

On-Farm Trial (Soil Science) under Revenue Budget

Trial out Line

Trail Code No: CDB-REV On-Farm Trail 26-27/15, Tha/Ran/Bog/Raj/Jas/Jhe/
Chu/Kus/Dha/Mym/Rang/Ban/Khag

| | | |
|--------------------------------|---|--|
| Experiment | : | Evaluation of Cotton Hybrid Variety Under High Density Planting System with Different Nutrients at Farmers Level |
| Justification | : | To minimize the yielding gape and appropriate fertilizer dose with High Density Planting System (HDPS) between the on-station and on-farm level experiment on high density planting system with different nutrients at farmers level. So, the taken experiment is justified. |
| Objectives | : | To assess the growth and yield performance of cotton hybrid variety under suitable fertilizer dose at farmer's field. |
| Materials and Methods | | |
| Location | : | Thirteen (13) - Thakurgaon, Rangpur, Bogura, Rajshahi, Jashore, Jhenaidha, Chuadanga, Kushtia, Dhaka, Mymensingh, Rangamati, Bandarban and Khagrachari zones. |
| Design | : | Augmented |
| Replication | : | Non-replicated |
| Fertilizer with Spacing | : | 3 (Three) Fertilizer Dose T ₁ : CDB recommended dose of fertilizer (Control) T ₂ : 25% less CDB Recommended dose (75% RDF) T ₃ : 25% more CDB Recommended dose (125% RDF) |
| Plot size | : | 20 m × 20 m |

Treatment and Plot Allocation

| Name of the Treatment | 3 (Three) Fertilizer Dose | Allocation of plots to treatments |
|------------------------------|--|--|
| T₁ | CDB recommended dose of fertilizer (Control) | 1 |
| T₂ | 25% less CDB Recommended dose (75% RDF) | 2 |
| T₃ | 25% more CDB Recommended dose (125% RDF) | 3 |

On-Farm Trial (Soil Science) under Revenue Budget

Field Layout of Fertilizer with HDPS

| Plot no-1 | Plot no- 2 | Plot no- 3 |
|--|---|--|
| 20 m x 20 m | 20 m x 20 m | 20 m x 20 m |
| T₁: CDB recommended dose of fertilizer (Control) | T₂: 25% less CDB Recommended dose (75% RDF) | T₃: 25% more CDB Recommended dose (125% RDF) |

Variety : White Gold-2

Sowing date : July, 2026

Spacing : 90 cm x 35 cm (Control)
70 cm x 10 cm

Fertilizer application rate kg per plot (400 m²)

CDB Recommendation Dose

| Fertilizer | To applied plot (kg) | Basal application (kg) | 1 st top dress after 1 st flowering (kg) | 2 nd top dress after 10 days of 1 st top dressing (kg) |
|--------------------|----------------------|------------------------|--|--|
| Urea | 10.00 | | 5.00 | 5.00 |
| TSP | 10.50 | 10.50 | | |
| MOP | 15.00 | 5.00 | 5.00 | 5.00 |
| Gypsum | 5.40 | 5.40 | | |
| Zinc sulphate | 0.60 | 0.60 | | |
| Borax | 0.90 | 0.90 | | |
| Mag. Sulphate | 0.60 | 0.60 | | |
| Organic fertilizer | 40.00 | 40.00 | | |

25% less CDB Recommended dose (75% RDF)

| Fertilizer | To applied plot (kg) | Basal application (kg) | 1 st top dress after 1 st flowering (kg) | 2 nd top dress after 10 days of 1 st top dressing (kg) |
|--------------------|----------------------|------------------------|--|--|
| Urea | 7.50 | | 3.75 | 3.75 |
| TSP | 7.88 | 7.88 | | |
| MOP | 11.25 | 3.75 | 3.75 | 3.75 |
| Gypsum | 4.05 | 4.05 | | |
| Zinc sulphate | 0.45 | 0.45 | | |
| Borax | 0.68 | 0.68 | | |
| Mag. Sulphate | 0.45 | 0.45 | | |
| Organic fertilizer | 30.00 | 30.00 | | |

On-Farm Trial (Soil Science) under Revenue Budget

25% more CDB Recommended dose (125% RDF)

| Fertilizer | To applied plot (kg) | Basal application (kg) | 1 st top dress after 1 st flowering (kg) | 2 nd top dress after 10 days of 1 st top dressing (kg) |
|--------------------|----------------------|------------------------|--|--|
| Urea | 12.50 | | 6.25 | 6.25 |
| TSP | 13.13 | 13.13 | | |
| MOP | 18.75 | 6.25 | 6.25 | 6.25 |
| Gypsum | 6.75 | 6.75 | | |
| Zinc sulphate | 0.75 | 0.75 | | |
| Borax | 1.13 | 1.13 | | |
| Mag. Sulphate | 0.75 | 0.75 | | |
| Organic fertilizer | 50.00 | 50.00 | | |

Weeding: As per general activity schedule.

Pesticide: As necessary.

A. Agronomic data

Data collected on : Number of days to 1st flower, Number of days to 1st boll split, Plant height (cm), Number of bolls per plant, Single boll weight (g), Weight of seed cotton (kg), Number of Plant population at harvest.

Date of Initiation : July 2026

Date of Completion : February 2027

Investigators:

PI: Dr. Md. Tasdiqur Rahman, IPS

CI: Dr. Khalequzzaman, SSO

Dr. M. Z. I. Talukder, CA

M. A. Wahab, CA

M. Salauddin, CA

Concern DD, CCDO & CDO

On-Farm Trial (Soil Science) under Revenue Budget

Field Dairy

Date of ploughing :
Date of marking out :
Date of sowing :
Date of emergence :
Date of gap filling :
Date of thinning :
Weeding :

| Time of weeding | Date | Method |
|-----------------|------|--------|
| 1 st | | |
| 2 nd | | |
| 3 rd | | |

Fertilizer application:

| Date | Kind of fertilizer | Quantity | Method |
|------|--------------------|----------|--------|
| | | | |
| | | | |
| | | | |
| | | | |

Pesticide application:

| Date | Kind of pesticide | Quantity | Method |
|------|-------------------|----------|--------|
| | | | |
| | | | |
| | | | |
| | | | |

Irrigation:

| Date | Method |
|------|--------|
| | |
| | |

Other Observation:

| |
|--|
| |
|--|

On-Farm Trial (Soil Science) under Revenue Budget

Record here details of other management practices (i.e., fertilizer application, weeding, thinning, insecticide spray, irrigation, drainage, herbicide application etc.), incidence of pest and diseases, unusual climatic factors and comments of visitors/ investigators.

| Date | Observation | Name / Title |
|------|-------------|--------------|
| | | |

On-Farm Trial (Soil Science) under Revenue Budget

Plot Data Sheet

Code:

Record of: **Date of first flowering**..... in..... (Units)

Recorded by on Date

| Plot no. | Date of first flowering | Required days of first flowering |
|----------|-------------------------|----------------------------------|
| 1 | | |
| 2 | | |
| 3 | | |

Plot Data Sheet

Code:

Record of: **Date of first boll split**..... in..... (Units)

Recorded by on Date

| Plot no. | Date of first boll split | Days to first boll split |
|----------|--------------------------|--------------------------|
| 1 | | |
| 2 | | |
| 3 | | |

Plot Data Sheet

Code:

Record of: **Number of Bolls/ plant**

Recorded by on..... Date

| Plot no. | Plant number | | | | | | | | | | Total | Mean |
|----------|--------------|---|---|---|---|---|---|---|---|----|-------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |

Plot Data Sheet

Code:

Record of: **Single boll weight**..... in..... (Units)

Recorded by on..... Date.....

| Plot no. | 10 boll weight (g) | Mean boll weight (g) |
|----------|--------------------|----------------------|
| 1 | | |
| 2 | | |
| 3 | | |

On-Farm Trial (Soil Science) under Revenue Budget

Plot Data Sheet

Code:

Record of: **Number of Plant population at harvest**..... in.....
(Units)

Recorded by..... on Date

| Plot no. | No. of Plants/plot | No. of Plants/ha |
|----------|--------------------|------------------|
| 1 | | |
| 2 | | |
| 3 | | |

Plot Data Sheet

Code:

Record of: **Plant height (cm) at harvest**..... in..... (Units)

Recorded by on Date.....

| Plot no. | Plant number | | | | | | | | | | Total | Mean |
|----------|--------------|---|---|---|---|---|---|---|---|----|-------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |

Plot Data Sheet

Code:

Record of: **Weight of seed cotton (kg)**..... in..... (Units)

Recorded by on Date

| Plot no. | Weight of Bag (kg) | Number and date of picking and weight of seed cotton (kg) | | | | | | Total (kg) | Yield Kg/ha |
|----------|--------------------|---|------------------------------|------------------------------|------------------------------|------------------------------|----------------------|------------|-------------|
| | | 1 st picking date | 2 nd picking date | 3 rd picking date | 4 th picking date | 5 th picking date | Days of 85 % harvest | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |