**Standard Operating Procedures (SOP’s) and Critical Control Points in Seedling nursery**

Pre-nursery bed preparation steps

|  |  |  |
| --- | --- | --- |
| s/n | Standard Operating Procedures | Critical Control Points |
| 1 | Use top-soils, sterilize if available | Ensure good soil is used |
| 2 | Sieve the top soil to remove unwanted materials | Use appropriate sieve for this activity |
| 3 | Fill the soils into jiffy pots and arrange them orderly in uniform numbers of row | The jiffy pot must be straight and properly arranged for ease of counting and inspection |
| 4 | Print the barcode labels appropriately and sow according to individual families (each family will carry 1big peg with barcode label and a small peg | Ensure that every family is well labelled, and label appropriately placed (confirm the seed list with the information on the pegs) |
| 5 | Sow at depth of 1-2cm to ensure proper germination | Ensure that seeds sown are not too shallow nor too deep |
| 6 | Appropriate fencing to prevent interference from animal’s rodents and crickets | Fencing should be properly done  |
| 7 | Watering of the seeds sowed must be done in the morning and evening | Ensure watering is done twice everyday (morning and evening) |
| 8 | Score for germination as soon as seedling emerge on daily basis using fieldbook | Supervisor /technicians should take note of germination count |
| 9 | Transplanting should be done when seedlings are about 15cm tall or 8 weeks | Adhere to transplanting pattern and plan  |
| 10 | Avoid mixtures by carrying families on separate trays | Avoid mixtures in transplanting |
| 11 | Use cassavabase to get the seed list and track the germination count | Proper naming of individual families |

**Seedling Nursey Steps**

|  |  |  |
| --- | --- | --- |
| s/n | Standard Operating Procedures | Critical Control Points |
| 1 | Marking of seedling nursery block: 20m; spacing: 1m x 0.25m; 80 seedlings per row | Supervisor should make sure marking of the field is properly done  |
| 2 | Water the seedlings transplanting or before moving them to the field  | Care must be taken to ensure seedlings are not damaged while conveying to the field |
| 3 | Move the seedling exactly the way it was arranged on the beds to the field  | Make sure the seedlings do not fall out during transporting to the field |
| 4 | Transplant seedlings in the morning or evening hours and water or irrigate immediately after planting | Make reliable arrangements for irrigation or watering |
| 5 | Plant in serpentine way and tag according to each family using Barcode labels generated from cassavabase and bamboo pegs | Ensure labels and bamboo pegs are in correct orientation  |
| 6 | Use appropriate checks to border the seedlings e.g. TMEB117 | Supervisor/technician in charge should ensure the checks are planted as designed  |
| 7 | Data on transplanted seedlings must be well documented (tablet etc) and uploaded to cassavabase | Data must be captured by competent personnel  |
| 8 | Proper field maintenance after transplanting  | Ensure field is well maintained |
| 9 | Erect sign board to indicate information on the trial  | Sign board must display appropriate trial information  |
| 10 | Collect trait data using fieldbook using barcode labels as identifiers | Ensure the tracking of sample identity  |