

PART A:																										
A1. HHID:		A2. Date ____/____/ 2016	A3. Enumerator Name:																							
Checked by:																										
A4. Name of household head:		A5. Name of Respondent:																								
We are here today to follow up on the high and low fertility plots you showed us in March. We will be doing yield measurements of each field.			Ask question A6 PRIOR to going to the field to manage time if rented have someone find manager while you proceed to other plot																							
DO NOT INCLUDE BORDER CROPS IN THIS SURVEY! WE ARE NOT CONSIDERING THE BORDER FOR ANYTHING IN THIS SURVEY! STAY AWAY FROM BORDER!			A6. Are either of the plots rented? _____ 1 = HIGH 2 = LOW 3 = NO																							
<p style="text-align: center;">CROP CODES</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><u>MAIZE</u></p> <p>1 = Local Maize</p> <p>2 = Newly Acquired Maize Hybrid</p> <p>3 = Saved Maize Hybrid</p> <p>4 = OPV/Composite Maize</p> <p><u>LEGUMES</u></p> <p>5 = Pigeon Pea / nadolo</p> <p>6 = Groundnut / mtedza</p> <p>7 = Soya Bean / soya</p> <p>8 = Common Bean / Nyemba</p> <p>9 = Cowpea / Khobwe</p> <p>10 = Velvet Bean / Kalongonda</p> <p>11 = Bambara nut / Nzama</p> <p>88 = Other Legume (specify)</p> </div> <div style="width: 45%;"> <p><u>OTHER CROPS</u></p> <p>12 = Sorghum / Mapira</p> <p>13 = Cassava / Chiningwa</p> <p>14 = Sweet Potato / Mbatata za kholowa</p> <p>15 = Millet</p> <p>16 = Pumpkin</p> <p>17 = Sugarcane</p> <p>18 = Tobacco</p> <p>19 = Cotton / thonje</p> <p>80 = FALLOW</p> <p>99 = Other Crop (specify)</p> </div> </div>			<p style="text-align: center;">Answer A7 below.</p> <p>Make sure all of your samples are accounted for and LABELED correctly BEFORE leaving EPA.</p> <p>A7. Did you collect the following samples for this HHID? 1 = YES 2 = NO</p> <p>IF YES, FILL OUT BELOW (to be done when leaving each field)</p> <table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th>1 = YES</th> <th>2 = NO</th> </tr> </thead> <tbody> <tr> <td rowspan="4" style="writing-mode: vertical-rl; transform: rotate(180deg);">HIGH</td> <td>a) MAIZE STOVER</td> <td></td> </tr> <tr> <td>b) LEGUME (1) STOVER</td> <td></td> </tr> <tr> <td>c) LEGUME (2) STOVER</td> <td></td> </tr> <tr> <td>d) RIDGE WEEDS</td> <td></td> </tr> <tr> <td rowspan="5" style="writing-mode: vertical-rl; transform: rotate(180deg);">LOW</td> <td>f) MAIZE STOVER</td> <td></td> </tr> <tr> <td>g) LEGUME (1) STOVER</td> <td></td> </tr> <tr> <td>h) LEGUME (2) STOVER</td> <td></td> </tr> <tr> <td>i) RIDGE WEEDS</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		1 = YES	2 = NO	HIGH	a) MAIZE STOVER		b) LEGUME (1) STOVER		c) LEGUME (2) STOVER		d) RIDGE WEEDS		LOW	f) MAIZE STOVER		g) LEGUME (1) STOVER		h) LEGUME (2) STOVER		i) RIDGE WEEDS			
	1 = YES	2 = NO																								
HIGH	a) MAIZE STOVER																									
	b) LEGUME (1) STOVER																									
	c) LEGUME (2) STOVER																									
	d) RIDGE WEEDS																									
LOW	f) MAIZE STOVER																									
	g) LEGUME (1) STOVER																									
	h) LEGUME (2) STOVER																									
	i) RIDGE WEEDS																									

HIGH FERTILITY PLOT

ENUMERATORS:

- 1) The following questions and measurements pertain only to the part of the plot which was FERTILIZED.
If none of it was, these questions pertain to the entire plot.
- 2) If the plot is FALLOW only answer B1, B2, B3, B4, B6 and PART H. WEEDS for the plot

PART B.

HIGH FERTILITY PLOT	B1. NAME OF PLOT: _____	B2. GPS OF PLOT	S	°	'	"
	MICRO-TOPOGRAPHY		E	°	'	"
	B3. SLOPE OF PLOT (write corresponding slope) _____					
			B4. Are these the same coordinates as your list?		1 = YES 2 = NO	
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 0 </div> <div style="text-align: center;"> 1 </div> <div style="text-align: center;"> 2 </div> <div style="text-align: center;"> 3 </div> </div>						

HIGH FERTILITY

PART C.

HIGH FERTILITY PLOT

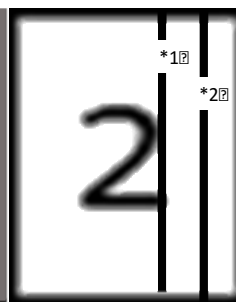
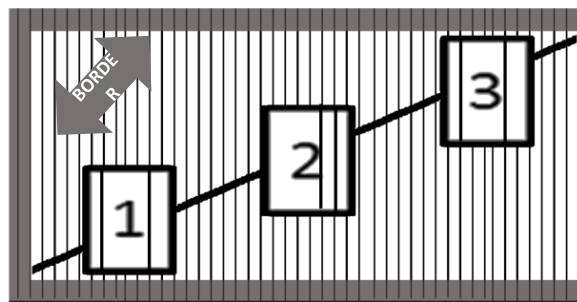
C1. Fill out which crops are present in the field below. This will allow you to identify MAIN crops and organize.

(Use crop codes from part A) DO NOT forget to list all additional crops that will not be sampled and **FALLOW**.

FOCUS ON THE **MAIN CROPS** WHICH ARE PRESENT IN THE **FERTILIZED** AREA OF THE FIELD OR THE **ENTIRE PLOT** IF UNFERTILIZED. IF THERE ARE MORE THAN 5 CROPS (INCLUDING MAIZE 4 CROPS IF NO MAIZE), **IGNORE** THE 6TH AND 7TH CROPS WHICH ARE PRESENT IN SMALL AMOUNTS.

IF (a) YES, STEP 2

a) IS PLOT FALLOW?	b) MAIZE CROP	c) MAIZE ready to harvest?	d) LEGUME (1)	e) LEGUME (1) ready to harvest?	f) LEGUME (2)	g) LEGUME (2) ready to harvest?	h) OTHER (1)	i) OTHER (2)
circle one 1 yes 2 no		circle one 1 yes 2 no		circle one 1 yes 2 no		circle one 1 yes 2 no		



2 METER SECTION
OF A RIDGE
*X2 (MAIZE)
*X1 (LEGUME & OTHERS)

STEP 1)

Avoid edge effect by choosing a location at least two (2) ridges (RIDGE SPACING) in from the field border. ALL locations must be at least 2 ridges apart. In LARGE fields this will be easy BUT be cautious in smaller fields.

STEP 2)

Choose three (3) random locations along a diagonal transect across field for measurements.

STEP 3)

For each crop in the field fill out the corresponding information.
Maize = Maize HIGH
Legume(s) = Legume (1 & 2*) HIGH
OTHER(S) = OTHER (1 & 2*) HIGH
(* if applicable. IF more than two of either pick the MAIN two)

STEP 4)

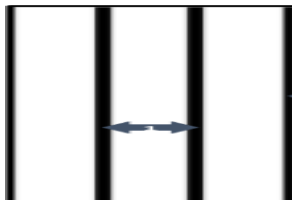
If **FALLOW**, skip to WEEDS HIGH section. Do steps 1 & 2 taking weed measurements.

SPACING BETWEEN RIDGES MEASUREMENTS



RIDGE SPACING HIGH

Measure from **CENTER** of one ridge **CENTER** of the adjacent



C2.
DISTANCE
BETWEEN
2 RIDGES AT
EACH LOCATION
WITHIN THE
FIELD
(example: 1.2 meter
OR 0.75 meter)

FIELD LOCATION

1 a)	2 b)	3 c)
_____	_____	_____
meter	meter	meter

PART D.										
<div>MAIZE</div> <div>HIGH MAIZE</div> <div>HIGH MAIZE</div> <div>MAIZE</div>	D2. Is MAIZE grown in this field? (circle one) 1 = YES 2 = NO				<div>IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS: ** FOCUS ONLY ON THE FERTILIZED CROP</div> <hr/> <div>IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED: ** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS</div>					
	<p>: If YES, fill out section D taking and recording all measurements for MAIZE.</p> <p>: If there is an intercrop with maize, do applicable measurements for the intercrop in following sections.</p> <p>: If NO, MAIZE is NOT grown in this field, skip section D and fill out subsequent applicable section(s).</p>									
	<div>★ = CANNOT DO IF NOT READY TO HARVEST</div>									
	MAIZE ONLY					SAMPLE INSTRUCTIONS				
	D3. CROP CODE: _____ D4. Is this crop intercropped or sole crop? (circle one): <div>1 = INTERCROPPED 2 = SOLE CROPPED</div>					TOTAL MAIZE STOVER OF 1 RANDOMLY CHOSEN IN-FIELD LOCATION (WHOLE MAIZE PLANTS WITHOUT COBS) <div>★</div>				
TAKE MEASUREMENTS IN ORDER OF QUESTIONS ONLY		IN - FIELD LOCATION								
		1		2		3				
D5. TOTAL NUMBER OF PLANTS STANDING IN 2 METER X 2 METER SECTION BEFORE HARVEST [4 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m X 2m section [4 meters]		b) TOTAL Plants 2m X 2m section [4 meters]		c) TOTAL Plants 2m X 2m section [4 meters]				
D6. TOTAL NUMBER OF COBS HARVESTED IN 2 METER X 2 METER SECTION (if not ready to harvest, count the number of total cobs present in sample area)		a) number harvested	b) weight (KG) ★	c) number harvested	d) weight (KG) ★	e) number harvested	f) weight (KG) ★			
D7. TIED STOVER RATING & WEIGHT 1=completely DRY 2=more DRY than GREEN 3=more GREEN than DRY 4=all GREEN		a) rating (1-4)	b) weight (KG) ★	c) rating (1-4)	d) weight (KG) ★	e) rating (1-4)	f) weight (KG) ★			
D8. 3 COBS SHUCKED GRAIN MOISTURE ★				a) ★ meter reading						
YOU WILL ONLY SHUCK 3 OF THE TOTAL NUMBER OF HARVESTED COBS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS (D8).										
<div>TAKE OFF PUT IN SAMPLE</div> <div> MAIZE STOVER </div> <div> <div>HHID:</div> <div>HIGH</div> </div> <div> Date ____/____/ 2016 </div>										

HOMOGENIZE by:

- collecting all stover in chosen location,
- chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE
- mixing together,
- collecting a 4 liter subsample,
- WEIGHING** the subsample (**D11**),
- placing subsample in sample bag provided
- labeling *outside* of bag with below information (MAIZE, HHID, DATE, HIGH)
- labeling and placing provided label *inside* the bag (use pencil)

PART E.



= CANNOT DO IF NOT READY TO HARVEST

LEGUME CROP 1										SAMPLE INSTRUCTIONS	
HIGH LEGUME (1)	E1. CROP CODE: _____		E2. Is this crop intercropped or sole crop? (circle one):						IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS: ** FOCUS ONLY ON THE FERTILIZED CROP <hr/> IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED: ** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS		
			<div style="display: flex; justify-content: space-between;"> 1 = INTERCROPPED 2 = SOLE CROPPED </div>								
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>		LEGUME (1) ONLY						TOTAL LEGUME PLANTS OF 1 RANDOMLY CHOSEN IN-FIELD LOCATION (WHOLE LEGUME PLANTS WITHOUT PODS) HOMOGENIZE by: 1) collecting all stover in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (E7), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (CROP NAME, HHID, DATE, HIGH) 8) labeling and placing provided label <i>inside</i> the bag (use pencil)		
			FIELD LOCATION								
			1		2		3				
	E3. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]				
E4. TOTAL NUMBER OF PODS HARVESTED IN 2 METER (X 1) SECTION (if not ready to harvest, count the number of total PODS present in sample area)		a) number harvested	b) weight (KG) ★	c) number harvested	d) weight (KG) ★	e) number harvested	f) weight (KG) ★				
		E5. TIED STOVER RATING & WEIGHTS 1=completely DRY 3=more 2=more DRY than GREEN 4=all GREEN GREEN then DRY		a) rating (1-4)	b) weight (KG) ★	c) rating (1-4)	d) weight (KG) ★	e) rating (1-4)	f) weight (KG) ★		
E6. 9 PODS SHELLED GRAIN MOISTURE ★		a) ★-meter reading						E7. WEIGHT OF 4 LITER ★ SUBSAMPLE (KG): _____			
		YOU WILL ONLY SHELL 9 OF THE TOTAL NUMBER OF HARVESTED PODS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS (E6)									
OTHER CROP 1 (NOT MAIZE OR LEGUME)										TAKE OFF PUT IN SAMPLE	
HIGH OTHER (1)	E8. CROP CODE: _____		E9. Is this crop intercropped or sole crop? (circle one):						LEGUME STOVER LEGUME (1) NAME (WRITTEN IN) : <hr/> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> HHID: _____ </div> <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 1.1em;">HIGH</div> </div> <hr/> Date ____/____/ 2016		
			<div style="display: flex; justify-content: space-between;"> 1 = INTERCROPPED 2 = SOLE CROPPED </div>								
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>		FIELD LOCATION						TAKE OFF PUT IN SAMPLE		
					1		2				3
E10. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]					

PART G.



= CANNOT DO IF **NOT** READY TO HARVEST

LEGUME CROP 2										SAMPLE INSTRUCTIONS	
HIGH LEGUME (2)	G1. CROP CODE: _____		G2. Is this crop intercropped or sole crop? (<i>circle one</i>):						1 = INTERCROPPED 2 = SOLE CROPPED		IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS: ** FOCUS ONLY ON THE FERTILIZED CROP <hr/> IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED: ** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>		FIELD LOCATION								
			1		2		3				
	G3. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]				
	G4. TOTAL NUMBER OF PODS HARVESTED IN 2 METER (X 1) SECTION (if not ready to harvest, count the number of total PODS present in sample area)		a) number harvested	b) weight (KG) ★	c) number harvested	d) weight (KG) ★	e) number harvested	f) weight (KG) ★	HOMOGENIZE by: 1) collecting all stover in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (G7), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (CROP NAME, HHID, DATE, high 8) labeling and placing provided label <i>inside</i> the bag (use <i>pencil</i>)		
	G5. TIED STOVER RATING & WEIGHTS 1=completely DRY 2=more DRY than GREEN 3=more GREEN then DRY 4=all GREEN		a) rating (1-4)	b) weight (KG) ★	c) rating (1-4)	d) weight (KG) ★	e) rating (1-4)	f) weight (KG) ★			
G6. 9 PODS SHELLED GRAIN ★ MOISTURE		a) ★ meter reading									
YOU WILL ONLY SHELL 9 OF THE TOTAL NUMBER OF HARVESTED PODS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS (G6)											
OTHER CROP 2 (NOT MAIZE OR LEGUME)										TAKE OFF PUT IN SAMPLE	
HIGH OTHER (2)	G8. CROP CODE: _____		G9. Is this crop intercropped or sole crop? (<i>circle one</i>):						1 = INTERCROPPED 2 = SOLE CROPPED		LEGUME STOVER LEGUME (2) NAME (<i>WRITTEN IN</i>): <hr/> <div style="display: flex; justify-content: space-between;"> <div>HHID: _____</div> <div style="border: 1px solid black; padding: 5px; font-weight: bold; font-size: 1.1em;">HIGH</div> </div> <hr/> Date ____/____/ 2016
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>		FIELD LOCATION								
			1		2		3				
	G10. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]				
TAKE OFF PUT IN SAMPLE											




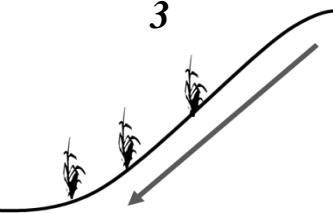
PART H.						
HIGH RIDGE	RIDGE WEEDS 1 QUADRAT SECTIONS IN-FIELD MEASUREMENTS				SAMPLE INSTRUCTIONS	
	RIDGE WEEDS ONLY	FIELD LOCATION			TOTAL RIDGE WEED BIOMASS IN QUADRAT OF 1 RANDOMLY CHOSEN IN-FIELD LOCATION HOMOGENIZE by: 1) collecting all above ground weed biomass in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (H4), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (RIDGE, HHID, DATE, HIGH) 8) labeling and placing provided label <i>inside</i> the bag (<i>use pencil</i>)	
		1	2	3		
		a) rating	b) rating	c) rating		
H1. WITCH WEED RATING (RIDGE) YES=1 NO=2						
	H2. WEED RATING <i>includes witch weed</i> (RIDGE) 0, 1, 2, 3 0 = 0 1 = soil > weeds 2 = soil = weeds 3 = soil < weeds	a) rating	b) rating	c) rating		
	H3. WEED BIOMASS <i>all above ground biomass including WITCH WEED</i>	a) weight (KG)	b) weight (KG)	c) weight (KG)		
FURROW WEEDS 1 QUADRAT SECTIONS IN-FIELD MEASUREMENTS						
HIGH FURROW	FURROW WEEDS ONLY	FIELD LOCATION			TAKE OFF PUT IN SAMPLE	
		1	2	3	RIDGE WEEDS	
		a) rating	b) rating	c) rating	HHID:	HIGH
					Date ____/____/ 2016	
	H5. WITCH WEED RATING (FURROW) YES=1 NO=2				ANY COMMENTS:	
H6. WEED RATING <i>includes witch weed</i> (FURROW) 0, 1, 2, 3 0 = 0 1 = soil > weeds 2 = soil = weeds 3 = soil < weeds	a) rating	b) rating	c) rating			
H7. WEED BIOMASS <i>all above ground biomass including WITCH WEED</i>	a) weight (KG)	b) weight (KG)	c) weight (KG)			

LOW FERTILITY PLOT

ENUMERATORS:

- 1) The following questions and measurements pertain only to the part of the plot which was **FERTILIZED**.
If none of it was, these questions pertain to the entire plot.
- 2) If the plot is **FALLOW** only answer I1, I2, I3, I4, I6 and **PART P. WEEDS** for the plot

PART I.

LOW FERTILITY PLOT	I1. NAME OF PLOT: _____		I2. GPS OF PLOT	S	°	'	"				
	MICRO-TOPOGRAPHY			E	°	'	"				
	I3. SLOPE OF PLOT (write corresponding slope) _____			I4. Are these the same coordinates as your list?			1 = YES 2 = NO				
<div style="text-align: center;">0</div> 			<div style="text-align: center;">1</div> 			<div style="text-align: center;">2</div> 			<div style="text-align: center;">3</div> 		

LOW FERTILITY

PART J.

LOW FERTILITY PLOT

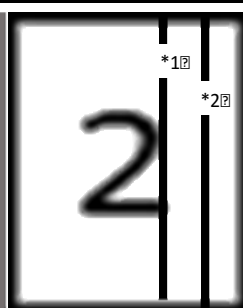
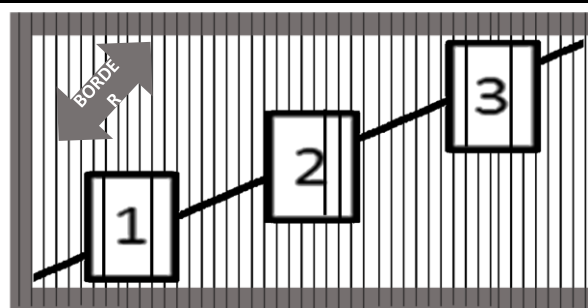
J1. Fill out which crops are present in the field below. This will allow you to identify MAIN crops and organize.

(Use crop codes from part A) DO NOT forget to list all additional crops that will not be sampled and **FALLOW**.

FOCUS ON THE **MAIN** CROPS WHICH ARE PRESENT IN THE **FERTILIZED** AREA OF THE FIELD OR THE **ENTIRE** PLOT IF UNFERTILIZED. IF THERE ARE MORE THAN 5 CROPS (INCLUDING MAIZE 4 CROPS IF NO MAIZE), **IGNORE** THE 6TH AND 7TH CROPS WHICH ARE PRESENT IN SMALL AMOUNTS.

IF (a) YES, STEP 4

a) IS PLOT FALLOW?	b) MAIZE CROP	c) MAIZE ready to harvest?	d) LEGUME (1)	e) LEGUME (1) ready to harvest?	f) LEGUME (2)	g) LEGUME (2) ready to harvest?	h) OTHER (1)	i) OTHER (2)
circle one 1 yes 2 no		circle one 1 yes 2 no		circle one 1 yes 2 no		circle one 1 yes 2 no		



2 METER SECTION
OF A RIDGE
*X2 (MAIZE)
*X2 (LEGUME & OTHERS)

STEP 1)
Avoid edge effect by choosing a location at least two (2) ridges (RIDGE SPACING) in from the field border. ALL locations must be at least 2 ridges apart. In LARGE fields this will be easy BUT be cautious in smaller fields.

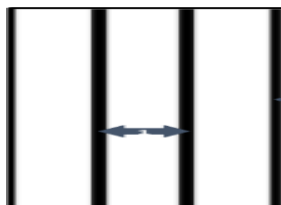
STEP 2)
Choose three (3) random locations along a diagonal transect across field for measurements.

STEP 3)
For each crop in the field fill out the corresponding information.
Maize = Maize LOW
Legume(s) = Legume (1 & 2*) LOW
OTHER(S) = OTHER (1 & 2*) LOW
(* if applicable. IF more than two of either pick the MAIN two)

STEP 4)
If **FALLOW**, skip to WEEDS LOW section. Do steps 1 & 2 taking weed measurements.

SPACING BETWEEN RIDGES MEASUREMENTS

Measure from **CENTER** of one ridge **CENTER** of the adjacent



J2.
DISTANCE BETWEEN 2 RIDGES AT EACH LOCATION WITHIN THE FIELD (example: 1.2 meter OR 0.75 meter)

FIELD LOCATION

1
a)

_____ meter

2
b)

_____ meter

3
c)

_____ meter

PART K.

K2. Is MAIZE grown in this field? (*circle one*) 1 = YES 2 = NO

: If **YES**, fill out section K taking and recording all measurements for **MAIZE**.
 : If there is an **intercrop with maize**, do applicable measurements for the intercrop in following sections.
 : If **NO**, MAIZE is NOT grown in this field, skip section K and fill out subsequent applicable section(s).

★ = CANNOT DO IF **NOT** READY TO HARVEST

IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS:

**** FOCUS ONLY ON THE FERTILIZED CROP**

IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED:

**** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS**

MAIZE ONLY

K3. CROP CODE: _____

K4. Is this crop intercropped or sole crop? (*circle one*):
 1 = INTERCROPPED
 2 = SOLE CROPPED

**TAKE MEASUREMENTS
IN ORDER OF QUESTIONS
ONLY**

IN - FIELD LOCATION

K5. TOTAL NUMBER OF PLANTS STANDING IN 2 METER X 2 METER SECTION BEFORE HARVEST
 [4 METERS TOTAL]
(includes all plants in each station)
(IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)

1
a) TOTAL Plants
2m X 2m section
[4 meters]

2
b) TOTAL Plants
2m X 2m section
[4 meters]

3
c) TOTAL Plants
2m X 2m section
[4 meters]

K6. TOTAL NUMBER OF COBS HARVESTED IN 2 METER X 2 METER
(if not ready to harvest, count the number of total cobs present in sample area)

a) number harvested

b) weight (KG)
★

c) number harvested

d) weight (KG)
★

e) number harvested

f) weight (KG)
★

K7. TIED STOVER RATING & WEIGHT
 1=completely DRY
 2=more DRY than GREEN
 3=more GREEN than DRY
 4=all GREEN

a) rating (1-4)

b) weight (KG)
★

c) rating (1-4)

d) weight (KG)
★

e) rating (1-4)

f) weight (KG)
★

K8. 3 COBS SHUCKED GRAIN MOISTURE ★

a) ★ meter reading

SAMPLE INSTRUCTIONS

TOTAL MAIZE STOVER OF 1
RANDOMLY CHOSEN IN-FIELD LOCATION
(WHOLE MAIZE PLANTS WITHOUT

HOMOGENIZE by:

- 1) collecting all stover in chosen location,
- 2) chopping into ~ **10 cm** size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE
- 3) mixing together,
- 4) collecting a 4 liter subsample,
- 5) **WEIGHING** the subsample (**K11**),
- 6) placing subsample in sample bag provided
- 7) labeling *outside* of bag with below information (MAIZE, HHID, DATE, LOW)
- 8) labeling and placing provided label *inside* the bag (*use pencil*)

K11. WEIGHT OF 4 LITER SUBSAMPLE (KG): ★ _____

TAKE OFF PUT IN SAMPLE

MAIZE STOVER

HHID:

LOW

Date ____/____/2016

YOU WILL ONLY SHUCK 3 OF THE TOTAL NUMBER OF HARVESTED COBS IN **LOCATION 2** FOR GRAIN MOISTURE MEASUREMENTS (K8).

MAIZE

LOW

MAIZE

LOW

MAIZE

PART M.



= CANNOT DO IF NOT READY TO HARVEST

LEGUME CROP 1										SAMPLE INSTRUCTIONS			
LOW LEGUME (1)	M1. CROP CODE: _____		M2. Is this crop intercropped or sole crop? (<i>circle one</i>):						1 = INTERCROPPED 2 = SOLE CROPPED				
	LEGUME (1) ONLY												
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS ONLY		FIELD LOCATION										
			1		2		3						
	M3. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2M section [2 meters]						
	M4. TOTAL NUMBER OF PODS HARVESTED IN 2 METER (X 1) SECTION (if not ready to harvest, count the number of total PODS present in sample area)		a) number harvested		b) weight (KG) ★		c) number harvested		d) weight (KG) ★		e) number harvested		f) weight (KG) ★
M5. TIED STOVER RATING & WEIGHTS 1=completely DRY 2=more DRY than GREEN 3=more GREEN then DRY 4=all GREEN		a) rating (1-4)		b) weight (KG) ★		c) rating (1-4)		d) weight (KG) ★		e) rating (1-4)		f) weight (KG) ★	
M6. 9 PODS SHELLED GRAIN MOISTURE ★		★		a) ★meter reading		★							
YOU WILL ONLY SHELL 9 OF THE TOTAL NUMBER OF HARVESTED PODS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS (M6)													
OTHER CROP 1 (NOT MAIZE OR LEGUME)													
LOW OTHER (1)	M8. CROP CODE: _____		M9. Is this crop intercropped or sole crop? (<i>circle one</i>):						1 = INTERCROPPED 2 = SOLE CROPPED				
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS ONLY		FIELD LOCATION										
			1		2		3						
	M10. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]						

LEGUME STOVER

LEGUME (1) NAME
(WRITTEN IN):

HHID:

LOW

Date ____/____/ 2016

TAKE OFF PUT IN SAMPLE

PART N.

★ = CANNOT DO IF NOT READY TO HARVEST

LEGUME CROP 2										SAMPLE INSTRUCTIONS		
LOW LEGUME (2)	N1. CROP CODE: _____		N2. Is this crop intercropped or sole crop? (circle one):				1 = INTERCROPPED 2 = SOLE CROPPED		IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS: ** FOCUS ONLY ON THE FERTILIZED CROP <hr/> IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED: ** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS			
	LEGUME (2) ONLY											
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS ONLY		FIELD LOCATION									
			1		2		3					
	N3. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2 section [2 meters]					
	N4. TOTAL NUMBER OF PODS HARVESTED IN 2 METER (X 1) SECTION (if not ready to harvest, count the number of total PODS present in sample area)		a) number harvested	b) weight (KG) ★	c) number harvested	d) weight (KG) ★	e) number harvested	f) weight (KG) ★	HOMOGENIZE by: 1) collecting all stover in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (N7), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (CROP NAME, HHID, DATE, LOW) 8) labeling and placing provided label <i>inside</i> the bag (use pencil)			
	N5. TIED STOVER RATING & WEIGHTS 1=completely DRY 2=more DRY than GREEN 3=more GREEN than DRY 4=all GREEN		a) rating (1-4)	b) weight (KG) ★	c) rating (1-4)	d) weight (KG) ★	e) rating (1-4)	f) weight (KG) ★				
N6. 9 PODS SHELLED GRAIN MOISTURE ★		★		a) ★meter reading		★						
YOU WILL ONLY SHELL 9 OF THE TOTAL NUMBER OF HARVESTED PODS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS (N6)										N7. WEIGHT OF 4 LITER ★ SUBSAMPLE (KG): _____		
OTHER CROP 2 (NOT MAIZE OR LEGUME)												
LOW OTHER (2)	N8. CROP CODE: _____		N9. Is this crop intercropped or sole crop? (circle one):				1 = INTERCROPPED 2 = SOLE CROPPED		LEGUME STOVER			
	FIELD LOCATION											
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS ONLY		1		2		3		LEGUME (2) NAME (WRITTEN IN): _____ <div style="display: flex; justify-content: space-between;"> <div>HHID: _____</div> <div style="border: 1px solid black; padding: 5px; font-weight: bold;">LOW</div> </div> <div style="margin-top: 10px;">Date ____/____/2016</div>			
	N10. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]					

TAKE OFF PUT IN SAMPLE

TAKE OFF PUT IN SAMPLE

PART P.						
LOW RIDGE	RIDGE WEEDS 1 QUADRAT SECTIONS IN-FIELD MEASUREMENTS				SAMPLE INSTRUCTIONS	
	RIDGE WEEDS ONLY	FIELD LOCATION			TOTAL RIDGE WEED BIOMASS IN QUADRAT OF 1 RANDOMLY CHOSEN IN-FIELD LOCATION HOMOGENIZE by: 1) collecting all above ground weed biomass in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (P4), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (RIDGE, HHID, DATE, LOW) 8) labeling and placing provided label <i>inside</i> the bag (<i>use pencil</i>)	
		1	2	3		
		a) rating	b) rating	c) rating		
P1. WITCH WEED RATING (RIDGE) YES=1 NO=2						
P2. WEED RATING <i>includes witch weed</i> (RIDGE) 0, 1, 2, 3 0 = 0 1 = soil > weeds 2 = soil = weeds 3 = soil < weeds	a) rating	b) rating	c) rating			
P3. WEED BIOMASS <i>all above ground biomass including WITCH WEED</i>	a) weight (KG)	b) weight (KG)	c) weight (KG)			
FURROW WEEDS 1 QUADRAT SECTIONS IN-FIELD MEASUREMENTS				P4. WEIGHT OF 4 LITER SUBSAMPLE (KG): _____		
LOW FURROW	FURROW WEEDS ONLY				TAKE OFF PUT IN SAMPLE	
	FURROW WEEDS ONLY	FIELD LOCATION			<div>RIDGE WEEDS</div> <div>HHID: LOW</div> <div>Date ____/____/ 2016</div> <div>ANY COMMENTS:</div>	
		1	2	3		
		a) rating	b) rating	c) rating		
P5. WITCH WEED RATING (FURROW) YES=1 NO=2						
P6. WEED RATING <i>includes witch weed</i> (FURROW) 0, 1, 2, 3 0 = 0 1 = soil > weeds 2 = soil = weeds 3 = soil < weeds	a) rating	b) rating	c) rating			
P7. WEED BIOMASS <i>all above ground biomass including WITCH WEED</i>	a) weight (KG)	b) weight (KG)	c) weight (KG)			

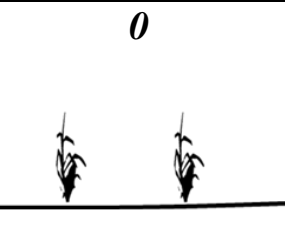
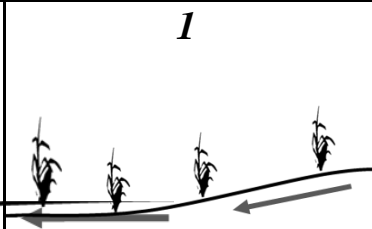
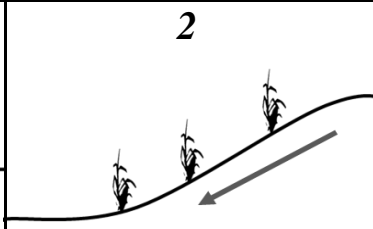
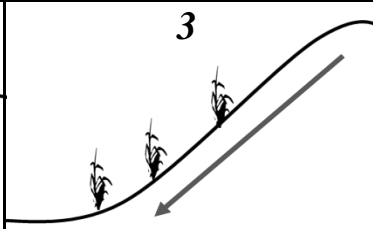
NEW MAIZE PLOT

ENUMERATORS:

1) The following questions and measurements pertain only to the part of the plot which was **FERTILIZED**.

If none of it was, these questions pertain to the entire plot.

2) If the plot is **FALLOW** only answer Q1, Q2, Q3, Q4, Q6 and PART V. WEEDS for the plot
PART Q.

NEW MAIZE PLOT	Q1. NAME OF PLOT: _____		Q2. GPS OF PLOT	S	°	'	"
	MICRO-TOPOGRAPHY			E	°	'	"
Q3. SLOPE OF PLOT (write corresponding slope) _____			Q4. Are these the same coordinates as your list?				1 = YES 2 = NO
0		1		2		3	
							

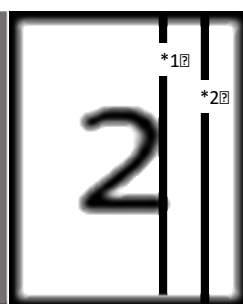
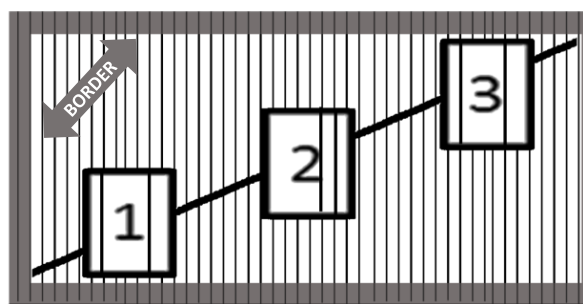
PART R.

NEW MAIZE PLOT

R1. Fill out which crops are present in the field below. This will allow you to identify MAIN crops and organize.
(Use crop codes from part A) DO NOT forget to list all additional crops that will not be sampled and **FALLOW**.

FOCUS ON THE **MAIN** CROPS WHICH ARE PRESENT IN THE **FERTILIZED** AREA OF THE FIELD OR THE **ENTIRE** PLOT IF UNFERTILIZED. IF THERE ARE MORE THAN 5 CROPS (INCLUDING MAIZE), **IGNORE** THE 6TH AND 7TH CROPS WHICH ARE PRESENT IN SMALL AMOUNTS.

	b) MAIZE CROP	c) MAIZE ready to harvest?	d) LEGUME (1)	e) LEGUME (1) ready to harvest?	f) LEGUME (2)	g) LEGUME (2) ready to harvest?	h) OTHER (1)	i) OTHER (2)
		circle one 1 yes 2 no		circle one 1 yes 2 no		circle one 1 yes 2 no		



2 METER SECTION
OF A RIDGE

*X2 (MAIZE)

*X1 (LEGUME & OTHERS)

STEP 1)

Avoid edge effect by choosing a location at least two (2) ridges (RIDGE SPACING) in from the field border. ALL locations must be at least 2 ridges apart. In LARGE fields this will be easy BUT be cautious in smaller fields.

STEP 2)

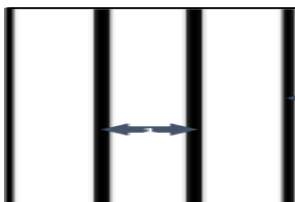
Choose three (3) random locations along a diagonal transect across field for measurements.

STEP 3)

For each crop in the field fill out the corresponding information.
Maize = Maize NEW
Legume(s) = Legume (1 & 2*) NEW
OTHER(S) = OTHER (1 & 2*) NEW
(* if applicable. IF more than two of either pick the MAIN two)

SPACING BETWEEN RIDGES MEASUREMENTS

Measure from
CENTER of
one ridge
CENTER of
the adjacent



R2.
DISTANCE
BETWEEN
**2 RIDGES AT EACH
LOCATION WITHIN
THE FIELD**
(example: 1.2 meter
OR 0.75 meter)

FIELD LOCATION

1 a)	2 b)	3 c)
_____	_____	_____
meter	meter	meter

SAMPLING INSTRUCTIONS
& CROPS IN FIELD

RIDGE SPACING
NEW MAIZE

PART S.													
NEW MAIZE NEW MAIZE NEW	<p><i>: If there is an intercrop with maize , do applicable measurements for the intercrop in following sections.</i></p>						<p>IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS: ** FOCUS ONLY ON THE FERTILIZED CROP</p> <hr style="border-top: 1px dashed white;"/> <p>IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED: ** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS</p>						
	<p>★ = CANNOT DO IF NOT READY TO HARVEST</p>												
	MAIZE ONLY												
	S3. CROP CODE: _____		S4. Is this crop intercropped or sole crop? (circle one):				1 = INTERCROPPED 2 = SOLE CROPPED						
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS ONLY		IN - FIELD LOCATION										
			1		2		3						
	S5. TOTAL NUMBER OF PLANTS STANDING IN 2 METER X 2 METER SECTION BEFORE HARVEST [4 METERS TOTAL] <i>(includes all plants in each station)</i> <i>(IF HARVESTED , look for stubble or ask farmer to demonstrate where planted)</i>		a) TOTAL Plants 2m X 2m section [4 meters]		b) TOTAL Plants 2m X 2m section [4 meters]		c) TOTAL Plants 2m X 2m section [4 meters]						
	S6. TOTAL NUMBER OF COBS HARVESTED IN 2 METER X 2 METER SECTION <i>(if not ready to harvest, count the number of total cobs present in sample area)</i>		a) number harvested	b) weight (KG) ★	c) number harvested	d) weight (KG) ★	e) number harvested	f) weight (KG) ★	<div style="text-align: center;">★</div> <p>HOMOGENIZE by:</p> <ol style="list-style-type: none"> 1) collecting all stover in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (S11), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (MAIZE, HHID, DATE, NEW) 8) labeling and placing provided label <i>inside</i> the bag (use pencil) 				
	S7. TIED STOVER RATING & WEIGHT 1=completely DRY 2=more DRY than GREEN 3=more GREEN than DRY 4=all GREEN		a) rating (1-4)	b) weight (KG) ★	c) rating (1-4)	d) weight (KG) ★	e) rating (1-4)	f) weight (KG) ★					
	S8. 3 COBS SHUCKED GRAIN MOISTURE ★				a) ★ meter reading								
YOU WILL ONLY SHUCK 3 OF THE TOTAL NUMBER OF HARVESTED COBS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS													
<div style="text-align: center; border: 1px dashed black; padding: 5px;"> TAKE OFF PUT IN SAMPLE </div> <div style="text-align: center; border: 1px solid black; padding: 5px;"> MAIZE STOVER </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 50%; padding: 5px;">HHID:</td> <td style="width: 50%; padding: 5px; text-align: center; font-weight: bold;">NEW</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Date ____/____/2016</td> </tr> </table>										HHID:	NEW	Date ____/____/2016	
HHID:	NEW												
Date ____/____/2016													

PART T.



= CANNOT DO IF NOT READY TO HARVEST

LEGUME CROP 1

SAMPLE INSTRUCTIONS

NEW MAIZE PLOT LEGUME (1)	T1. CROP CODE: _____		T2. Is this crop intercropped or sole crop? (circle one): 1 = INTERCROPPED 2 = SOLE CROPPED				IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS: ** FOCUS ONLY ON THE FERTILIZED CROP IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED: ** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS	
	LEGUME (1) ONLY							
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>		FIELD LOCATION					
			1		2		3	
	T3. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]	
	T4. TOTAL NUMBER OF PODS HARVESTED IN 2 METER (X 1) SECTION (if not ready to harvest, count the number of total PODS present in sample area)		a) number harvested	b) weight (KG) ★	c) number harvested	d) weight (KG) ★	e) number harvested	f) weight (KG) ★
T5. TIED STOVER & WEIGHTS RATING 1=completely DRY 2=more DRY than GREEN 3=more GREEN than DRY 4=all GREEN		a) rating (1-4)	b) weight (KG) ★	c) rating (1-4)	d) weight (KG) ★	e) rating (1-4)	f) weight (KG) ★	
T6. 9 PODS SHELLED GRAIN ★ MOISTURE				a) ★ meter reading				
YOU WILL ONLY SHELL 9 OF THE TOTAL NUMBER OF HARVESTED PODS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS (T6)								
OTHER CROP 1 (NOT MAIZE OR LEGUME)								
NEW MAIZE OTHER (1)	T8. CROP CODE: _____		T9. Is this crop intercropped or sole crop? (circle one): 1 = INTERCROPPED 2 = SOLE CROPPED				LEGUME STOVER LEGUME (1) NAME (WRITTEN IN): _____ HHID: _____ Date ____/____/2016	
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>							
			FIELD LOCATION					
			1		2		3	
T10. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]		

TAKE OFF PUT IN SAMPLE

PART U.



= CANNOT DO IF **NOT** READY TO HARVEST

LEGUME CROP 2

SAMPLE INSTRUCTIONS

NEW MAIZE PLOT LEGUME (2)	U1. CROP CODE: _____		U2. Is this crop intercropped or sole crop? (<i>circle one</i>): 1 = INTERCROPPED 2 = SOLE CROPPED						IF PLOT IS DIVIDED INTO SOLE CROPPING OF DIFFERENT CROPS: ** FOCUS ONLY ON THE FERTILIZED CROP <hr/> IF ALL SOLE CROPS ARE FERTILIZED OR ALL UNFERTILIZED: ** CHOOSE 3 SECTIONS WITHIN EACH INDIVIDUAL SOLE CROP FOR MEASUREMENTS	
	LEGUME (2) ONLY									
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>		FIELD LOCATION						TOTAL LEGUME PLANTS OF 1 RANDOMLY CHOSEN IN-FIELD LOCATION (WHOLE LEGUME PLANTS WITHOUT PODS) HOMOGENIZE by: 1) collecting all stover in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (U7), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (CROP NAME, HHID, DATE, NEW) 8) labeling and placing provided label <i>inside</i> the bag (<i>use pencil</i>)	
			1		2		3			
	U3. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]			
	U4. TOTAL NUMBER OF PODS HARVESTED IN 2 METER (X 1) SECTION (if not ready to harvest, count the number of total PODS present in sample area)		a) number harvested	b) weight (KG) 	c) number harvested	d) weight (KG) 	e) number harvested	f) weight (KG) 		
U5. TIED STOVER RATING & WEIGHTS 1=completely DRY 2=more DRY than GREEN 3=more GREEN then DRY 4=all GREEN		a) rating (1-4)	b) weight (KG) 	c) rating (1-4)	d) weight (KG) 	e) rating (1-4)	f) weight (KG) 			
U6. 9 PODS SHELLED GRA MOISTURE		a) meter reading						U7. WEIGHT OF 4 LITER SUBSAMPLE (KG): _____		
YOU WILL ONLY SHELL 9 OF THE TOTAL NUMBER OF HARVESTED PODS IN LOCATION 2 FOR GRAIN MOISTURE MEASUREMENTS (U6)										
OTHER CROP 2 (NOT MAIZE OR LEGUME)										
NEW MAIZE OTHER (2)	U8. CROP CODE: _____		U9. Is this crop intercropped or sole crop? (<i>circle one</i>): 1 = INTERCROPPED 2 = SOLE CROPPED						TAKE OFF PUT IN SAMPLE LEGUME STOVER LEGUME (2) NAME (WRITTEN IN) : <hr/> <div> HHID: _____ <div>NEW</div> </div> <hr/> Date ____/____/2016 TAKE OFF PUT IN SAMPLE	
	TAKE MEASUREMENTS IN ORDER OF QUESTIONS <u>ONLY</u>		FIELD LOCATION							
			1		2		3			
U10. TOTAL NUMBER OF PLANTS STANDING IN 2 METER (X 1) SECTION BEFORE HARVEST [2 METERS TOTAL] (includes all plants in each station) (IF HARVESTED, look for stubble or ask farmer to demonstrate where planted)		a) TOTAL Plants 2m section [2 meters]		b) TOTAL Plants 2m section [2 meters]		c) TOTAL Plants 2m section [2 meters]				

PART V.						
NEW MAIZE RIDGE	RIDGE WEEDS 1 QUADRAT SECTIONS IN-FIELD MEASUREMENTS				SAMPLE INSTRUCTIONS	
	RIDGE WEEDS ONLY	FIELD LOCATION			TOTAL RIDGE WEED BIOMASS IN QUADRAT OF 1 RANDOMLY CHOSEN IN-FIELD LOCATION HOMOGENIZE by: 1) collecting all above ground weed biomass in chosen location, 2) chopping into ~ 10 cm size pieces, DO NOT MIX WITH SOIL OR OTHER RESIDUE 3) mixing together, 4) collecting a 4 liter subsample, 5) WEIGHING the subsample (V4), 6) placing subsample in sample bag provided 7) labeling <i>outside</i> of bag with below information (RIDGE, HHID, DATE, NEW) 8) labeling and placing provided label <i>inside</i> the bag (<i>use pencil</i>)	
		1	2	3		
		a) rating	b) rating	c) rating		
	V1. WITCH WEED RATING (RIDGE) YES=1 NO=2					
V2. WEED RATING <i>includes witch weed</i> (RIDGE) 0, 1, 2, 3 0 = 0 1 = soil > weeds 2 = soil = weeds 3 = soil < weeds	a) rating	b) rating	c) rating			
V3. WEED BIOMASS <i>all above ground biomass including WITCH WEED</i>	a) weight (KG)	b) weight (KG)	c) weight (KG)	V4. WEIGHT OF 4 LITER SUBSAMPLE (KG):		
NEW MAIZE FURROW	FURROW WEEDS 1 QUADRAT SECTIONS IN-FIELD MEASUREMENTS				TAKE OFF PUT IN SAMPLE	
	FURROW WEEDS ONLY	FIELD LOCATION			RIDGE WEEDS HHID: <div>NEW</div> Date ____/____/ 2016 ANY COMMENTS:	
		1	2	3		
		a) rating	b) rating	c) rating		
	V5. WITCH WEED RATING (FURROW) YES=1 NO=2					
V6. WEED RATING <i>includes witch weed</i> (FURROW) 0, 1, 2, 3 0 = 0 1 = soil > weeds 2 = soil = weeds 3 = soil < weeds	a) rating	b) rating	c) rating			
V7. WEED BIOMASS <i>all above ground biomass including WITCH WEED</i>	a) weight (KG)	b) weight (KG)	c) weight (KG)			