

# TILLERING IN SSI – EMERGENCE, FACTORS AFFECTING, CONSTRAINTS AND SOLUTIONS

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## TILLERING PER GERMINATED BUD (CLUMP)

Method	Approx buds planted /ha	Germi nation %	Germi nants / bud	Millable canes / ha	Tillers / bud			
SSI	10,000	-	-	1,20,000	12.0			
Conventional								
Tropical	75,000	50	37,500	80,000	2.3			
Sub tropical	1,00,000	40	40,000	1,00,000	2.5			



### SYNCHRONOUS TILLERING IN SSI

Germination phase	Conventional	SSI
	30days	10 days
	Non-synchronous	Synchronous Bet. & within clumps
Benefits		
<b>Recovery Increase</b>		Atlest 0.2 units
Extra sugar output (5000 tcd 200 days 10000 ha )		2000 tonnes (5 crores in a season)















#### **45 DAYS OLD SEEDLING**

SIX COMPRESSED INTERNODES THAT WOULD GIVE TILLERS NORMAL INTERNODES THAT WOULD NOT GIVE TILLERS

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#### 58 DAYS OLD SETTLING (LEAVES REMOVED)

MOTHER SHOOT

NORMAL INTERNODE PORTION ONE TILLER

THREE TILLERS ABOUT TO ARISE







# **Tillering Potential in SSI**

Sprouting	Mother shoot	Primary tillers	Secondary tillers	Total No. of Tillers
All six	1	6	6 x 6 = 36	43
Only four	1	4	4 x 4 = 16 4 x 3 = 12	21 17
Only three	1	3	$3 \times 3 = 9$	15



Phyllochron





Phyllochron





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Phyllochron





Phyllochron





Phyllochron





Phyllochron









# Clump from 20 days old seedling

Max. Tillers - 28 per clump Av. tillers - 12 per clump

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