

ADAPTABILITY OF PROMISING VARIETIES/CLONES IN FEBRUARY/SEPTEMBER PLANTATION IN PUNJAB

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NEED

Sowing of recently evolved high cane yielding varieties/clones can increase sugar recovery of mills and cane yield of the growers

Materials and methods

Row spacing:	2.5 feet
NPK:	168-112-112 kg/ha
Seed rate:	50000 TBS/ha
Weed control:	Ametryn + Atrazine @ 2.5 kg/ha
Insect control:	20 kg Fipronil/ha at sowing 20 kg Fipronil/ha at 45 DAS 40 kg Fipronil/ha at 90 DAS
Sept 2013	3 Trials
Feb-March 2014	12 Trials

Promising clones / varieties

Promising Clones (8)	Approved Varieties as Check (4)
S2003 US-127 S2006 US-272 S2006 US-469 S2003 US-633 S2006 US-658 S2003-US-704 S2003 US-778 S2008 FD-19	HSF-240 CPF-246 CPF-247 CPF-248

September – 2013 Planting

Sr #	Locations	Varieties
1.	Chak No. 111/GB, Jaranwala	S2003 US-127, S2003 US-633, S2003 US-778, S2003-US-704, S2006 US-272, S2006 US-469, S2006 US-658, S2008 FD-19, HSF-240, CPF-246, CPF-247 and CPF-248
2.	Kadarpur Ran, Multan	-do-
3.	Moza Mangatt, M.B. Din	-do-

Feb-March – 2014 Planting

Sr #	Locations	Varieties
1.	Chak No. 323/EB, Burewala	S2003 US-127, S2003 US-633, S2003 US-778, S2003-US-704, S2006 US-272, S2006 US-469, S2006 US-658, S2008 FD-19, HSF-240, CPF-246, CPF-247 and CPF-248
2.	Kot Panjeet, Sheikhpura	-do-
3.	Kot Addu, Muzaffargarh	-do-
4.	Rajanpur	-do-
5.	Chak No. 247/RB, Faisalabad	-do-
6.	Lalian, Chiniot	-do-
7.	Chak No. 130/TDA, Layyah	-do-
8.	Chanar SM Mill Farm, Faisalabad	-do-
9.	Moza Karyal, Kasur	-do-
10.	Chak No. 57, Kot Allah Baksh, Radah Kurishan, Kasur	-do-
11.	Chak No. 90/5-R, Haroonabad	-do-
12.	Mianwala	-do-

Results and discussion

September – 2013 performance

Sr. #.	Varieties	Germination %	Tillers per plant	No. of canes (000/ha)	Cane yield (t/ha)	Sugar recovery (%)	Sugar yield (t/ha)
1.	HSF-240	43.26 c	1.42 h	110.38 f	101.55 f	11.09	11.26 d
2.	CPF-246	47.20 b	1.56 g	115.00 e	133.75 bc	12.08	16.16 ab
3.	CPF-247	48.64 a	1.72 e	116.20 e	115.20 e	12.15	14.00 bcd
4.	CPF-248	42.31 c	1.83 c	112.99 ef	112.99 e	12.10	13.67 bcd
5.	S2003-US-127	41.23 d	1.35 i	121.47 d	136.05 b	12.25	16.67 ab

6.	S2003-US-633	35.55 f	1.95 a	135.57 b	113.73 e	13.85	15.75 ab
7.	S2003-US-778	29.78 i	1.65 f	124.75 cd	99.93 f	11.60	11.59 cd
8.	S2003-US-704	39.87 e	1.89 b	127.80 c	128.80 bc	12.45	16.04 ab
9.	S2006-US-272	47.56 b	1.78 d	125.24 cd	118.33 de	11.28	13.35 bcd
10.	S2006-US-469	34.19 g	1.65 f	132.84 b	126.20 cd	11.89	15.01 bc
11.	S2006-US-658	47.30 b	1.39 h	125.11 cd	158.83 a	12.01	19.08 a
12.	S2008-FD-19	32.33 h	1.95 a	150.10 a	136.99 b	12.05	16.46 ab
LSD (0.05)		1.0496	0.0365	4.3673	7.9598	-	3.6400

Feb March – 2014 performance:

Sr. #.	Varieties	Germination %	Tillers per plant	No. of canes (000/ha)	Cane yield (t/ha)	Sugar recovery (%)	Sugar yield (t/ha)
1.	HSF-240	40.23 ab	1.35 ab	106.90 g	99.60 f	11.01	10.97 g
2.	CPF-246	44.09 a	1.49 ab	111.52 efg	131.80 b	11.98	15.79 bc
3.	CPF-247	45.67 a	1.62 ab	112.72 efg	113.25 de	12.07	13.67 cdef
4.	CPF-248	39.12 ab	1.73 ab	109.51 fg	111.04 c	12.01	13.34 defg
5.	S2003-US-127	38.15 ab	1.27 b	117.99 def	134.10 b	12.19	16.35 ab
6.	S2003-US-633	32.49 bc	1.87 a	132.09 b	111.78 c	13.79	15.42 bcde

7.	S2003-US-778	26.84 cd	1.58 ab	121.27 cdef	97.98 f	11.53	11.30 fg
8.	S2003-US-704	36.99 abc	1.81 ab	124.32 bcd	126.85 c	12.37	15.69 bcd
9.	S2006-US-272	44.81 a	1.68 ab	121.76 bcde	116.38 d	11.21	13.05 efg
10.	S2006-US-469	31.58 bc	1.54 ab	129.36 bc	124.25 c	11.91	14.80 bcde
11.	S2006-US-658	44.39 a	1.31 ab	121.63 bcde	156.88 a	11.98	18.79 a
12.	S2008-FD-19	29.56 cd	1.87 a	146.62 a	134.64 b	11.99	16.14 b
LSD (0.05)		10.429	0.5914	10.766	3.3347	-	2.4405

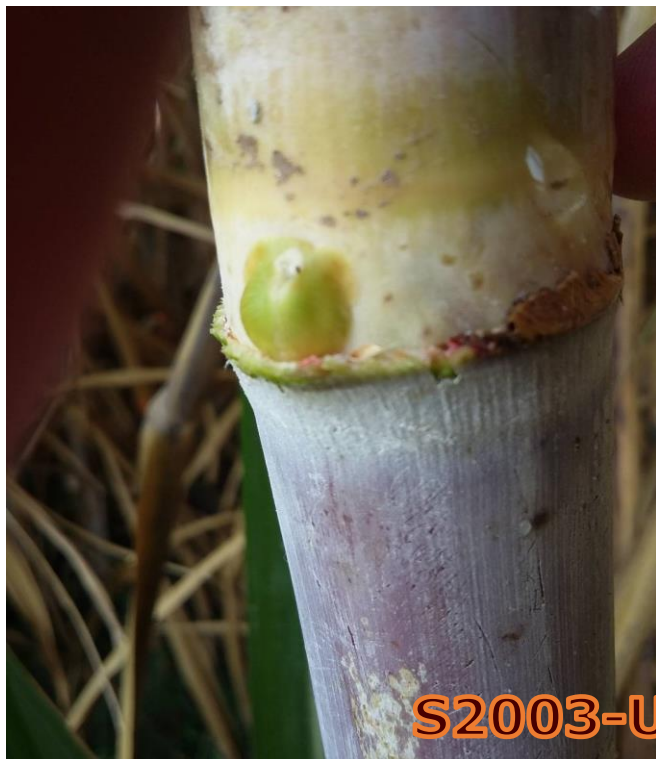
Comparison between autumn vs. spring sowing

	Varieties	Sept 2013	Feb-Mar 2014	% Diff.	Sept 2013	Feb-Mar 2014	% Diff.	Sept 2013	Feb-Mar 2014	% Diff.
Sr. #.		Cane yield (t/ha)	Cane yield (t/ha)		Sugar recovery (%)	Sugar recovery (%)		Sugar yield (t/ha)	Sugar yield (t/ha)	
1.	HSF-240	101.55	99.60	1.92	11.09	11.01	0.72	11.26	10.97	2.58
2.	CPF-246	133.75	131.80	1.46	12.08	11.98	0.83	16.16	15.79	2.29
3.	CPF-247	115.20	113.25	1.69	12.15	12.07	0.66	14.00	13.67	2.36
4.	CPF-248	112.99	111.04	1.73	12.10	12.01	0.74	13.67	13.34	2.41
5.	S2003-US-127	136.05	134.10	1.43	12.25	12.19	0.49	16.67	16.35	1.92
6.	S2003-US-633	113.73	111.78	1.71	13.85	13.79	0.43	15.75	15.42	2.10

7.	S2003-US-778	99.93	97.98	1.95	11.60	11.53	0.60	11.59	11.30	2.50
8.	S2003-US-704	128.80	126.85	1.51	12.45	12.37	0.64	16.04	15.69	2.18
9.	S2006-US-272	118.33	116.38	1.65	11.28	11.21	0.62	13.35	13.05	2.25
10.	S2006-US-469	126.20	124.25	1.55	11.89	11.91	- 0.17	15.01	14.80	1.40
11.	S2006-US-658	158.83	156.88	1.23	12.01	11.98	0.25	19.08	18.79	1.52
12.	S2008-FD-19	136.99	134.64	1.72	12.05	11.99	0.50	16.46	16.14	1.94



S2003-US-127



S2003-US-704



S2006-US-658

