

JAGORAR MANOMA NA SRI

INGANTACCEN TSARIN NOMAN SHINKAFA NA (SRI)

.....Samar da kyakkyawan yanayi wa noman shinkafa

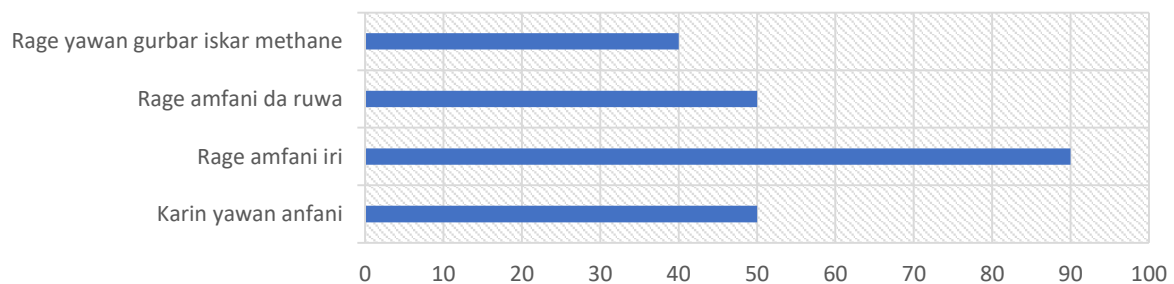
RICOWAS

“Gwajin yanayi mai jure wa noman shinkafa a Afirka ta Yamma”

(A kasashen Benin, Burkina Faso, Cote d'Ivoire, Gambia, Ghana, Guinea Conakry, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone da kuma Togo).



Alfanun Tsarin SRI



Gabatarwa

An kirkiri shirin RICOWAS ne domin inganta yanayi mai juriya tare da tabbatar da samar da habakar noman shinkafa wa kananan manoma a duk ilahirin kasashen Afirka ta Yamma. Wannan tsarin na nufin ingantawa da kuma tabbatar da gwajin ingantaccen tsarin noman shinkafa na (SRI) da kuma samar da yanayi mai kyau ta yadda za a alkinta gona da kuma ruwa da ake bukata (SLWM) a Afirka ta Yamma, wannan, dori ne bisa tsarin sakamakon ayyukan yankuna na SRI-WAAPP. An dabbaka tsarin ne a matakan yankuna a karkashin masu sa ido a yankunan Sahara da kuma Sahel (OSS), Adaptation Fund (AF) ce ta dauki nauyi sannan da kudaden gudanar da shirin a kasashen haɗin guiwa na Yammacin Afirka (ECOWAS) guda goma sha uku (13).

Kaidodin Tsarin Noma na SRI

An kirkiri irin wannan ingantaccen tsarin noman shinkafar ne bisa jadawalin shuka akan lokaci da kuma samar da ingantacciyar shuka, da kuma takaita cunkoso a tsakankanin shuke-shuke, tare da samar da ingantacciyar kasar noma mai dauke da takin gargajiya, da alkinta ruwa a tsanake domin kula da kasa mai zaizayewa, da nome ciyayi ta yin amfani da injina domin karya kwarin guiwar yin amfani da sinadarin kashe ciyayi. Tsarin SRI kan habaka shuka daga kaso 20 zuwa 50 cikin 100, yakan takaita yin amfani da tsabar irin shuka da kaso 90 cikin 100, yakan tattala ruwa daga kaso 30 zuwa 50 cikin 100, kuma taki kaɗan ake bukata domin habaka yawan shinkafa kuma tare da rage kwararowar turirin sinadarin guba zuwa sararin samaniya da kaso 50 cikin 100.

Tantance Muhallin Noma

- A zaɓi shimfidadden fili ko kuma wanda ya ɗan shingide wanda kuma yake iya riƙe ruwa na tsawon lokaci, wurin ya kasance ba ya fuskantar barazanar ambaliya da zaizayar kasa ko kuma inuwa.
- Filin ya kasance yana ɗauke da ingantaccen takin gargajiya.



Figures 1. Zaben gonakin noma shinkafa da riƙe ruwa da masu dauke da takin gargajiya.

Sharar Gona

- Ingantaccen Kintsi wa kasar gonar na da matukar fa'ida domin samar da amfani yalwatacce.
- Yana fa'ida a tsarin SRI, a raba saman kasar na tsawon santimita 20 a tsakanin shukoki domin inganta girman shuka da kuma haɓakarta.
- A kintsa gonar gaba ɗaya cakude da takin gargajiya.
- A kange filin ta hanyar yin shinge na tarin kasa domin killace shi daga kwararowar ruwa zuwa ciki.

- A samar da ingantaccen magudanan ruwa domin saukaka yin ban-ruwa tare da magance kwararowar ambaliya.



Figures 2. Yin kaftu da harrow da kuma Leveling da Bunding kafin shuka ko dashe

Irin Iri Da Aka Amince.

- Kowane irin iri wanda aka samo daga sahihiyar hanya, ana iya amfani da shi a tsarin SRI.
- Iri wanda nau'i daya ne kan kasance masu sura da fasali da kuma launi iri guda bai-daya.
- A tabbatar cewa irin na ɗauke da kaso 80 cikin ɗari na iya jure wa kowane yanayi.



Figures 3. Zaben irin da a shuka daga amintattun kampanomi ko gidajen gona.

Alkinta da kuma tantance Iri

- A tsoma irin a cikin ruwan da aka zuba gishiri domin a tantance masu kyau da lalatattu sannan da kuma dusa.
- Iriin da suka kasance a kasan ruwan da ke cikin mazubin kan fara tare da hanzarta tsurowa a inda aka yafa su kafin dashe.
- Idan shuki za a yi kai-tsaye, a jika irin a cikin bokiti na tsawon sa'o'i 24 sannan a shanya a karkashin inuwa na sa'o'i 12 sannan a kai ga inda za a shuka.



Figures 4. Tsarin wanke iri ta tsoma shi a ruwa domin tantance iri mai kyau da maras kyau

Kintsa Muhallin Da Za A Yi Yafen Iri.

- Wurin da za a yi yafen ya kasance yana kusa da gonar.
- Yakasance akwai sahihiyar hanyar samar da ruwa kusa da wurin domin yin ban-ruwa a kai- a kai.
- A kange muhallin daga barnar wasu halittu irin su beraye da tsuntsaye da kuma kwari da sauransu.
- A cakuda kasar tare da busasshen takin gargajiya wanda adadinsa zai kasance daidai da na kasan wannan muhallin domin samar da inganciyar kasa mai dauke da sinadarin da ake bukata.
- Ba a bukar sai an zuba takin zamani.
- A daga tarin kasar muhallin yafen ya yi sama na kimanin bisan santimita 10 zuwa 15.
- A daidaita saman shimfidaddiyar kasar muhallin yafen sosai sannan ya yi laushi kuma ya yi sambal.
- Kimar muhallin yafe na SRI kan kasance ne kaso 1 cikin 100 na kimanin fadin gona. Misali: idan muhallin da aka yi yafen kimanin mita 100 ne, za a iya dashen mai kimanin mita dubu 10,000 ko kuma hekta 1 (1 ha).
- Ya kamata kimanin inda za a yi yafen ya kasance 1m x 5m amma yana iya kai wa har kimanin 1m x 10m.
- A kange muhallin da aka yi yafen ta hanyar kakkafa sanduna tare da kewayewa da igiya.
- Nauyin kg 8 zuwa 13 na iri ya wadatar domin yin dashen gona mai tsawon mita dubu 10,000 (1 ha).
- A riƙa yi wa yafen ban-ruwa sau 1 zuwa 2 a kowace rana.

- A rika yin amfani da ‘yar busasshiyar ciyawa a koda yausha domin rufe duk inda tsuntsu ko kuma wani kwaro ya lalata.
- A cire busasshen ganyen da aka rurrufe yafen cikin kwanaki biyu da fara tsirowa.
- A bar shukar ta kai matakin fitar da kunnuwa biyu, wato, a tsakanin kwanaki 8 zuwa 13.
- A yi dashe nan da nan, in an tsawaita, ya kasance an yi dashen cikin mintuna 15 zuwa 30 bayan an tumbuko su daga inda aka yafa.

Field Area	Size of Nursery	Nursery Dimension	Amount of Seed
100 m ²	1 m ²	1m x 1m	60g - 100g
1,000 m ²	10 m ²	1m x 10m	600g - 1 kg
10,000 m ² or 1 ha	100 m ²	1m x 100m	6-10 kg

Table 1. Nursery size by field area and seed rates



Figures 5. Tsarin yin bedi domin yafa irin shinkafa kafin dashe a bisa tsarin SRI

Dashe

- **Gyaran Muhalli Noma**

- A sa alama a filin na santimita 25 x 25 ta yin amfani da igiya da manjagara da kuma abin saka alama domin samar da shaidar inda za a yi dashen.
- Samar da tazara mai fadi sosai kan ba wa iska damar rarratsawa a tsakankanin su.



Figures 6. Tsarin zane a gona kafin dashen jaririn irin shinkafa a gonakin shinkafa.

- **Yin Dashe**

- A yi ban-ruwan baki dayan inda za a yi dashen tun saura sa'o'i 6 zuwa 12 kafin a yi dashen.
- Dashen rami kan kasance ne mai zurfin santimita 1 zuwa 2 a daidai lokacin da yake da kunnuwa bibbiyu bayan da kai kwanaki 8 zuwa 13 tsirowa.
- Akan yi dashen kananan iri ne a cikin fasalin ratsin layuka na santimita 25 x 25.
- A dasa kwaya daya ce rak a kowane gurbi.
- Akan cusa irin ne tare da dukkan jijiyoyinsa ta yadda zai kasance mai surar L- bay a kasance mai surar J- ba.



Figures 7. Dashen jaririn irin shinkafa ta amfani da igiya.



Figures 8. Tsarin dashe na SRI domin rage gasa tsakanin shuka da shuka a gonar shinkafa.

Shuka Kai-tsaye

- Shuka kai-tsaye na wakana ne a cikin damina a yayin da yin dashen ke da matukar wahala.
- Iri guda biyu / Irin da bai fara tsira ba, shi akan shuka ba tare da tantancewa ba.
- Yin amfani da hannu ko na'ura (idan akwai ta) domin shuki.



Figures 9. Shuka iri wanda ya fara tsira domin samun ingantacciyar yabanya an gonaki



Figures 10. Wasu daga cikin injunan shuka shinkafa da suka dace da tsarin noma na SRI



Figures 11. Yanayin gonar shinkafa da aka shuku iri kai tsaye ta hanyar tsasin SRI.

Ciron Ciyayi/ Nome Ciyayi

- Nome ciyayi na daga cikin muhimmin aikin da tsarin ayyukan SRI ta tasa gaba.
- An aminta da yin amfani da fatanya da kuma yin amfani da na'urar kashe ciyayi.
- Tsarin SRI bai amince da yin amfani da sinadarin kashe ciyayi ba.
- Ana matukar bukatar yin ciro na kananan ciyayi da hannu a cikin mako na farko da kuma na biyu bayan an yi dashen.
- Yin ciron ciyayi sau huɗu ake bukata domin tabbatar da kyakkyawan jadawalin tsarin da SRI ta siffanta da shi.
- Zurfin ramina da za a tumbuko ciyawa daga kasa, ya kasance kimanin santimita 1 zuwa 2 domin a takaita illatarwar da za a iya yi wa jijiyoyin shuka da aka dasa.
- Iri daban-daban na na'urar ciron ciyawa mai jujjuyawa tsarin SRI ta fi amincewa da ita.
- Ita irin wannan na'urar takan sa ciyawa ta yi laushi a tsakankanin layukan shukoki, ya sanya kasan wurin ya baje a kasa.



Figure 12. Ciron chiyayi a gonar shinkafa da hannu.



Figures 13. Wasu daga ingantattun kayan noma da suka dace da tsarin noma na SRI.



Figures 14. Ana iya amfani da naurar noma ta (rotary weeder) don yin noman shinkafa a gonaki.

Taki

- Takin gargajiya ne mafi inganci a tsarin SRI.
- Ton 5 zuwa 20 na takin gargajiya ake bukata ya wadaci hekta guda, hakan ya ta'allaka ne ga adadin sinadarin kara kuzarin da ke cikin takin (nutrients OM nutrients concentration).
- A binne sinadrin takin gargajiya na (OM) tun kafin a yi kaftu domin hakan zai bayar da damar takin ya binnu a cikin kasa.
- Ana iya amfani da takin zamani ne kawai domin shawo kan matsalar karacin takin gargajiya.
- Ana iya saka takin UREA bayan makwanni 3 zuwa 4 da yin dashen.



Figures 15. Wasu nauin takin gargajiya daga kashin shanu da kuma na kaji.



Figures 16. Takin gargajiya da aka samar dage buntun shinkafa da kuma na dusar katako

Alkinta Ruwa

- A kiyaye da danshin gonar na tsawon makwanni biyu bayan shuka domin ba wa tsiron ya yi yabanya mai kyau.
- Sannan a bayar da 'yar tazarar yin ban-ruwa domin gonar ta ɗan bushe, hakan za a ci gaba da yi, irin wannan tsarin ne ake kira da (Jikawa da Busarwa) Wetting and Drying (AWD).
- A samar da wani layi na magunar ruwa kimanin santimita 1 zuwa 2 ta gefen shukar, sannan a bar wurin ya bushe har sai ta kai ga an fara ganin alamar kasar ta fara darewa. A rika yin ban-ruwa bayan duk kwanaki 7 zuwa 10, hakan ya dogara ne ga irin yanayin kasar wurin da kuma irin yanayin da ake ciki.
- A lokacin da shinkafar ta fara daukan ciki, a rika yin ban-ruwa sosai kuma a kai-a kai hakan zai ci gaba har zuwa lokacin furanni da kuma zuba 'ya'ya.
- A bar gonar ta kasance a bushe tun makwanni biyu kafin lokacin da yanke ta.



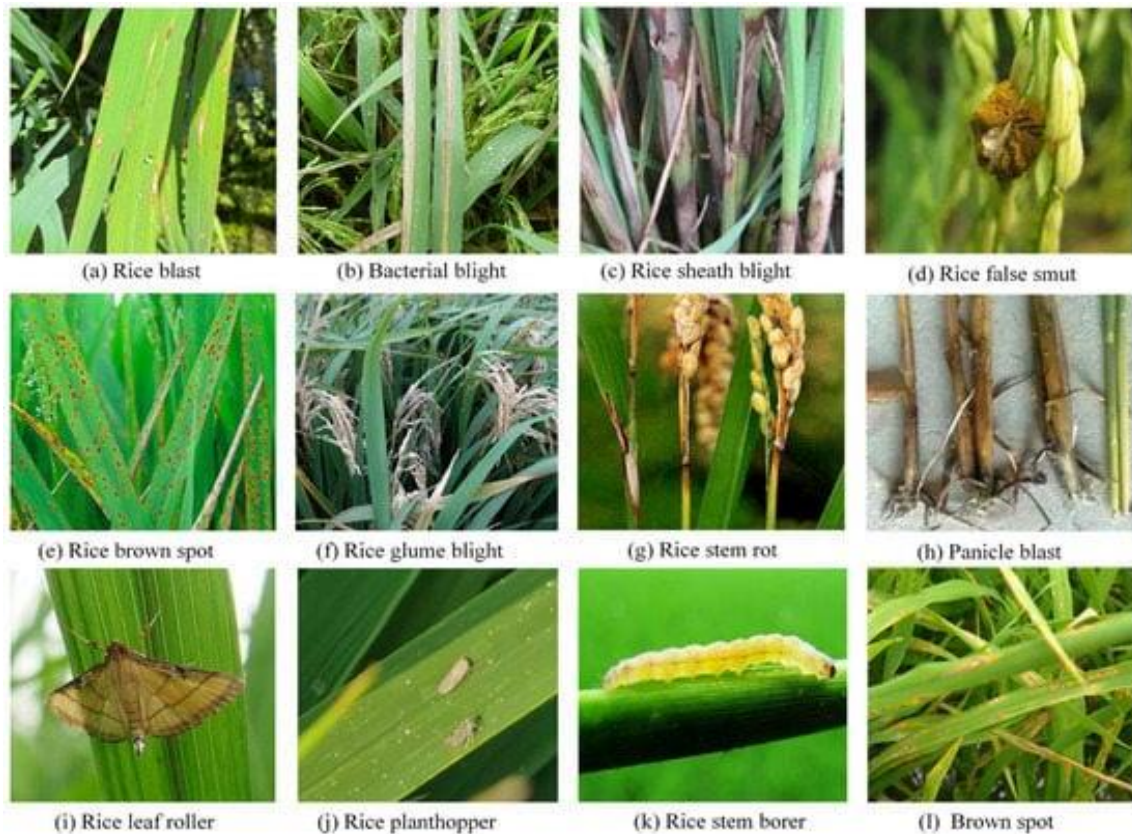
Fig. 17. Jerin wasu matakan ban-ruwa da busarwa a bisa tsarin gudanarwa na SRI

Magance Kwari Da Kuma Cututtuka

- A binciko alama ko yanayin wata cuta ko kuma kwari suka bayyana a gonar.
- A tuntubi malamin gona ko wani wakilinsa a yayin da aka ga wata alama ta cuta ko kwari sun farmaki gonar.
- Tsarin SRI ta fi gamsuwa da hanyar amfani da wasu halittu a yayin magance matsalar kwari da cututtuka.
- Mafi akasari, tsarin gonakin SRI sun inganta shukarsu ta yadda sukan iya jure wa matsalolin kwari da kuma cututtuka saboda suna da manyan jijiyoyinsu da kuma ganyayyaki masu kauri da sauransu.
- A yi amfani da dukkan gamayyar hanyoyin magance matsalar kwari da kuma cututtuka.
- A yi amfani da raga da mutum-mutumi da sauran wasu dabarun da kan razana tsuntsaye domin kare gonar a cikin makwanni 12 zuwa 16 da yin wannan dashen.



Fig. 18. Irin cututtukan da kan addabi gonakin shinkafa kenan.



Figures 19. Wasu daga cikin barnar da kwari da kuma cututtukan da suke addaban shinkafa.

Girbi Da Kuma Bayan Girbi.

- Gonar shinkafa kan nuna alamar ta isa girbi da zarar kaso 80 zuwa 85 na ganyayyakin ta suka sauya zuwa launin tsanwa ko kuma ruwan kasa-kasa.
- Hakan na faruwa ne a tsakanin makwanni 4 zuwa 6 da fara fitar da furanni ko kuma kusan makwanni 13 zuwa 16 da yin dashe.
- A yanke karar shinkafar da lauje kimanin tazarar santimita 20 tsakaninta da kasa.
- A yi amfani da na'urar injin yankan shinkafa idan an sami sukunin hakan.
- A daddaure sandunan shinkafar zuwa dami-dami domin ta sama inda shinkafar take ta hau kan tampol domin shanyawa.
- A shanya shinkafar na tsawon kwanaki 5 zuwa 10 da yin girbi kafin a cashe ta.
- A yi amfani da inji casa idan an sami damar hakan don takaita barnatar da shinkafa.
- Kada a shanya shinkafar a tsandorin kasa domin guje wa kamuwa da cututtuka da kuma cakuduwa da duwatsu.
- A tabbatar da tsabar ta yi bushewar akalla kaso 12 zuwa 13 cikin dari kafin a dura a cikin buhu.
- A adana tsabar a wuri mai iska da sanyi-sanyi, kuma ya kasance akwai kariya ingantacciya.
- A tsafata ma'adanann sannan a yi feshin maganin kwari tun cikin kwanaki 3 zuwa 7 tun kafin a adana shinkafar a ciki.
- A shishshirya buhan shinkafar yadda ya dace domin ba wa iska damar rarratsawa ta ko'ina da kuma samun saukin gudanar da bincike.



Fig. 20. Nunanniyar gonar shinkafa da kuma yadda ake yanka ta da lauje a gargajiyan

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