

A Breakthrough in Yam Multiplication Using Leaf-bud Cuttings



Minitubers of < 10 g (Foundation seed)

Starting with a minituber weighing less than 10 g, about 300 seed tubers can be generated after eight months, weighing approximately 25 kg. This achievement is possible through a process where the first harvest of vines from the mother plants yields about 160 leaf-bud cuttings (LBCs). These are planted directly in the field and produce up to 20 kg (120 g/seed). A second harvest from the same mother plant gives an average of 90 LBCs, which will yield about 5 kg (50 g/seed). A third round of cuttings, gives about 50 LBCs that generate about 300 g (6 g/seed). Finally, tubers are harvested from the mother plants weighing up to 300 g each. The process is shown in the diagram.



Healthy mother plants in the screen house.

1st cutting of vines:
8-12 weeks after planting (WAP)

2nd cutting:
12-16 WAP
3rd cutting: 20-22 WAP



Leaf-bud cuttings



Tubers from mother plants after 8 months (up to 300 g)



LBCs growing in the screen house (6 WAP)



Freshly planted LBCs in the field



Established LBCs in the field 12 WAP



Tubers (< 10 g) harvested from screen house LBCs after 12 WAP



Tubers (100 – 600 g) harvested from field LBCs after 4 – 5 months

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Contact: Email: B.Aighewi@cgiar.org