

COMPARISON OF FIBRE PROPERTIES



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**Extracts from Dr. Shukla's Keynote Address delivered
at the Value Creation & Market Competitiveness
with Kasturi Cotton session held at SIMA, Coimbatore
on 5th November 2025.**

User Perspective: From Spinner to End Buyer

SPINNER'S NEED: Consistency In Fibre Quality, Low Contamination, Minimal Neps (Seed cost Neps)

PLACE	Total Nep Cnt	Nep Mean Size	Fib Nep Cnt	Fib.Nep Mean Size	SC Neps Cnt	SC Nep Mean Size	Lw	Lw Cv	SFC W	UQL W	Ln	Ln Cv	SFC N	5% LN	Fine ness	Matur ity	IFC	Trash Range
BRAZILIAN COTTON REPORT	250	692	239	674	12	1075	23.8	39.6	12.6	30.4	18.3	54.6	32.4	34.4	151	0.82	9.8	2.0 TO 3.0
AUSTRALIAN COTTON REPORT	127	692	16	667	11	967	24.9	35.9	8.8	30.7	20.1	49	24.8	35.3	165	0.93	5.8	1.80 TO 2.80
INDIAN COTTON 30+	90	749	66	601	24	1122	26.4	34.2	6.6	32	21.2	49.2	22	36.3	158	0.9	6.3	2.40 TO 2.80
INDIAN COTTON 29+	153	711	122	615	32	1024	24.9	37.3	10.2	31.2	19.8	50.9	27.3	35.8	151	0.87	7.4	3.0 TO 3.40
INDIAN COTTON 28.5+	192	768	150	676	42	1096	22.4	39.7	13.3	28	17.6	52.1	32	32.4	154	0.86	7.5	4.0 TO 6.0

USTER COTTON HVI TEST REPORT

Sample Party Name	SCI	MST	MIC	MAT	UHML	UI	SF	STR	ELG	RD	+B	C GRADE	TRCNT	TRAR	TRID	AMT
BRAZILIAN COTTON REPORT	120	7.6	4.68	0.86	29.25	81.3	11.8	28.8	7.8	76.6	9	31-3	36	0.37	3	508
AUSTRALIAN COTTON REPORT	156	9.3	4.94	0.88	30.86	84.2	7	32.6	6.7	74.4	8	41-1	53	0.44	4	428
INDIAN COTTON 30+	160	6.8	4.56	0.87	30.95	85.5	5.8	33.8	6.8	79	8	31-1	18	0.34	2	591
INDIAN COTTON 29+	141	6.2	4.08	0.86	29.67	82.4	8.8	32.1	6.6	76	8	31-2	36	0.44	3	570
INDIAN COTTON 28.5+	124	6.6	3.53	0.84	28.81	80.6	10.8	28.2	6.7	74.7	9	31-4	31	0.24	3	537

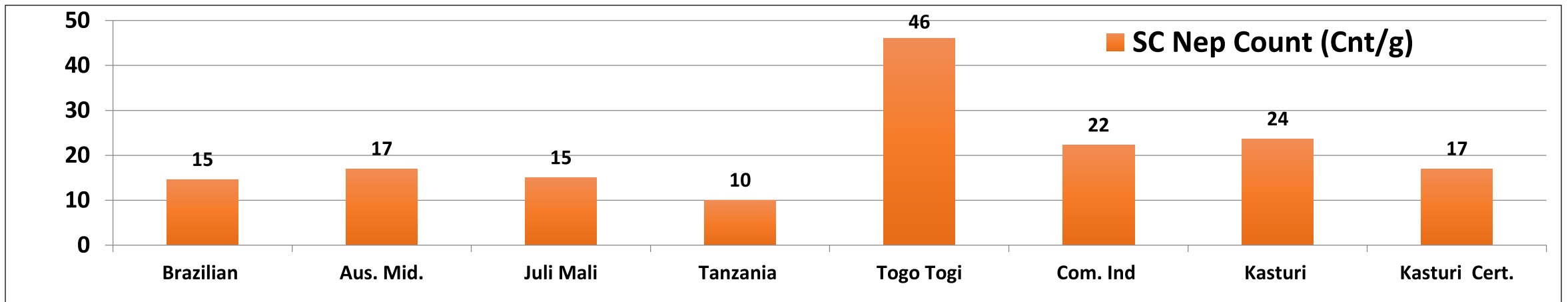
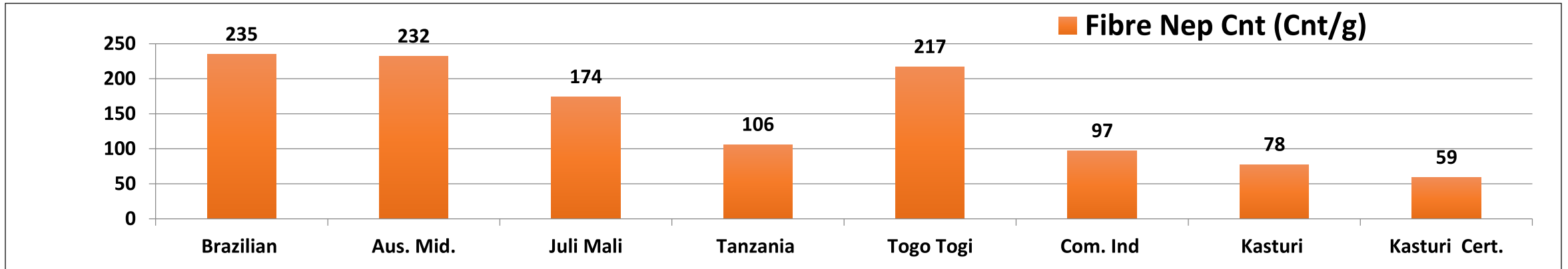
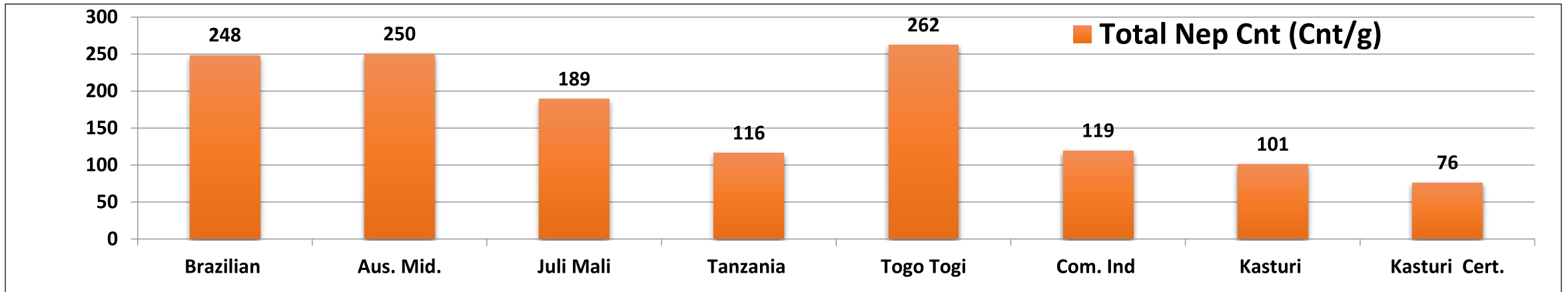
Brazilian Cotton: Poor in strength, SCI, SFC

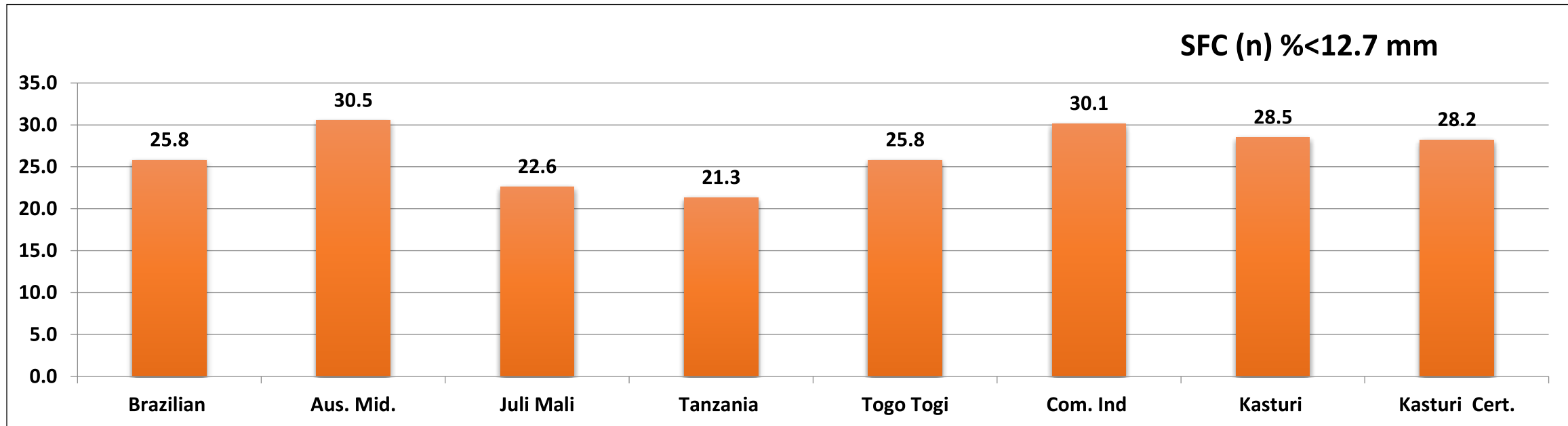
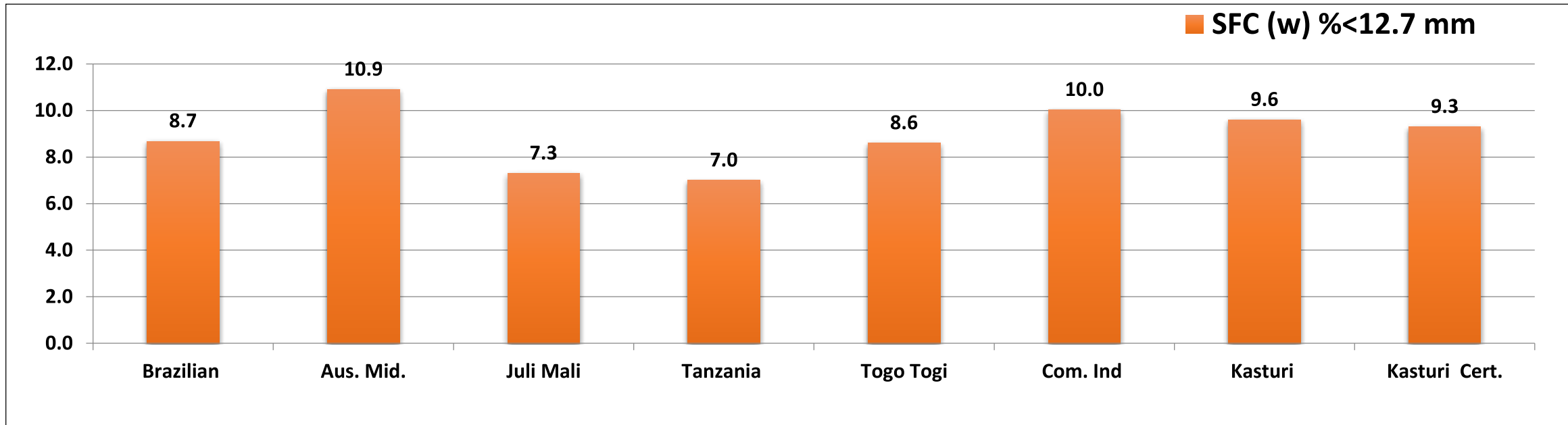
Kasturi Cotton Specification for Long Cotton

Name / Parameters	Kasturi Cotton 28 mm+	Kasturi Cotton 29 mm+	Kasturi Cotton 30 mm+	Kasturi Cotton 31 mm+
UHML (mm)	28+	29+	30+	31+
UI	83% or more	83% or more	84% or more	84% or more
Tenacity (gpt)	29.0 (-1.5)	29.5 (-1.5)	30.5 (-1.5)	32.5 (-1.5)
MIC ($\mu\text{g}/\text{inch}$)	3.7 to 4.7	3.7 to 4.5	3.7 to 4.5	3.7 to 4.5
RD Value (%)	76+	76+	76+	76+
Trash (%)	2% or below	2% or below	2% or below	2% or below
Moisture Content	8% or below	8% or below	8% or below	8% or below

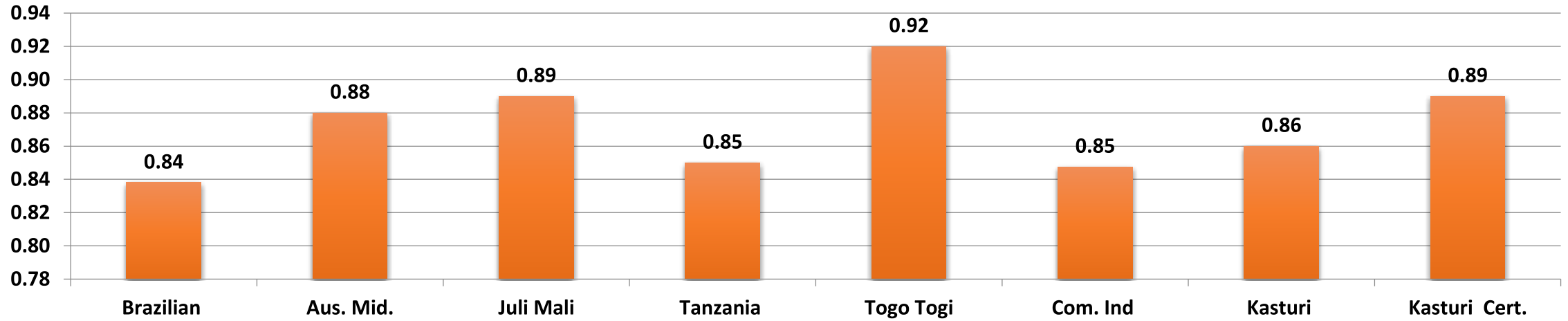
Long Staple Cotton

Comparison of Fibre Properties

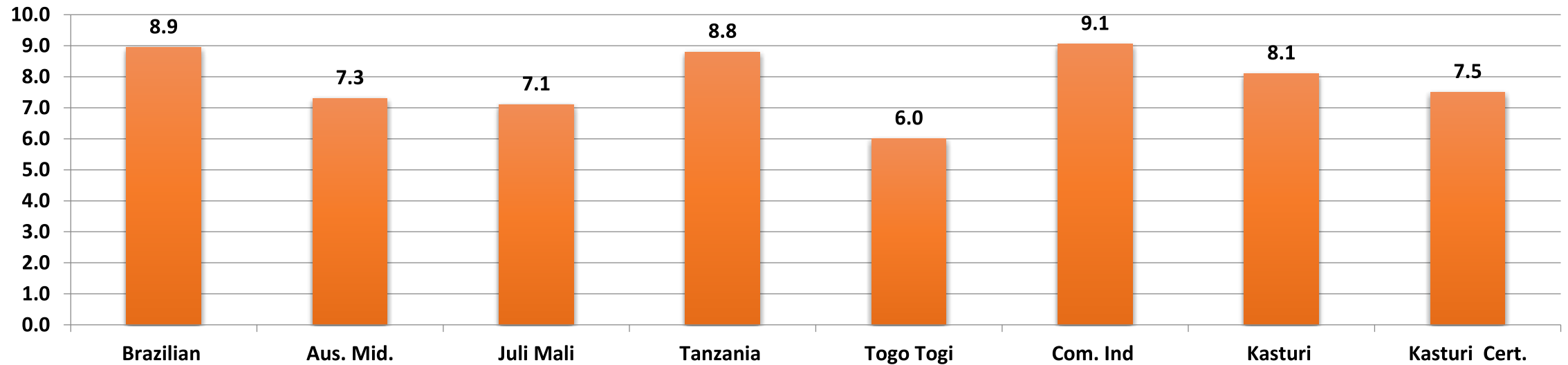


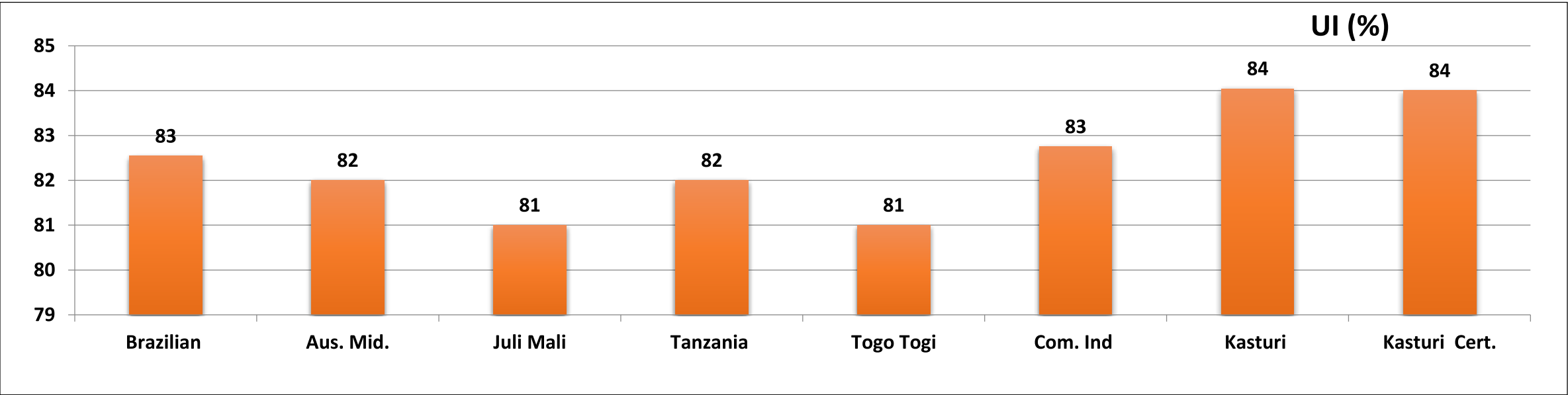
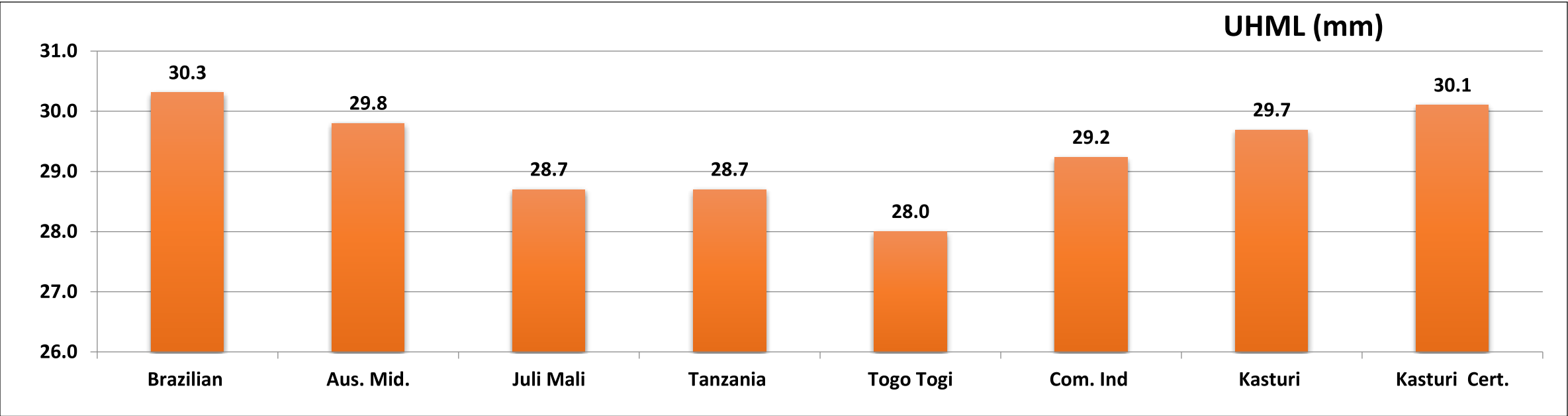


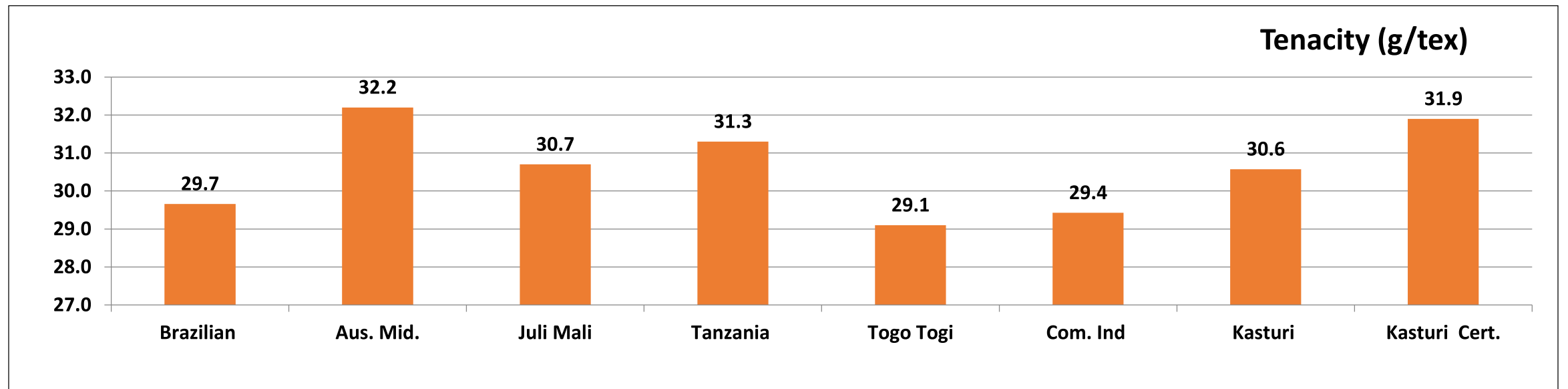
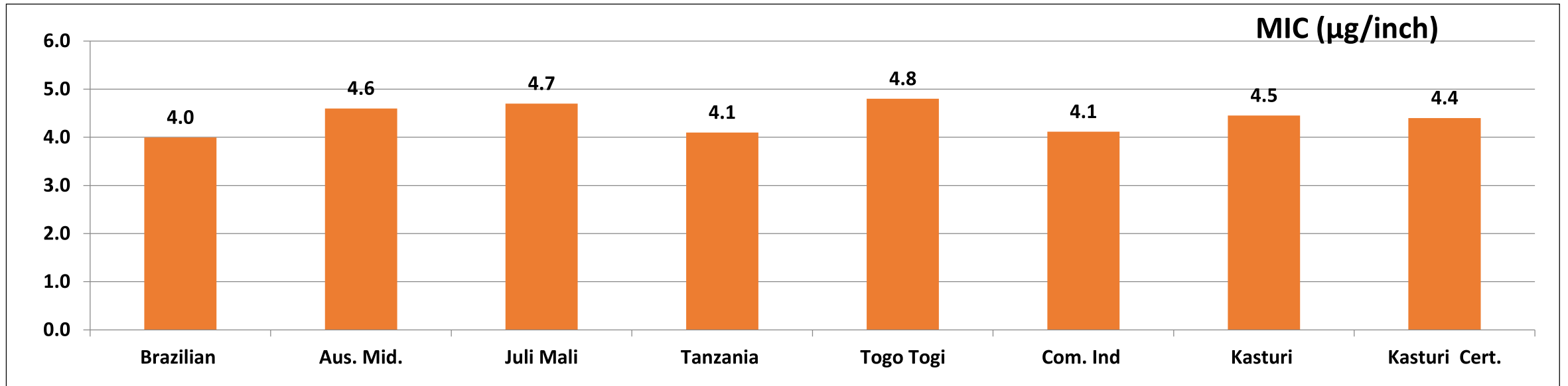
Maturity (mat1)

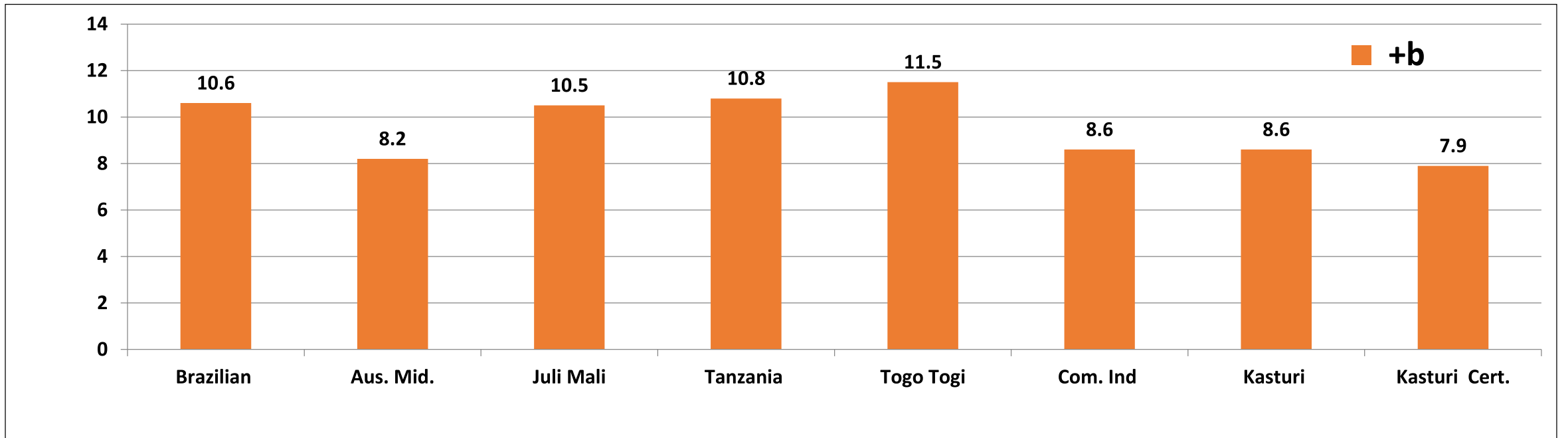
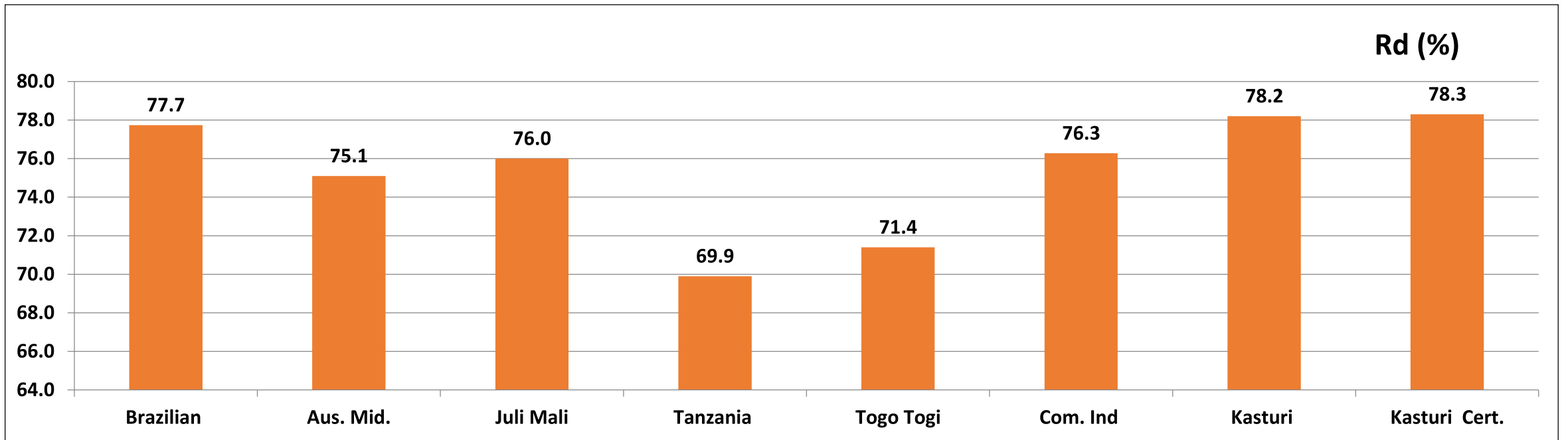


IFC (%)







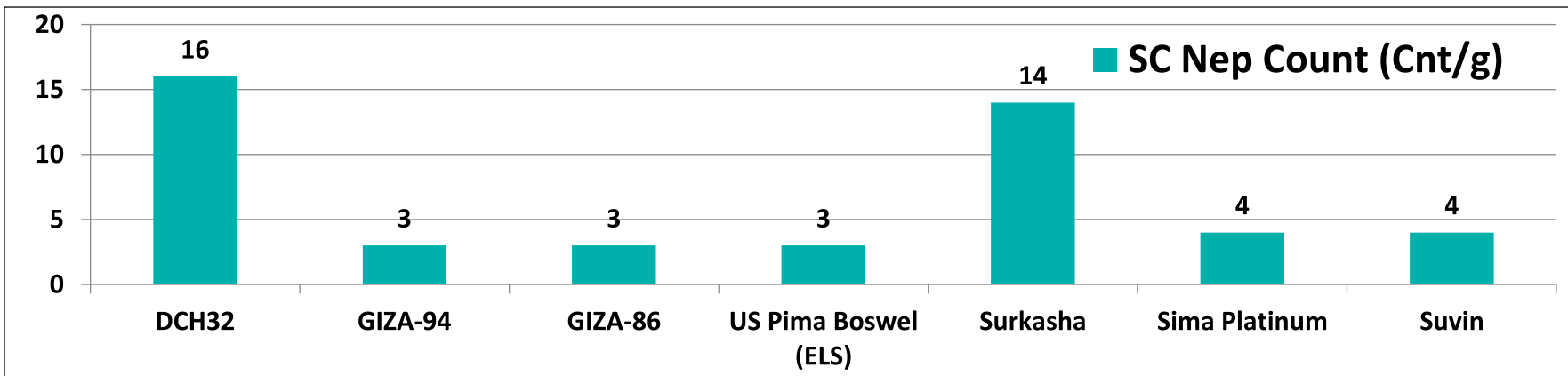
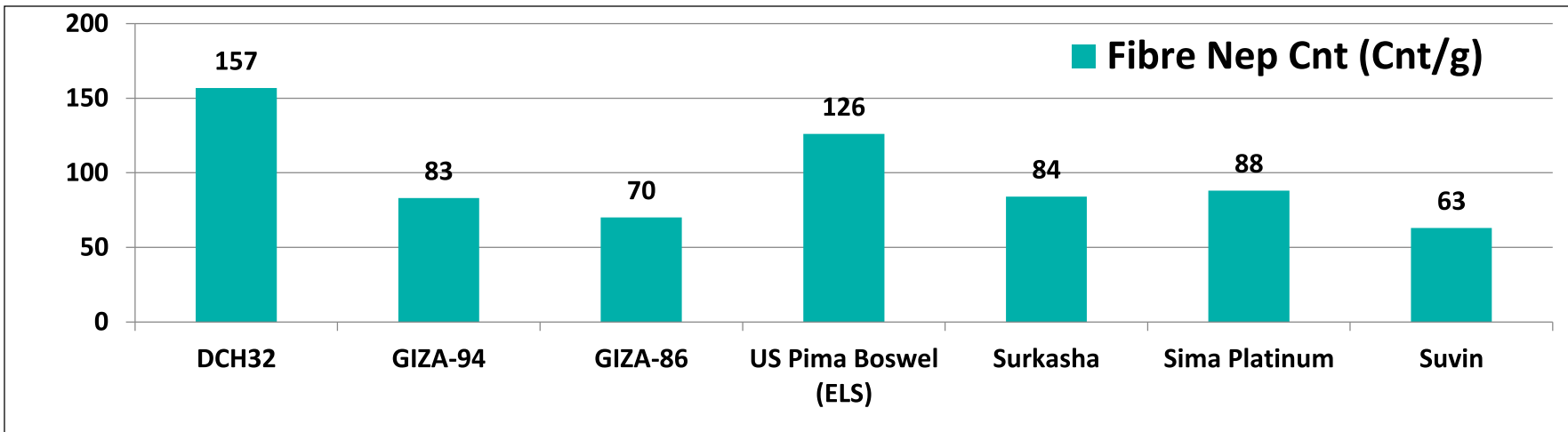
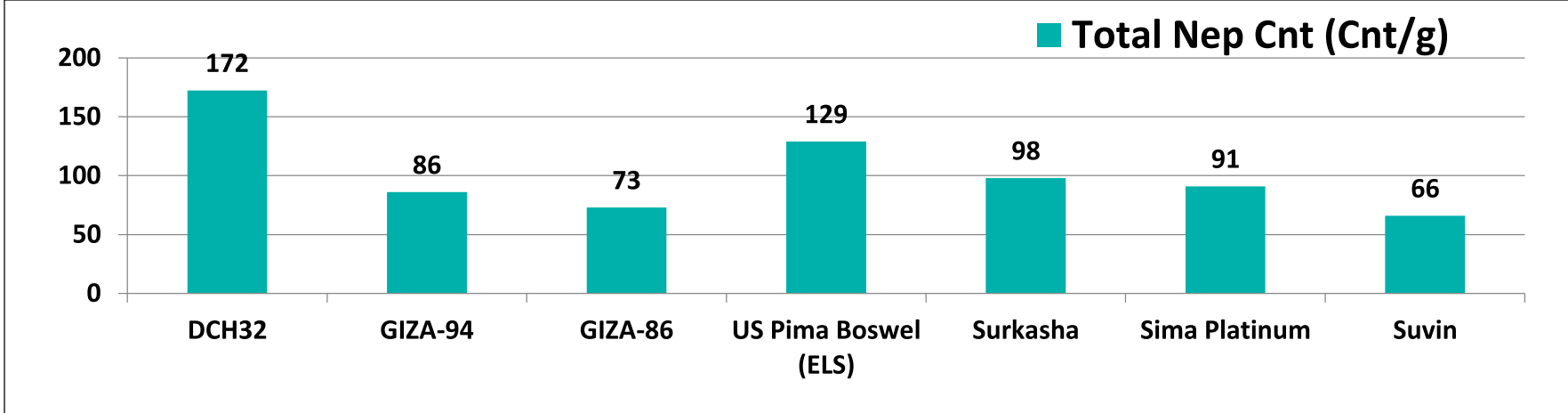


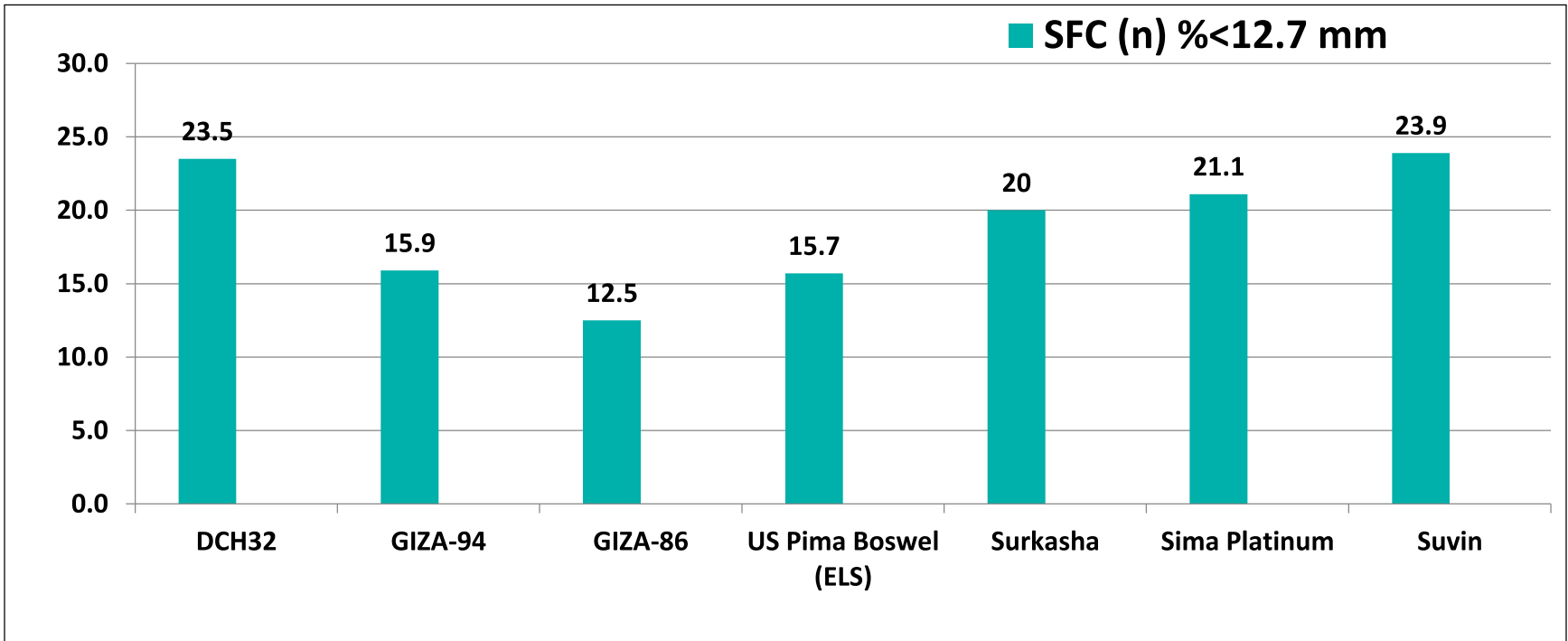
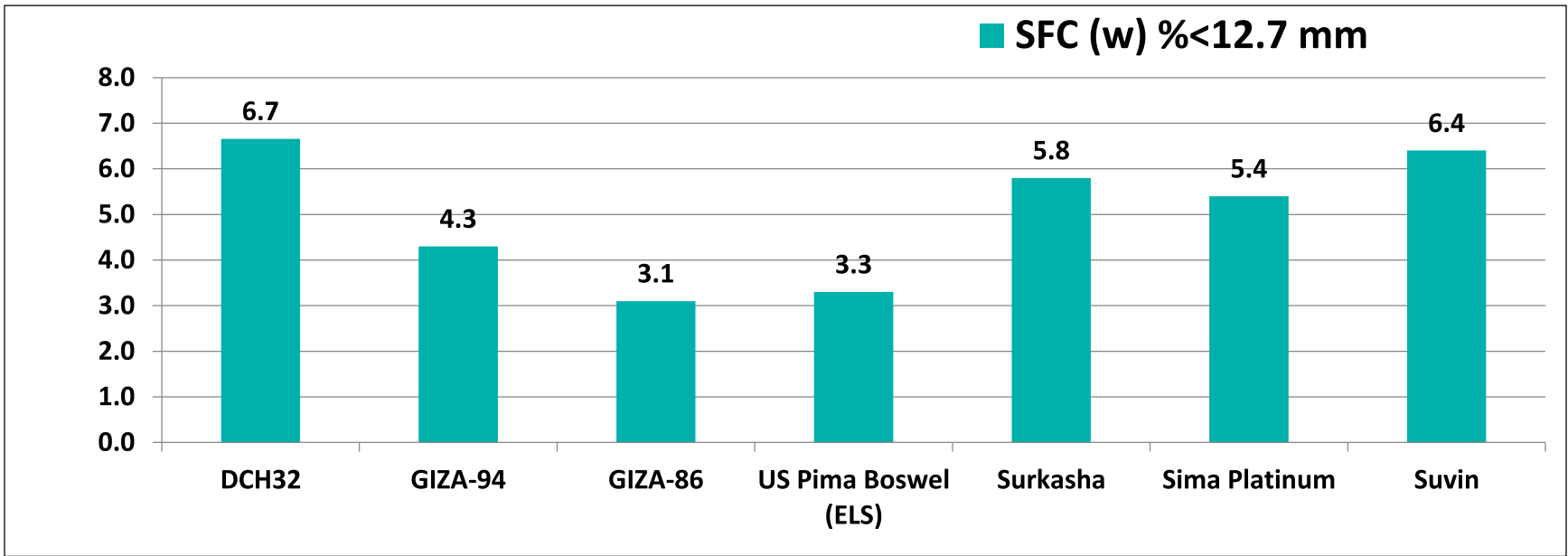
Extra Long Staple Cotton

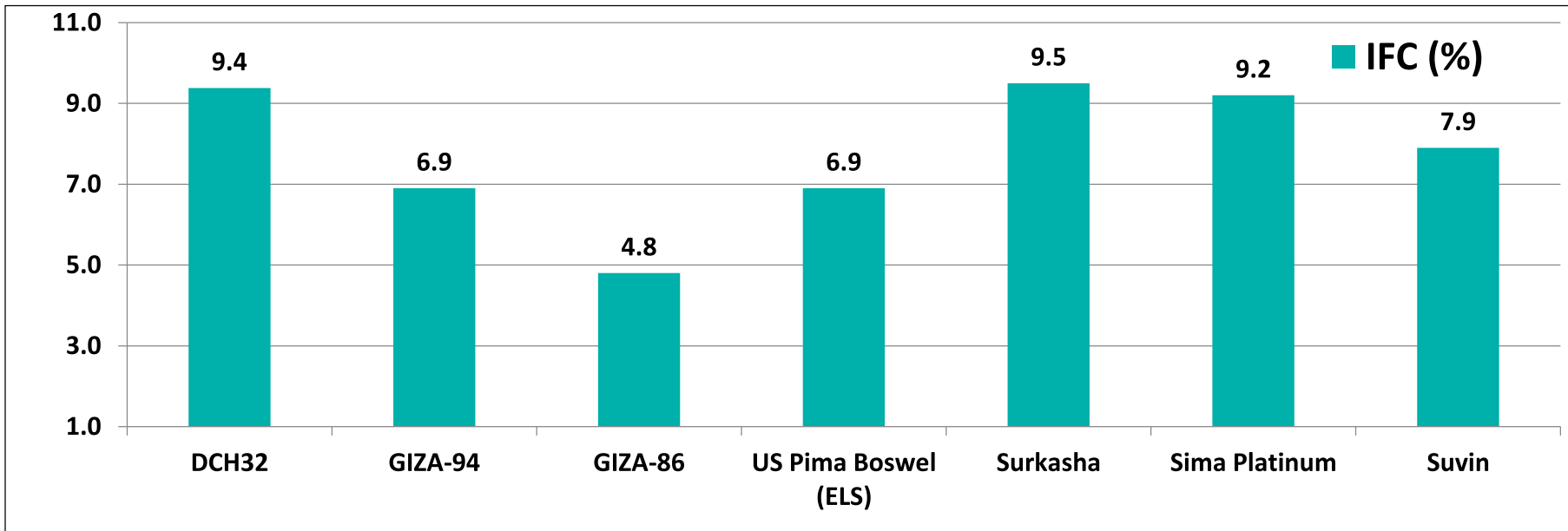
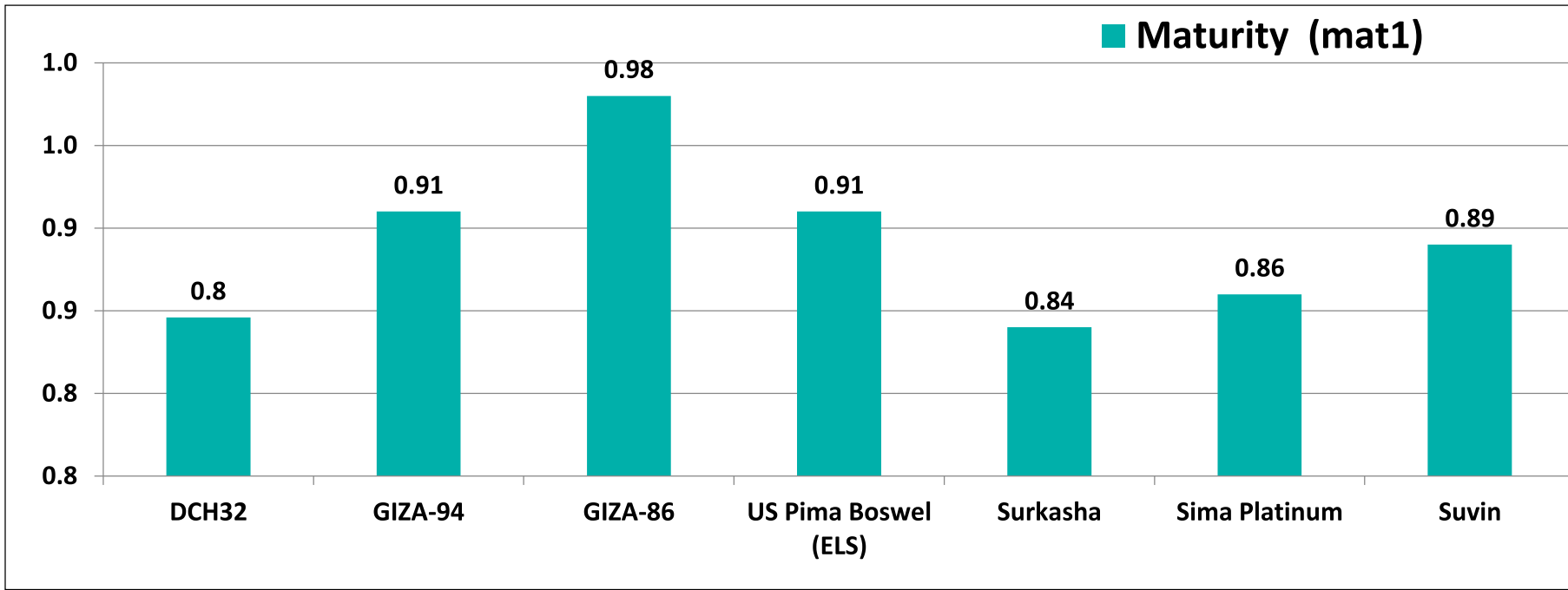
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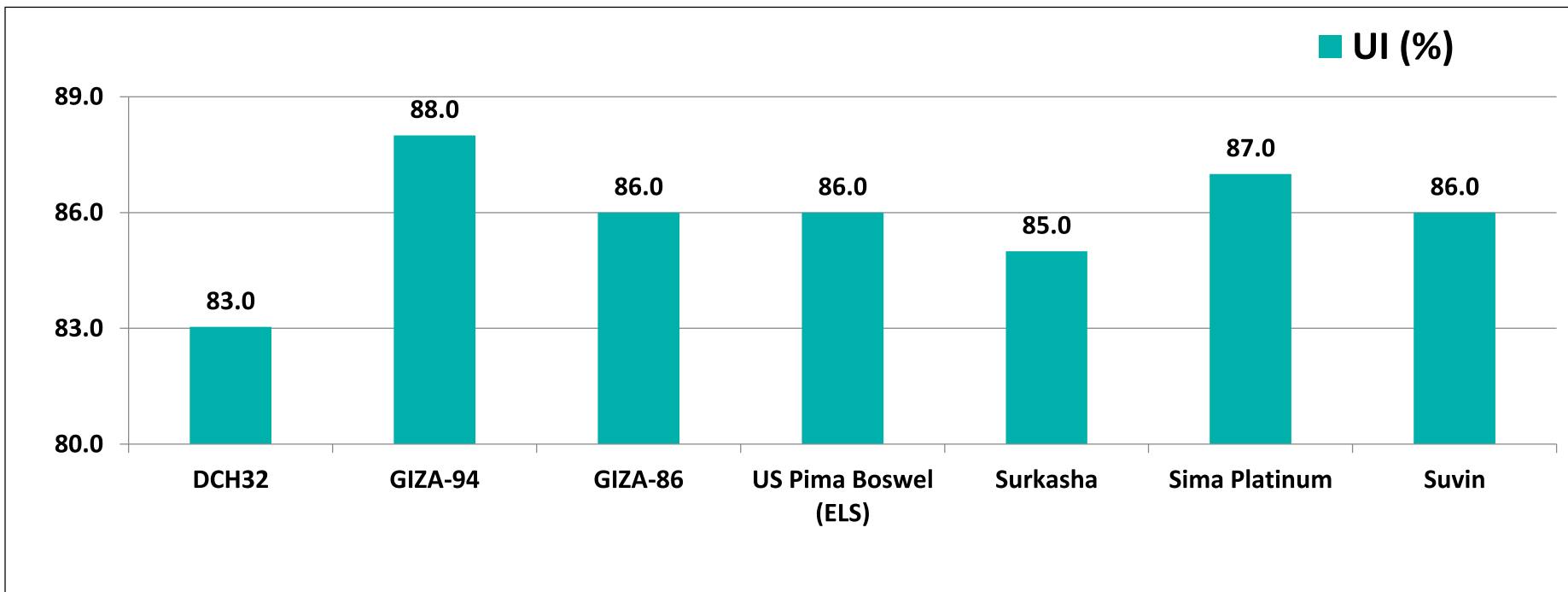
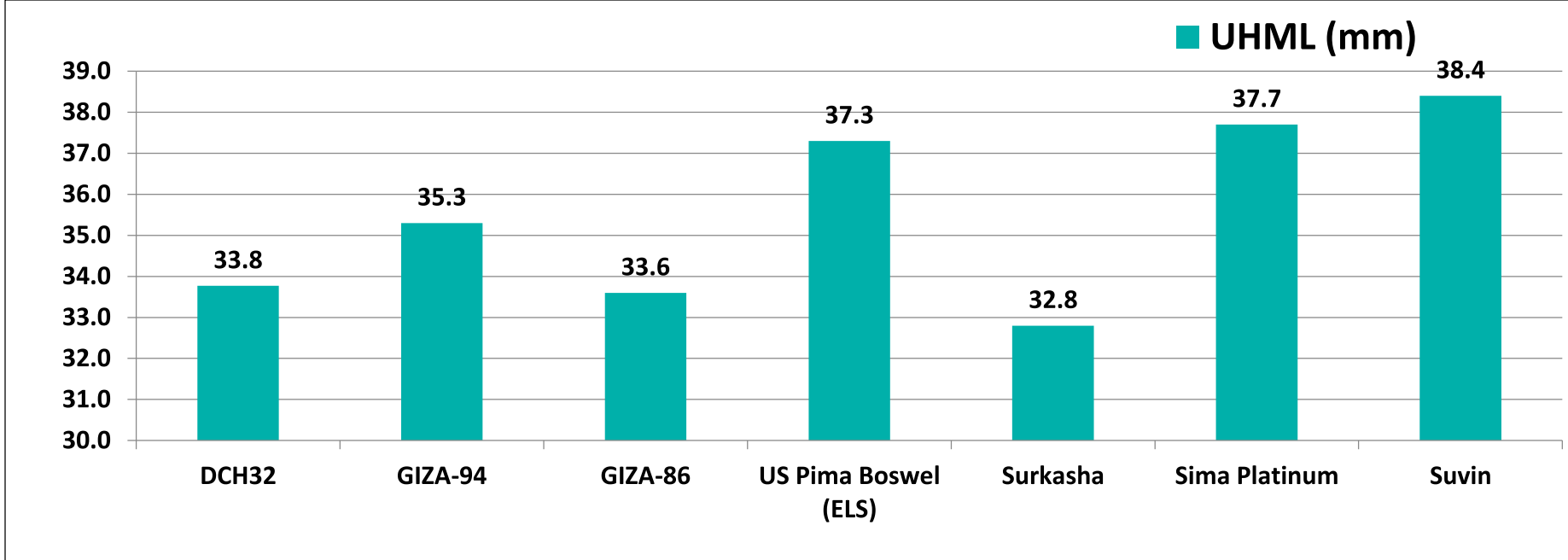
Kasturi Cotton Specification for Extra Long Staple Cotton

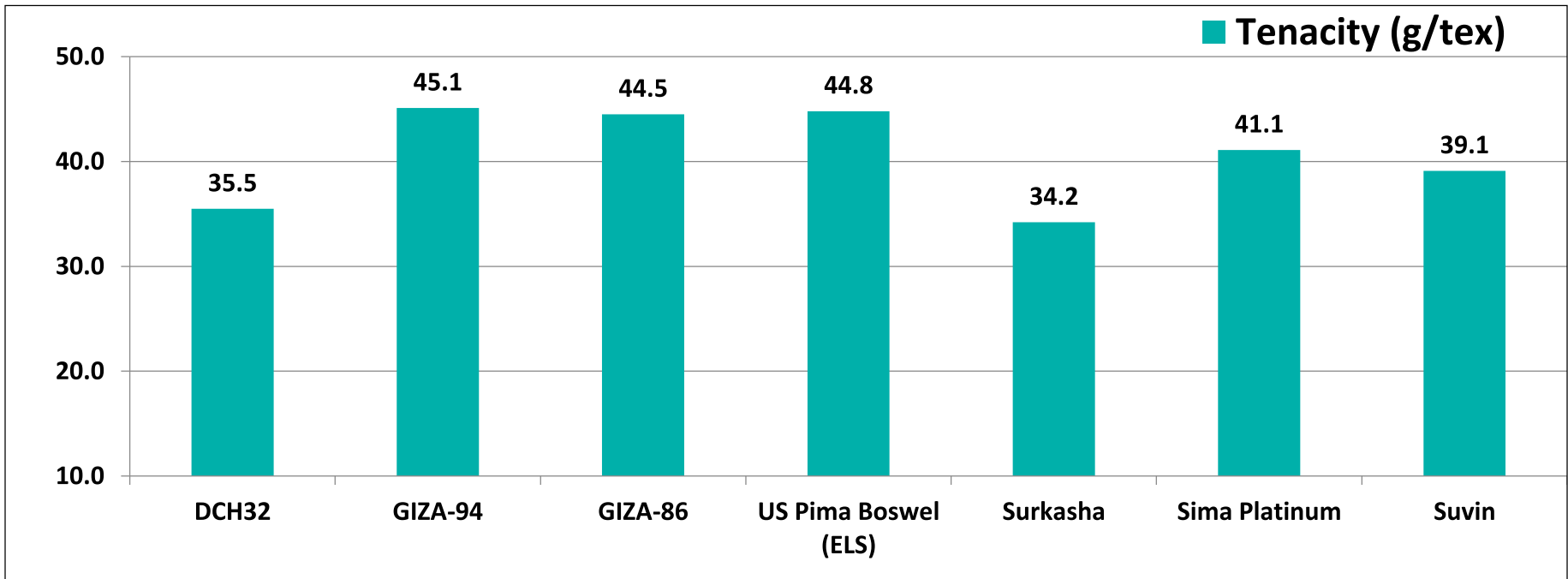
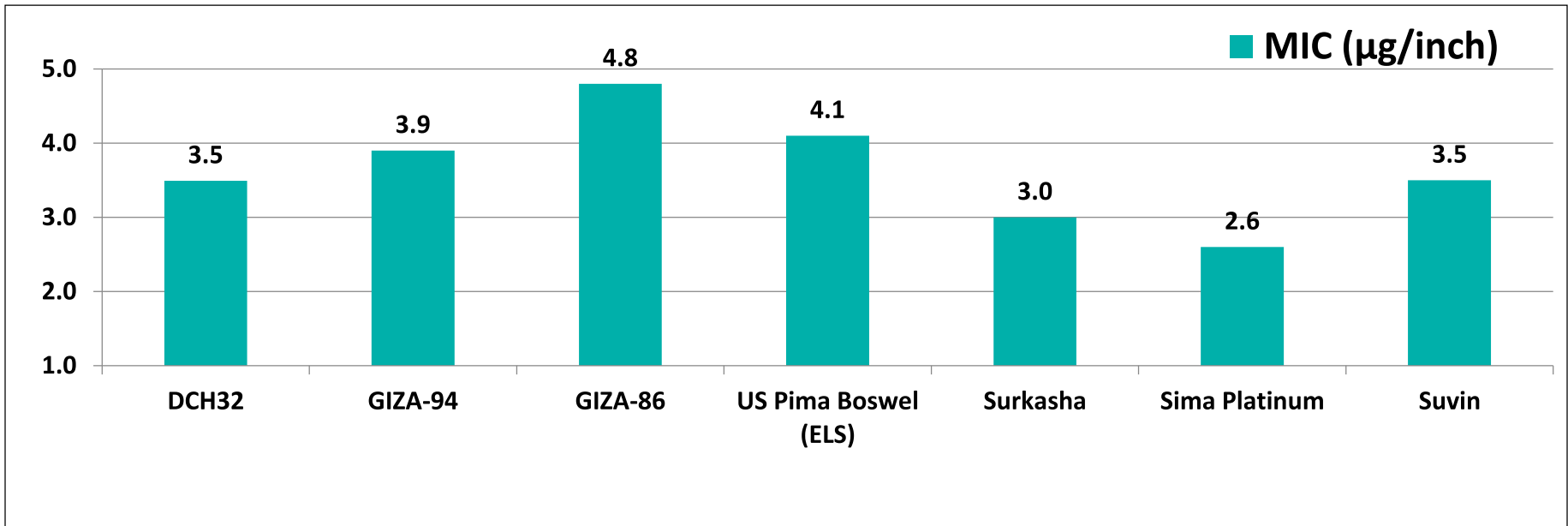
Name / Parameters	Kasturi Cotton 28 mm+	Kasturi Cotton 29 mm+	Kasturi Cotton 30 mm+	Kasturi Cotton 31 mm+
UHML (mm)	32 mm+	33 mm+	34 mm+	35 mm+
UI	83% or more	83% or more	85% or more	85% or more
Tenacity (gpt)	35.0 (-1.5) g/tex	36.0 (-1.5) g/tex	36.5 (-1.5) g/tex	37.5 (-1.5) g/tex
MIC (µg/inch)	3.0 to 4.2	3.0 to 4.2	3.2 to 4.2	3.0 to 4.0
RD Value (%)	73+	73+	74+	74+
Trash (%)	2% or below	2% or below	3% or below	3% or below
Moisture Content	8% or below	8% or below	8% or below	8% or below

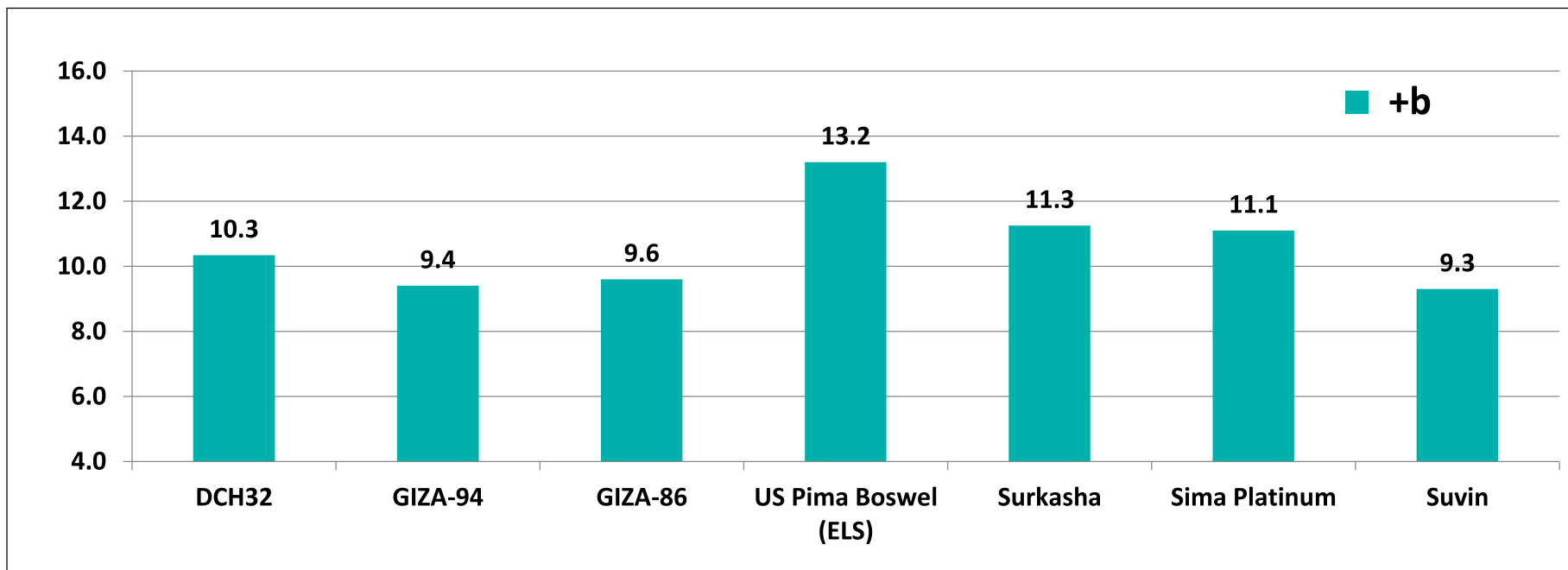
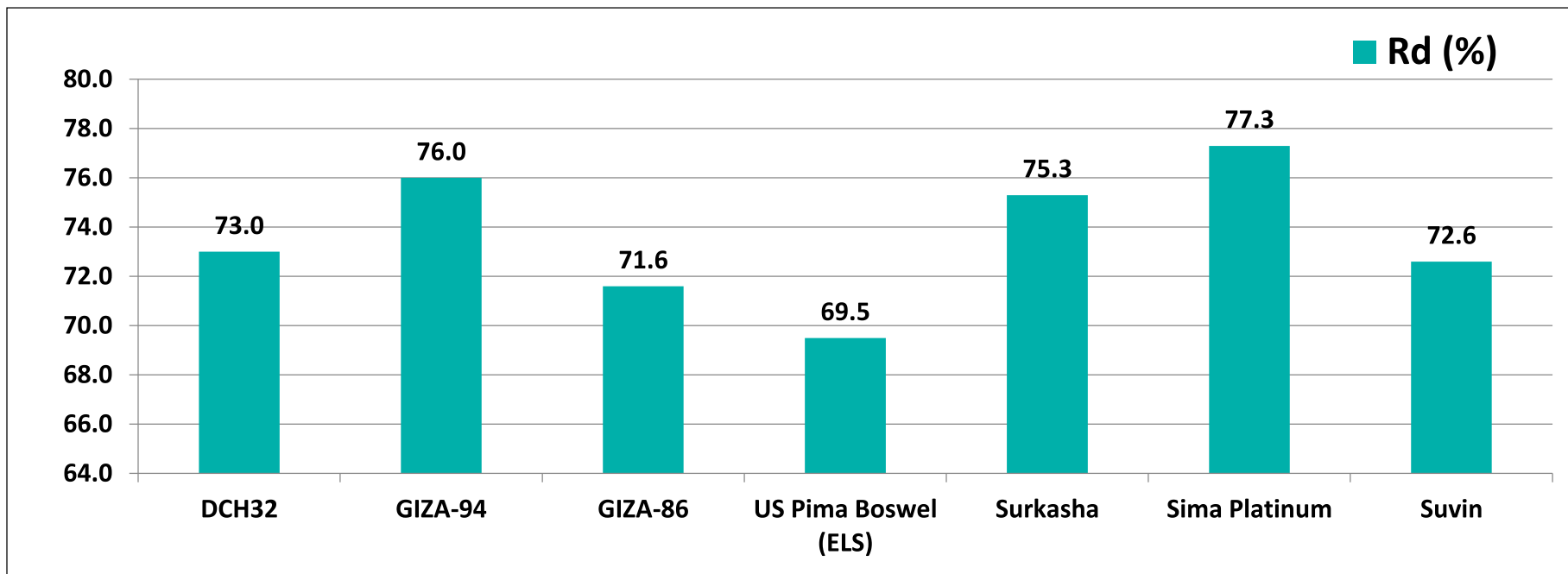












Conclusions

- ❖ **Kasturi Cotton Bharat has potential to match the fibre qualities of Brazilian and Australian cotton**
- ❖ **Raw cottons of 1st and 2nd pickings can only meet Kasturi Cotton norms**
- ❖ **Kasturi Cotton bales have much better fibre Uniformity Index (UI), 1-2 hybrids**
- ❖ **Trash cotton $\leq 2\%$ ensures minimal seed coat neps and ginned cottonseeds in bales**
- ❖ **Five percent testing of bales ensures uniform quality in lots of 100 bales**
- ❖ **Moisture content about 6-7% ensures weight gain to spinners**
- ❖ **Low seed coat neps ensures better yarn parameters including less thick/thin places**
- ❖ **Better yarn realization percentage is expected from Kasturi Cotton**
- ❖ **Scope for improvisation of Kasturi Cotton quality by incorporating contamination**

Thank You



हर कदम, हर डगर

किसानों का हमसफर

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