

Wadanda suka dauki nauyi fassara littafin zuwa harshen Hausa, sune Ladi Fitor, Zigwai John, John Dada na Fantsuam Foundation, Kafanchan Jihar Kaduna Nijeriya (www.fantsuam.org) da taimakon manyan masanan harkokin kiwon zuma Alhaji Idris Muhammad Barau da Alhaji Adamu Usman Muhammad na Kungiyar yada kiwon kudar zuma (Beekeeping Extension Society) dake Zaria- Nijeriya da kuma Dakta Abdullahi Ahmed Yusuf na tsagayar binciken kudan zuma da kwari danginsu na Jamiar Pretoria dake Kasar Afurka ta Kudu. da kuma goyon bayan Dadamac-UK (http://dadamac.net)
Watar Decemba, shekara ta 2010 miladiya

Wandanda sun dauki nauyin thewaterloofoundation

Mataimakin Edita, Gay Marris, Kungiyar kudan zuma ta UK

fera
The Food and Environment Research Agency

Yadda Za'a Yi Anfani da Wannan Takarda

Yanzu an yadda cewa kiwon kudan zuma na iya bawa mutanen karkara hanyar samun kudade, koda yake ba abune mai sauki ba. Kudan zuman sukan yi harbi da kuma canza yanayi. Kwashen/shan zuma ya dangata ga abubuwa da yawa, kamar su yanayin wuri da kuma samun kasuwa. Zuman da ke da tsada dole ne ya kasance da daraja.

Wannan gefen takardan an shirya ta ne domin waddanda suke aiki masaman cikin wannan sashi, wandanda a ka yi masu bitta a kasashen Africa. Takardan na dauke da hotuna masu kayartarwa da kuma kara bayani, ta kuma kunshi da mahimman fasaha da a ke bukata don fara kasuwanci kiwon kuda zuma, Yana kuma kawo wassu sabobin hanyoyi da zasu taimaka wa masu kiwon kudan zuma, su samu yanchin iya yin kiwon kudan zuma ba tare da yin anfani da naurorin zamani ba. Ina fata cewa wannan zai taimake mutane su fara kiwon kudan zuma a madaidaicin kudi da kuma gwadawa sabobin naurori.

Hotunan suna nuna hanyoyi daban-daban da mutane ke kiwon kudan zuma, sa a nan da nufin a kara tataunawa a kan al'amuran da ana fuskanta. Wannan za ya taimaka wa mutane domin su ma su iya maganta damu'o'in da kan su. Littafin na jawo hankalin mutane a kan yadda ake kiwon kudan zuma, da kuma yawancin hanyoyi da kuma ingantatun tunani na gargajiya da za'a iya anfani da su wajen gina gidan kudan zuman.

A na bukata cewa waddanda zasu yi ta koyar da wannan, su iya fasara kalmomin da harsuna daban-daban.

Muna godiya da tamakon kungiyar Waterloo Foundation da suke yi domin a kara walafa wannan takarda, wanda zata kunshi mahimman hanyoyi da maganta damu'o'i. Idan a na bukatan karin bayani da kuma hanya samun sabbuwar littafi mai suna "Domin me, da yadda" tuntube Pam Gregory ta i-mel: pamgregory@phonecoop.coop

Pam Gregory tana kiwon kudan zuma tun 1974. Tana aiki da kungiyar masun kiwon kudan zuma na tareyar UK daga 1976-2003. Ta na da shaidar kwarewa na kiwon kudan zuma, watau National Diploma, da kuma digirii na MSc a Overseas Rural Development. Ta yi shekaru sha biyu tana aiki da kiwon kudan zuma a kasashen Africa.

Muna maku kyakyawar
Fatar kiwon zuma
Pam Gregory June 2009

Rayuwar Kudan Zuma

Kudar zuma a kan fure.

Hoto daga Margaret Cowley, Ged Marshall, Adrian Waring, Claire Waring da Mark Westby.

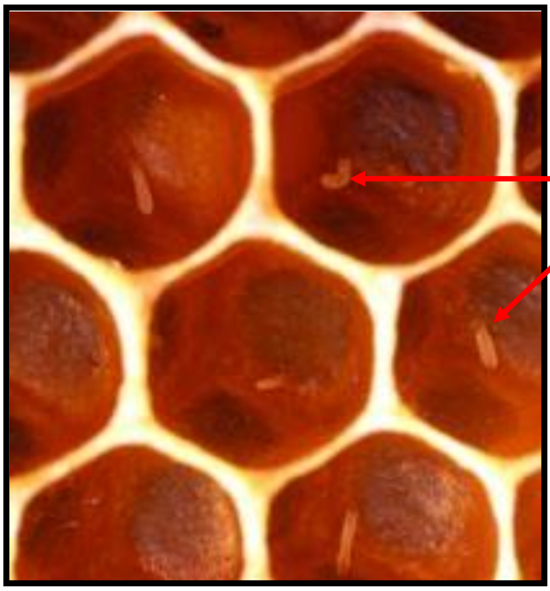
Akwai kudan zuma kashi uku, kowane na gudanar da aiyuka dabam da sauran. Kudar zuma kwaruwa ce mai hikima. Kowace rundunar kudar zuma na kunshe da kudar zuma kashi uku.

Sarauniya ko uwar zuma, it daya ce tak, kuma matce-ce, aikin ta nasa kwoi ne kawai. Ta na iya nasa kwoi har guda dubu daya (1000) kowace rana. Jikin ta yafi na sauran tawo da launi mai ban-shiawa.

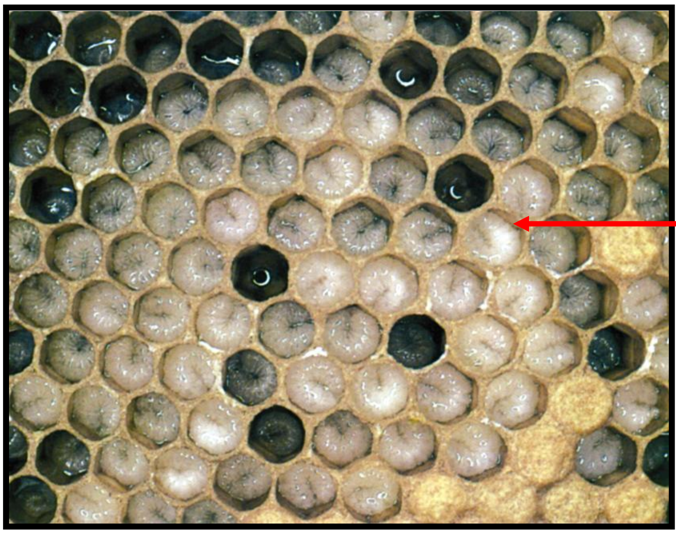
Namijin kudar zuma. Aikinsa kawai shine barbarar sarauniya. Yawan su na iya kai har dari biyar (500). Suna da kwama-kwaman kai da baban jikuna. Da duhun kalan jiki

Mata maikata. Duk aikace-aikacen gidan gaba daya na kansune. Aiyukan sun hada da shara,samowa da bada abinci. Ciyar da sarauniya da yan tayi. Yawarsu kan kai har 40,000. Ita ke harbi. Amma a matsayinta ta matce ba ta nasa kwai. Sai inhar ya kasance ba srauniya. To amma kwayayenta basu haihuwar mata sai maza.

Wannan hoton na nuna maaikaciyar kudar zuma tana fitar da kakin zuma daga jikinta domin amfani das hi don yin sakan zuma.

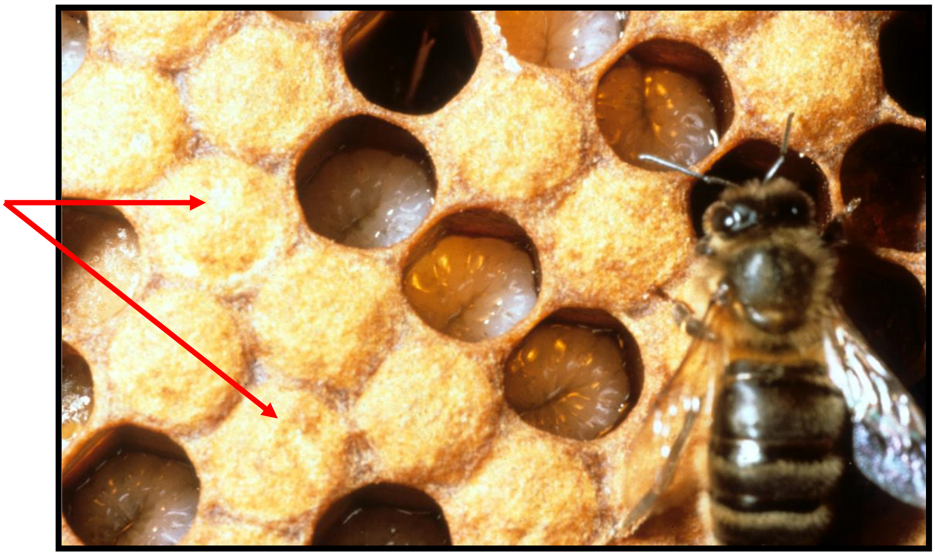


Wannan hoton na nuna kwayayen da sarauniyar kudan zuma ta nasa a cikin kwansoshin sakar zuma. In an lura suna tsaye ne kuma dai-dai ne a cikin kwanson. Wandanda mata maaikata suka nasa sukan kai uku ko hudu, kuma a war-watse suke a cikin kwanson.



Bayan Kwa-yayen sun kyen-kyeshe sai su canja kamani zuwa yantayi (masu kama day yan tsu-tsotsi).

Kafin kyan-
kyashewar
kwayayen,
Kudar zuma
kan goge su
da kakin su.

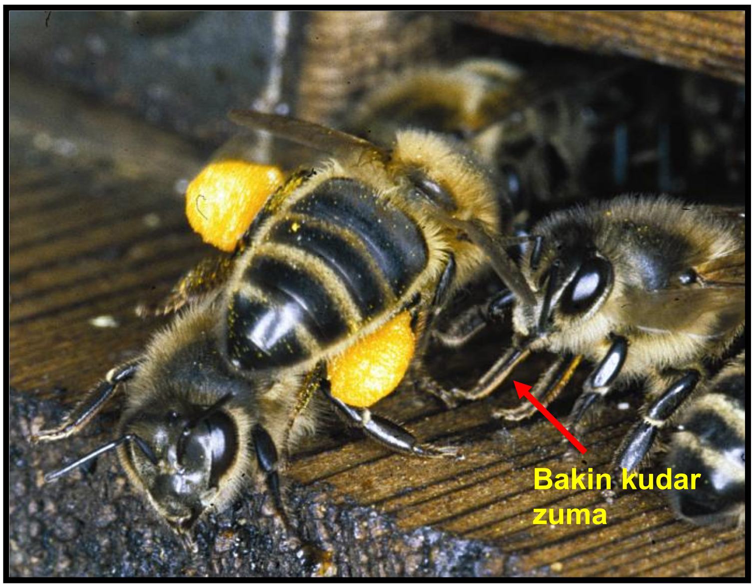


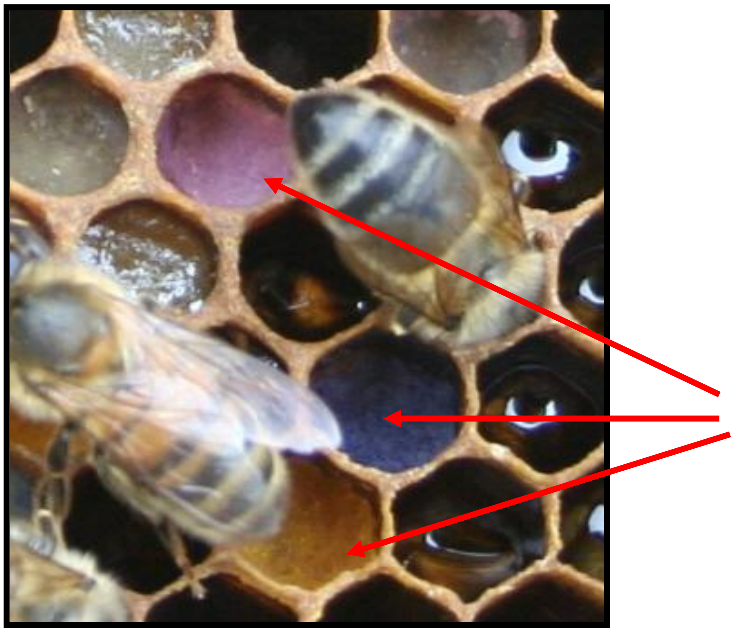
Maaikaciyar
Kudar zuma
tana kyan-
kyashe kanta.

Wannan hoto na nuna
maaikaciyar zuma ta na
ziyartar fure domin ta
dibo zakin ruwan fure da
kuma garin fure, daga
itachiyar turare.

Daya daga mahimmin amfanin kudar zuma shine bar-barar furennin tsirai kamar su mangoro, koffi, lemo, gwaiba, da dai sauransu.

Maaikaciyar kudar na amfani da dogon bakinta wajen zuko ruwan zakin cikin fure sannan ta dedo garin huren ta zuba cikin jakar dake kafafunta biyu na baya.



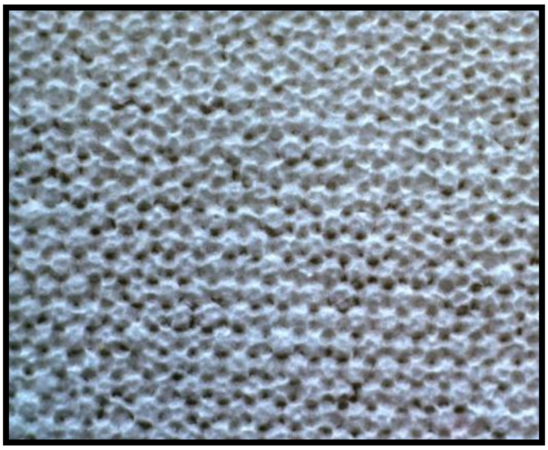


Yanda maaikata ke ije garin fure a cikin kwanson sakar zuma, kowace irin garin fure da nasa irin launin.

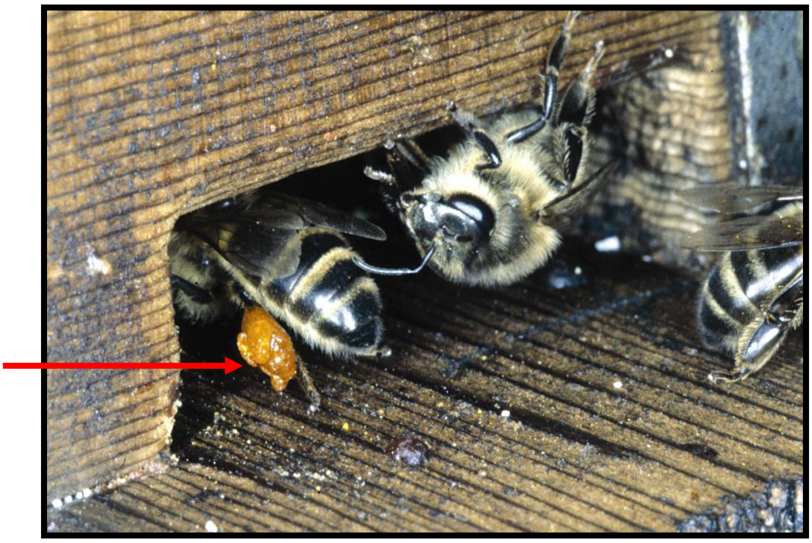
Kudar zuma na karkade ruwar fure da ta dauk. Tana kuma shafawa sauran. Yin haka zai jawo su kusa da juna sosai.

Matan kudan zuma suna rabon abinci.

Matan kudar zuma su na rawa. Wanna irin rawar wata hanyace ta sannar da juna kyaun abincin da nisan inda sauran zasu iya zuwa samo ruwan fure mai zaki.



Bayan maaikata sun tara ruwan fure cikin sakan zuma, bayan sun tabbatar ya nuna ya zama chikakken ruwar zuma, sai su yi amfani da kakin zuma su goge sakar domin tanadin lokacin dab a abinci a furenni.

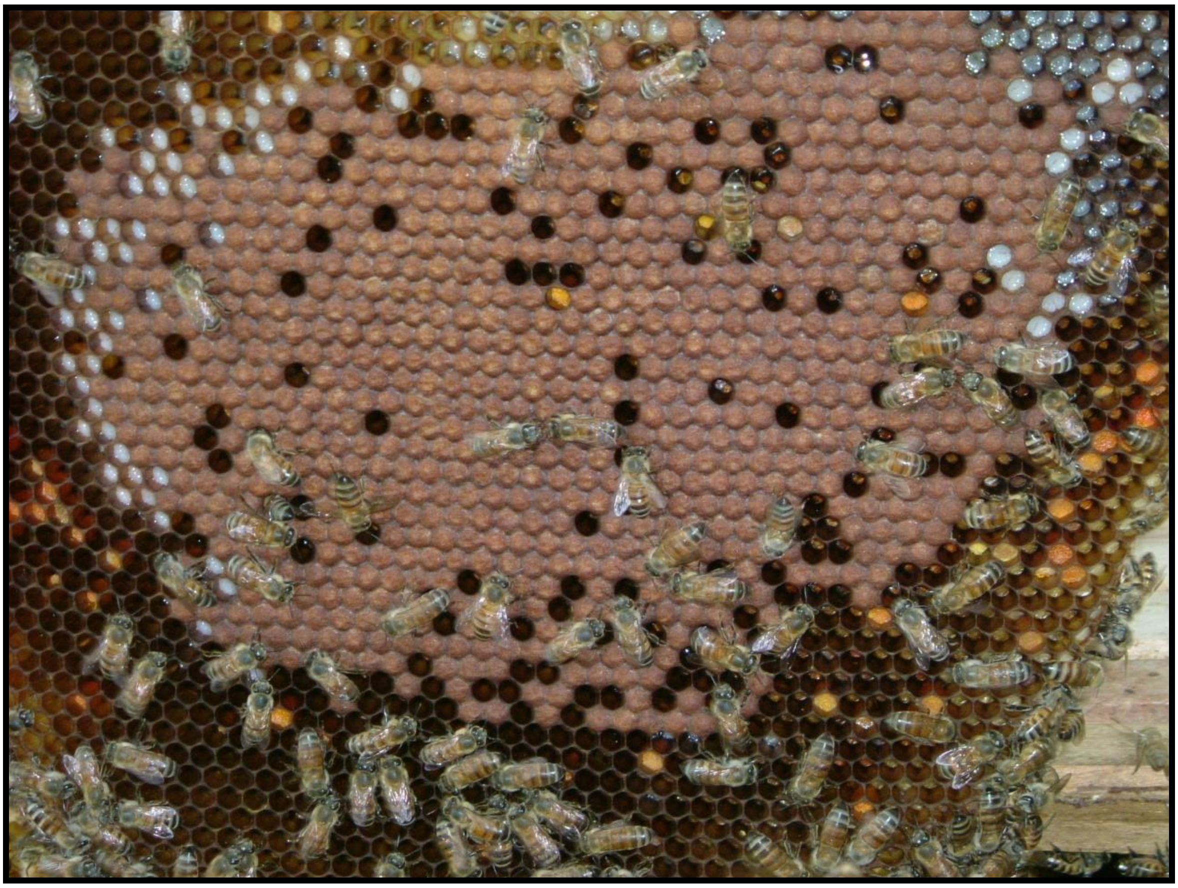


Maaikata kan dauko danko daga cikin karon tsirai. Da wannan dankon ne suke tsabtace cikin gidansu, kuma su rufe kowane irin tsaga inda iska ke shiga cikin gidansu.

Maaikaciya mai gadin gida. Kudar zuma na mutuwa bayan tayi harbi.

Wannan hoton na nuna Karin zuma.

Babin Tambayoyi.



Ko za a iya nuna abubuwan da ke dauke a kan wannan sakar zumar.

Wadannan ababen dubawa sune:

- **Matan kudan zuma**
- **Gogaggen saka mai dauke day an tayi (wato kananan yayan zuma dab a su kyan-kyashe ba)**
- **Yan tayin da bas u yi kwarin kudar zuma su goge sakar ba**
- **Kwansoshin daba komai cikin su**
- **Kwansoshi fresh masu dauke da ruwan furenni da bai zama ruwar zuma ba**
- **Kwansoshin da ke dauke da huranr zuma**

Kariya Daga Harbin Kudar Zuma

Salomi daga Kenya, ta sa rigar kariya daga harbin kudar zuma wanda a ka dinka da hanu.

Paul Lathan, ya bayar da hotunan

Koyar da kiwon kudar zuma. Littafi na daya (1) (© Pam Gregory)

TUNA CEWA

- Mata maaikata keda karin harbi.
- Dazaran kudar zuma ta yi harbi, tana fitar da wani wari dake gargadin sauran su kawo gudunmuwa daganan sai suyi ta harbi ba kak-kautawa.
- Domin boye warin Karin harbin,daga kawo daukin wadansu kudajen zumar ,sai a hura hayaki inda kudar zumar tai harbin.

Kayan kare jiki

A ko yaushe a rika sa kaya da zai rufe jiki duka, wannan rigar kariya na iya zama yadi mai araha, da kuma saukin samu. Kuma amfison farin kala domin kudar zuma bata faya ganin farin kala ba.

Wannan rigar kariyar an yi sa ne daga fatun buhuna

A lura da akwai mahayaki a hannusa.

Kuma jikkunasu a rufe suke sosai.

Idan mutum ba za ya iya sayen ainihin rigar kare jiki ba, sai ya nemi kamar wanda a ka nuna a hoton.

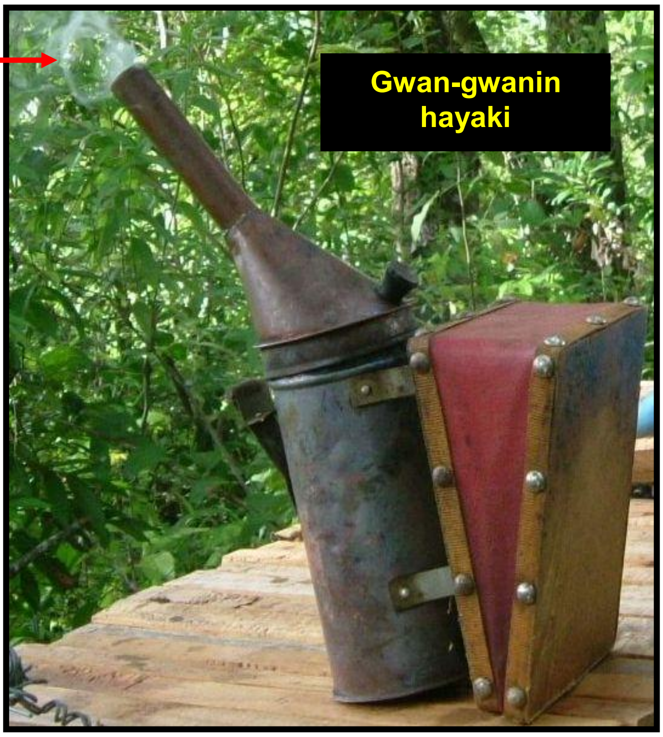
A sanya kaya masu kaurin gaskiye.

A ajiye kayan kariya cikin tsabta a koyaushe domin rage warin kari dake jikin kayan.

Sarrafa kudar zuma a yayin aiki

Wani abu mai muhimanchi shi ne hayaki. Anfani da hayaki ya kan taimaka kudar zuma ta natsu. Akwai hanyoyi daban-daban na sa wa kudar zuma hayaki:

Anfi son ganin mahayaki na fitar da farin hayaki.



A yi aiki Tare da mataimaki

Yanada kyau in zaa bude akawtin zuma, a je tare da abokin aiki.

Mahimanci ne a tuna cewa

- **Kada a bude akwatin kudar zuma bada wani dalili ba**
- **A bude akwatin a hankali**
- **A yi aiki hanzari**
- **Anfi so a bude akwatin da safe ko da yamma**
- **A kare jiki sosai**

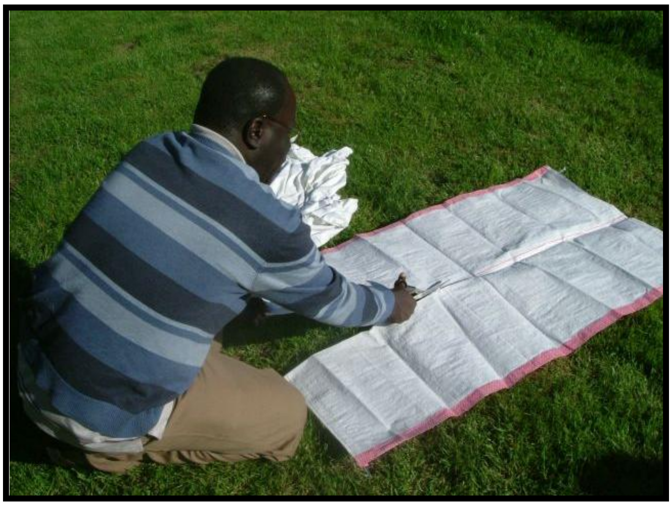
Yadda Za'a Yi Ragar kare Fuska

Hoton, na nuna mutani masun kiwon kudan zuma daga Ukisoro, Uganda,da ragar fuska da sukayi da hannun su.

YADDA ZA'A YI HADA RAGAR MAI SAUKIN FARASHI

Bai da wuyan yin ragar fuska.

A nemi buhu kuma a raba shi biyu, kowane rabi za a yanka kashi uku.

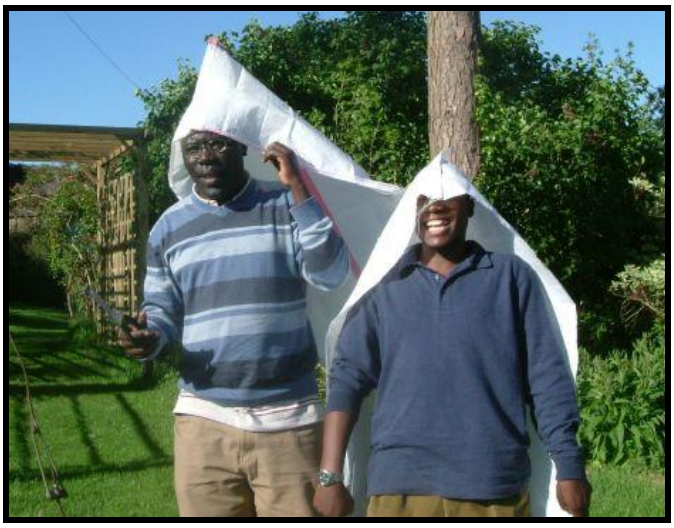


Za a iya yin ragar guda shida daga buhu guda in an yanka shi da kyau.

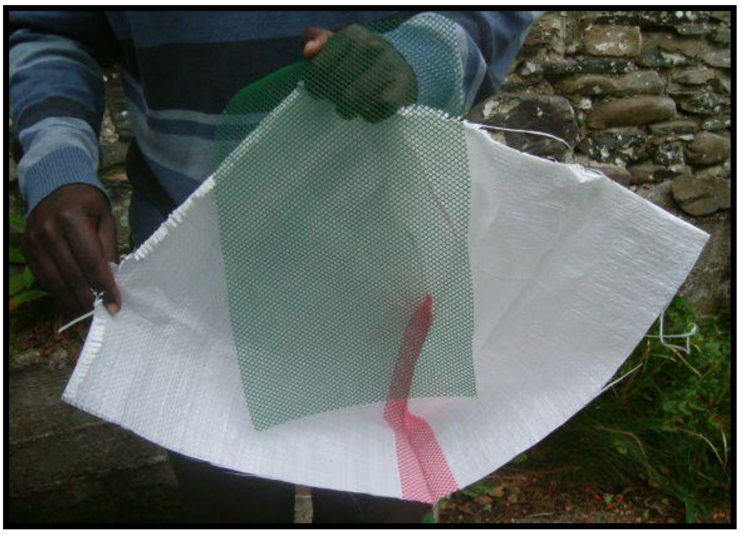
A dinke buhun da ba su da karfi domin a gyarasu.

A denke gefen dab a kyau.

A fitar da gefen da zai zauna cikin kai kamar yanda yake a hoton kasa.



Yanda za a sa raga. Zaa iya Anfani da gidan sauro.



Dinkakken ragar fuska.

Zaa kara yadi da zai rufe kirji.

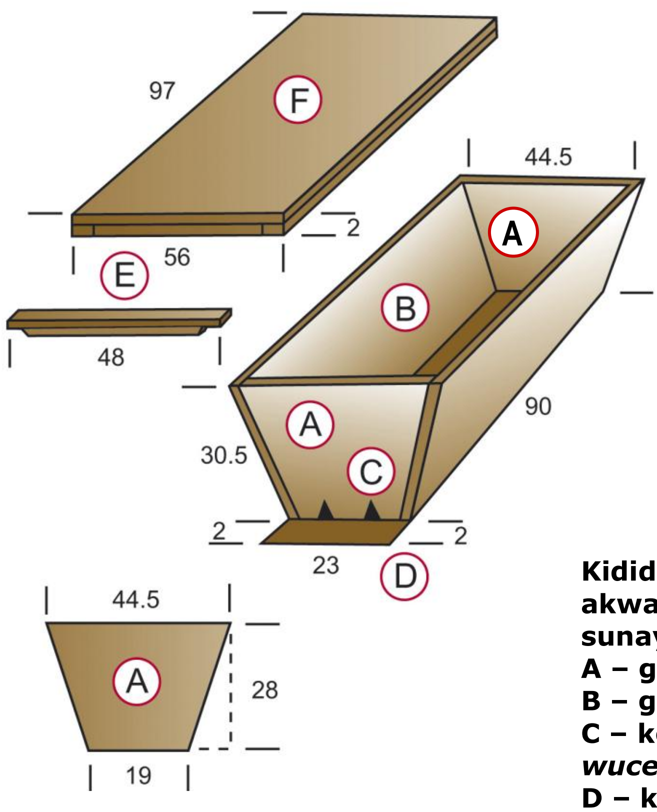
Kamalalen ragar fuska.

Gina Gidan Zuma

Hoton yana nuna mata daga Nessuit project rift valley ta kasar Kenya suna shafa jikin gidan zumar da kashin shanu da laka domin yakarawa katakon karfi da nagarta.

Roy Dyche da kuma Paul Latham ne suka dauki hotonan

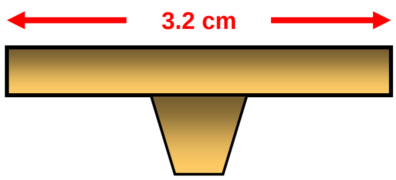
Taswirar dake kasa, na nuna adadin yanda a ke bukatar kafinta ya auna domin gina gidan zuma



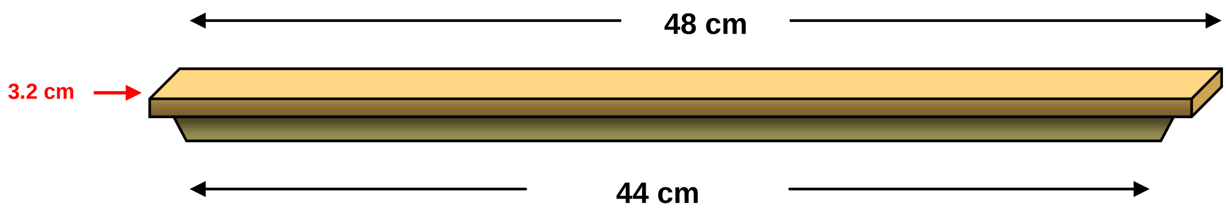
Kidid-dige bangarorin akwatin kudar zuma da sunayen su
A – gaba
B – gefe
C – kofar shiga (*kada ya wuce tsawon 8 mm*)
D – kasan akwatin (*zaa iya dan zobashi. Amma kada ya wuce 2 cm*)
E – yayan saman akwatin

A tabatar yayan saman basu kasa ko wuce fadin 3.2 cm ba:

YANDA YAYAN SAMAN SUKE TA GEFEN KARKE



YANDA YAYAN SAMAN SUKE TA GEFE



1. HADA AKWATIN KUDAR ZUMA DA KATAKO

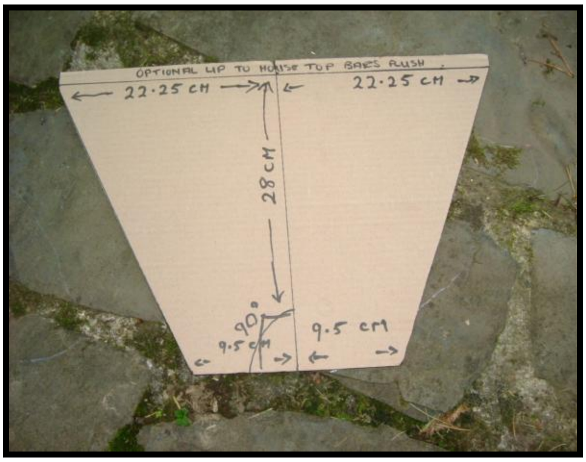
Bangaren gefen akawtin.

Goge katakon domin dai-daituwa.

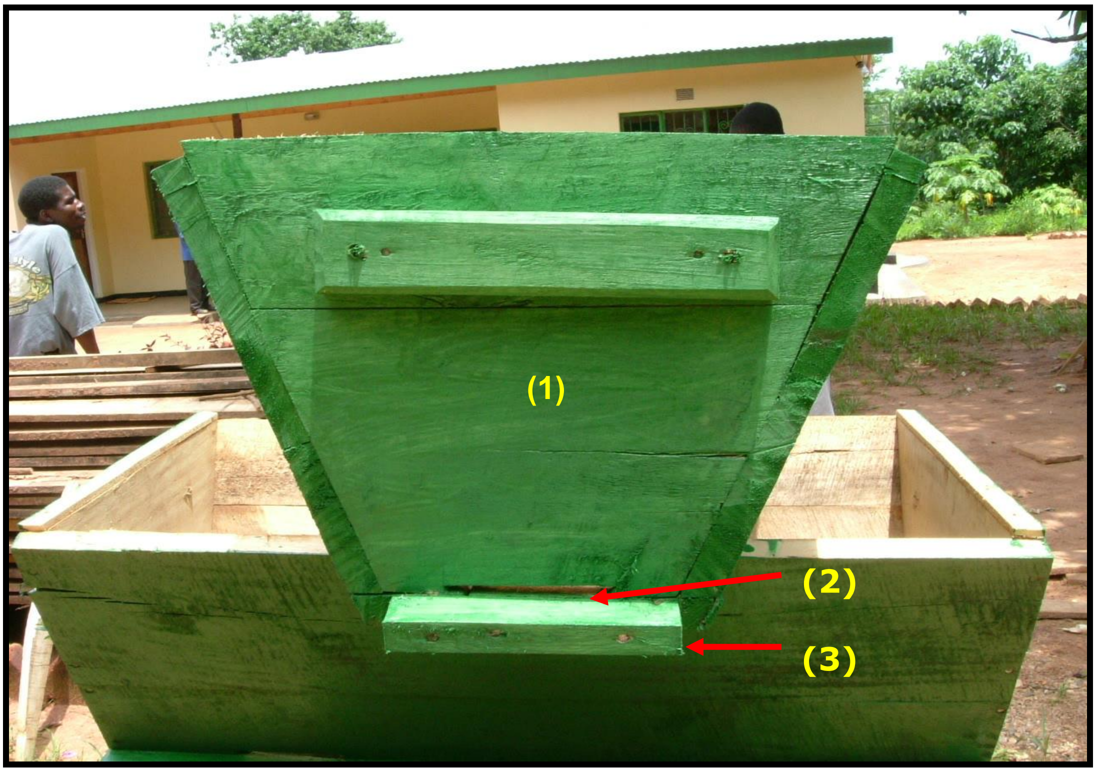
Yana nuna kafinta yana gyara katakon akwatin.

Kafinta na nuna gaba da bayan bangaren akwatin.

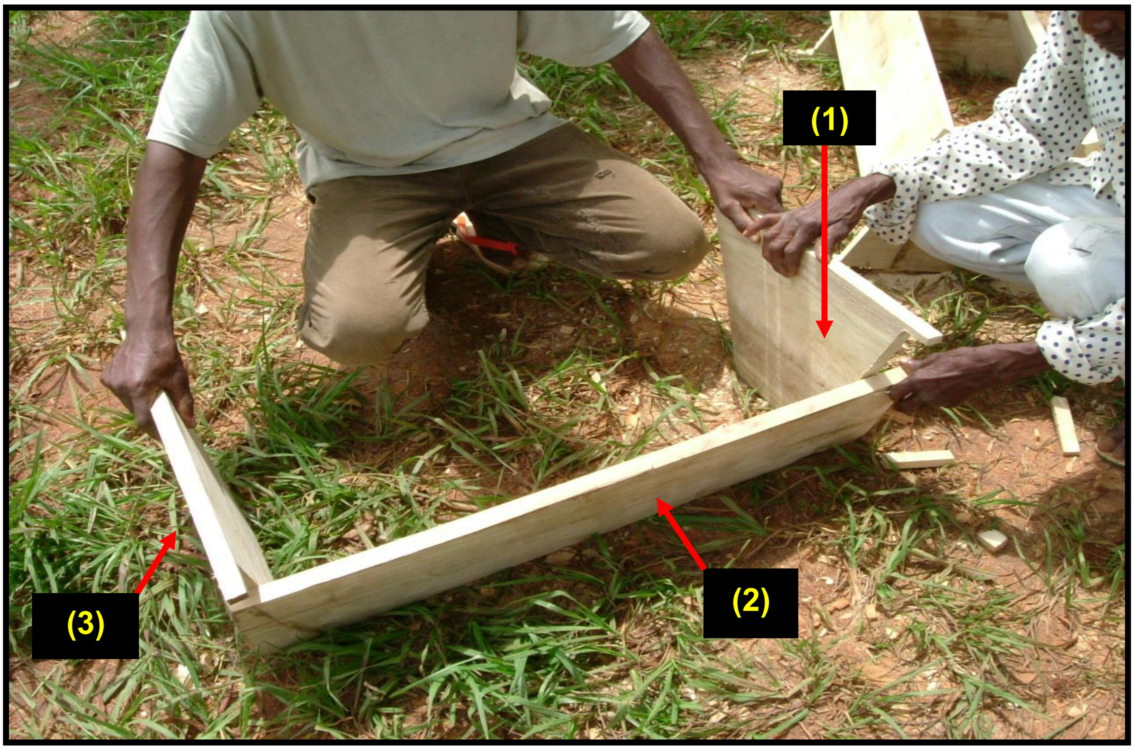
Gwaji mai kyau shine manufar akwatin zamani.



Kada a manta, a jikin bangaren gaba (1) a yi masu kafar shiga (2) kuma ai masu wajen sauka kafin shiga cikin gidansu (3).



Bayan da aka yayanka katakan,sai a har-hada bangarorin daya bayan daya.



Bayan an hada jikin akwatin sai murfin kasa.

A kan hada akwatin zuma da dan tsawo ta gefan sama domin yan-katakan sakar zumar su sami zama sosai.

Sanya Kusurwar akawti ya dan fada zai sa katakan saka su zauna daram a kan akawtin.

Za a iya sa katako cikin akwatin domin katakana saka su zauna daram.

2. YIN AKWATIN ZUMA DA ABABE MASU ARHAN SAMU

Gina gidan kudan zuma daga kaya masu arha da kuma saukin samu. Wato gina gidan kudar zuma ba sai an yi da katako mai tsada ba. Wassu gidan akan ginane da itace masu saukin samu.

Hoton, yana nuna gidan zuma da aka yi daga gutsi-rarrun katakai da mikakkun itatuwa.

Wannan hoton na nuna yanda ake yin gidan kudan zuma daga itaciyar gora ba tare da anfani da kusa ba.

Gidan kudar zuman da akayi daga itacen gora dole ne a sanya wani abu kamar leda ko makamancin sa domin hana kowane mugun abu shiga ciki.

Gidan kudan zuma, daga kasar Uganda da aka yi da kara, laka, toka da kuma kashin shanu.

Gidan kudan zuma mai kama da Kwando, kuma mai karfi, daga kasar Uganda.

Gidan kudan zuma da a ka sassaka, a ka kuma shafe shida laka domin kada gara ko wasu kwari su shiga ciki, kuma domin ya sa cikin gidan yayi duhu, ta gefe daya domin kudar taji dadin aiki.

Ba sai anyi amfani da kayan aiki mai tsada ba domin a rufe gidan daga ruwan sama.

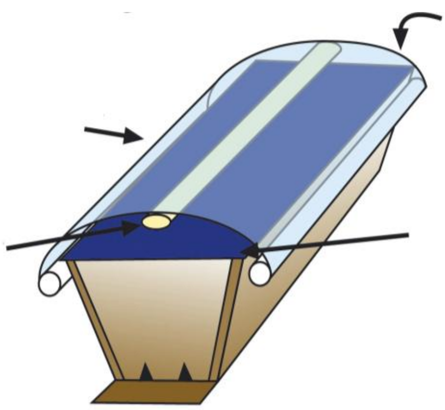
Zaa iya amfani da leda domin rufe murfin akwatin.

Honton, yana nuna gidan kudar zuma da a ka yi daga itachiyar gora da ciyawa. Anyi shi da nagarta, domin kada macizai da wassu miyagun kwari su shiga.

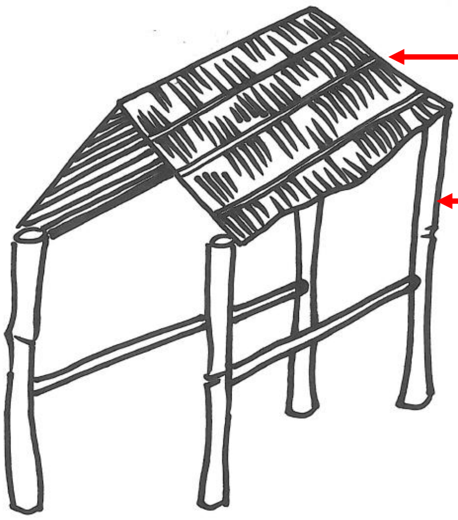
Hoton, ya na nuna, yadda za'a yi gidan kudar zuma da jinka da akayi daga karan gora a kasar Kenya.

Hoton, na nuna yanda za'a rarraba karan goran ciki biyu-biyu, a kara rufe goran da leda domin a kare gidan daga ruwan sama.

Hoton, na nuna za'a yi anfani da leda da kuma, sanduna domin ya rike nauyin ledan a kasa.



Za a iya yin rumfa da jinka domin kare kudar zumar daga rana da ruwan sama.



Jinka da ganyen kwara.

Gora domin rike jinkan.

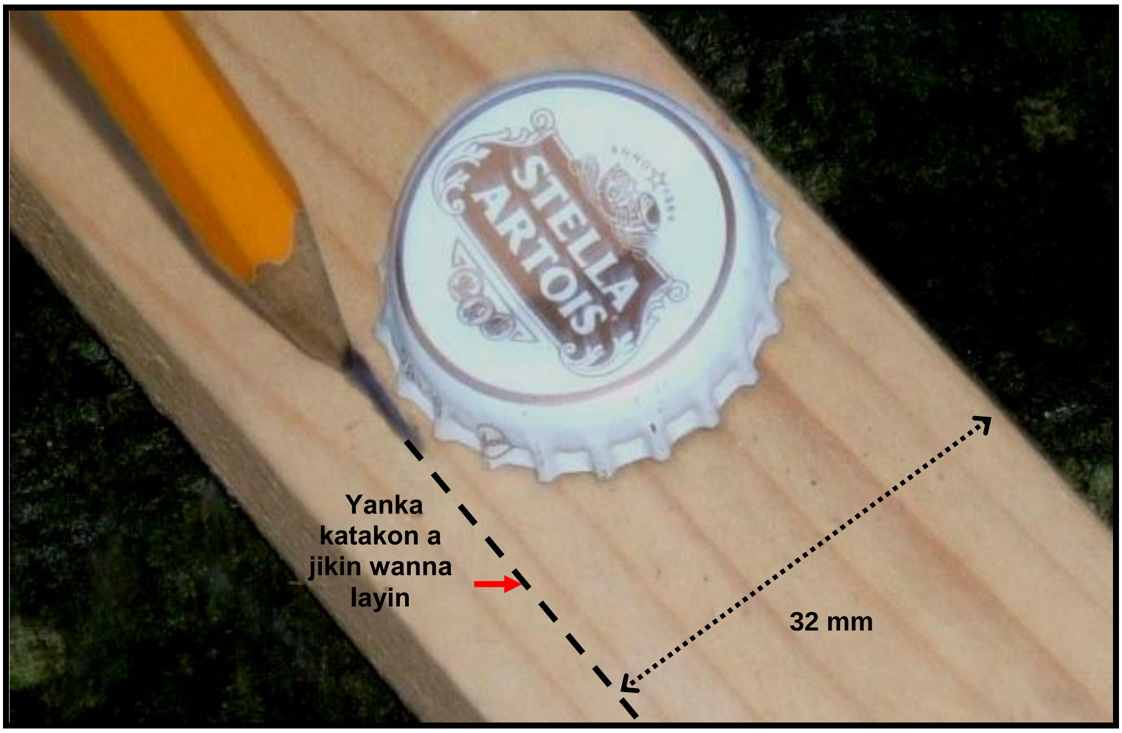
Rataye akwati domin ya kasance yana reto.

Wayoye dake dauke da akwatin.

Itace da aka rattsa a jikin akwatin.

3. DUBARAR YIN YAN KATAKANA SAKAR ZUMA

Manufar sakar zuma itace samun katakai su zama cantimita 32mm ko milimita 33mm fadi (3.2 – 3.3cm). Dubara mafi sauki domin a tabbatar cewa an gwada itacen daidai, sai a yi anfani da marufin lemon kwalba, kaman yanda ake gani acikin hoton kasa.



Hoton, yana nuna itacen saman jinka da a ka yi jikin reshen kwara, wannan yafi inganci da waddan da ake yi da itatuwa masu tsada.

Mikken katakon sakar zuma.

Hoton, yana nuna itacen gora wadda a ka gyara shi daidai wadaida.

Da Kakin zuma, ya kamata a yi shimfidan kiran kudar zuma.

Sa ido sosai, a hoton nan. Ku tattauna a tsakanin ku.

Hoton, na nuna saka daya a jikin katakon da a ka yishi kan kaida.

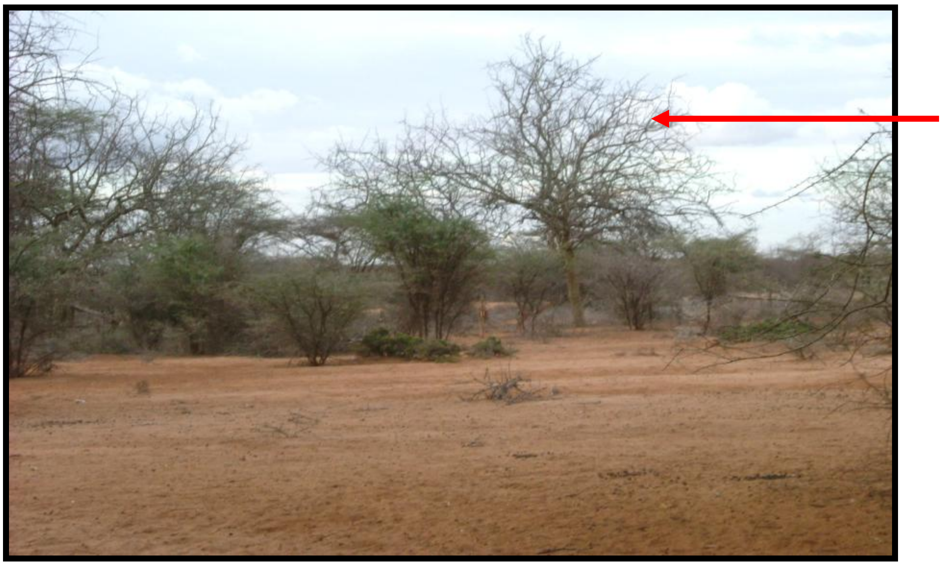
Gonar Kudar zuma

Hoton, na nuna gidan zuma a wani daji a kasar Malawi.

Hoton, ya na nuna yanayi mai kyau na kiwon kudar zuma.

1. Mahimman kaidojin samun wajen kiwon kudar zuma:

- **Wajen daba nisa;**
- **Baya kusa da muhalin mutane;**
- **Kusa da ruwa da kudan zuma zasu samu su sha;**
- **Ya na da kyau wurin yayi kusa da itatuwa masu furenni sosai;**
- **Samun inuwa mai sanyi, inda zafin rana ko iska mai karfi ba zai damesu ba;**
- **Zai iya zama wajen da ba a nomawa.**



A samu fili mai itatuwa masu rassa da za a iya rataye gidan kudar zumar akai.

2. Gyaran wuri:

- **A cire ciyawa;**
- **Boye gidan kudan zuma daga bakin hanya kadda barayi da kuma dabobin su damesu;**
- **A rika shuka itatuwa ko tsirai masu furenni.**

Sharar gona, zai taimaka wajen raba kudar da kwari ko kadangaru ko maka-mantansu.

3. Sanya akwati a gona:

- **Yana da kyau a ijiye gida kudar zuma a wurin da ba kwari;**
- **Ana iya ajiyewa abisa kan wani abu wato itace ko katako, ko kan tarin duwatsu;**
- **Tsayin wayan ko itacen ya zama mita daya ne tak daga kasa;**
- **Ayi amfani da itatuwan masu saurin girma da za a rataye akwatin. Ittatuwa kamar su aduruku da shauransu.**

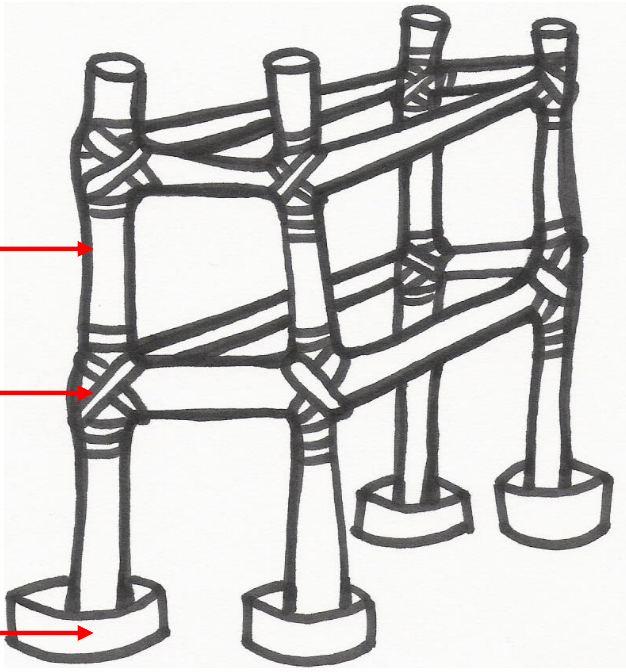
Tsawon akwatin daga kasa kada ya wuce mita daya

Hada mazaunin akwati a saukake:

Sanduna mikku.

Hada sandunan da igiya.

A nemi gwan-gani guda hudu a saka kafafuwan ciki. Sannan a zuba tsohun bakin mai a ciki domin hana kwari hawan sandunan.



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- **A sargafe akwatin da waya domin hana kwari shiga;**
- **A shafa greese a akan wayan.**

- **A tabbata ce wa kofar shigan kudar zumar bayana fuskantar gefen hanyar wucewan mutane ba;**
- **Kada a sanya akwatin fiye da goma a wuri guda.**

4. Yadda za'a kama kudar zuma:

- **Ya na da kyau a yi anfani da kakin zuma;**
- **Ya kamata gidan yana da tsabta;**
- **A goga kakin zuma da yawa har a kofar shigar su;**
- **Zaa iyi amfani dawsu ganyaye kamarsu ganyen lemon tsami ko chiyawar tea.**

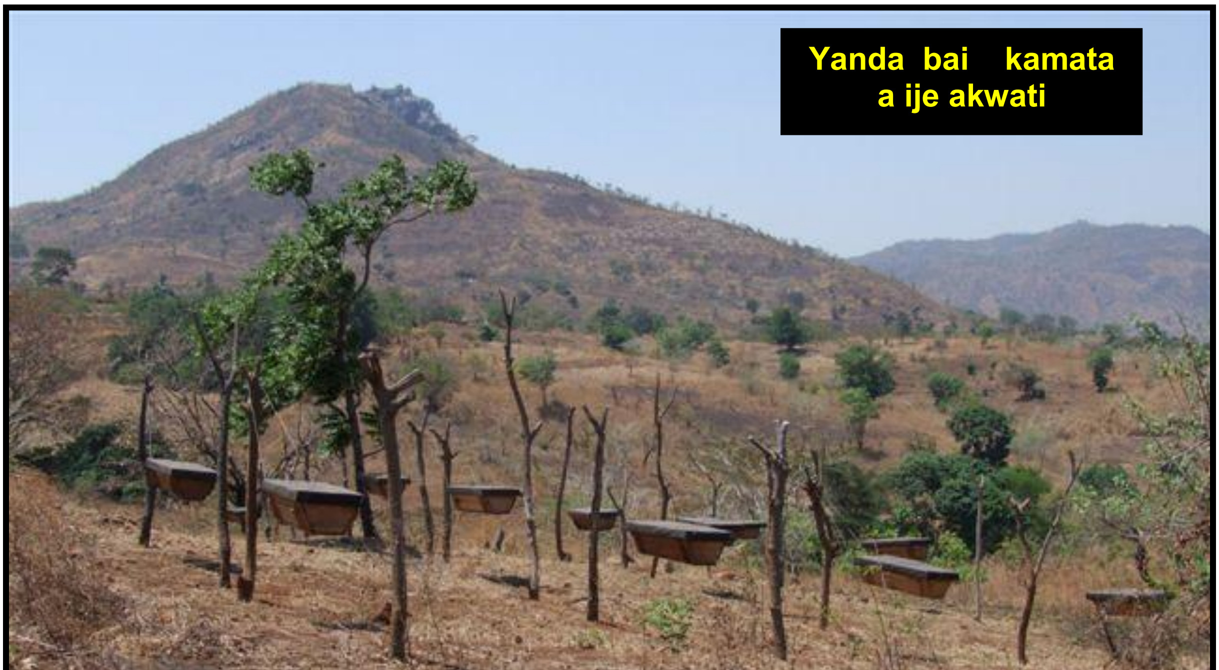
5. Yadda za'a sani ko zuma sun shiga gidan su:

- **Ya kamata a rika duba gidan kudan zuman akai-akai don a san lokacin da suka shiga ciki;**
- **A lura sosai kada bera, cinnaku, ko gizo su shiga ciki in ba kudan zuma aciki, gidan kuma ya zama da tsabta ko da yaushe;**
- **Ya kamata, a rika tambayar masana ko malaman gona yanda za ai kiwon.**

6. A tsabtace mahallin kudan zuma:

- **Ya kamata a tsabbatace gidan kudan zuma a kuma kare su. Misali a nome ciyawa;**
- **Yana da kyau a shuka itatuwa masu saurin girma kewaye da akwatunan domin su zama kamar Katanga ke nan.**

Wadannan gidajen kudar zumar sun lallace domin babu itatuwa da za su ba gidajen inuwa. Kuma kudan zuma ba su shiga ba ko kadan. Ba kudar zuma, babu kudi ken an ko?



Kiwon kudar zuma

Masu kiwon kudar zuma na zamani a Nijeriya.

Mike Brown, Brian Durk da Clare Waring ne suka taimaka da wassu hotunan

Koyar da kiwon kudar zuma. Littafi na daya (1) (© Pam Gregory)

SHIRIN YIN AIKI

Mahimman aiyukan da mai kiwon zuma zai yi a gonarsa sune:

1. Tsabbatace gidan kuma a rika lura ko kudan sun shiga.

2. A duba ko sunyi saka mai kyau yadda ya kamata, kowane saka ya kamata ya mane akan katako daya ne tak:

- **Ko sarauniyar tana aikin ta daidai;**
- **Ko akwai wurin da ke zuban ruwa;**
- **Ko a kwai abubuwan da ke damun kudar kamar cinnaka, ko gizo-gizo;**
- **Ko a kwai cututuka wadan da zasu dami kudar.**

3. Shan zuma:

- **Yana da kyau a sha zuma da ya goge sosai;**
- **Kada a kashe kudar a yayin shan zuma;**
- **A bar ruwar zuman kadan don ya zama abincin zumar.**

4. Bayan an gama shan zuma:

- **A fitar da kakin daga gidan su;**
- **A shirya sauran sakkar yanda zasu zama a hade kar a sami rata a tsakanin su;**

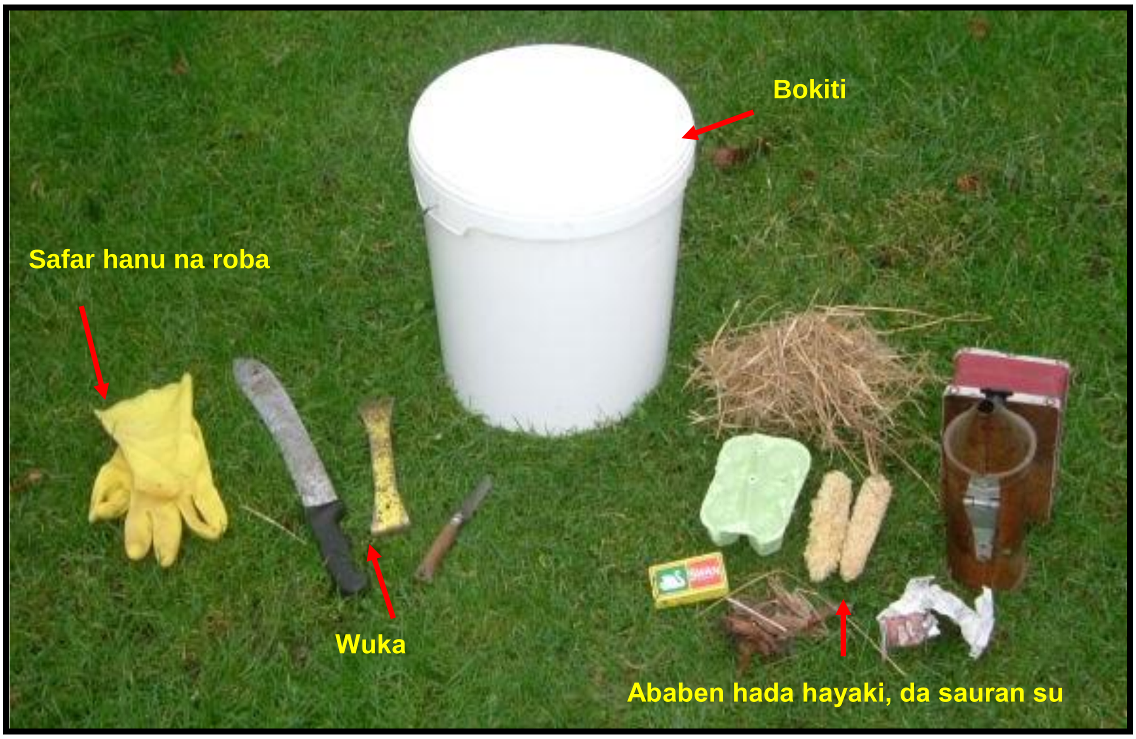
5. Idan kudan zumar sun gudu daga gidan:

- **A kwashe kakin zuma;**
- **A share datti daga gidan;**
- **Ayi anfani da wuta domin a kone kowace kwayar cuta dake cikin gidan;**
- **A kara shafa kakin zuma a katakan saman sannan a mayar da su cikin gidan.**

KARE KAI DAGA HARBI

1. Asa kayan da zai rufe jiki duka.

2.   Kaya-yakin bukata na aikin shan zuma.



3. Domin tada hayaki sai ayi amfani da bawon masara, busashen ciyawa ko itace.

4. A sa hayakin sosai san a jinkirta.

5. A sa hayaki sosai a karkashin murfin.

6. A lura kada a taba inda zuma suke, idan an natsu, a bude katakon saman da aka sa layi-layi.

7. A cire katako daya bayan daya.

8. Sai an kankare danko kafin chire sakar.

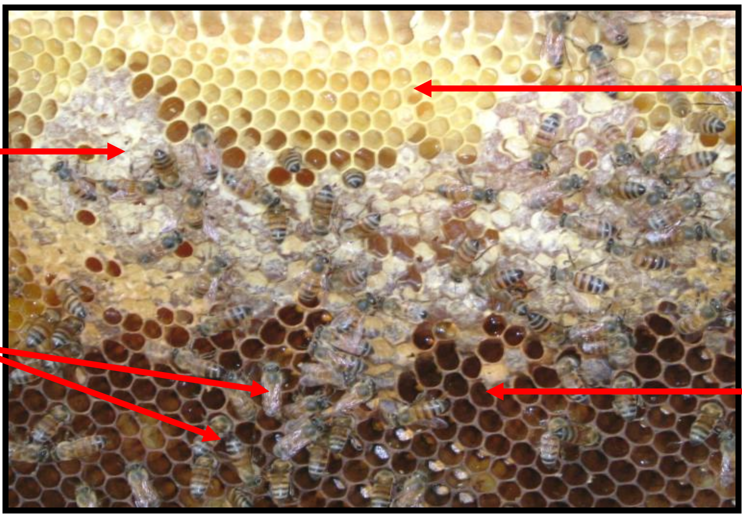
9. A daga sakar zuma kudan zuma a hankali domin a ga yanayin aikin su.

Duba aikin kuda.

10. Dabarar kiwon zuma shine chire sakar daya bayan daya .

11. Kudan zuma a kaki.

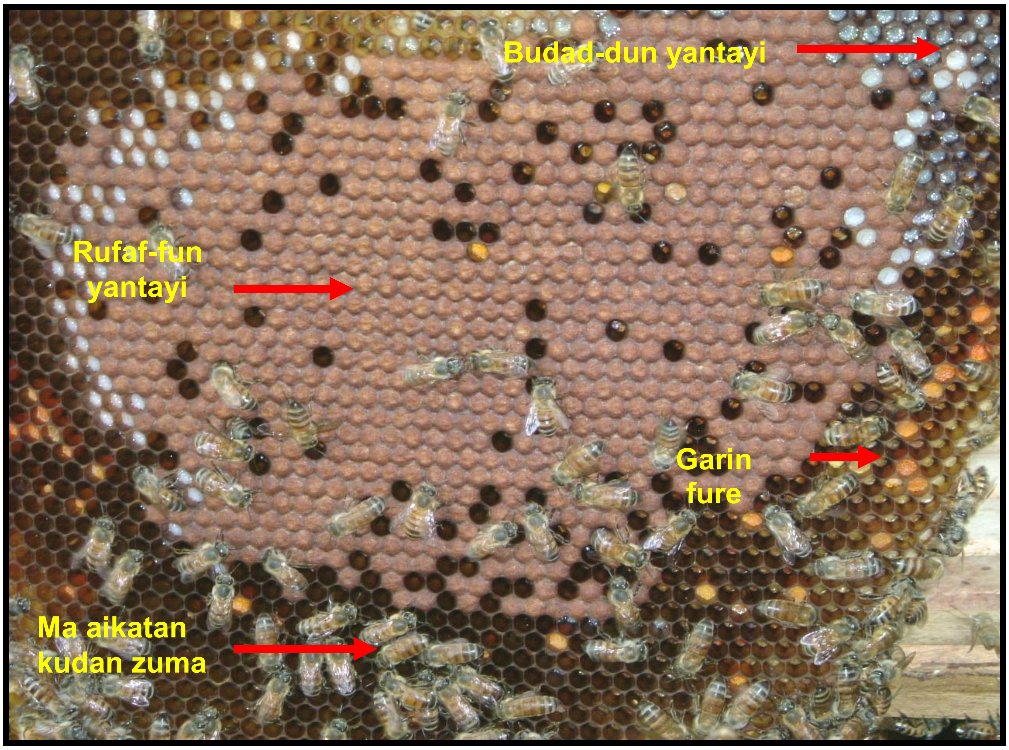
12. A lura, maikatan sun zuba ruwan zuma da garin fure.



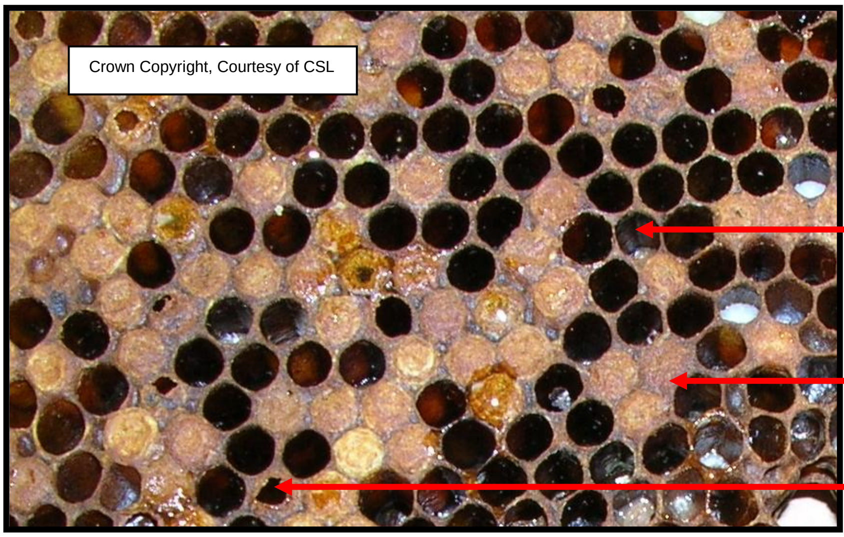
13. Yana nuna matan kudan zuma suna aikin ginin sabon sakar kudan zuma.

14. Wannan gidan kudan zuma ya cika sosai ya kamata a diba ruwan zuman.

15. Yana nuna matan kudan zuma su na lura da sabobin kwoi da ba a kyenkyeshe ba, kwoi da ke a rufe da wadda ke a bude.



16. Kudan zuma da suka kamu da cuta, ya kamata a kone gidan da wuta.



Yana nuna bakin kwoi na kudan zuma ya lallace da cuta, kwoi na kudan zuma wadda ya yi iri daban, yadda ciwo ya kama shi.

Shan Zuma

Palen Len Dixon da Tarayar kiwon kudan zuma suka bada hotuna, National Bee Unit (Fera)

Ingantacen zuma ya na da tsada. Kuma za a iya shan zuma fiye da sau daya, sai a tuntube masu kiwon zuma wane lokaci ne ya dace a di ba zuma ko aje shan zuma a shekara.

Crown Copyright, Courtesy of CSL

Hoton kasa na nuna cewa kudar zuma sun ije ruwa cikin amma zaa sami wahalan sha saboda katakan sama sunyi fadi baa bi kaidan 3.2 cm ba.

Yanda yakamata sakar zuma ta zama kenan.

Domin saukin aiki da kuma kare kai daga harbin kudan zuma, yana da kyau a je shan zuma da wani mataimaki ko.

Kayan aiki da za a bukata domin shan zuma.

Yin hayaki kafin bude gidan zuma.

A kula kada a karkashe kudar zuman.

Yan a nuna kudajen zuma da zaran an chiro sakarsu daga akwatin kiwo.

Yana da kyau a je sha ko duba kudar zuma da yamma domin lokacin ne yawaichin kudajen dasuka tafi kiwo sunkan kasance a cikin gida.

Idan za a yanke sakar zuma, ta sama za a dauko zuwa kasa, sannan a sa cikin bokiti mai tsabta da kuma murfi.

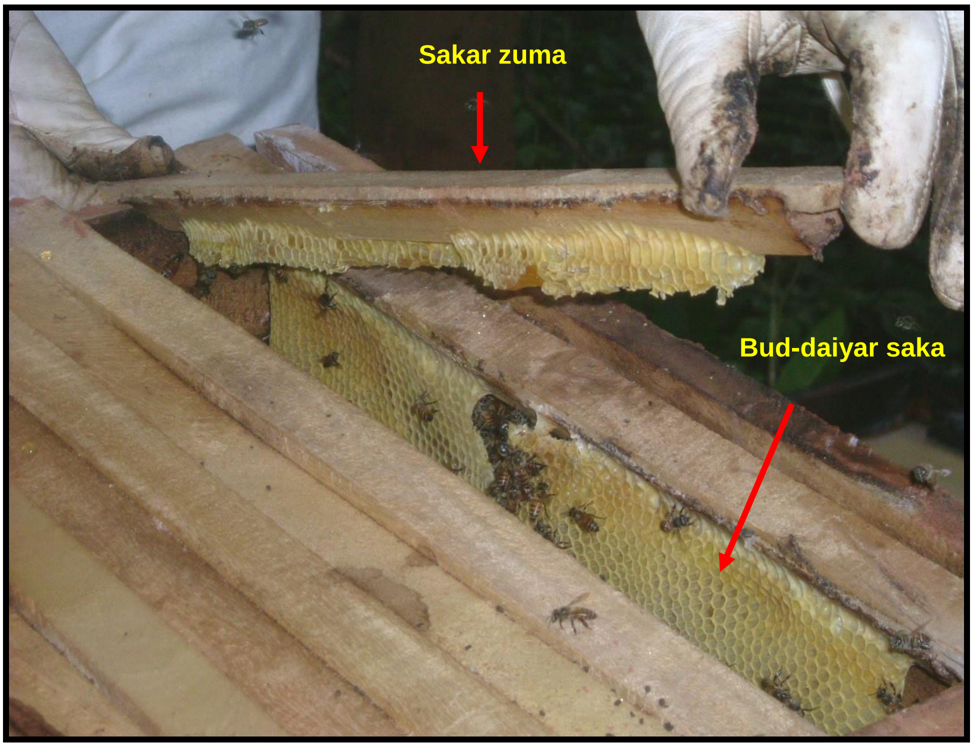
Wukan aiki.

Sandar da zuma ke saka.

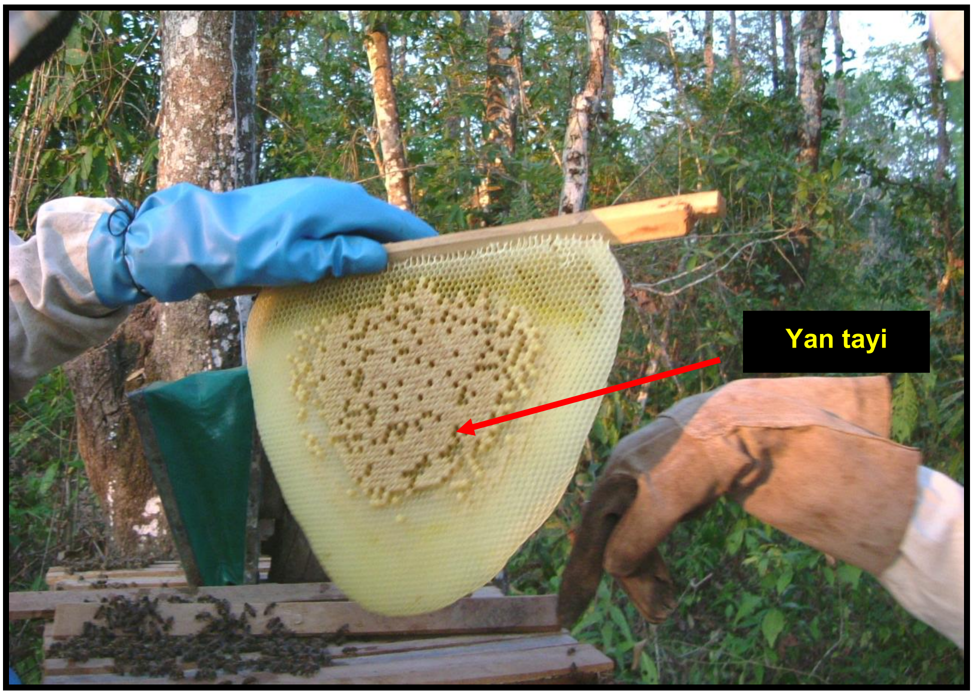
Bokiti.

A tabatar bokitin mai tsabta ne kuma ba ruwa ko damshi a ciki.

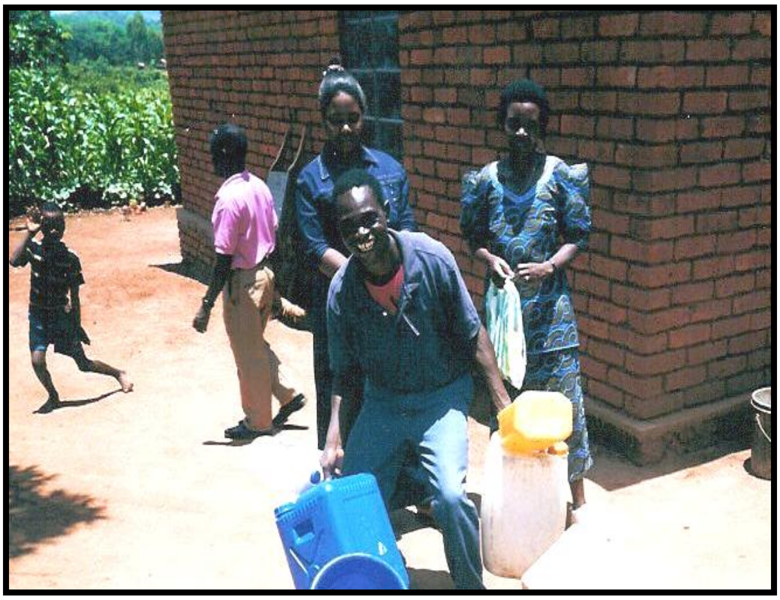
A yayin cire sakar kada a chire saka mai yaya. Haka kuma kada a yanke sakar a jikin katakon gaba daya. A dan bar kadan a saman katakon. Idan ba ai haka ba zai iya sa kudar ta mutu ko su gudu gabaki daya.



A lura kada a chire sakar mai yan tayin ko kwayaye yayin shan zuma.



Yadda Za'a Tace Ingantacciyar Ruwar Zuma



Briton Chiteje ne ke saryarda zuma a wani kanfani da ake kira NHPC, A Nkhata.
Zababen zuma daga Uganda.

Hoto daga National Bee Unit (Fera)

A na bukatan bokitai guda biyu da kyelen tata, watau dankwalin. Inda hali ai tatan a cikin daki mai raga a wundo.

Kyalen tata.

A tabbata cewa an wanke hanaye sosai kafin tatan zuma.

Idan an matse zuman a kwance ragar tatan.

Sakar zuma.

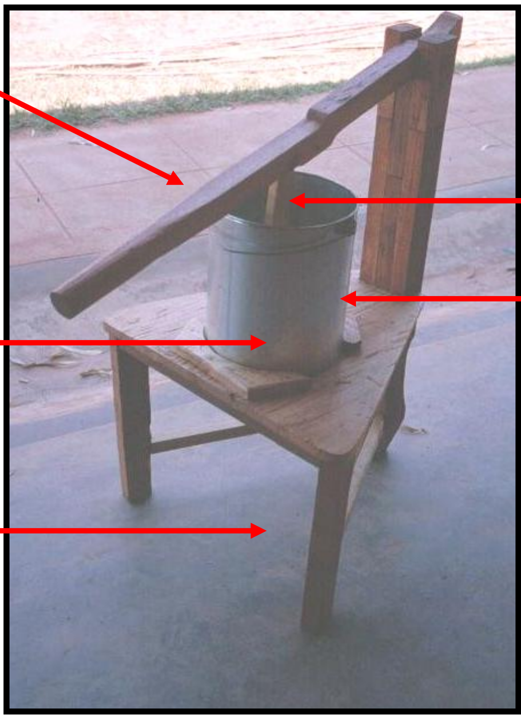
A jaj-jaga zumar dakeke cikin sakar.

A zuba jaja-gagen sakar a kan ragar tatan.

Za a iya amfani da naurar tace zuma.

Matatar zuma mai saukin farashi.

Matata.



Ramin zuba sakar zuma matsewa.

Bangon gwan-gwanin tata.

Kujerar matata.

Zaa sa bokati mai tsabta a karkashin matatar.

Dogon karfen da a ke anfani da shi a matse zuma, a kwai bokitin karfe mai ramuka a karkashi da hannun danna zuma.

Yadda Za’a samar da Kakin Zuma daga sakarsu

Honton, na nuna kakin zuma daga kasar Malawi.

Honton, na nuna abubuwan da yan kasar Uganda ki yi da kakin.

Kakin zuma abu ne mai matukan amfani. Za a iya yin man shafawa kuma yakasance maganin ciwon fatan jiki. Haka kuma za a iya maidashi kendir.

Wadanan ababen an yi su ne daga kakin zuma

Yanda zaa sarrafa sakar zuma ya zama kaki.

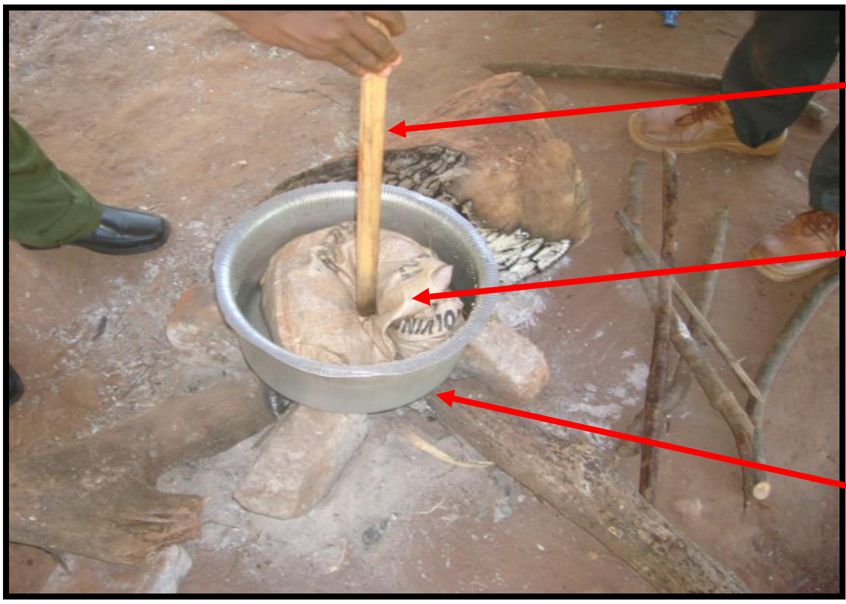
A rarrabe kakin zuma daga sakar zuma mai dauke da kwayaye,ko hurar zuma.

Sakan zuma mai tsabta

Sakan zuma me dauke da kwayaye

Sakan zuma mai tsabta yakan ba da kakin zuma mai kyau.

A wanke sakar zumar da ruwa har sai ba datti. Sannan sai a sake a cikin buhu a daure da karfi, sai a sa buhun da kakin cikin tukunya da ke akan wuta, da ruwan zafi aciki. A tabbata cewa ruwan zafin ya rufe buhun.



A danne buhun ya shiga ruwa sosai.

Buhu.

Tukunya da ruwan zafi a ciki.

A bar ruwan ya yi zafi sosai,amma kada ya tausa. A rikayi ana danna buhun har sai sakar zumar ta narke. Alamun narkewa shine ganin narkakken kakin a cikin ruwan.

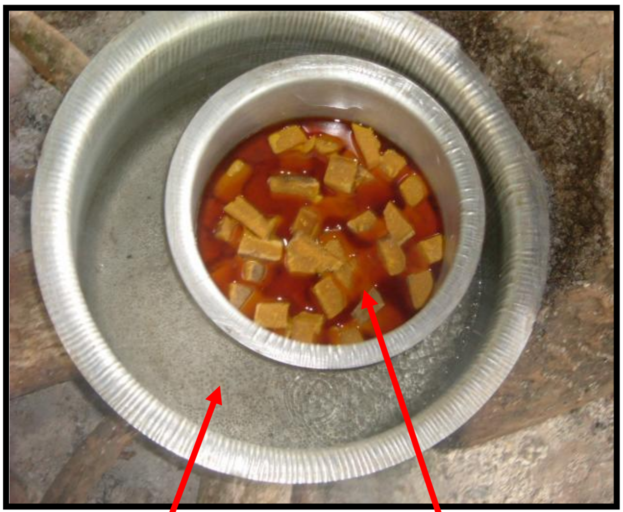
A matse buhun sosai domin kakin ya fita - kakin zuma yana fita daga ramin buhu zuwa cikin ruwan zafin.

A yi anfani da ita-tuwa guda biyu domin a samu a iya rike buhun dashi. A lura kada a bar buhun ya yi sanyi.

Ana kara sarafa Kakin zumar domin a cire sauran datin.

A gut-tsutsura kakin su zama kanana.

A kara narkar da kakin a chikin kwanon wadda aka sa cikin tukunya a kan wuta.



Tukunya da ruwan zafi a ciki

Wuta

Kwano cikin tukunya da kakin zuma ciki

Ruwa a cikin tukunya

Kakin zuma yana narkewa

A tabbatar cewa an narkar da kakin har sai an ga dattin a kasar kwanon.

Datti a kasar kwano.

A zuba narkakken kakin a rariyar dake daure a kwano.

Ayi amfani da kwanon roba domin fitar da fasalin.

A shafa sabulu a cikin robar domin hana kakin makalewa bayan ya huche.

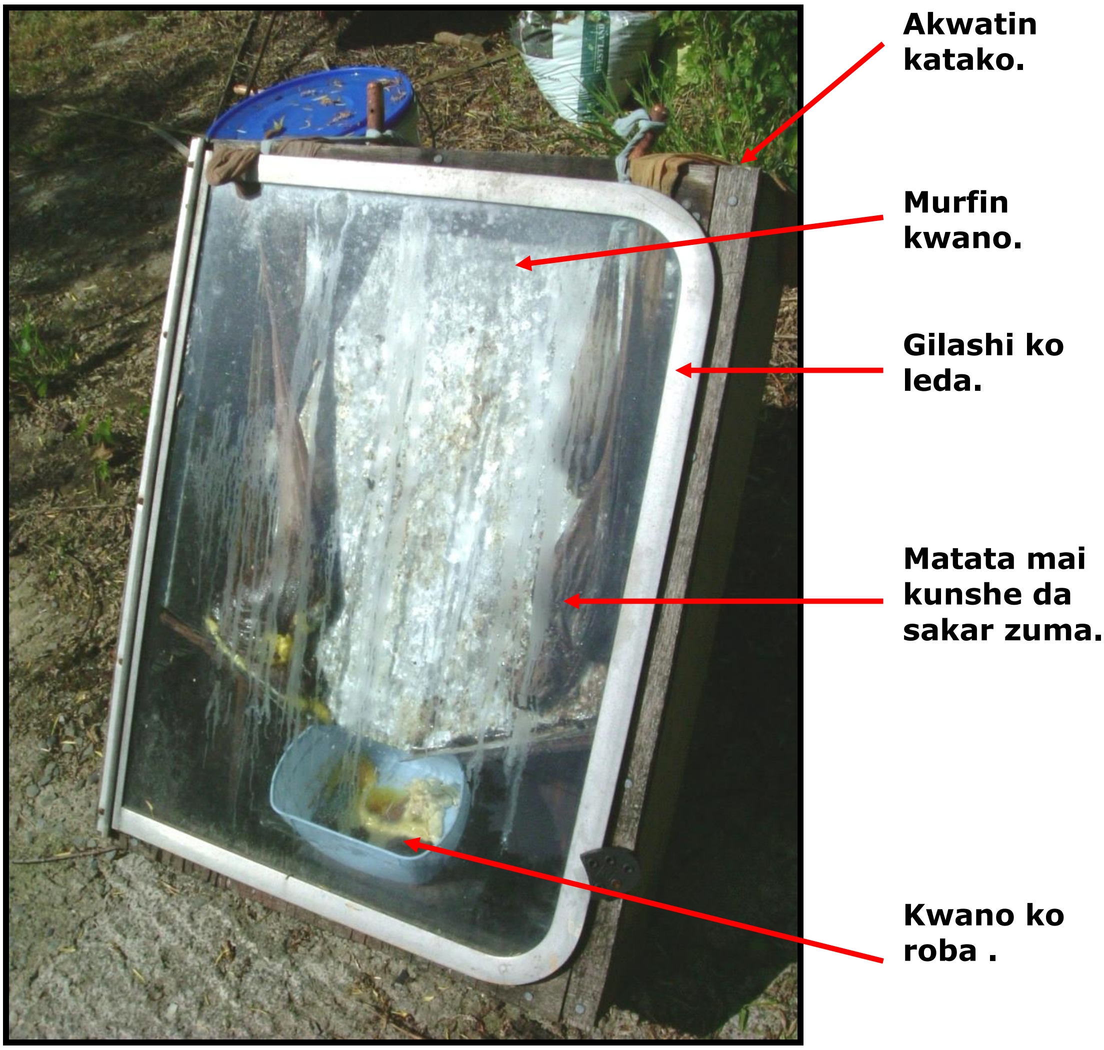
Cire kakin daga cikin roba.

A wanke kayan aiki bayan an gama.

A sanya kakin nauyi –nauyi Kaman rabi ko ½ and 1kg .
(daga NHPC, Malawi)

WADANSU HANYOYIN GYARA KAKIN ZUMA

1. **Akwati mai amfani da hasken rana. Ana yin akwatin ne da katako, sannan a sa mashi gilashi a saman. Kuma ai masa bakin penti ta ciki domin yasa akwatin daukan zafin rana. A kasa ta wajen akwatin zaa sa kwano da narkaken kakin zai rinka diga.**



Koyar da kiwon kudar zuma. Littafi na daya (1) (© Pam Gregory)

2. Narka kaki ta amfani da tururi: Zaa iya sanya kwano mai dauke da sakar cikin tukunya da ruwa chiki. Sai a sa sakar cikin fatar buhu a daure. Tururen da ke fita daga rowan ne zai sa sakar ta narke.