



Benga sebr Burkina Faso yīnga

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Institut International d'Agriculture Tropicale

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Gom-zugu

Seb-kānga maaname t'a na n yī zāmsg tʉm-teoogo puta zāmsg yīnga, sēn yaa proze sēn boond tī AVEC BF sēn yaa zapō koodbala weooga ministæērā sēn sōnge-proze wā sigla zāmsdo sēn na n sōng la a paas Burkīna Faso beng koadba la beng-bu koadba minim, b bāngre la b rabay, bōn-buudā la bengā koob wængē.

Zāmsga no-kēnda wʉsg la b sigl-yā ne INERA wā. Seb-kānga yiisgā tūu ne proze wā zāmsgā wakato. Seb-kānga pugē, goam wʉsg la b kumb-yā n maneg n wegse t'a wumbā yī nana. Foto rāmb wʉsg la b rigs-yā sebra yīnga. Yell bāmba fāa ya sēn na n sōng BF ka-koadb nins sēn get-b bengā yelle. Sēn be seb-kānga pugē singda sig-noy kiuugu, ka-koadbā tʉma sēn wat n sung sōmb-sōmbo. Sebrā leb n wilgdame tī puta warb la a budbā ya a sigr kiuugā pugē. Putā zāab yaa sēoogo kiuugu la sa-sik kiuusa pusē bengā taoosgo la a gūusgu yaa bōn-bwung la zī-likr kiuusā pusē. beng koadba tōe n zāmsa kiuug fāa ne a tʉma b sēn sōmb n bānge n maane.

Haruki “Kabore-Batia” Ishikawa (Ph.D.)

IITA Saria, Burkina Faso.

IITA Kano, Nigeria.

Sên kēed ne proze AVEC-BF

Nand- nand ti sên keta pugda

Rëndame ti beng koadba, beng-bu getba, a tūusdba la neb nins fāa sên kēesd b mens bengda tūumd wēengē gād taaba n t ôog n yī noor a yembre n paam n bōeeg beng-bu sāamsa ti hal baa ka-koad bōonesa fāa n yuda tōog n paame. Būmb d sên ne bengda wēengē nin-sables tēms wīndg sên lutē la a tēng-n-suka wilgdame ti baa ne modgr nins fāa b sên maand bengda tūumd wēengē n tāag rūnda, beng-bu sōma wā paam n ta nin-sables tēms wusg pugē kēna maasa hal wusgo, lasōm bame ti b reng n ges n pids būmb ning sên paooge sên kēed neb nins sên getb bengda tūuma yelle.

Benga yaa ko-buugu sên be ko-buud a taaba taoore ne sōmblem. Ziis nins sên yaa randagre(zī-koεnga) n be nin-sables tēms wīndg sên tūtē la a tēng-n-suka la ti tōnd tēnga Burkina Faso be b suka, tēn-bāmba pusē b naagda bengda ne ko-buud a taaba wala kamaana, kazēega la baninga n kooda.

Benga kooba, yaa a ruba yīng n yiida; sên yud fāa a biisa. La a leb n kēesda laog kāsenga beng koadba yīnga t'a sên kēes ligd sōor zēk n ta Amerik tēng ligd dolaar milyaar 2.2 yuum (FAO2007-2009) pugē. Baob kāensa pugē, beng-bu tūulsa d sên taoosd rasem 70 pugē wā tōeeme ti d zab ne koma n koglg d rubā n pōs zuloese tēn-koura sên wat ne a soaba bengda moogra wakatā. Beng-bu kāens sōngda beng koadba t'a paasda b paongo b sên wat n vē ti beng biisa ligd wa rug n lebg toogo ti b yaool n na n koosa. Ne rē fāa beng-bu tūulsa IITA wā la tūum noyā a taaba sên tūusd beng-bu sōma wā sên ges n tum n yiisa kell n paa gōgdē n pa tat beng koadb nins sên dat-b bengda ye.

Proze AVEC-BF yaa IITA wā proze a yembre, zapô tēng gof neera sên sōnge sên na yulē n wa ne nao-kēnd paala ti bengda bōn-bu tūulsa bōeeg zīig zānga. Proze AVEC-BF sigla tūum kāsēmsa tāabo sên na yulē n bōeeg bāngr la minim.

- 1) Beng buuga tūusgu sên kēed ne beng koadba sên dat la b nonga soaba
- 2) Beng bu koadba sulla la b lagem-n taara paasgo sên na yulē n keng bōn-bu paala kōom b suka.

- 3) Puta kaorengo ne beng koadba sën na n song-b ti b bäng beng-bu sōnga yōodo la b le paam rabay beng a womb la beng a tuum a taaba wëengê sën kēed ne neb nins fāa sën tumdb beng a tuuma.

Ne tuum kãensa sën pa maneg n yaa toora, sën ya tle n bakd proze AVEC-BF ne a taaba, yaa tuum buud toor-toor sën lagem taaba tēng a ye b sën yāk pugē taky ligda yaa nana n kell n zemsdē la sakd ne tēnga nin-buiidā tōogo.

Marsā proze wā baasga pugē tōnd tōe n maneg n maana tuum buud toor-toor n paase, d tēms nins b sën yāka pusē. Proze wā yuum a tãaba pugē pu-paal ektaar 50 la tōnd beng-bu koadba sën paam-b zāmsga tall beng buug sën tar kaset sebre n ko. Kakoadb 797 n tū n zāms kakoadba puta tuuma kaorengo n paam bāngre koodā zāab rabay zugu ti ka-koadb sōor sën ta 1500 sën be tēms nins b sën yāka pusē la tēms sën keg-b bāmba sungame n kood beng-bu paalga IT98k-205-8 b sën boond ti Niizwe (Niizoe) (sën dat n yeel ne guremde ti kom saame) sën paasd lagem-n taar sën tūus bōn buud ninga ti koadb 910 tū n tume, beng buud a taab sōor sën ta a nu (5) n zoe n be sorē ti d na n bōeeg. Proze wā tumdame yesa n yiisd bōn-bu paala sën yekd ne koadba raabo.

Wakat kānga baa ne proze AVEC-BF tuuma sën tar yōod la a kēng taora, sën pak n yuda yaa rabaar ning sën na n maan n paase ti ka-koadba ne beng-bu koadba la beng-bu tūusdba gād taaba ti beng-bu sōnga paam n bōeeg n ta a sën tog n taē la b le maan bōn-bu paal n kō baobg ning b sën datā. Tuumd sën pa baood tōog wusgo t'a sakr la a rabaar na sōng ti zems tōe n yi tagsgo sën na n yilē ti beng-bu paala bōeegr yi tao-tao tēnga pugē sën tūud ne tēnga ninbuiidā pāntōogo. Baa tēng fāa sën wa n paood n zem to-to, tēng fāa ne a tuuma sën yaa soaba tōe n sōnga wakat sën wate tōnd Burkina Faso beoog neer la a taor kēnd yīnga.

Seb-kānga makda koadba sebr zalle ka-koadba yīnga, sën kēed koadba puta tuuma kaoreng wëengē n na n sōng-ba n paas b bāngre beng a koob wëengē. Baoob sulls vëesdb kãsems toor-toor naagame n tum n yiis seb sën kōt kibay la tuum nao-kēnda zāadba yīnga. Ne sebr kānga sën yaa proze AVEC-BF tuum teooga yembrā, tōnd gëegdame t'a na n sōngame n nek ka-koadba ti b tall beng-bu sōnga n tum ne rabay paala b sën paama n paas b lagem-n-taara pānga ne neb toor-toor sën ning b toog proze AVEC-BF pugē wā.

Proze AVEC-BF ya sōm-mita sēn kēed ne sōngr ning b sēn sōnge ti d na n sōde ne b neba: tōnd kōata, zapō tēng kooba, weooga la zīma yēeb ministēera (MAFF), zamaan zēms sull ning sēn geta kooba yelle (IITA), tōnd tēnga sull sēn geta weooga la kooba veesg yelle (INERA), zapō tēng zooda sulli (JICA). Zapō tēng no-rēesa sēn be Burkina Faso, sullsa taab sēn tūmd b mensē, tōnd tēnga tūmd noor ning sēn geta bōn-buuda yelle (SNS) la tōnd Burkina Faso ka-koadb.

Proze wā wakata tōr fāa pugē, bi-pugla a ye singame n na n kēng kolēez yesa wēnd maag paoong sēn kēed ne beng-bu paala tūma. Tōnd saagda ne d sūur fāa ti bōm-bu koadb paala sēn be tēmsā pusē wā na n paama bāngre sēn kēed ne proze AVEC-BF sēn tall zāmsd nins tēmsa pusē wā la b sōng tēnga a beoog neer yīnga. Tōnd proze wā teelda Burkina Faso ne “AVEC-BF” wala a yūura meng sēn dat yeel ti būmb ninga.

The logo for AVEC-BF features the word "AVEC" in a stylized, green, sans-serif font, followed by "BF" in a black, serif font. The letters are slightly overlapping.

Satoru Muranaka (Ph.D.)

- Tropical agriculture research frontier -

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Twusgo

Benga ya bũmb b sɛn kood tɔnd zamaana wĩn-toog sɛn yitɛ la sɛn yud fãa tɛms nins saaga sɛn pa niidɛwusga, ti zĩ-bãmba la benga kɔt n yuda. Yuumd fãa pugɛ benga wuwaga b sɛn koode tɔe n zɛk n ta hektar (ha) tus kɛema 14 (14 millions) t'a biisa waooglem tɔe ta tond (toand) tus-kɛema a 4 la pu-suka (4,5 million de tonnes). benga ya neb nins sɛn wu-b we-kuremsã rub yɛgre, a le yaa galem-tɛmsa pusɛ neba pu-suk rub yɛgre t'a ledgda nemda zĩigɛ. ninsables tɛms wusg pusɛ, beng vãada ya b zɛedo. Nasaar tɛms wala Amerik tɛnga la nin-kɔodsa la nin sables tɛms neb nong n dita beng telma la beng-bi-maasa. Benga sɛn tar n maand rub buud toor-toor sɔor ya wusgo. Beng biisa tar n maanda bɛere, zɛedo, a rugda woto n wãbdɛ, a tɔe n naaga ne bũmb a to wala mui, zom, n dug n di. Benga biisa tɔe n werame n maan ribda taaba. beng-pagda la a vãada n paas a fugda yaa rũmsa ri-nongre.

Ne benga sɛn sakd d zamaana pugɛ la a sɔmblma sɛn ta toto wã, benga pa kɔt wusg ye t'a segda zu-loees wusgo sɛn kɛed a zĩ-koodsa (zĩisa yaame, budba pa yɔkd sɔma ye) birga d sɛn ningd bilfu buɔ sɛn dag pa ningdi la tuma. Zuloees bɛd sɛn kɛed benga koob wɛengɛ ya a bɔn-yigdi wã (beng karensã, zũin-zuĩ wã, vũn-vũuda la beng-biisa). Benga bãase (beng suda, beng-wãoodo). Sɛn paasd rɛ yaa mo-yooda la beng-wɔonga n paas twulga la wara, la sɛn yud fãa kooba minin kaalem

Sebr kãnga wilgda nana nana yam la rabay buud toor-toore y sɛn tɔe n tum benga t'a yi sɔma n wa ne nafre. Rɛ tũuda ne puta kaorengo, beng koadba sɛn naag taab n maan sulli bi sɛn tumd b yembre n tar bãngr bilfu. Benga twumda vũks toor-toora, zĩiga tũusgu beng buuga tũusgu, benga bĩngri wilgda sebra pugɛ vɛenega ti karemda tɔe n karem n wum a vɔore nana-nana. Beng koadba tɔe n tũ rabay nins sɛn wilg sebrã pugɛ wã n tɔog n paam n naf b mense benga koob wɛengɛ.

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Kiuug fãa ne a tovma



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Sig noy kiuugu

Yel buud toor-toore

Putā kaorengo beng
koaadba yīnga

Bōn-buudā seglgo



Naag putā kaoreng beng-
koaadba

Putā kaorengo



**Zīga manegr sēn na n buda
yīnga.**

Maane-y rōanda bengā sēn tog n kō
toto wā geelgo.

Pvuga zīga yalem ya a wana ? Yāmb
zoe n noga kuga la y ke tusa bi? Bōe la
y bud zīga pugē ruē ? **Benga ko n yilma
tōeeme t'a pa kō sōma ye.** Yāmb pa
tog n ko bengā noor wusg zī-yeng pugē
ye.

Paam bāngr la rabaya

Naag n tū putā kaorengo n yaool n sing putā seglgo.

Beng-koaadbā putā kaorengā pugē, sēn zāmsd-b bāmba sēn
paam zāmsg ningā ne zāmsd beda a taaba proze AVECBF
wēngē wā wilgda bāngr la rabay bōn-buuda maaneg
wēngē ; la b put ne taaba kibay ruē yuumdā tuuma sēn yī a
soaba. Makre : bengā kōo a wān toto ? Bengā bu-bugo la b
bud-yā ? Bōn-buudā ligd yu wāna ? Bōn-buudā sēn tar kaset
sebrā raa ye ? **kibay bāmba fāa yaa tlae sēn na n sōng
rōanda tuumdā yīnga a nafr wēngē.**



Makre : Niizwe (Niizoe)

A yalē :

A bwunga tuulem (rasem 60), bila bedlem zemsame, a tõe wôongo, a sën köt toto 1000-1500kg ha a 1 pugě.

Bõn-buudā yākre :

Nand ti y bude, yāk-y beng-buud ning y sën dat n buda. Yīngr fotā wilgd-d la makre beng-bu sōng ning sën zems ne tond tēnga BF. Beng-buugā sã n yāk n sa, makre yel turs nīns sën pugda kēeda ne benga buuga yākr weengě. Yel-turs bāmba yaa wala benga bubo, b pāng ne bāasa, beng biisa bedlem, benga kũun sën yala la benga sōmblem. Yāmb sã n vui wala zīg nīng saagã sën pa niid n sekdě wã, bõn-bu tuulgã tõe n sōng-y-la koobã weengě n yuda.

Gũus-y ne bõn-buuda raabo :

Bõn-buuga sën tara kaset sebra yaa beng-koadb nīnsi b sën mi tiira nengě la tog n ti ra. Sōmbame ti y ra beng-bu sōnga INERA wã pugě, sã n mikame ti beng koadba b sën mi tiir sãn pa pē ne yāmba.

Yāmb sën nan ko n paam toto tũuda ne yāmb bõn-buuda y sën buda sōmblma. Bao-y bõn-bu sōnga n ra, beng-bu yooda pa bund sōma, b pa womd sōma me. Yāmb pa tog n kts sid ne beng koadba la koosdb nīnsi sën pa tar-b bõn-buug ning sën tar kaset sebra ye.



Exemple

Ra-y bõn-bu sōnga beng koadb nins sën paam-b kaset sebre.



Exemple

Makre ne bõn-buug sën tar kaset sebre

Bõn-buud sën tar kaset sebre ne bõn-buud sën ka tar kaset sebr ka a yembr ye. Beng buuga sën tar kaset sebre, ya budba yīng bala, la ser vis ning sën get-a beng-buudã yelle tōnd Burkina Faso wãn mi a tiiri a sōmblema weengě. Beng-bu bāmb pa rub yīng ye, la beng biis a taaba yaool n yaa riiba yīng, la sën paasd me pa sën na n bud ye ti b pa na n yi sōma ye. Yāmb patog n tall beng-bu zaalga budb yīng ye.

Yāmb tog n raa beng buug ning sën tarkaset sebre beng-bu koadbaã nengě wall bi sën köt-b yāmb beng-bu kãnga nengě.

Sigr kiuugu

Yel buud toor-toore

- Warbo

- Budbo



Wënd na ning-y barka

Tën-gãonga seglgo



Rūm bīnda birga

Bao-y birg ning sēn pōog sōma, sān ka rē a tōe n sāama bengā yēga.



Nasaar birga :

Ra-y nasaar birga ne nins y sēn tar kaset sida. Yāmb tōe n paamame ti koobā taoor dāmb pug-y n ges yāmb birga raab wēngē. La sēn yud fāa bao-y vēnem kooba tuum getba nengē
DRAHRH/DPAHRH

Tën-gãonga seglgo:

Saagā sã n ni sōma ti tēnga woug sōma bi y war tēnga ti kē sōma ne wāka, bi ne rūms.

Wāka wall ne mansīn koadga. Benga yēga kēeda tēnga, rēnd b rata tēnga sēn bugse. Woto bengā zīg tog n warame ti bus tēnga sōma n sakd beng yēga kōom. Kuga ne tusā tog n yāgsame.yāmb togame n ges birgā sān ningame ti yaa sōma ti y yaool n bude. Moog birga 2,5t/ha bi nasaar bīrga 100kg/ha yāmb tog n yedga birgā ti fāa yi a yembr puuga zīg fāa.

Sōmbame yesa ti y gudg-a ne wāka t'a bus tēnga ti kaalma ludi



80cm rulg ne a to svka. Vusma 40cm bud-bok ne a to svka.



Saag sã n ni soma bi y yaool n bode (15mm)

Budbo :

Budbã tog n yi saasa belem wakato, makre wala sigr kiuugã pu-svka n dadb s̄oog kiuugã singre, s̄en t̄iud ne yãmb s̄en be z̄iig ninga. Nand ti yãmb bode, y tog n deng n kalma beng buuda ne tum b s̄en wilg yãmba sãn mikame ti bengana n ka kalme ne tum. Beng-bu tvulga s̄en pa t̄eed-a wã, s̄en zemsã dasem (60-65) tog n budame n bas vusem s̄en zems (40cm) ne taaba ti rulsa me yalem zems (60-65 cm). Beng-buug a taaba me vusem zems (40 cm) ne taaba ti b rulsa yalem zems (80 cm). Yãmb sãn na n bode, bi y ning ti ta beng beel a tãabo bud bok fãa pugẽ s̄en k̄eed ne rulsa vusem.



Koglgo:

Bõn-buuda s̄omb n koglga s̄oma ne tum s̄en na yil n koglg-a ne bãase, ne bõn-yo-yigdi wã. Sã n ka r̄ẽ bõn-yo-yigdi wã t̄õe n sãama a biisa ti b nan pa ta bulb ye.



Bõn-buuda waooglem s̄en zems ne z̄iiga yalem:

12-14kg 1ha ȳinga. La tog n yi beng buug n̄ing s̄en tar kaset sebre.



Wakat bugo la y s̄omb n bode ?

Saag sã n ni s̄oma ti t̄enga wuoge 15mm bi yud r̄enda.

Sěoog kiuugu

Yel buud toor-toore

- Sěbda luvsgo la b woosgo
- Mooga koobo la zabr ne bōn-yo-yıgdi wā



Sěoog kiuugā yaa tum
toogā meng-meng wakato

Luvsgo la woosgo



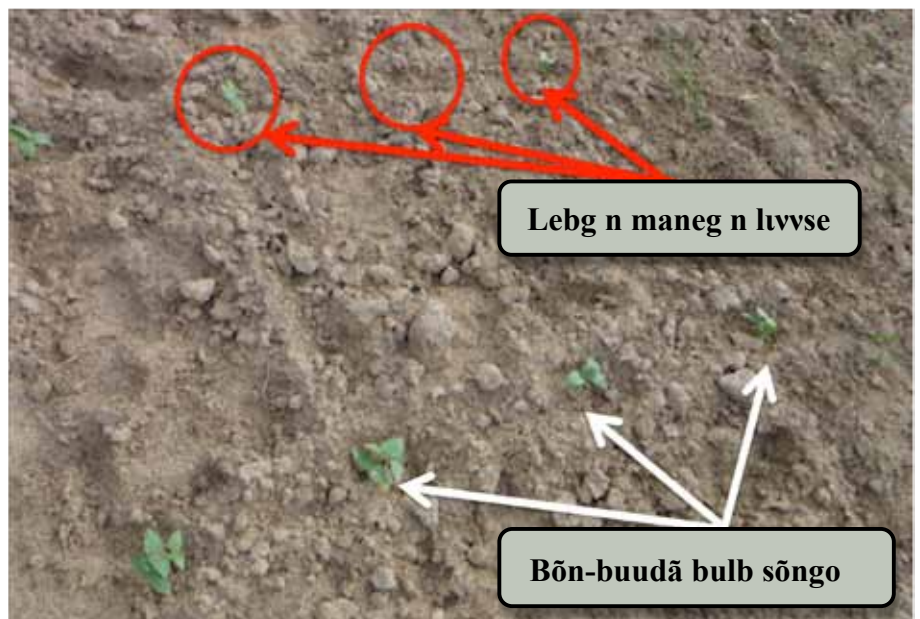
Luvsgo la woosgo:

Rasem a yopoe (7) poore bi y ti gilg n ges puvgā, ti sān pa yı sōma bi y luvse. Woto me tōe n woos n basa beng yēg a yiib (2) bud-bok fāa pugě. Beng buuda sān pa kalem ne tum sōma, bōn-yıgdi wā tōe n sām-b lame gūus-y n gese bōn-buuda sā n bula sōma y puvgě wā.



Bōn-yood sēn sāmnd bengā biisi la b yēga :

Yāmb sā n maan kuung ne bengā tum kalengo, bōn-yood toor-toor sēn sāmnd beng biisa bi beng yēga nan sāmā y bengā ti b nan pa buli wall bi b bulba poore.





Zabr ne mo-yoodã :

Zabr hakuk ne mo-yoodã sōngdame ti bengã tōog n yik sōma la b wom sōma. Tall-y pān-tōog n zã y pvugã t'a yi yolemde. Rasem 14 pugê bi y modg n ko pipi koobã. Rasem 21 poore bi y leb n ko naoor a yiib soaba. **Ra yim-y ti pvuga moog sã n pa ko sōma, bengã womb woogda hal wosg ye.**

Zabr ne bōn-yo-yıgdı wã :

Bengã sã n wa yik n sa ti war maan bilf bala, la beng-karensã sēn yōkd bengã. Beng karensa (*Aphis-craccivora*) yaa yel-kāseng sēn kōt bengã. Bengã sãoong a tōe n toemdame. Wara wakato bōn-yo-yıgdı wã sã n paasd tao-tao n dabda. Beng-karensa wata ne bāas biis wusgo. Wakat kãnga bi y mao n tall ti-puusdgã n puus bōn-yo-yıgdı wã n k v.



Ti-puusdga pōmpa ne ti-pōmpdma:

Tuma pompa talldame n sãeeg tuma bengã zut pvuga pugê. La ti-pōmp yooda pa zæed sãoong ye. Mao-y n ning ko-yulemde ti-pōmpa pugê-ti puusma ya sōma la a leb n yaa wēng ne ninsaal laafi wã. Yãmb sã n na n puus y bengã bi y koglg y meng ne teedo la y zã te-bãmb me sōma



Tu ma kalemda wãn-wãna:

Ning-y tuma bidu pugê koom litr 16 la y paas tuma 32ml n kalme.

Sa-sik kiuugu

Yel buud toor-toore

- Zabr ne bôn-yıgdi wã la bãase
- Birga paasgo



Gũus-y ne bôn-yo-yıgdi
wã sãoonga

Zabr ne bôn-yo-yıgdi wã la bãase



Maruca:

Bôn-yo-yıgdi wã biis sãoong tōnd beng puuda la beng telma zut paasda ne bôn-yo-yıgdi wã sōor la b pãnga. Rě me woogda bengda sěn tog n kō toto wã.

(Photo: Dr. M. Tamò, IITA-Benin)

Zabr ne bôn-yo-yıgdi wã la bãase :

Sa-sik kiuuga pugě bengda sōma, la yaa bôn-yoyıgdi wã la bãasa paasg wakat me. Sěn yud fãa bôn-yoyıgdi wã sãoonga kutdame ti bengda sěn da tog n kōtoto wã boog wusgo. Yaa tıle ti d puus bengda ne tum sěn na yı lě n yals bengda sãoongo.



Tuma kalengo yaa Desis ml 32 la Titã ml 40 n yaool n kalem ne ko-yilemd litr 16. Tuma puusgã yaa budbã poor rasem 32 yĩnga. Yãmb sã n suiid ko-rěgd y tuma pōmpa pugě, a tōe n sãama tao.



Birgā paasgo

Birga tall n tuma ne birga sēn pa ning benga kūun yaa toor-toore. Birga ningra yaa sōma benga puub wakato t'a paasda benga wombo. Birga raab yaa zu-loεεga ligda wεεngē. La d sã n yaool n tall birga n tum sōma ne d benga a na n woma wala sēn segde.

Zabr ne mo-yooda yasa

Tōnd sã n maan kuung ne mooga koobo, a na n dt tōnd birga noosem n paam pānga. Mooga koob tog n yī sōma n tall pānga.



Bôn-yo-yıgdt sēn fōsd beng telma:

Bôn-yo-yıgdt nins sēn fōsd-b beng telma tara pāng ne beng telma sãoongo. D tōe n yānda b kãsemba beng yēg a taaba zutu.



Skarabe rāmba:

Benga skarabe rāmba rulgda b mens ne beng puuda la b wat ne sãoong hakuka beng yēga zutu. b sōora sã n yaa wusg beng puuga pugē, b kitdame ti benga pa tol n wom ye.



Strips rāmba:

B rūmda beng puuga n fōog sēn be a pugē wã. Sãoongã sa n tall pānga, benga tōeeme n pa tol n wom ye.

(Photo: Dr. M. Tamò, IITA-Benin)

Bõn-bwung kiuugu la zî-likr-kiuugu

Yel buud toor-toore

- Benga taoosgo
- Benga pãbre bi a sogbo
- Benga bîngri



Modg-y wakat fãa n
gũusdë

Benga zãab taoosga wakat la taoosga poore



Beng talem nins sën pa kut-ba n wat ne bengapukra :

Yãmb sãn taoos bengap, y tog n
yedgame, y pa tog n sãm-b taab zug ye-
y sãn sãm-b taab zutu, b tõe n
sãamame.



Benga pãbra ne nuga:

Maane-y gũusgu n da pãb beng
beela n wã ye.

Taoosga :

Benga taoosg tõe n yi pînda yãmb sã n zã y puvgã
sõma, la y sã n ninga beng-bu tvulga y puuga pugë.

Makre niizwen (niizoe) y toë n taoosa y bengap, y sã
n wa mik ti beng-telma wala koabg pugë sën kut
wã ta 80-90. Beng koeemsa tõe n pãbame n yelg ne
nugu. Yãmb tõe n taoosa y bengap naoor a yiib bi a tã
la rë tũuda ne y beng buugã. Sõmbame ti y taoos
beng-koeemsa la y bas beng maasa ti b sãn wa kut b
pãbra yaa toogo ti leb n woogd bengap sõor la a
sõmblem.





Benga pãbr ne mansîni:

Mansîn dâmb ya toor-toore, bed la bõonego n suiid lesâns, gazol bi n tumd ne kurã.

Bengã pãbr bi a sogbo :

Benga tog n kvi sõma pvuga pugë ti y yaool n taos-ba. Naor wvsg pugë beng-telma sên pa kvi sõma wã kitdame ti y le maneg n yedg-a sõma rasem a yiib bi a tãabo n yaool n pãbe yãmb tõe n pãba y benga ne nug wall bi ne mansîn. D sên minim n maand ne nugu yaa d sên samd benga taab zugu n bao ra-saar n pãbde, la y gũus n da wã beng-beela ye. Yãmb sên na n pãb y benga toto fãa bi y gũus n da wã beng-beela ye. Yãm sã n pãb n sa n na n yelge, bi y tod sebga sên na yil ti sebga kãag benga-pedsa la a bas beng biisa ti y paam n kok bũmb pugë.

Benga zãabo pãbra poore :

Maasr benga pugê tog n pa ta 11% ye. Sãn yaa ne beng-buuda koobo y tog n tũusa beng-pedsa la bõn-yood a taaba n base. Yedg-y benga ze-yolemd pugë. Gũus-y ti kuga la te- yaals ra paas y benga ye.rë poore y benga sã n wa kvi sõma, puglda ne yondo sên na yi t'a bĩgra yi sõma. Gũus-y ti yaa yol-paal la y tog n bao la y sõng ti yonda ra madg koom ye. Sên na yil ti benga ra puki y tog n sēba yonda noya ti bõn-wãbdsa la bõn-yigdi wã ra wa sãam ye.



Benga yelgre:

Benga yelgdame n tũud ne sebga sên teesdë sên na yil ti sebga loog ne beng pedsã n paas-rëgd sên be benga pugë.



Bengã tũusgu:

Tũus-y beng-bi bõonega, beng-pedsa la beng-bu kõbg toor-toora. Beng-bu neera raag ya soma.



**Bõn-yo-yıgdi wěnsa
sěn sāmdb bengā yell
gesgo taoosga poore**

Maane-n gūusg la y zā y
laogā sōma

Bēnga bīngri :

Bēnga sã n bīngri, bõn-yood wusg n nong n sãm-d-a.yel-kasemsa tãaba yaa : pukra beng-bīisã la yõensa. Bēnga sã n yaool n sãame, ti yãmb rug-a n nan ri a ka le noom ye, n paas me neba pa le raad-a sōma ye.

Bõn-yo-yıgdi wã :

Bõn-yo-yıgdi ning sěn sãm-d-a a bīngra wakata yaa beng-biisa n yuda. Yaa bengra pugê la a bila be n rilgda menga n wa tol n lebg bõn-yıgdi n pusg n yıgd marsã.



Yõensa :

Yel-kãsems toor-toor a tã la yõensa sãm-d bengā a bīngra wakato. B wãbda bengã sōma n woogdê, b pedsda kēer n sãm-dê la b wurd yondã n sãeegd bengā tēnga.





1. Vees-y mana wã sõma n ges a pa tar bogdo. Bog-bila a yembr meng tõe n kutame ti y benga bingr pa yi sõma ye, n tõe n sãam y benga.



2. Põd-y pipi mana wã n dik a yũb soaba n sui pipi mana wã pugẽ.



3. Rik-y mana a tãab soaba n sui a yũb soaba pugẽ, la y sui benga n pids marsã.



4. Yũs-y pemsem ning sãn be mana a tãab soaba pugẽ wã y sã n tõe la y maan boto ne a taaba.

Benga bingra zãada wãn toto

D rik nao-kênd nana sãn na n pugl d benga ne sak pics sãn pa ning tum ye. Sak pics sõngdame ti d zab ne beng-biisa la d kogl d benga ti ta kiuus a yoobe bi yud rẽ.



1. Bengã sã n wa pelg n kvı bi y zoe tao-tao n taoose ti rẽ sõngdame ti benga ra kẽ biis ye. Yãmb sãn taoos benga tao, a pa kãed biis woto ye.

2. Kuvıis-y benga sõma wĩndgẽ la sebgẽ. Bengã maasrã sãn waogẽ a woogda bõn-yo-sãamdi wã pãnga. La y gũus ti saaga la meenema ra madg benga ye.

3. Yãmb sã n dat n bĩng benga t'a kaos bi y tũus bengã sõma la yulemde. Sĩd-y bogd bi võy nins fãa sãn na n yulẽ n da bas vıwogo bõn-yo-yıgdi wã la yõensa yĩng ye. Yãmb sãn na n sui benga zĩig ninga sã n wãag wall bi wurgi, bi y mao n sã-a ti bõn-yo-yıgdi wã la yõensa ra tũ ben sãam y bengã ye.



4. Sagles nins b sãn wilg yãmba na n sõng-y lame ti y mao n bĩng y benga sak pics rãmb pusẽ (ges-y foto wã).

5. Rıgl-y bẽdse n gũusd yõensa, sãn paasde yũusa la baasa tõe n sõng n riga yõensa ti b zãag ne rooga. Y tõe n rıglga yõens tum me.



* Sak pics : gũus-y ne yon-togsenda. b pa sõma ye. FASOPLAST rẽnda la sõma y sãn tõe n da (tel : 50 31 51 06)

Annexes

Sě̃n sōmb ti paase

1. Birgā sě̃n maand toto

2. Bōn-buudā koosg wεεngê



International Institute of Tropical Agriculture (IITA)

www.iita.org

A wān toto la y tōe n maan birga ?

Benga pa maneg n baood birg sēn tar noosen woto ye, t'a kokda noosma a toor pemsmē wā. Wakat kānga tēms nins tēnga noosem sēn pa waooga, sōmbame ti y paas bir-pēelga nasaara rēnda sēn tōen ta 15kg sēn na yulē ti bengā wom sōma. Y sān ning nasaar bir-pēelga wosg me, beng vaāda na n fūmame n yaool n pa kō biis sōma ye. Burkina Faso ka, tēnga pa maneg n tar noosem wosgye, rēndame tid sōng tēnga ne nasaar birga bi bir-moaaga ti bengā tōog n wom sōma. Kooba ministēera tōe n sōng-y lame ti y paam n ra nasaar birga.



Nasaar birga :

NPK 14-23-14 +5s +1B2 O3 : woto wilgdame ti bir-kānga tara noosem buud toor-toor a (5) nu.

A ligda w 3400-4600 50kg yolga.

*Goofneera sā n sōnge a ligda boogdame n lebg w 2300-w 3000 50kg yolga.

A ligda sān wa ka ta boto bi y bāng ti pa bir-sōnga ye.

Ya a togsengo

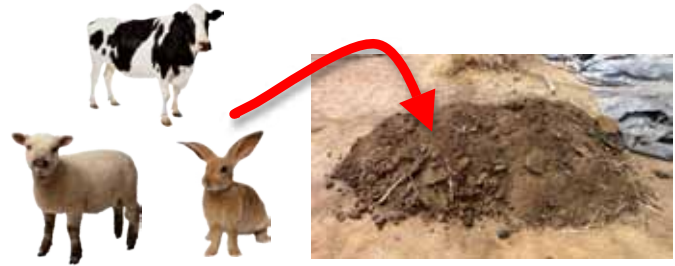
Wakat nīnga birga waooglem ka mi n sekdē ye. INERA wā wilgame ti 1ha pugē bi y ning bir-moaaga 2,5t bi nasaar birga 100kg. Nasaar birga ligd ya toogo ti neb kēer mi n nong n maan a togsengo. Sōmbame ti y ra y birga mangas y sēn tar kaset sid pugē. Nasaar birga sōngda bengā t'a wom sōma y birga ningr sā n yī wala sēn segde.

Bir-moaaga me sōngda bengā t'a yik sōma n tob n yedg sōma. Y tōe n ra bir-moaagā wala y sēn tōe n maan-a y toore. Rēnd gom-zu-raoog kānga wilgda birga sēn maand toto, la bōe la y tōe n tall n maan birgā? Birga maaneg rikda kiuusa tāabo. Rēnd yāmb tōe n zoe n singa y birga maaneg yūm-vēkr kiuuga pugē.

Bir-moaaga tõe n maana zīg fāa

Pipi vūka :

Wok-y rūmsa bīnda n naag ne tēnga tom n bīngi. Woto me y na n wora mooga n kurs-b bōneg-bōnego.



Vūka yiib soaba :

Kalme-y rūmsa bīnda ne toma ne mooga. Rē poore maane-y rol-bila, ning-y koom wosg a zugu n zāgs t'a kē taaba. Yulme-y boto naoor a yiib bi a tāabo.



Vūk a tāab soaba

Lud-y roya ne mana sabelle n koglg a maasra ne a tvulma. Lebgd-y roya la y zāgs-a rasem piig la a naase (14) fāa la y kell n lut-a ne mana sabella.



Vūk a naas soaba

Yāmb sã n tū vūks a naasa fāa kiuuga tāab pugē y na n mikame ti y birga pōogame. **Bir-sōngo yaa birg ninga sēn pōoga wã.**



Bõn-yěgr sěn be a pugě ti y na n dik la woto :



Benga raaga kēeda ne yěsgo b sã n ges yãmb benga ra-sãndlma, wakat ninga b sãamda benga sōmblma b yonda suiib pugě, koadba ne ritba suka ti wat ne zu-loees buud toor-toore. Saaga niiba la benga womba me tõe n teka benga ligdi. Woto wã raada togame n sak yěsgã. Rě wã yãmb paoonga tũuda ne yěsga sěn na n yi a soaba, y paoonga toě n woogame me. D sã n leb n na gese koadba sōmb n bānga benga raaga, beng ninga b sěn date, la beng sōor b sěn baoode ka-koadba sōmb n naaga taab n maan sulli wall bɪ b yembr-yembre n tum ti benga yi sōma ti b sã n wa baoodê bɪ yi bāmb beng koadma. Woto n tõe n kut ti raadba sã n wa baood beng bɪ b tõe n kō kaset sid ne bāmba. Sěn na yilě ti beng koadba raab pīdi bɪ b naag taab n kě yěsg pugě la b ko beng sōngo sěn tar sōmblem la b maood n paasd b benga sōmblema pānga ti rě n wat ne a raaga sōmblem.

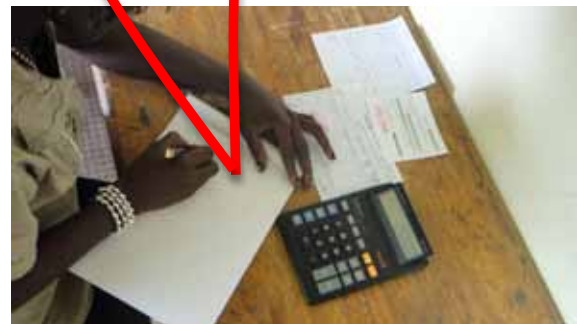
Bõn-yëgr sën be a pugë tu y na n duk la woto

Bõe la yãmb tog n maane ?

- Geelg-y benga tuumdã, laog ninga y sën tog n kéesa pugë wã. Makre : birga ligdi la tuma ligdi.
- Yãmb sã n na geelge bi y bing ligd ninga y sën kées benga tuumda pugë wã sebrã tu da menem ye.
- Gols-y y sën ko n paam kilo wã sõore.paoonga sõmb n yuga y sën kées ligd ninga wã
- la y mag y yõodã n gese.

Expense	Designation	Prix de unitaire	Quant	Total
	Fertilizer	23000 CFA	100kg	46000 CFA
	Chemical	15000CFA	5L	75000 CFA
	Spade	2500CFA	1	2500 CFA
	Seed	600CFA	3kg	1800 CFA
			
	Total			125300 CFA

Yield	Variety	Ha	Kg
	IT98K-205-8		0.7 320
	KVx61-1		0.2 210
		
	Total Yield		530Kg



Client	Prix de unitaire	Quant	Total
Moussa SAWADO	250CFA	2.5kg	625 CFA
Noufou KABRE	250CFA	10kg	2500 CFA
Rene NANEMA	250CFA	5kg	1250 CFA
Usumane KABRE	250CFA	40kg	10000 CFA
.....			
Total			14375 CFA

Wakat bugo la y tog n koos y benga?

- Benga ligd toemdame n tũud wakatsã.
- Yãmb sã n tar rabay sën tõe n bing y benga bi y bing n tãag wakat ning benga ligd sën wat n roge.
- Bi y ra yim benga bingr zu-loesa la y ges y sën na n koos y benga wakat ninga.



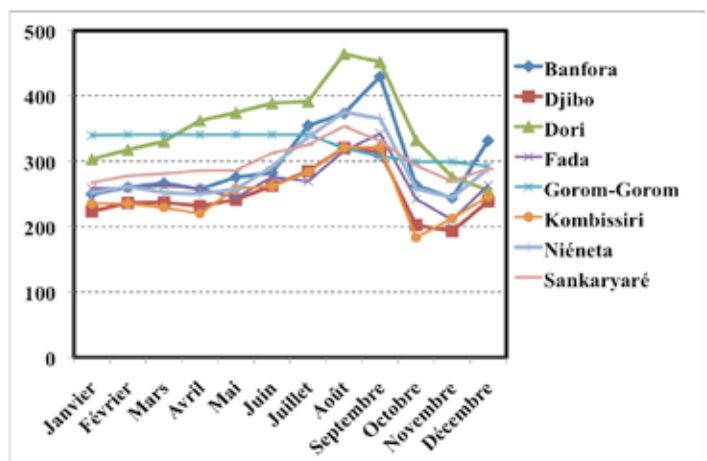
- Sard rikre :
- Wakat bugo ?
 - Ne ãnda ?
 - Kilo a wãna ?
 - Ne wãna ?

Bãng-y benga zislem, a waoglem la y yaool n koos y bengã

Koosgã maanda wãn-wãna ?

- Bao-y raag sën ta y yam la raad sõngo.
- Yãmb sã n koos y benga ne neda bi y maan sebr n bingi.
- Maane-y sullsi y koosga yinga la y naagd-y taab n yêsd ne raadã.

2010 yuumde benga yorba laag ligdi 2.8kg



Pousem

I.Y. Dugje, L.O. Omoigui, F. Ekeleme, A.Y. Kamara, and H. Ajeigbe. (2009) “Farmers’ Guide to Cowpea production in West Africa” IITA, Ibadan, Nigeria. 2-17pp

H.A. Ajeigbe, S.G. Mohammed, J.O. Adeosun, and D. Ihedioha. (2010) “Farmers’ guide to increased productivity of improved legume-cereal cropping systems in the savannas of Nigeria” IITA, Ibadan, Nigeria. 3-7, 67-77pp

Bar puusom

Seb-kānga yaa proze wā veñom << beng bu-paala kešgo (koõm) ninsable tẽms nins baobg pugě saasa sěn pa niid n sekdě-wā. Beng-bu tuulā sěn be burkina Faso (AVEC-BF) zapõ teng koaba , weooga la zĩma yěeb ministæera sěn sõnge (MAFF).

Tõnd datame n puus zapõ tẽng no-ræesa sěn be Burkina, Zapõ tẽng zooda sull sěn be Burkina Faso (JICA) nonglem hakuk zooda ne tond yĩnga.

Tõnd leb n puusda Dr Manuelle Tamo (IITA-Benin) sěn tall nonglem nedo n kõ-d bõn-yegdi wā foto rāmba ti d naag n yiis d sebrā.

D kell n puusda a Katherine Lopez la Mr. Atser Godwin (IITA-Ibadan) b sõngre la beb-kānga kibar bõeegr yĩnga, d puusem le b n bee ne Dr. Nieyidouba LAMIEN la Dr. Korodjouma OUTTARA (INERA/Saria) b nonglem la zood sĩngrā yĩnga. D wilgda d yel- sõmminimne ne Mr.Vincent O. Nanema la Mr Rene T. Nanema seb kānga lebgr ne moora yĩnga. Tond bark puusem bee ne Mlle Honorine Kaboré, a Mr. Moussa Sawadogo, a Mr Noufou Kabré, a Mlle Mireille W.Yameogo (INERA/Saria) b kées-m-meng seb-kānga tuumda pugě yĩnga.

D wilgda d yel-sõm minim ned beng-koaadba sěn be benga prize wā sěn tumd ziis ninsa fāa pusě : a Mr. Babou Nagalo (Pouni), a Mr. Souleymane Bationo (Pouni), a Mr. Norbert P. Sawadogo (Samboaga), a Mr. Eloi Sawadogo (Samboaga) a Mr. Souleymane Tapsoba (Laongo), a Mr. Adama Tapsoba (Laongo), a Mr. Salam Nonkre (Yako), a Mme. Aminata Nonkre (Yako), a Mr. Lamine Belem (Titao) la Mr. Yamba Komi (Titao) b bāngr la b minim puub d sěn paa m b nengě n paas b tagsg la b skre seb-kānga lebgr ne moora wæegě. D barka puusem kota INERA zaka sěn be Saria tum-tumdba fāa gilli b sõngra yĩnga.

