



ACHIEVEMENT OF *RABI* (2023-24) (OFTs)



ASSESSMENT OF BIO-FORTIFIED SWEET POTATO VARIETIES FOR NUTRITIONAL SECURITY



Season – *Rabi* (2023-24)

No. of beneficiaries -7

Area- 0.42 ha

Village- Lekidiguda

| FP | TO ₁ | TO_2 |
|-----------------------------------|---|---|
| Kisan | Bhu Sona (OFSP) | Bhu Krishna (PFSP) |
| (Non- biofortified variety) | rvarienes inner vield 19 A I/na dry maner 177 - 79% i | High anthocyanin (90mg/100gm), tuber yield - 18 t/ha, dry matter - 24.5 – 25.5%, starch - 19.5%, total sugar: 1.9–2.2% and salinity stress tolerant, 105-100 days |

$P^{H} - 5.4$, EC - 0.1 ds/m, O.C - 0.3 % (L), Avail (N - 235 kg/ha, P - 16 kg/ha, K - 220 kg/ha)







| Technology | | Yield attributes | | | | % | Cost of | Gross | Net | BC |
|-----------------|-------------|------------------|-------------|-------------|--------|----------|-------------|----------|----------|-------|
| options | Vine length | Length | No. of | Avg. tuber | Yield | change | cultivation | return | return | ratio |
| | at 60 DAP | of tuber | tuber/plant | yield/plant | (q/ha) | in yield | (Rs./ha) | (Rs/ha) | (Rs./ha) | |
| | (cm) | (cm) | (No.) | (kg) | | | | | | |
| FP | 139.65 | 17.46 | 2.45 | 258.95 | 135.4 | | 36000 | 1,35,400 | 99,400 | 3.76 |
| TO ₁ | 213.5 | 15.98 | 2.44 | 262.7 | 148.7 | 9.8 | 38000 | 1,48,700 | 1,10,700 | 3.91 |
| TO ₂ | 198.7 | 13.85 | 3.22 | 252.8 | 144.9 | 7.0 | 38000 | 1,44,900 | 1,06,900 | 3.81 |
| CD (0.05) | 15.90 | 2.84 | 0.35 NS | 17.87 | 9.88 | | | | | |

Recommendation: The sweet potato variety Bhu Sona performed well with higher yield and good marketability.





ACHIEVEMENT KHARIF, 2024 (OFTs)



ASSESSMENT ON APICAL ROOTED CUTTINGS (ARC) OF POTATO



Season – *Kharif*, 2024 **No. of beneficiaries** – **07 Area-** 1 ha **Village** – Gunthaput, Hadiguda

| FP | TO ₁ | TO_2 |
|------------------------------|---------------------------------------|---------------------------------------|
| Cultivation of potato | Planting of Apical rooted cuttings of | Planting of Apical rooted cuttings of |
| var. Kufri Jyoti | potato var. Kufri Karan | potato var. Kufri Himalini |







| Results | Plant height (cm) | No. of branches/ plant | No. of tubers/plan t | Late blight incidence (PDI) (%) | Yield (q /ha) | % change in yield | Cost of cultivation (Rs/ha) | Gross return (Rs/ha) | Net return (Rs/ha) | в:С |
|-----------------|-------------------------|------------------------------|----------------------------|---------------------------------|--------------------|-------------------|-----------------------------|----------------------------|-----------------------|------|
| FP | 49.56 | 5.24 | 6.49 | 14.8 | 158.2 | | 146450 | 316400 | 169950 | 2.16 |
| TO ₁ | 55.20 | 6.30 | 8.20 | 6.7 | 182.9 | 15.6 | 150600 | 365800 | 215200 | 2.42 |
| TO ₂ | 62.30 | 7.16 | 9.36 | 9.6 | 189.5 | 19.7 | 150600 | 379000 | 228400 | 2.51 |
| CD(0.05) | 3.5 | 0.8 | 0.9 | 1.2 | 12.6 | | | | | |

Farmers' feedback: Farmers appreciated the performance ARC of K. Himalini variety on the basis of higher yield potential and moderately resistant to late blight disease.



ASSESSMENT OF FINGER MILLET VARIETIES



Season - Kharif, 2024

No. of beneficiaries – 7

Area- 0.4 ha

| FP | TO_1 | TO_2 |
|-----------------------------|------------------------------------|---------------------------------|
| Local Ragi var. Budi Mandia | Finger Millet var. Arjuna, OEB-526 | Finger Millet var. Kalinga -601 |









| Technology | Yield attributes | | Yield | Cost of | Gross | Net return | BC |
|-----------------|---------------------|-----------------------------|--------|-------------------------|-------------------|------------|-------|
| options | No. of EBT/plant | Fingers / Ear head (No.) | (q/ha) | cultivation (Rs./ha) | return (Rs/ha) | (Rs./ha) | ratio |
| FP | 1.6 | 5.2 | 11.8 | 31600 | 50622 | 19022 | 1.60 |
| TO ₁ | 1.8 | 5.9 | 13.4 | 31600 | 57486 | 25886 | 1.82 |
| TO_2 | 1.9 | 6.2 | 13.9 | 31600 | 59631 | 28031 | 1.89 |
| CD(0.05) | 0.24 | 0.56 | 1.2 | | | | |

Recomendation: Kalinga - 601 was found superior than OEB-526 and Budi mandia in comparison to yield attributes. .



ASSESSMENT OF LITTLE MILLET VARIETIES



Season – Kharif, 2024

No. of beneficiaries – 7

Area- 0.4 ha

| FP | TO ₁ | TO_2 |
|-------------------------------|----------------------------|----------------------------|
| Local little millet var. Sana | Little Millet var. OLM 208 | Little Millet var. Kalinga |
| Suan | | suan - 217 |







| Technology option | No. of EBT/plant | Yield (q/ha) | Cost of cultivation (Rs./ha) | Gross return (Rs/ha) | Net return (Rs./ha) | BC ratio |
|-------------------|---------------------|-----------------|------------------------------|-------------------------|------------------------|----------|
| FP | 3.2 | 9.68 | 30100 | 48400 | 18300 | 1.61 |
| TO ₁ | 3.5 | 10.62 | 30100 | 53100 | 23000 | 1.76 |
| TO ₂ | 4.1 | 12.38 | 30100 | 61900 | 31800 | 2.06 |
| CD(0.05) | 0.36 | 0.71 | | | | |

Recomendation: Kalinga Suan -217 was found superior than OLM -208 and Sana Suan in camparison to yield.



ASSESSMENT OF EFFECTIVENESS OF DIFFERENT EXTENSION METHODS TO ACCESS INFORMATION ON RICE PRODUCTION



Season - Kharif, 2024

No. of beneficiaries - 30

Village- Gunthaput, Lekidiguda, Missingguda

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Farmers getting
information from peer
group, input dealers
extension
functionaries, mass
media and KMA

TO₁

Delivering need based technology through video lecture followed by focus group discussion along with traditional existing extension methods would provide need based information, skill and objective clarification through FGD, along with traditional existing mechanism of transfer of technology.

TO_2

Providing timely & need based infformation to farmers regarding situation specific rice varities, crop management, farm machinaries, nutrient and pest management, post harvest management etc. through rice Xpert App along with traditional existing mechanism of transfer of technology.

FP + using of "rice Xpert" (TO2) APP performed better than >TO1 > FP







| Observation parameter (farmers' opinion) | percentage (%) | FP | TO ₁ | TO ₂ |
|---|----------------------------|-----------------|------------------|-----------------|
| Timely availability/delivery of information | % | 43.33 | 73.33 | 76.67 |
| Suitability of technology | % | 40.00 | 66.67 | 73.33 |
| Easy handling of extension method | % | 36.67 | 63.33 | 70.00 |
| Retantion and retrival | % | 33.33 | 56.67 | 66.67 |
| Change in knowledge | % | 46.67 | 63.33 | 76.67 |
| User friendly extension method | % | 43.33 | 56.54 | 82.24 |
| performance & recommendation | ED + using of "vice Vnout" | 2(TO2) ADD nove | Faumad hattau th | on >TO1 > ED |