

Table 5.7 Step by step worksheet for calculating your sweetpotato planting material

No. of cuttings required per household:

200

Planting spacing = no. of cuttings/ sq m:

50

Level of multiplication	Proposed size of each multiplication plot (sqm)	Months working backwards	Target no. of households and timing (200 cuttings/hh)	No. of cuttings of variety B	Area required (50pp/sqm)
Farmer root production		Nov-13	100,000	20,000,000 Step 1. = total no. of cuttings needed = target no. hh x no. cuttings per hh	
		Oct-13			
		Sep-13			
		Aug-13			
TMS	100	Jul-13		1,000,000 Step 2. =no. of cuttings reqd at TMS level = no. cuttings reqd by farmers / multiplication rate at TMS level	20,000 Step 3. = area reqd at TMS level = no. of cuttings required/ planting density of cuttings
		Jun-13			
		May-13			
		Apr-13			
SMS	750	Mar-13		33,333 Step 5. =no. of cuttings reqd at SMS level =no. cuttings reqd by TMS level / multiplication rate at SMS level	667 Step 6. =area reqd at SMS level=no. of cuttings reqd at SMS level/ planting density of cuttings
		Feb-13			
		Jan-13			
		Dec-12			
PMS		Nov-12		833 Step 8. =no. of cuttings reqd at PMS level =no. cuttings reqd by SMS level / multiplication rate at PMS level =E14/H19	16.7 Step 9. =area reqd at PMS level =no. of cuttings reqd at PMS level/ planting density of cuttings =E19/D2

You need to know the following figures in advance (highlighted cells):

No. of cuttings required per household

200

Planting spacing = no. of cuttings/ sq m

50

Proposed size of each TMS multiplication (sq m)

100

Proposed size of each SMS multiplication (sq m)	750
Multiplication rate in a 4 month period at TMS level	20
Multiplication rate in a 4 month period at SMS level	30
Multiplication rate in a 4 month period at PMS level	40

Note: this worksheet:

- does not account for any wastage factor,
- assumes that all PMS goes to SMS which goes to TMS
- assumes a multiplication rate of 20 at TMS level in 4 months (2 cycles but lower RMT as under farm

multiplication strategy

No. of multipliers needed	Multiplication rate in a 4 month period
200 Step 4. = no. of multipliers needed = total TMS area reqd/ size of each TMS plot	20
0.9 Step 7. = no. of multipliers needed =total SMS area reqd/ size of each SMS plots	30
	40

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