

12(Y) x BFC1

Improved Crossbreed for Eastern & North Eastern Zone

Comparative Performance 12(Y) x BFC1 & Nistari x SK6.7

Trait	12(Y) x BFC1	Nistari x SK 6.7	Improve (%)
Shell (%)	19.55	17.54	11.46
Shell Wt. (g)	0.336	0.277	21.30
Cocoon Wt. (g)	1.720	1.579	08.93
Yield/ 100 dfls (kg)	63.12	51.54	22.47
Survival (%)	94 - 96	90 - 92	04.44
Fecundity	500 - 550	400 - 450	25.00
Neatness	84 - 86	78 - 80	07.69
Raw Silk (%)	12.60	11.00	14.55
Reelability (%)	82.0	71.0	15.49
Rendita	8 - 9	9 - 10	- 12.50
Filament Length (m)	797	704	13.21

Salient Features 12(Y) x BFC1

- Hardy & Productive Hybrid with qualitative silk
- Easy Rearing in all the Seasons
- Plain Larvae
- High Cocoon Shell (up to 20%)
- Cocoon Yield: >60kg/ 100 dfls
- Better Silk Neatness
- Filament Length: 750-800m
- Rendita: 8-9
- Reelability: 82-86%
- Raw silk: 12.60
- Neatness: 84-86



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The plains of tropical Eastern & North Eastern zone including West Bengal are characterized by variable climatic conditions. High yielding and high quality silkworm breeds/hybrids can not tolerate the adverse climatic conditions. This constraint compels predominant usage of Nistari x BV hybrids by the farmers despite the low cocoon productivity (45-50 kg/100 dfls).

A new multivoltine breed 12(Y) with high shell & neatness was developed in 2016. 12(Y) x BFC1 (12Y x BCon1.4) was identified as promising hybrid for authorization trial on the basis of on-farm trials (2017-19) in West Bengal, Jharkhand, Odisha and NE states.

12Y x B.Con1.4 exhibited consistent performance with regard to cocoon yield potential (15-19% improvement) and other economic traits. Male component of the hybrid combination was altered because of low shell content (15-16%) in BCon1.4 with high shell (18%) breed, BFC1. 12Y x BFC1 exhibited 18-20% shell ratio with better yields (56-65 kg/100 dfls). Central Silk Board's Hybrid Authorization Committee recommended the Improved Crossbreed, 12Y x BFC1 for authorization trials in Eastern and North Eastern India.

Performance of 12(Y) x BCon 1.4 - On Farm Trial (2017-19)

Place/ Hybrid/ Trait		Birbhum	Murshidabad	Malda	West Bengal	Jharkhand	Jorhat	Koraput	Mean
Nistari x SK 6.7 (Control)	Shell (%)	15.33	15.56	15.45	15.43	14.61	16.16	15.19	15.39
	Shell Wt. (g)	0.223	0.210	0.229	0.221	0.210	0.222	0.255	0.227
	Cocoon Wt. (g)	1.458	1.352	1.485	1.432	1.437	1.349	1.681	1.475
	Yield/100 dfls (kg)	46.40	47.00	46.58	46.66	50.76	41.75	55.56	48.68
12(Y) x BCon 1.4	Shell (%)	18.052	17.23	17.03	17.25 (11.79%)	16.01	18.11	16.84	16.98 (10.33%)
	Shell Wt. (g)	0.289	0.248	0.288	0.275 (24.43%)	0.240	0.240	0.272	0.257 (13.22%)
	Cocoon Wt. (g)	1.601	1.486	1.694	1.594 (11.31%)	1.499	1.357	1.613	1.512 (2.5%)
	Yield/100 dfls (kg)	57.37	55.53	54.22	55.74 (19.45%)	56.09	52.52	57.21	55.39 (13.78%)