# FeSeRWAM<sub>MAIZE</sub>/GHANA



AII-AEZ

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

## RAINFALL VOLUME RANGE 0 MM/YEAR

| Maize                      | $\bigcirc$                           |
|----------------------------|--------------------------------------|
| Variety Name:              | Sanzal-sima                          |
| Local Name:                |                                      |
| Seed Type:                 | 20                                   |
| Quantity of seed:          | 0 kg/ha                              |
| Spacing:                   | White                                |
| Grain/Flesh<br>Color:      | 15 April - 15 May, 15 July-15 August |
| Suitable Zone of Planting: | Rainfall                             |
| Production                 |                                      |
| System:                    |                                      |
| Cycle Sowing               |                                      |
| to maturity                |                                      |
| (number of                 |                                      |
| days):                     |                                      |
| Potential yield (kg/ha):   | 5.40                                 |

| Potential yield | 5.40 |
|-----------------|------|
| (kg/ha):        |      |
| Pest            | no   |
| Resistance:     |      |

Disease drought tolerant; tolerant to lodging; tolerant to rust, blight; streak and curvularia Resistance Other Stresses: Drought tolerant; tolerant to lodging; tolerant to rust, blight; streak and curvularia

Nutritional Quality

Other 90N-60P2O5-60K2O+2.1Zn (Transition, semi-deciduous and rain forest) 100N-Qualities: 40P2O5-40K2O+2.1Zn (Sudan and Guinea)

## **NUTRIENT**



Information

## organicRecommendation



Method of fertilizer application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

# **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2. 150kg/ha of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha), At planting (together with the first 6 bags)

## **Fertilizers**



### Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid,Semi-arid (Ghana-Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## Good Agricultural Practices & Management



Soil and Water Side placement for NPK and burying for Urea fertilizers Conservation

Method of fertilizer application:

Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity

| Soil<br>Amendment: | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
|--------------------|---|
| Water Management:  | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Pest<br>Management | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Weed Control:      | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |
| Cropping System:   | Information   |









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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

## RAINFALL VOLUME RANGE 0 MM/YEAR

## Maize



Aburohema

Name

Name

Variety

Seed Type: 20

Quantity of 0 kg/ha

seed

Spacing: White

Rainfal

Grain/Flesh 15 April - 15 May, 15 July-15 August

Color

Suitable

Zone of

Planting:

Production

System

Cycle

Sowing to

maturity

(number of

days):

Potential

5.00 vield

(kg/ha):

Pest

Resistance

Disease

Resistance

Other

Stresses

Nutritional

Quality

Other Qualities: 90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea) For farm

specific recommendations, farmers should conduct soil testing

## **NUTRIENT**



Information

## organicRecommendation

Quality Protein Maize

Quality Protein Maize



Method of

fertilizer

When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

week after planting

Humid.Semi-arid (Ghana-Rain Forest.Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50

kg/ha), Apply 6 bags at planting and 2 bags 4

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

planting





## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

1. 50kg/ha of MOP (0.2 bags x 50 kg/ha), At planting (together with the first 6 bags)

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. **100**kg/ha of **Urea** (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## Good Agricultural Practices & Management



Soil and Water Conservation

Side placement for NPK and burying for Urea fertilizers

| Method of fertilizer application: | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
|-----------------------------------|---|
| Soil<br>Amendment:                | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Water Management:                 | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Pest<br>Management                | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. herbicides and GAP  |
| Weed Control:                     | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |
| Cropping System:                  | Information   |









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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: CSIR-Abontem Abontem Local Name Open Pollinated Variety (OPV) Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 45cm; Seeds/hill: 2; Population/ha: 59.259: Yellow (Flint) Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting:

Production System: Rainfall Cycle Sowing to maturity (number of 75 days): Potential yield

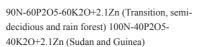
4 70 (kg/ha): Pest Resistance: no

Disease Resistance:

Drought Torelant, striga resistance Other Stresses: Nutritional Quality: Quality Protein Maize. Good for poultry and livestock

Other Qualities:

## **NUTRIENT**



## organicRecommendation



Method of fertilizer

When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 10kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 50kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |









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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: Aburo Legon Legon Aburo Local Name Hybrid Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 45cm; Seeds/hill: 2; Population/ha: 59.259 White (Flint) Grain/Flesh Color:

15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall

Cycle Sowing to maturity (number of

Suitable Zone of

days):

Potential yield 10.00 (kg/ha):

Pest Resistance:

Disease Resistance:

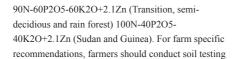
Fairly resistant to maize streak virus Other Stresses: disease (MSVD)

Nutritional Quality:

Suitable for food, feed and industrial Other Qualities:

## **NUTRIENT**

Recommendation



## organicRecommendation



Method of When possible If available add any of the following: Organic manure Compost. fertilizer Biofortifiers, Biostimulants application:

## **Fertilizers**

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

week after planting

Humid.Semi-arid (Ghana-Rain Forest.Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50

kg/ha), Apply 6 bags at planting and 2 bags 4

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

Agro-Ecological Zones Suitable:

# planting

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

Humid, Semi-arid (Ghana-Rain Forest, Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn +

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

0.5B (5.5 bags x 50 kg/ha), Apply at planting

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

# **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

planting

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible

(7)

| Method of<br>fertilizer | Side placement for NPK and burying for Urea fertilizers.  |
|-------------------------|---|
| application:            |   |
| Soil Amendment:         | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:       | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management      | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:           | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:        | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |









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WEST AFRICA AGRO ECOLOGICAL

SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

## RAINFALL VOLUME RANGE 0 MM/YEAR

## Maize



Variety Akposoe Name

Name

Seed Type: 20

Quantity of 0 kg/ha

seed

Spacing: White

Rainfal

Grain/Flesh

15 April - 15 May, 15 July-15 August

Color

Suitable

Zone of

Planting:

Production

System

Cycle

Sowing to

maturity

(number of

days):

Potential

5.00 vield

(kg/ha):

Pest

Resistance

Disease

Resistance

Other

Quality Protein Maize Stresses

Provitamin A

Nutritional

Quality

Other

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-Oualities: 40K2O+2.1Zn (Sudan and Guinea). For farm

specific recommendations, farmers should conduct soil testing

## **NUTRIENT**



Information

## organicRecommendation



Method of

fertilizer application: When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2. 150kg/ha of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

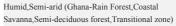
## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:



## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## Good Agricultural Practices & Management



Soil and Water Side placement for NPK and burying for Urea fertilizers Conservation

fertilizer application:

Method of

Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity

| Soil<br>Amendment: | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
|--------------------|---|
| Water Management:  | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Pest<br>Management | Weed Control (herbicides and GAP)   |
| Weed Control:      | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |
| Cropping System:   | Information   |







# FeSeRWAM<sub>MAIZE</sub>/GHANA



AII-AEZ

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: CSIR-Bihilifa Local Name Open Pollinated Variety (OPV) Seed Type: Quantity of 20 kg/ha seed Between Rows: 75cm; Within Rows: 45cm; Spacing: Seeds/hill: 2; Population/ha: 59,259 Grain/Flesh Yellow (Flint)

Suitable Zone 15 April - 15 May, 15 July-15 August of Planting: Production

Rainfall

System: Cycle Sowing to maturity (number of days): Potential yield

Color

(kg/ha)

Pest Resistance

Disease

Resistance

Other Stresses: Striga and drought tolerant; tolerant to lodging, tolerant to rust, blight, streak and curvularia

Nutritional

Quality Protein Maize Quality:

Other Qualities: Most suitable for the striga hermonthica infested fields of the Guinea and Sudan savanna, and Forest-savannah transition

## **NUTRIENT**

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea). For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of When possible If available add any of the following: Organic manure, Compost, fertilizer Biofortifiers, Biostimulants application:

## **Fertilizers**



**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

planting

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

week after planting

planting

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

Humid, Semi-arid (Ghana-Rain Forest, Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

1. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5

second top dress 1.5 bag 5-6 weeks after

weeks after planting or split application; first

top dress, 2 bags 3-4 weeks after planting and

kg/ha), Apply 6 bags at planting and 2 bags 4

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and

Humid, Semi-arid (Ghana-Rain Forest, Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

# (5)

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2. 150kg/ha of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**

(6)

## Agro-Ecological Zones Suitable:

Sub-humid,Semi-arid (Ghana-Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)











## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Soil and Water<br>Conservation | Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible |
|--------------------------------|--|
| Method of                      |  |
| fertilizer                     | Side placement for NPK and burying for Urea fertilizers  |
| application:                   |  |
| Soil                           | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock  |
| Amendment:                     | phosphate and biochar to reduce soil acidity   |
| Water                          | Use supplementary irrigation where appropriate even during rainfed production. e.g.  |
| Management:                    | irrigation, water harvesting techniques  |
| Pest                           | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  |
| Management                     | Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance   |
| Weed Control:                  | Good agricultural practices (mechanical weeding) and combinations of herbicides can  |
|                                | be adopted. Herbicides and GAP   |
| Cropping                       | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation,   |
| System:                        | inter-cropping/mixed cropping, Continuous monocropping   |
|                                |  |







# FeSeRWAM<sub>MAIZE</sub>/GHANA



**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: Dorke Local Name Open Pollinated Variety (OPV) Seed Type: Quantity of 20 kg/ha seed Between Rows: 75cm; Within Rows: 45cm; Spacing: Seeds/hill: 2; Population/ha: 59,259 Grain/Flesh White (Flint) Color

Suitable Zone 15 April - 15 May, 15 July-15 August of Planting: Production Rainfall System: Cycle Sowing

to maturity (number of days):

Potential yield (kg/ha)

Pest Resistance: no Disease

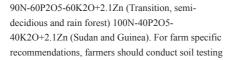
Resistance

Other Stresses: Striga and drought tolerant; tolerant to lodging, tolerant to rust, blight, streak and curvularia

Nutritional Quality Protein Maize Quality:

Other Qualities: Most suitable for the striga hermonthica infested fields of the Guinea and Sudan savanna, and Forest-savannah transition

## **NUTRIENT**



## organicRecommendation



Method of

When possible Organic manure, Compost, fertilizer Biofortifiers, Biostimulants, Innoculants

application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

week after planting

Humid.Semi-arid (Ghana-Rain Forest.Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50

kg/ha), Apply 6 bags at planting and 2 bags 4

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



### Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

planting



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of     |  |
|---------------|--|
| fertilizer    | Side placement for NPK and burying for Urea fertilizers.   |
| application:  |  |
| Soil          | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock                                    |
| Amendment:    | phosphate and biochar to reduce soil acidity   |
| Water         | Use supplementary irrigation where appropriate even during rainfed production                                      |
| Management:   | 11 7 5 11 1  |
| Pest          | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  |
| Management    | Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance                           |
| Weed Control: | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP |
| Cropping      | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation,                             |
| System:       | inter-cropping/mixed cropping, Continuous monocropping   |







maturity (number of

days): Potential yield

(kg/ha):

Pest Resistance:

Other Qualities:

**NUTRIENT** 

Disease Resistance: no Other Stresses:



**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: CSIR-Golden Jubilee Golden Jubilee Local Name Open Pollinated Variety (OPV) Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 45cm; Seeds/hill: 2; Population/ha: 59.259 Yellow (Dent) Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to

# **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## Recommendation

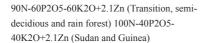
Nutritional Quality: Quality Protein Maize. Suitable for

health of humans

poultry and livestock production

Excellent for enhanced nutrition and

5.00



## organicRecommendation

Method of When possible If available add any of the fertilizer following: Organic manure. Compost. Biofortifiers, Biostimulants application:

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of<br>fertilizer | Side placement for NPK and burying for Urea fertilizers.  |
|-------------------------|---|
| application:            |   |
| Soil Amendment:         | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:       | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management      | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:           | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:        | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |







# FeSeRWAM<sub>MAIZE</sub>/GHANA



**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize LG 336 Variety Name: Local Name Hybrid Seed Type: 16 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 25cm; Seeds/hill: 1; Population/ha: 53.333 Orange-yellow; type: Cornea Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to maturity (number of 110 days):

8.00

Disease Resistance: Helminthosporiosis, with rust streak

Drought resistant Other Stresses:

Nutritional Quality Other Qualities:

Potential yield

Pest Resistance

(kg/ha):

## **NUTRIENT**



90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea). For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of When possible If available add any of the fertilizer following: Organic manure. Compost. Biofortifiers, Biostimulants application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



### Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

Savanna)

Agro-Ecological Zones Suitable:



**Fertilizers** 

Agro-Ecological Zones Suitable: Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

Recommendation

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 10kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

# Method of fertilizer application

1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 50kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |







# FeSeRWAM<sub>MAIZE</sub>/GHANA



**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize LG 345 Variety Name: Local Name Hybrid Seed Type: 16 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 25cm; Seeds/hill: 1; Population/ha: 53.333

Orange-yellow; type: Semi-Corné Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August

Planting:

Production System: Rainfall

Cycle Sowing to maturity (number of

days):

Potential yield

(kg/ha):

Pest Resistance

Disease Resistance: Helminthosporiosis, with rust streak

7.00

Drought resistant Other Stresses:

Nutritional Quality

Other Qualities:

## **NUTRIENT**

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea). For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of When possible If available add any of the fertilizer following: Organic manure. Compost. Biofortifiers, Biostimulants application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

week after planting

Humid.Semi-arid (Ghana-Rain Forest.Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50

kg/ha), Apply 6 bags at planting and 2 bags 4

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

# Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

planting



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



# Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 10kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 50kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |









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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: Mamaba Mamaha Local Name Hybrid Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 45cm; Seeds/hill: 2; Population/ha: 59.259 White (Flint) Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to maturity (number of days): Potential yield 6.50 (kg/ha): Pest Resistance: no Disease Resistance: no Other Stresses: Nutritional Quality: Quality Protein Maize

## **NUTRIENT**

Other Qualities:

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea). For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of When possible If available add any of the fertilizer following: Organic manure. Compost. Biofortifiers, Biostimulants application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

week after planting

Humid.Semi-arid (Ghana-Rain Forest.Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50

kg/ha), Apply 6 bags at planting and 2 bags 4

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

planting



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |









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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: CSIR-Omankwa Omankwa Local Name Open Pollinated Variety (OPV) Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 25cm; Seeds/hill:1; Population/ha: 53.333 Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to maturity (number of days): Potential yield 5.00 (kg/ha): Pest Resistance: no Disease Resistance: Striga Resistant Other Stresses Nutritional Quality: Quality Protein Maize

## **NUTRIENT**

Other Qualities:

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea)

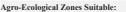
## organicRecommendation



Method of When possible If available add any of the fertilizer following: Organic manure, Compost, Biofortifiers, Biostimulants application:

## **Fertilizers**





Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 second top dress 1 bag 5-6 weeks after planting

weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and

## **Fertilizers**

planting

**Fertilizers** 

Agro-Ecological Zones Suitable:

Method of fertilizer application

Humid, Semi-arid (Ghana-Rain Forest, Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn +

2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags

2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

weeks after planting or split application; first

top dress, 2 bags 3-4 weeks after planting and

x 50 kg/ha), Apply at planting

0.5B (5.5 bags x 50 kg/ha), Apply at planting

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

Agro-Ecological Zones Suitable:

Method of fertilizer application

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

**Fertilizers** 

Savanna)

Agro-Ecological Zones Suitable:

Method of fertilizer application

**Fertilizers** 

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn +

0.5B (4 bags x 50 kg/ha), Apply at planting

2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5

second top dress 1.5 bag 5-6 weeks after

weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and

## **Fertilizers**

Recommendation

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**

planting

# (7)

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |







# FeSeRWAM<sub>MAIZE</sub>/GHANA



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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: SC510 Local Name Hybrid Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 25cm; Seeds/hill: 1; Population/ha: 53.333 Yellow (Flint) Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to maturity (number of days): Potential yield 5.00 (kg/ha): Pest Resistance Disease Resistance: Resistant to most common maize diseases and less susceptile to the fall

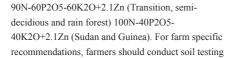
## **NUTRIENT**

Other Stresses:

Other Qualities:

Recommendation

Nutritional Quality: ProVitamin A



army worm

## organicRecommendation

Method of following: Organic manure, Compost, fertilizer Biofortifiers, Biostimulants application:

When possible If available add any of the

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 10kg/ha of MOP (0.2 bags x 50 kg/ha), At planting (together with the first 6 bags)

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2. 150kg/ha of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

# Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4  $\,$ week after planting
- 2. 50kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

(5)



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna.Semi-deciduous forest.Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible Conservation

Method of

Side placement for NPK and burying for Urea fertilizers fertilizer

application:



| Soil<br>Amendment: | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
|--------------------|---|
| Water Management:  | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:      | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:   | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |









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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

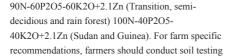
**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: SC649 Hw3fo) Local Name Hybrid Seed Type: 25 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 25cm; Seeds/hill: 1; Population/ha: 53.333 White (Semi-dented) Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to maturity (number of 105 days): Potential yield 8.00 (kg/ha): Pest Resistance: no Disease Resistance: Good tolerant to maize leaf blight and Other Stresses:

## **NUTRIENT**

Nutritional Quality:

Other Qualities:



## organicRecommendation



When possible If available add any of the following: Organic manure, Compost, fertilizer Biofortifiers, Biostimulants application:

## **Fertilizers**

Agro-Ecological Zones Suitable:

Method of fertilizer application

Humid, Semi-arid (Ghana-Rain Forest, Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5

second top dress 1 bag 5-6 weeks after

weeks after planting or split application; first

top dress, 1 bag 3-4 weeks after planting and



# Agro-Ecological Zones Suitable:

**Fertilizers** 

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

planting

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of<br>fertilizer | Side placement for NPK and burying for Urea fertilizers.  |
|-------------------------|---|
| application:            |   |
| Soil Amendment:         | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:       | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management      | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:           | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:        | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |







# FeSeRWAM<sub>MAIZE</sub>/GHANA



**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize SC719 Variety Name: Gyemedi Local Name Hybrid Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 25cm; Seeds/hill: 1; Population/ha: 53.333 Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to maturity (number of 115

Potential yield 10.00 (kg/ha): Pest Resistance: Disease Resistance:

(MSV) Maize Streak Virus, Leave spot Drought

Other Stresses:

Nutritional Quality:

days):

Very good for Ga Kenkey, and good Other Qualities:

for Fanta Kenkey and Banku

## **NUTRIENT**



90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea). For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



When possible If available add any of the following: Organic manure, Compost, fertilizer Biofortifiers, Biostimulants application:

## **Fertilizers**



Agro-Ecological Zones Suitable:

Method of fertilizer application

Humid, Semi-arid (Ghana-Rain Forest, Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn +

0.5B (5.5 bags x 50 kg/ha), Apply at planting

**Fertilizers** 

Agro-Ecological Zones Suitable:

## Method of fertilizer application

Humid, Semi-arid (Ghana-Rain Forest, Coastal

Savanna, Semi-deciduous forest, Transitional zone)

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

**Fertilizers** 



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2. 150kg/ha of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable: Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid,Semi-arid (Ghana-Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)



1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Soil and Water<br>Conservation | Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible |
|--------------------------------|--|
| Method of                      |  |
| fertilizer                     | Side placement for NPK and burying for Urea fertilizers  |
| application:                   |  |
| Soil                           | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock  |
| Amendment:                     | phosphate and biochar to reduce soil acidity   |
| Water                          | Use supplementary irrigation where appropriate even during rainfed production. e.g.  |
| Management:                    | irrigation, water harvesting techniques  |
| Pest                           | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  |
| Management                     | Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance   |
| Weed Control:                  | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP                                 |
| Cropping                       | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation,   |
| System:                        | inter-cropping/mixed cropping, Continuous monocropping   |
|                                |  |









**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, **SUB-HUMID**



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: CSIR-Wang-dataa Wang-dataa Local Name Open Pollinated Variety (OPV) Seed Type: Quantity of seed: 20 kg/ha Between Rows: 75cm; Within Rows: Spacing: 25cm; Seeds/hill:1; Population/ha: 53.333 Grain/Flesh Color: White Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production Rainfall System Cycle Sowing to maturity (number of days): Potential yield 4.70

## **NUTRIENT**

(kg/ha):

Pest Resistance Disease

Resistance

Nutritional

Other Qualities:

Quality:

Other Stresses:



Striga and drought tolerant: tolerant to

lodging, tolerant to rust, blight, streak

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea)

and curvularia

## organicRecommendation



Method of When possible If available add any of the following: Organic manure, Compost, fertilizer Biofortifiers, Biostimulants application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



### Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

### Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |









**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, **SUB-HUMID**

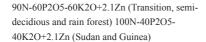


COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: Obatampa 1 Obatanpa Local Name opv Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 45cm; Seeds/hill: 2; Population/ha: 59.259 Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August; Planting: Production System: Rainfall Cycle Sowing to maturity (number of 105 days): Potential yield 6.00 (kg/ha): Insect pests Pest Resistance: Disease Resistance: Helminthosporiose, striga Drought Other Stresses: Nutritional Quality: Rich in quality protein Good suitability for local dishes Other Qualities: (porridge and fresh corn)

## **NUTRIENT**



## organicRecommendation



Method of fertilizer application:

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Semideciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Semideciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

# (5)

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B(), Apply at planting
- 2. 175kg/ha of Urea (), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (), 6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Semideciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B(), Apply at planting
- 2. 100kg/ha of Urea (), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 200kg/ha of NPK 15-20-20 + 0.7Zn () Apply at planting
- 2. 150kg/ha of Urea (), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (), At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Semideciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (), Apply at planting

## Good Agricultural Practices & Management



Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible Conservation

Method of

Side placement for NPK and burying for Urea fertilizers . fertilizer

application:

Soil Add organic manure when necessary, Biochar, lime and rock phosphate . Lime, rock

phosphate and biochar to reduce soil acidity Amendment

| Water Management:  | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
|--------------------|---|
| Pest<br>Management | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:      | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted . herbicides and GAP   |
| Cropping System:   | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |











WEST AFRICA AGRO ECOLOGICAL **70NES** 

SUB-HUMID, SEMI-**ARID** 



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

# Soybean



Variety Name Afayak Local Name Seed Type: opv Quantity of seed: 40 kg/ha

Spacing: 60 cm x 5 cm. Drilling is recommended

Grain/Flesh Color: Cream

Suitable Zone of

July - August Planting:

Production Rainfall System

Cycle Sowing to

maturity (number 110

of days):

Potential vield

(kg/ha):

Pest Resistance:

Resistance

Above average tolerance to common Other Stresses:

2.00

no

soybean pests and diseases

Nutritional Quality

Protein content: 38%, Oil content: 18%; Carbohydrate content: 36%

Other Qualities:

Excellent seed quality; Good seed storability; High and stable yield across many environments

## **NUTRIENT**



20N-60P2O5-30K2O+1.2Zn. For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of

fertilizer

When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 100kg/ha of NPK 4-18-13 + 3S +3MgO +6CaO + 0.1B (2 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 150kg/ha of NPK 14-31-0 +9S +1Zn +1B (3 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone.Guinea Savanna.Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 12-30-17+0.7Zn (4 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage Conservation is also a recommended land preparation method when possible. e.g. irrigation, water harvesting techniques

Method of

Drilling along the row and band placement Seed innoculation is recommended fertilizer

application:

Soil Compost, organic manure, rock phosphate, TSP could be applied

Amendment Water

See "Soil and Water Conservation Techniques"

Management

Pest Integrated Pest Management

Management

Weed Control: Good agricultural practices (Integrated weed management) and combinations of herbicides

can be adopted. Pre-emergence, early post and post emergence herbicides

Cropping

Rotation with cereals where applicable Intercropping with maize where applicable. At

least plant in 3 years rotation System:











WEST AFRICA AGRO ECOLOGICAL **70NES** 

SUB-HUMID, SEMI-**ARID** 



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

| Soybean                                    | $\odot$                               |
|--|---------------------------------------|
| Variety Name:                              | Anidaso                               |
| Local Name:                                |                                       |
| Seed Type:                                 | opv                                   |
| Quantity of seed:                          | 40 kg/ha                              |
| Spacing:                                   | 60 cm x 5 cm. Drilling is recommended |
| Grain/Flesh Color:                         | Cream                                 |
| Suitable Zone of Planting:                 | July - August                         |
| Production System:                         | Rainfed                               |
| Cycle Sowing to maturity (number of days): | 105                                   |
| Potential yield (kg/ha):                   | 1.20                                  |
| Pest Resistance:                           | no                                    |
| Disease Resistance:                        | no                                    |
| Other Stresses:                            |                                       |
| Nutritional Quality:                       |                                       |
|  |                                       |

## **NUTRIENT**

Other Qualities:

20N-60P2O5-30K2O+1.2Zn For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation

Method of

fertilizer application:

When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 100kg/ha of NPK 4-18-13 + 3S +3MgO +6CaO + 0.1B (2 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

1. 150kg/ha of NPK 14-31-0 +9S +1Zn +1B (3

## **Fertilizers**

# Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone.Guinea Savanna.Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 12-30-17+0.7Zn (4 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible. e.g. irrigation, water Conservation harvesting techniques

Method of

Drilling along the row and band placement Seed innoculation is recommended fertilizer application:

Soil

Compost, organic manure, rock phosphate, TSP could be applied

Amendment Water

See "Soil and Water Conservation Techniques" Management

Cropping

Pest Integrated Pest Management

Management

Weed Control: Good agricultural practices (Integrated weed management) and combinations of herbicides

can be adopted. Pre-emergence, early post and post emergence herbicides

Rotation with cereals where applicable Intercropping with maize where applicable. At

least plant in 3 years rotation System:







These recommendations are made possible by the generous support of the American people through Feed the Future, the U.S. Government's Global Hunger and Food Security Initiative. The contents are the responsibility of IFDC and CORAF, and do not necessarily reflect the views of Feed the Future or the United States Government. The data presented was current at the time of publication. Rely on consultation with local authorities when using this information..







bags x 50 kg/ha), Apply at planting







WEST AFRICA AGRO ECOLOGICAL

**70NES** 

## SUB-HUMID, SEMI-**ARID**



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Soybean



CSIR-Favour Favour Local Name Seed Type:

Quantity of seed: 40 kg/ha

Spacing: 60 cm x 5 cm. Drilling is recommended

Grain/Flesh

Color

Suitable Zone of July - August Planting:

Production System

Rainfall

Cream

Cycle Sowing to

maturity (number 115

of days):

Potential yield

(kg/ha):

Pest Resistance: no

Disease

Resistance

Other Stresses:

Resistance to pod shattering (up to 5% shattering), Fairly tolerant to common

soybean pests and diseases

Nutritional

Contains up 43% protein; 18% oil content; Carbohydrate: 39.9%.

Quality:

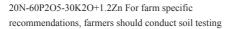
Excellent seed quality for soymilk; High Other Qualities:

and stable yield across many

environments

## NUTRIENT





## organicRecommendation



Method of

fertilizer

When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

application:

## **Fertilizers**



Agro-Ecological Zones Suitable:

Method of fertilizer application

Semi-arid, Sub-humid (Ghana-Transitional

zone,Guinea Savanna,Sudan Savanna)



**Fertilizers** 



Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 150kg/ha of NPK 14-31-0 +9S +1Zn +1B (3 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

planting



1. 100kg/ha of NPK 4-18-13 + 3S +3MgO

+6CaO + 0.1B (2 bags x 50 kg/ha), Apply at

Semi-arid, Sub-humid (Ghana-Transitional zone.Guinea Savanna.Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 12-30-17+0.7Zn (4 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible. e.g. irrigation, water Conservation harvesting techniques

Method of

Drilling along the row and band placement Seed innoculation is recommended fertilizer

application:

Soil Compost, organic manure, rock phosphate, TSP could be applied Amendment

Water

See "Soil and Water Conservation Techniques"

Management

Pest

Integrated Pest Management

Management

Weed Control: Good agricultural practices (Integrated weed management) and combinations of herbicides

can be adopted. Pre-emergence, early post and post emergence herbicides

Cropping

Rotation with cereals where applicable Intercropping with maize where applicable. At

least plant in 3 years rotation System:











WEST AFRICA AGRO ECOLOGICAL 70NES

SUB-HUMID, SEMI-**ARID** 



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Soybean



Jenguma

Name Local

Variety

Name

seed

Seed Type: Inbred line

Quantity of

40 kg/ha 60 cm x 5 cm Spacing:

Cream

July - August

Rainfall

Grain/Flesh

Color

Suitable

Zone of

Planting:

Production

System

Cycle

Sowing to

maturity 110

(number of

days):

Potential

vield

(kg/ha):

Pest

Disease

Resistance:

Resistance to pod shattering (up to 3% Other

2.50

shattering). tolerant to common soybean pests Stresses: and diseases; relatively tolerant to low soil P;

trap-crop for Striga hermonthica

Nutritional Protein content: 38%, Oil content: 14%;

Carbohydrate content: 37%. Quality

Other Excellent seed quality; High and stable yield

across many environments Qualities:

## **NUTRIENT**



20N-60P2O5-30K2O+1.2Zn For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of

When possible Organic manure, Compost, fertilizer Biofortifiers, Biostimulants, Innoculants

application:

## **Fertilizers**



Agro-Ecological Zones Suitable: Semi-arid, Sub-humid (Ghana-Transitional

zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 100kg/ha of NPK 4-18-13 + 3S +3MgO +6CaO + 0.1B (2 bags x 50 kg/ha), Apply at planting

## Fertilizers



## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 150kg/ha of NPK 14-31-0 +9S +1Zn +1B (3 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone.Guinea Savanna.Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 12-30-17+0.7Zn (4 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible. e.g. irrigation, water Conservation harvesting techniques

Method of

Drilling along the row and band placement Seed innoculation is recommended fertilizer application:

Soil

Compost, organic manure, rock phosphate, TSP could be applied

Amendment

Water

See "Soil and Water Conservation Techniques"

Management

Pest

Cropping

Integrated Pest Management Management

Weed Control: Good agricultural practices (Integrated weed management) and combinations of herbicides

can be adopted. Pre-emergence, early post and post emergence herbicides

Rotation with cereals where applicable Intercropping with maize where applicable. At

least plant in 3 years rotation System:











WEST AFRICA AGRO ECOLOGICAL

**70NES** 

## SUB-HUMID, SEMI-**ARID**



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

| Soybean                       | $\odot$   |
|-------------------------------|---|
| Variety Name:                 | Salintuya-I   |
| Local Name:                   |   |
| Seed Type:                    |   |
| Quantity of seed:             | 40 kg/ha  |
| Spacing:                      | 60 cm x 5 cm. Drilling is recommended   |
| Grain/Flesh Color:            | Cream   |
| Suitable Zone of<br>Planting: | July - August   |
| Production System:            | Rainfall  |
| Cycle Sowing to               |   |
| maturity (number of           |   |
| days):                        |   |
| Potential yield               | 2 20  |
| (kg/ha):                      | 2.20  |
| Pest Resistance:              | no  |
| Disease Resistance:           | yes   |
| Other Stresses:               | Tolerance to diseases: tolerant to bacterial pustule and Cercospora leaf spot |
| Nutritional Quality:          |   |
| Other Qualities:              | Excellent seed quality; good trap-crop  |

## **NUTRIENT**

20N-60P2O5-30K2O+1.2Zn For farm specific recommendations, farmers should conduct soil testing

for S. hermonthica

## organicRecommendation

Method of

When possible Organic manure, Compost, fertilizer Biofortifiers, Biostimulants, Innoculants application:

## **Fertilizers**



Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 100kg/ha of NPK 4-18-13 + 3S +3MgO +6CaO + 0.1B (2 bags x 50 kg/ha), Apply at planting

## **Fertilizers**



Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 150kg/ha of NPK 14-31-0 +9S +1Zn +1B (3 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone.Guinea Savanna.Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 12-30-17+0.7Zn (4 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage Conservation is also a recommended land preparation method when possible. e.g. irrigation, water harvesting techniques

Drilling along the row and band placement Seed innoculation is recommended

Method of

fertilizer

application:

Soil

Compost, organic manure, rock phosphate, TSP could be applied

Amendment

Water

See "Soil and Water Conservation Techniques"

Management

Pest

Integrated Pest Management

Management

Weed Control: Good agricultural practices (Integrated weed management) and combinations of herbicides

can be adopted. Pre-emergence, early post and post emergence herbicides

Cropping Rotation with cereals where applicable Intercropping with maize where applicable. At

least plant in 3 years rotation System:













































WEST AFRICA AGRO ECOLOGICAL

**70NES** 

SUB-HUMID, SEMI-**ARID** 



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Soybean



Variety Name: Salintuya-II

40 kg/ha

Local Name Seed Type:

Quantity of seed:

Spacing: 60 cm x 5 cm. Drilling is

recommended

Grain/Flesh Color: Cream

Suitable Zone of

July - August Planting:

Rainfall Production System:

Cycle Sowing to

maturity (number of

days):

Potential yield (kg/ha): 3.20

Pest Resistance:

Disease Resistance:

Tolerant to common sovbean pests Other Stresses:

and diseases

Nutritional Quality:

Excellent seed quality, high and Other Qualities:

stable yield across many

environments

## **NUTRIENT**

20N-60P2O5-30K2O+1.2Zn For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of

fertilizer

When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

application

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 100kg/ha of NPK 4-18-13 + 3S +3MgO +6CaO + 0.1B (2 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

# Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 150kg/ha of NPK 14-31-0 +9S +1Zn +1B (3 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone.Guinea Savanna.Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 12-30-17+0.7Zn (4 bags x 50 kg/ha), Apply at planting

# Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible. e.g. irrigation, water Conservation harvesting techniques

Method of

Drilling along the row and band placement Seed innoculation is recommended fertilizer application:

Soil

Compost, organic manure, rock phosphate, TSP could be applied

Amendment

Water See "Soil and Water Conservation Techniques"

Management

Pest

Integrated Pest Management

Management

Weed Control: Good agricultural practices (Integrated weed management) and combinations of herbicides

can be adopted. Pre-emergence, early post and post emergence herbicides

Cropping Rotation with cereals where applicable Intercropping with maize where applicable. At

least plant in 3 years rotation System:













WEST AFRICA AGRO ECOLOGICAL

**70NES** 

SUB-HUMID, SEMI-**ARID** 



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Soybean



Suong-Pungun Variety Name: Local Name Inbred line Seed Type:

Quantity of seed: 40 kg/ha

Spacing: 60 cm x 5 cm. Drilling is recommended Grain/Flesh

Cream

Color Suitable Zone of

July - August Planting:

Production Rainfall

System

Cycle Sowing to maturity (number 85

of days):

Potential yield

(kg/ha):

Pest Resistance:

Disease

no

no

Resistance

Resistance to pod shatering (less than Other Stresses: 5%); Fairly tolerance to common

soybean pests and diseases

Nutritional

Quality:

Excellent seed quality; Good seed Other Qualities: storability; High and stable yield across

many environment

## NUTRIENT



20N-60P2O5-30K2O+1.2Zn For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of

fertilizer

When possible Organic manure, Compost, Biofortifiers, Biostimulants, Innoculants

application:

## **Fertilizers**

Agro-Ecological Zones Suitable:

Method of fertilizer application

Semi-arid, Sub-humid (Ghana-Transitional

zone,Guinea Savanna,Sudan Savanna)



1. 100kg/ha of NPK 4-18-13 + 3S +3MgO

+6CaO + 0.1B (2 bags x 50 kg/ha), Apply at



**Fertilizers** 



Agro-Ecological Zones Suitable: Semi-arid, Sub-humid (Ghana-Transitional zone,Guinea Savanna,Sudan Savanna)

## Method of fertilizer application

1. 150kg/ha of NPK 14-31-0 +9S +1Zn +1B (3 bags x 50 kg/ha), Apply at planting

## **Fertilizers**

planting

## Agro-Ecological Zones Suitable:

Semi-arid, Sub-humid (Ghana-Transitional zone.Guinea Savanna.Sudan Savanna)

## Method of fertilizer application

1. 200kg/ha of NPK 12-30-17+0.7Zn (4 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible. e.g. irrigation, water Conservation harvesting techniques

Method of

Drilling along the row and band placement Seed innoculation is recommended fertilizer

application:

Soil Compost, organic manure, rock phosphate, TSP could be applied Amendment

Water See "Soil and Water Conservation Techniques"

Management

Pest

Integrated Pest Management

Cropping

Management

Weed Control: Good agricultural practices (Integrated weed management) and combinations of herbicides can be adopted. Pre-emergence, early post and post emergence herbicides

Rotation with cereals where applicable Intercropping with maize where applicable. At

least plant in 3 years rotation

System:









**AII-AEZ** 

WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize LG 501 Variety Name: Local Name Hybrid Seed Type: 16 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows:

25cm; Seeds/hill: 1; Population/ha: 53.333 Orange-yellow; type: Semi-Corné Grain/Flesh Color:

15 April - 15 May, 15 July-15 August

Planting: Production System: Rainfed

Cycle Sowing to

Suitable Zone of

maturity (number of 105

days):

Potential yield

(kg/ha):

Pest Resistance

Disease Resistance: Helminthosporiosis, with rust streak

7.00

Drought resistant Other Stresses:

Nutritional Quality

Other Qualities:

## **NUTRIENT**

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea) For farm specific recommendations, farmers should conduct soil testing

## organicRecommendation



Method of When possible If available add any of the fertilizer following: Organic manure. Compost. application:

Biofortifiers, Biostimulants

## **Fertilizers**



Humid, Semi-arid (Ghana-Rain Forest, Semideciduous forest, Transitional zone)

## Method of fertilizer application

Agro-Ecological Zones Suitable:

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Semideciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 50kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Semideciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 10kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Semideciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



Soil and Water Plough and harrow where applicable, mulching, use of cover crops. Minimum/zero tillage is also a recommended land preparation method when possible

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| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |









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WEST AFRICA AGRO ECOLOGICAL

## SEMI-ARID, HUMID, SUB-HUMID



COUNTRY AGRO ECOLOGICAL ZONES

**RAINFALL VOLUME RANGE 600** MM/YEAR

## Maize Variety Name: CSIR-CRI Tintim Tintim Local Name Hybrid Seed Type: 20 kg/ha Quantity of seed: Spacing: Between Rows: 75cm: Within Rows: 45cm; Seeds/hill: 2; Population/ha: 59.259 White (Flint) Grain/Flesh Color: Suitable Zone of 15 April - 15 May, 15 July-15 August Planting: Production System: Rainfall Cycle Sowing to maturity (number of 110 days): Potential yield 7.90 (kg/ha): Pest Resistance: no Disease Resistance: Moderately tolerant to drought Other Stresses: Nutritional Quality

## **NUTRIENT**

Other Qualities:

90N-60P2O5-60K2O+2.1Zn (Transition, semidecidious and rain forest) 100N-40P2O5-40K2O+2.1Zn (Sudan and Guinea). For farm specific recommendations, farmers should conduct soil testing

Very good for domestic purposes

## organicRecommendation



Method of When possible If available add any of the fertilizer following: Organic manure. Compost. Biofortifiers, Biostimulants application:

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

### Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 275kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (5.5 bags x 50 kg/ha), Apply at planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**

## Agro-Ecological Zones Suitable:

Humid.Semi-arid (Ghana-Rain Forest.Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 100kg/ha of Urea (2 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 1 bag 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after planting

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan

## Method of fertilizer application

- 1. 200kg/ha of NPK 15-20-20 + 0.7Zn (4 bags x 50 kg/ha), Apply at planting
- 2.  $150 \mathrm{kg/ha}$  of Urea (3 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1 bag 5-6 weeks after

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 200kg/ha of NPK 11-22-21 + 5S + 0.7Zn + 0.5B (4 bags x 50 kg/ha), Apply at planting
- 2. 175kg/ha of Urea (3.5 bags x 50 kg/ha), 3-5 weeks after planting or split application; first top dress, 2 bags 3-4 weeks after planting and second top dress 1.5 bag 5-6 weeks after planting

## **Fertilizers**

Recommendation



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 450kg/ha of NPK 23-10-5 + 2MgO + 3S + 0.3Zn (9 bags x 50 kg/ha), Apply 6 bags at planting and 3 bags 4 week after planting
- 2. 50kg/ha of MOP (0.2 bags x 50 kg/ha). At planting (together with the first 6 bags)

## **Fertilizers**



## Agro-Ecological Zones Suitable:

Sub-humid, Semi-arid (Ghana-Guinea Savanna, Sudan Savanna)

## Method of fertilizer application

- 1. 400kg/ha of NPK 20-10-10 + 3S (8 bags x 50 kg/ha), Apply 6 bags at planting and 2 bags 4 week after planting
- 2. 10kg/ha of Urea (1 bags x 50 kg/ha), 6 weeks after planting

## **Fertilizers**





## Agro-Ecological Zones Suitable:

Humid, Semi-arid (Ghana-Rain Forest, Coastal Savanna, Semi-deciduous forest, Transitional zone)

## Method of fertilizer application

1. 300kg/ha of NPK 15-20-20 + 0.7Zn (6 bags x 50 kg/ha), Apply at planting

## Good Agricultural Practices & Management



| Method of fertilizer application: | Side placement for NPK and burying for Urea fertilizers   |
|-----------------------------------|---|
| Soil Amendment:                   | Add organic manure when necessary, Biochar, lime and rock phosphate. Lime, rock phosphate and biochar to reduce soil acidity  |
| Water Management:                 | Use supplementary irrigation where appropriate even during rainfed production. e.g. irrigation, water harvesting techniques   |
| Pest<br>Management                | Scout for insects and apply pesticide (IPM) especially for Fall Army Worms.  Emamectin benzoate or Bacillus thuringiensis (or Bt) rotate chemical to avoid resistance |
| Weed Control:                     | Good agricultural practices (mechanical weeding) and combinations of herbicides can be adopted. Herbicides and GAP  |
| Cropping System:                  | Rotation (maize and legumes on the same field over time is recommended. E.g. rotation, inter-cropping/mixed cropping, Continuous monocropping                         |





