

# TROPICAL TASAR SILKWORM ECORACES

A MONOGRAPH

Dr. Ajit Kumar Sinha



**CENTRAL TASAR RESEARCH AND TRAINING INSTITUTE, RANCHI**  
Central Silk Board, Ministry of Textiles- Govt. of India  
Nagri, Ranchi - 835303 (Jharkhand)

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## 1. DABA



Geographical pocket/places	: Jhinkpani, Chaibasa (Jharkhand)
Eco-niches	: Saranda-Singhbhum forest sectors (Manoharpur, Goilker, Jaganathpur, Jamda, Joda, BadaJamda, Jeteya, Tonto, Jhinkpani, Majhgon, Bandgoan, Chakradarpur)
Forest type	: Tropical moist deciduous
Nature of the forest	: Mixed forest with <i>Terminalia tomentosa</i> (Asan), <i>Terminalia arjuna</i> (Arjun) and <i>Shorea robusta</i> (Sal)
Food plant	: <i>Terminalia tomentosa</i> (Asan) <i>Terminalia arjuna</i> (Arjun)
Soil type	: Red loamy
Latitude	: 22.12° N
Longitude	: 86.23° E
Altitude	: 209 m.
Cocoon colour	: Light Grey
Cocoon shape	: Oval
Cocoons weight (g)	
Male	: 9.69 – 12.94
Female	: 9.86 - 16.39
Shell Weight (g)	
Male	: 1.50 – 3.47
Female	: 1.60 – 3.74
Shell Ratio (%)	
Male	: 12.0 – 23.0
Female	: 12.0 – 21.0
Cocoon length (cm)	: 4.8 -5.7
Cocoon breadth (cm)	: 3.3 – 3.7
Peduncle length (cm)	: 3.5 – 6.8
Volume (cc)	: 28 – 32
Silk Recovery (%)	: 50 - 70
Elongation (%)	: 18 – 25
Filament length (m)	: 900 – 1300
Denier	: 8.0 – 12.0
Reelability (%)	: 25 – 40
Teenacity (g/d)	: 1.9 – 2.4



## 2. SUKINDA



Geographical pocket/places	: Sukindagarh (Orissa)
Eco-niches	: Bamnipal, Mangalpur
Forest type	: Tropical Moist Deciduous
Nature of the forest	: Mixed forest with dominance of Asan
Food plant	: <i>T. tomentosa</i> (Asan)
Soil type	: Red loamy
Latitude	: 21.00 °N
Longitude	: 86.00 °E
Altitude	: 209 m.
Cocoon colour	: Yellow
Cocoon shape	: Oval
Cocoons weight (g)	
Male	: 9.08 – 12.38
Female	: 9.38 – 12.76
Shell Weight (g)	
Male	: 0.97 – 2.21
Female	: 1.05 – 2.48
Shell Ratio (%)	
Male	: 13.0 – 20.0
Female	: 10.0 – 18.0
Cocoon length (cm)	: 4.5 – 4.9
Cocoon breadth (cm)	: 2.8 – 3.1
Peduncle length (cm)	: 3.2 – 6.5
Volume (cc)	: 25 – 28
Silk Recovery (%)	: 55 – 60
Elongation (%)	: 20 – 30
Filament length (m)	: 1000 – 1200
Denier	: 9.0 – 10.0
Reelability (%)	: 25.0 – 35.0
Teenacity (g/d)	: 2.00 – 2.70

### 3. RAILY



Geographical pocket/places	: Bastar (Chhattisgarh)
Eco-niches	: Antagarh, Narayanpur, Dhaurai, Chotey Donger, Dantewada, Tongpal, Farasgaon, Makdi, Kondagaon, Mardapal, Bhanpuri, Bakawand, Tokapal, Barsur, Geedam, Darbha, Kanger, Nangoor and Keshkal.
Forest type	: Tropical Moist Deciduous
Nature of the forest	: Sal ( <i>Shorea robusta</i> ) dominant forest
Food plant	: <i>Shorea robusta</i>
Soil type	: Red loamy
Latitude	: 19.05 °N
Longitude	: 82.05 °E
Altitude	: 670 m.
Cocoon colour	: Blackish Grey
Cocoon shape	: Oval
Cocoons weight (g)	
Male	: 10.00 – 15.5
Female	: 11.80 – 18.58
Shell Weight (g)	
Male	: 2.18 – 3.50
Female	: 2.75 – 3.78
Shell Ratio (%)	
Male	: 17.0 – 25.0
Female	: 16.0 – 24.0
Cocoon length (cm)	: 5.0 – 5.3
Cocoon breadth (cm)	: 3.2 – 3.4
Peduncle length (cm)	: 2.5 – 3.8
Volume (cc)	: 28 -30
Silk Recovery (%)	: 45 – 60
Elongation (%)	: 20 -25
Filament length (m)	: 1200 – 1500
Denier	: 10.0 – 11.0
Reelability (%)	: 20 – 30
Teenacity (g/d)	: 1.80 -2.20



#### 4. MODAL



<b>Geographical pocket/places</b>	: Keonjhar, Mayurbhanj (Orissa)
<b>Eco-niches</b>	: Guruguria and Tulsibani on the west, Talabandha and Joranda on the north, Pithabata on east and Notto and Khandabarai on south of Similipal forest
<b>Forest type</b>	: Tropical Moist Deciduous
<b>Nature of the forest</b>	: Mixed forest with Sal dominance
<b>Food plant</b>	: <i>Shorea robusta</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 21.40 °N
<b>Longitude</b>	: 86.40 °E
<b>Altitude</b>	: 423 m.
<b>Cocoon colour</b>	: Copper Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
Male	: 9.60 – 16.54
Female	: 12.59 – 20.10
<b>Shell Weight (g)</b>	
Male	: 2.25 – 3.82
Female	: 2.30 – 3.92
<b>Shell Ratio (%)</b>	
Male	: 19.0 – 26.0
Female	: 17.0 – 23.0
<b>Cocoon length (cm)</b>	: 5.8 – 6.4
<b>Cocoon breadth (cm)</b>	: 4.5 – 5.4
<b>Peduncle length (cm)</b>	: 4.3 – 5.5
<b>Volume (cc)</b>	: 29 – 31
<b>Silk Recovery (%)</b>	: 55 – 65
<b>Elongation (%)</b>	: 20 – 25
<b>Filament length (m)</b>	: 1400 – 1600
<b>Denier</b>	: 10.0 – 11.0
<b>Reelability (%)</b>	: 18.0 – 25.0
<b>Teenacity (g/d)</b>	: 1.8 – 2.5

## 5. LARIA



Geographical pocket/places	: Gola, Peterbar , Hazaribagh, (Jharkhand )
Eco-niches	: Palma, Oramanjhi, Lohardaga and Latehar
Forest type	: Tropical moist deciduous
Nature of the forest	: Sal ( <i>Shorea robusta</i> )
Food plant	: <i>Shorea robusta</i>
Soil type	: Red loamy
Latitude	: 23.04 <sup>0</sup> N
Longitude	: 85.40 <sup>0</sup> E
Altitude	: 613 m.
Cocoon colour	: Blackish Grey / Grey
Cocoon shape	: Oval
Cocoons weight (g)	
Male	: 5.56 – 10.18
Female	: 6.06 – 10.98
Shell Weight (g)	
Male	: 1.03 – 2.45
Female	: 0.91 – 2.26
Shell Ratio (%)	
Male	: 16.0 – 27.0
Female	: 13.0 – 26.0
Cocoon length (cm)	: NA
Cocoon breadth (cm)	: 2.8 – 3.1
Peduncle length (cm)	: 4.5 – 7.2
Volume (cc)	: 15 – 17
Silk Recovery (%)	: 42 – 58
Elongation (%)	: 20 – 25
Filament length (m)	: 550 – 700
Denier	: 8.0 – 9.0
Reelability (%)	: 20 – 32
Teenacity (g/d)	: 1.9 – 2.5

## 6. SARIHAN



<b>Geographical pocket/places</b>	: Santhal Pargana, Dumka (Jharkhand)
<b>Eco-niches</b>	: Saraiahat forest
<b>Forest type</b>	: Tropical moist deciduous
<b>Food Plant</b>	: <i>Terminalia tomentosa</i> , <i>T. arjuna</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 24.30° N
<b>Longitude</b>	: 87.00°E
<b>Altitude</b>	: 140 m.
<b>Cocoon colour</b>	: Whitish Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 5.20 – 8.34
<b>Female</b>	: 6.64 – 9.98
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.76 – 1.25
<b>Female</b>	: 0.77 – 1.46
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 11.0 – 19.0
<b>Female</b>	: 09.0 – 15.0
<b>Cocoon length (cm)</b>	: 3.2 – 3.6
<b>Cocoon breadth (cm)</b>	: 2.4 – 2.6
<b>Peduncle length (cm)</b>	: 3.5 – 4.8
<b>Volume (cc)</b>	: 14.0 – 16.0
<b>Silk Recovery (%)</b>	: 55 – 60
<b>Elongation (%)</b>	: 20 – 30
<b>Filament length (m)</b>	: 560 – 600
<b>Denier</b>	: 7.0 – 8.0
<b>Reelability (%)</b>	: 15 – 20
<b>Teenacity (g/d)</b>	: 2.00 – 2.10

## 7. ANDHRA LOCAL



<b>Geographical pocket/places</b>	: Adilabad (Telangana)
<b>Eco-niches</b>	: Adilabad, Karimnagar, Warangal and Khammam
<b>Forest type</b>	: Tropical dry deciduous
<b>Food Plant</b>	: <i>Terminalia tomentosa</i> , <i>T. arjuna</i>
<b>Soil type</b>	: Black clayey
<b>Latitude</b>	: 19.409° N
<b>Longitude</b>	: 79.42° E
<b>Altitude</b>	: 311 m.
<b>Cocoon colour</b>	: Whitish Grey / Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 4.21 – 6.30
<b>Female</b>	: 6.75 – 10.11
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.63 – 0.98
<b>Female</b>	: 0.86 – 1.42
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 12 – 16
<b>Female</b>	: 10 – 15
<b>Cocoon length (cm)</b>	: 3.0 – 3.2
<b>Cocoon breadth (cm)</b>	: 2.2 – 2.5
<b>Peduncle length (cm)</b>	: 2.6 – 4.9
<b>Volume (cc)</b>	: 20 – 21
<b>Silk Recovery (%)</b>	: 45 – 55
<b>Elongation (%)</b>	: 18 -20
<b>Filament length (m)</b>	: 590 – 670
<b>Denier</b>	: 7.0 – 8.0
<b>Reelability (%)</b>	: 15 – 20
<b>Teenacity (g/d)</b>	: 1.8 – 2.0

## 8. BHANDARA



<b>Geographical pocket/places</b>	: Adilabad (Telangana)
<b>Eco-niches</b>	: Adilabad, Karimnagar, Warangal and Khammam
<b>Forest type</b>	: Tropical dry deciduous
<b>Food Plant</b>	: <i>Terminalia tomentosa</i> , <i>T. arjuna</i>
<b>Soil type</b>	: Black clayey
<b>Latitude</b>	: 19.409° N
<b>Longitude</b>	: 79.42° E
<b>Altitude</b>	: 311 m.
<b>Cocoon colour</b>	: Whitish Grey / Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 4.21 – 6.30
<b>Female</b>	: 6.75 – 10.11
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.63 – 0.98
<b>Female</b>	: 0.86 – 1.42
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 12 – 16
<b>Female</b>	: 10 – 15
<b>Cocoon length (cm)</b>	: 3.0 – 3.2
<b>Cocoon breadth (cm)</b>	: 2.2 – 2.5
<b>Peduncle length (cm)</b>	: 2.6 – 4.9
<b>Volume (cc)</b>	: 20 – 21
<b>Silk Recovery (%)</b>	: 45 – 55
<b>Elongation (%)</b>	: 18 -20
<b>Filament length (m)</b>	: 590 – 660
<b>Denier</b>	: 7.0 – 8.0
<b>Reelability (%)</b>	: 15 – 20
<b>Teenacity (g/d)</b>	: 1.8 – 2.2

## 9. MANDALLA

<b>Geographical pocket/places</b>	<b>:</b>	<b>Mandalla (Madhya Pradesh)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>22.35 °N</b>
<b>Longitude</b>	<b>:</b>	<b>80.43 °E</b>
<b>Altitude</b>	<b>:</b>	<b>765 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Blackish Grey / Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>9.22 – 11.35</b>
<b>Female</b>	<b>:</b>	<b>10.50 – 14.00</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>1.20 – 2.50</b>
<b>Female</b>	<b>:</b>	<b>2.32 – 3.50</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>20.0 – 23.0</b>
<b>Female</b>	<b>:</b>	<b>17.0 – 22.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.9 – 4.0</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>3.2 – 3.4</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.2 – 4.1</b>
<b>Volume (cc)</b>	<b>:</b>	<b>20 - 27</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>40 - 50</b>
<b>Elongation (%)</b>	<b>:</b>	<b>15 - 20</b>
<b>Filament length (m)</b>	<b>:</b>	<b>600 - 700</b>
<b>Denier</b>	<b>:</b>	<b>7.5 - 9.5</b>
<b>Reelability (%)</b>	<b>:</b>	<b>15 - 20</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.6 - 2.2</b>



## 10. JAPLA

<b>Geographical pocket/places</b>	:	<b>Palamau (Jharkhand)</b>
<b>Forest type</b>	:	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	:	<i>Zizyphus jujube</i>
<b>Soil type</b>	:	<b>Red loamy</b>
<b>Latitude</b>	:	<b>23.52 °N</b>
<b>Longitude</b>	:	<b>84.17 °E</b>
<b>Altitude</b>	:	<b>348 m.</b>
<b>Cocoon colour</b>	:	<b>Whitish Grey / Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>5.57 – 11.95</b>
<b>Female</b>	:	<b>7.89 – 14.93</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>0.80 – 1.02</b>
<b>Female</b>	:	<b>1.18 – 2.63</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>12.0 – 20.0</b>
<b>Female</b>	:	<b>11.0 – 19.0</b>
<b>Cocoon length (cm)</b>	:	<b>4.3 – 4.5</b>
<b>Cocoon breadth (cm)</b>	:	<b>3.0 – 3.2</b>
<b>Peduncle length (cm)</b>	:	<b>2.5 – 3.7</b>
<b>Volume (cc)</b>	:	<b>15 – 17</b>
<b>Silk Recovery (%)</b>	:	<b>55 – 60</b>
<b>Elongation (%)</b>	:	<b>20 – 22</b>
<b>Filament length (m)</b>	:	<b>550 – 750</b>
<b>Denier</b>	:	<b>7.0 – 8.0</b>
<b>Reelability (%)</b>	:	<b>20 – 30</b>
<b>Teenacity (g/d)</b>	:	<b>1.7 – 2.2</b>

## 11. MUNGA

<b>Geographical pocket/places</b>	<b>:</b>	<b>Santhal Pargana (Jharkhand)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>24°30'00"N</b>
<b>Longitude</b>	<b>:</b>	<b>87°30'00"E</b>
<b>Altitude</b>	<b>:</b>	<b>125 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>4.98 – 6.42</b>
<b>Female</b>	<b>:</b>	<b>5.85 – 7.85</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.50 – 0.84</b>
<b>Female</b>	<b>:</b>	<b>0.62 – 1.10</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>10.0 – 15.0</b>
<b>Female</b>	<b>:</b>	<b>09.0 – 14.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>5.1 – 5.3</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>3.6 – 3.9</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>5.1 – 6.9</b>
<b>Volume (cc)</b>	<b>:</b>	<b>25 – 30</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>40 - 55</b>
<b>Elongation (%)</b>	<b>:</b>	<b>15 - 22</b>
<b>Filament length (m)</b>	<b>:</b>	<b>550 - 750</b>
<b>Denier</b>	<b>:</b>	<b>8 - 10</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.8 - 2.00</b>

## 12. MODIA

<b>Geographical pocket/places</b>	<b>:</b>	<b>Dhanbad (Jharkhand)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>23°48'07"N</b>
<b>Longitude</b>	<b>:</b>	<b>86°26'35"E</b>
<b>Altitude</b>	<b>:</b>	<b>250 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>9.23 – 13.50</b>
<b>Female</b>	<b>:</b>	<b>12.39 – 18.75</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>1.85 – 3.05</b>
<b>Female</b>	<b>:</b>	<b>2.50 – 3.95</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>20.0 – 27.0</b>
<b>Female</b>	<b>:</b>	<b>18.0 – 25.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>4.5 – 5.0</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.8 – 3.1</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>2.5 – 3.6</b>
<b>Volume (cc)</b>	<b>:</b>	<b>27 – 30</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>50 – 60</b>
<b>Elongation (%)</b>	<b>:</b>	<b>18 – 22</b>
<b>Filament length (m)</b>	<b>:</b>	<b>850 – 1400</b>
<b>Denier</b>	<b>:</b>	<b>8.0 – 9.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>25 – 30</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>2.0 – 2.3</b>

### 13. LODHMA

<b>Geographical pocket/places</b>	:	<b>Ranchi (Jharkhand)</b>
<b>Forest type</b>	:	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	:	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	:	<b>Red loamy</b>
<b>Latitude</b>	:	<b>23°20'51"N</b>
<b>Longitude</b>	:	<b>85°20'18"E</b>
<b>Altitude</b>	:	<b>631 m</b>
<b>Cocoon colour</b>	:	<b>Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>7.80 – 8.68</b>
<b>Female</b>	:	<b>10.58 – 13.89</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>1.77 – 2.58</b>
<b>Female</b>	:	<b>1.88 – 2.93</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>21.0 – 28.0</b>
<b>Female</b>	:	<b>22.0 – 25.0</b>
<b>Cocoon length (cm)</b>	:	<b>5.4 – 5.6</b>
<b>Cocoon breadth (cm)</b>	:	<b>3.2 – 3.6</b>
<b>Peduncle length (cm)</b>	:	<b>4.2 – 5.6</b>
<b>Volume (cc)</b>	:	<b>25 – 30</b>
<b>Silk Recovery (%)</b>	:	<b>50 - 60</b>
<b>Elongation (%)</b>	:	<b>20 - 25</b>
<b>Filament length (m)</b>	:	<b>550 - 650</b>
<b>Denier</b>	:	<b>8.00 - 10.00</b>
<b>Reelability (%)</b>	:	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	:	<b>1.7 - 2.2</b>

## 14. PALMA

<b>Geographical pocket/places</b>	<b>:</b>	<b>Ranchi (Jharkhand)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>23°20'51"N</b>
<b>Longitude</b>	<b>:</b>	<b>85°20'18"E</b>
<b>Altitude</b>	<b>:</b>	<b>631 m</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>6.61 – 11.37</b>
<b>Female</b>	<b>:</b>	<b>9.07 – 14.90</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>1.27 – 2.38</b>
<b>Female</b>	<b>:</b>	<b>1.59 – 2.79</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>16.0 – 23.0</b>
<b>Female</b>	<b>:</b>	<b>15.0 – 21.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>2.5 – 3.0</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.2 – 2.8</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.2 – 5.5</b>
<b>Volume (cc)</b>	<b>:</b>	<b>19 – 22</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>43 – 57</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>540 – 690</b>
<b>Denier</b>	<b>:</b>	<b>7.0 – 8.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.8 - 2.0</b>

## 15. KOWA

<b>Geographical pocket/places</b>	<b>:</b>	<b>Palamau (Jharkhand)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>23.52 °N</b>
<b>Longitude</b>	<b>:</b>	<b>84.17 °E</b>
<b>Altitude</b>	<b>:</b>	<b>348 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Whitish Grey / Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>4.98 – 9.15</b>
<b>Female</b>	<b>:</b>	<b>5.23 – 14.98</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.83 – 1.95</b>
<b>Female</b>	<b>:</b>	<b>0.68 – 2.73</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>17.0 – 24.0</b>
<b>Female</b>	<b>:</b>	<b>16.0 – 21.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.2 – 3.6</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.4 – 2.6</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>4.7 – 5.2</b>
<b>Volume (cc)</b>	<b>:</b>	<b>18 – 25</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>50 - 60</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>550 - 750</b>
<b>Denier</b>	<b>:</b>	<b>7.5 - 9.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.8 - 2.0</b>



## 16. BARHARWA

<b>Geographical pocket/places</b>	<b>:</b>	<b>Simdega (Jharkhand)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>22°36'54"N</b>
<b>Longitude</b>	<b>:</b>	<b>84°30'07"E</b>
<b>Altitude</b>	<b>:</b>	<b>443 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Light Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>4.93 – 11.27</b>
<b>Female</b>	<b>:</b>	<b>8.06 – 14.58</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>1.05 – 2.03</b>
<b>Female</b>	<b>:</b>	<b>1.15 – 2.73</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>16.0 – 22.0</b>
<b>Female</b>	<b>:</b>	<b>15.0 – 18.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>4.5 – 4.8</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>3.3 – 3.5</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.2 – 5.8</b>
<b>Volume (cc)</b>	<b>:</b>	<b>25 – 29</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>50 – 66</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 – 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>900 – 1400</b>
<b>Denier</b>	<b>:</b>	<b>10.0 – 11.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>25 – 30</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.8 – 2.4</b>

## 17. NALIA

<b>Geographical pocket/places</b>	:	<b>Sundergarh (Orissa)</b>
<b>Forest type</b>	:	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	:	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	:	<b>Red Loamy</b>
<b>Latitude</b>	:	<b>22°07'00"N</b>
<b>Longitude</b>	:	<b>84°01'59"E</b>
<b>Altitude</b>	:	<b>239 m.</b>
<b>Cocoon colour</b>	:	<b>Blackish Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>7.05 – 12.85</b>
<b>Female</b>	:	<b>9.50 – 17.17</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>0.99 – 2.95</b>
<b>Female</b>	:	<b>1.24 – 3.64</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>17.0 – 22.0</b>
<b>Female</b>	:	<b>15.0 – 20.0</b>
<b>Cocoon length (cm)</b>	:	<b>4.0 – 4.2</b>
<b>Cocoon breadth (cm)</b>	:	<b>2.2 – 2.5</b>
<b>Peduncle length (cm)</b>	:	<b>6.5 – 8.3</b>
<b>Volume (cc)</b>	:	<b>25 – 30</b>
<b>Silk Recovery (%)</b>	:	<b>50 – 60</b>
<b>Elongation (%)</b>	:	<b>20 - 25</b>
<b>Filament length (m)</b>	:	<b>650 – 900</b>
<b>Denier</b>	:	<b>8.0 -9.0</b>
<b>Reelability (%)</b>	:	<b>25 - 30</b>
<b>Teenacity (g/d)</b>	:	<b>1.7 - 2.2</b>

## 18. BOADH

<b>Geographical pocket/places</b>	:	<b>Phulbani (Orissa)</b>
<b>Forest type</b>	:	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	:	<b><i>Terminalia arjuna, Terminalia tomentosa</i></b>
<b>Soil type</b>	:	<b>Red Loamy</b>
<b>Latitude</b>	:	<b>20°28'44"N</b>
<b>Longitude</b>	:	<b>84°13'53"E</b>
<b>Altitude</b>	:	<b>483 m.</b>
<b>Cocoon colour</b>	:	<b>Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>7.97 – 13.37</b>
<b>Female</b>	:	<b>12.63 – 20.20</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>1.77 – 2.58</b>
<b>Female</b>	:	<b>1.8 – 2.93</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>21.0 – 24.0</b>
<b>Female</b>	:	<b>20.0 – 22.0</b>
<b>Cocoon length (cm)</b>	:	<b>4.7 – 4.9</b>
<b>Cocoon breadth (cm)</b>	:	<b>3.2 – 3.5</b>
<b>Peduncle length (cm)</b>	:	<b>3.6 – 5.8</b>
<b>Volume (cc)</b>	:	<b>18 – 27</b>
<b>Silk Recovery (%)</b>	:	<b>50 - 60</b>
<b>Elongation (%)</b>	:	<b>20 - 25</b>
<b>Filament length (m)</b>	:	<b>600 - 900</b>
<b>Denier</b>	:	<b>8.0 - 9.0</b>
<b>Reelability (%)</b>	:	<b>25 - 30</b>
<b>Teenacity (g/d)</b>	:	<b>1.8 - 2.2</b>

## 19. SIMLIPAL

<b>Geographical pocket/places</b>	: Simlipal (Orissa)
<b>Forest type</b>	: Tropical Moist Deciduous
<b>Food Plant</b>	: Sal ( <i>Shorea robusta</i> )
<b>Soil type</b>	: Red Loamy
<b>Latitude</b>	: 21°48'13"N
<b>Longitude</b>	: 86°16'19"E
<b>Altitude</b>	: 834 m.
<b>Cocoon colour</b>	: Blackish Grey / Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 10.66 – 15.64
<b>Female</b>	: 15.40 – 24.38
<b>Shell Weight (g)</b>	
<b>Male</b>	: 2.39 – 3.54
<b>Female</b>	: 2.17 – 3.82
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 18.0 – 24.0
<b>Female</b>	: 17.0 – 21.0
<b>Cocoon length (cm)</b>	: 5.0 – 5.3
<b>Cocoon breadth (cm)</b>	: 3.1 – 3.5
<b>Peduncle length (cm)</b>	: 4.1 – 5.7
<b>Volume (cc)</b>	: 30 – 32
<b>Silk Recovery (%)</b>	: 40 – 55
<b>Elongation (%)</b>	: 20 – 30
<b>Filament length (m)</b>	: 1400 – 1600
<b>Denier</b>	: 10.0 – 12.0
<b>Reelability (%)</b>	: 18 – 25
<b>Teenacity (g/d)</b>	: 2.0 – 2.5

## 20. OMARKOTE

<b>Geographical pocket/places</b>	<b>:</b>	<b>Kalahandi (Orissa)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical Moist Deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red Loamy</b>
<b>Latitude</b>	<b>:</b>	<b>19°45'00"N</b>
<b>Longitude</b>	<b>:</b>	<b>83°00'00"E</b>
<b>Altitude</b>	<b>:</b>	<b>445 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>7.00 – 12.89</b>
<b>Female</b>	<b>:</b>	<b>11.16 – 18.58</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>1.18 – 2.68</b>
<b>Female</b>	<b>:</b>	<b>1.44 – 3.42</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>19.0 – 21.0</b>
<b>Female</b>	<b>:</b>	<b>15.0 – 18.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>4.2 – 4.8</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>3.1 – 3.3</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.6 – 5.2</b>
<b>Volume (cc)</b>	<b>:</b>	<b>24 – 29</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>40 - 55</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 30</b>
<b>Filament length (m)</b>	<b>:</b>	<b>1200 - 1500</b>
<b>Denier</b>	<b>:</b>	<b>8.0 - 10.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.7 - 2.3</b>

## 21. SUKLY

<b>Geographical pocket/places</b>	<b>:</b>	<b>Kharipal (Orissa) Baramkela (Chhattisgarh)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical dry deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Shorea robusta, Anogeissus latifolia</i></b>
<b>Soil type</b>	<b>:</b>	<b>Red Loamy</b>
<b>Latitude</b>	<b>:</b>	<b>21°34'00"N</b>
<b>Longitude</b>	<b>:</b>	<b>83°16'00"E</b>
<b>Altitude</b>	<b>:</b>	<b>235 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Whitish Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>3.95 – 8.23</b>
<b>Female</b>	<b>:</b>	<b>6.39 – 11.60</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.64 – 1.77</b>
<b>Female</b>	<b>:</b>	<b>0.88 – 2.90</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>16.0 – 23.0</b>
<b>Female</b>	<b>:</b>	<b>15.0 – 21.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.6 – 3.8</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.7 – 2.9</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>2.8 – 3.7</b>
<b>Volume (cc)</b>	<b>:</b>	<b>14 – 22</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>40 – 55</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>650 – 800</b>
<b>Denier</b>	<b>:</b>	<b>8.0 – 9.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.6 - 2.2</b>



## 22. KURUDH

<b>Geographical pocket/places</b>	:	<b>Kurudh (Madhya Pradesh)</b>
<b>Forest type</b>	:	<b>Tropical moist deciduous</b>
<b>Food Plant</b>	:	<b><i>Terminalia tomentosa</i></b>
<b>Soil type</b>	:	<b>Red Loamy</b>
<b>Latitude</b>	:	<b>20°50'N</b>
<b>Longitude</b>	:	<b>81°43'E</b>
<b>Altitude</b>	:	<b>298 m.</b>
<b>Cocoon colour</b>	:	<b>Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>8.98 – 11.20</b>
<b>Female</b>	:	<b>10.32 – 13.20</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>1.42 – 2.20</b>
<b>Female</b>	:	<b>2.25 – 3.50</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>19.0 – 22.0</b>
<b>Female</b>	:	<b>18.0 – 20.0</b>
<b>Cocoon length (cm)</b>	:	<b>4.5 – 4.6</b>
<b>Cocoon breadth (cm)</b>	:	<b>3.2 – 3.4</b>
<b>Peduncle length (cm)</b>	:	<b>4.2 – 5.8</b>
<b>Volume (cc)</b>	:	<b>28 – 33</b>
<b>Silk Recovery (%)</b>	:	<b>40 - 50</b>
<b>Elongation (%)</b>	:	<b>15 - 20</b>
<b>Filament length (m)</b>	:	<b>550 - 700</b>
<b>Denier</b>	:	<b>8 - 10</b>
<b>Reelability (%)</b>	:	<b>15 - 20</b>
<b>Teenacity (g/d)</b>	:	<b>1.6 - 2.0</b>

## 23. MULTAI

<b>Geographical pocket/places</b>	<b>:</b>	<b>Multai (Madhya Pradesh)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical moist deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Terminalia arjuna, Terminalia tomentosa</i></b>
<b>Soil type</b>	<b>:</b>	<b>Red Loamy</b>
<b>Latitude</b>	<b>:</b>	<b>21°46'28"N</b>
<b>Longitude</b>	<b>:</b>	<b>78°15'31"E</b>
<b>Altitude</b>	<b>:</b>	<b>762 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>1.96 – 6.09</b>
<b>Female</b>	<b>:</b>	<b>3.15 – 12.75</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.71 – 0.98</b>
<b>Female</b>	<b>:</b>	<b>0.90 – 1.20</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>16.0 – 18.0</b>
<b>Female</b>	<b>:</b>	<b>14.0 – 17.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>4.5 – 4.6</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.2 -2.5</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.9 – 4.5</b>
<b>Volume (cc)</b>	<b>:</b>	<b>28 – 35</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>35 - 55</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>500 - 700</b>
<b>Denier</b>	<b>:</b>	<b>8 - 10</b>
<b>Reelability (%)</b>	<b>:</b>	<b>15 - 20</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.7 - 2.0</b>

## 24. JHABUA

<b>Geographical pocket/places</b>	: Jhabua (Madhya Pradesh)
<b>Forest type</b>	: Tropical moist deciduous
<b>Food Plant</b>	: Sal ( <i>Shorea robusta</i> )
<b>Soil type</b>	: Red Loamy
<b>Latitude</b>	: 22°46'05"N
<b>Longitude</b>	: 74°35'29"E
<b>Altitude</b>	: 331 m.
<b>Cocoon colour</b>	: Whitish Grey / Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 4.76 – 6.47
<b>Female</b>	: 7.66 – 9.95
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.53 – 0.78
<b>Female</b>	: 0.65 – 1.22
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 10.0 – 13.0
<b>Female</b>	: 09.0 – 11.0
<b>Cocoon length (cm)</b>	: 3.6 – 5.5
<b>Cocoon breadth (cm)</b>	: 2.6 – 2.8
<b>Peduncle length (cm)</b>	: 4.3 – 5.5
<b>Volume (cc)</b>	: 22 – 30
<b>Silk Recovery (%)</b>	: 40 - 45
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 500 - 750
<b>Denier</b>	: 7.5 - 9.0
<b>Reelability (%)</b>	: 20 - 25
<b>Teenacity (g/d)</b>	: 1.8 - 2.2

## 25. BHOPAL - PATNAM

<b>Geographical pocket/places</b>	<b>:</b>	<b>Bhopalpatnam (Madhya Pradesh)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical dry deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Sandy red</b>
<b>Latitude</b>	<b>:</b>	<b>18°51'50"N</b>
<b>Longitude</b>	<b>:</b>	<b>80°23'03"E</b>
<b>Altitude</b>	<b>:</b>	<b>128 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Whitish Grey / Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>3.97 – 7.13</b>
<b>Female</b>	<b>:</b>	<b>5.47 – 10.41</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.54 – 1.37</b>
<b>Female</b>	<b>:</b>	<b>0.51 – 1.53</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>12.0 – 20.0</b>
<b>Female</b>	<b>:</b>	<b>10.0 – 21.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.5 – 3.8</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>3.2 – 3.5</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>2.5 – 3.5</b>
<b>Volume (cc)</b>	<b>:</b>	<b>09 – 15</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>40 - 50</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>500 - 750</b>
<b>Denier</b>	<b>:</b>	<b>7.5 - 9.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.7 - 2.2</b>

## 26. PIPRAI

<b>Geographical pocket/places</b>	<b>:</b>	<b>Piprai (Madhya Pradesh)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical dry deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b>Sal (<i>Shorea robusta</i>)</b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>24°30'34"N</b>
<b>Longitude</b>	<b>:</b>	<b>77°57'51"E</b>
<b>Altitude</b>	<b>:</b>	<b>458 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>5.21 – 6.97</b>
<b>Female</b>	<b>:</b>	<b>6.41 – 11.01</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.44 – 0.72</b>
<b>Female</b>	<b>:</b>	<b>0.71 – 1.30</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>10.0 – 13.0</b>
<b>Female</b>	<b>:</b>	<b>09.0 – 11.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>4.2 – 4.3</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.4 – 2.6</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.1 – 5.3</b>
<b>Volume (cc)</b>	<b>:</b>	<b>21 – 27</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>45 - 55</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>550 - 800</b>
<b>Denier</b>	<b>:</b>	<b>7.5 - 9.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.8 - 2.0</b>

## 27. SEONI

<b>Geographical pocket/places</b>	: Seoni (Madhya Pradesh)
<b>Forest type</b>	: Tropicaldry deciduous
<b>Food Plant</b>	: <i>Lagerstroemia parviflora</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 22°05'11"N
<b>Longitude</b>	: 79°33'01"E
<b>Altitude</b>	: 628 m.
<b>Cocoon colour</b>	: Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 4.90 – 8.09
<b>Female</b>	: 7.74 – 9.44
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.65 – 1.05
<b>Female</b>	: 0.75 – 1.52
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 12.0 – 14.0
<b>Female</b>	: 10.0 – 13.0
<b>Cocoon length (cm)</b>	: 4.6 – 4.8
<b>Cocoon breadth (cm)</b>	: 2.5 – 2.7
<b>Peduncle length (cm)</b>	: 3.2 – 4.6
<b>Volume (cc)</b>	: 24 – 30
<b>Silk Recovery (%)</b>	: 45 - 55
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 600 - 750
<b>Denier</b>	: 8.0 - 9.5
<b>Reelability (%)</b>	: 20 - 25
<b>Teenacity (g/d)</b>	: 1.8 - 2.0



## 28. JANGHBHIR

<b>Geographical pocket/places</b>	: Bastar (Chhattisgarh)
<b>Forest type</b>	: Tropical dry deciduous
<b>Food Plant</b>	: <i>Shorea robusta</i>
<b>Soil type</b>	: Sandy red
<b>Latitude</b>	: 19°15'00"N
<b>Longitude</b>	: 81°15'00"E
<b>Altitude</b>	: 790 m.
<b>Cocoon colour</b>	: Whitish Grey / Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 4.40 – 8.28
<b>Female</b>	: 7.39 – 11.85
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.98 – 1.85
<b>Female</b>	: 1.10 – 2.42
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 18.0 – 23.0
<b>Female</b>	: 15.0 – 19.0
<b>Cocoon length (cm)</b>	: 3.7 – 3.9
<b>Cocoon breadth (cm)</b>	: 2.6 – 2.9
<b>Peduncle length (cm)</b>	: 3.2 – 5.4
<b>Volume (cc)</b>	: 27 – 31
<b>Silk Recovery (%)</b>	: 40 - 50
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 1200 - 1600
<b>Denier</b>	: 10.0 - 12.0
<b>Reelability (%)</b>	: 20 - 30
<b>Teenacity (g/d)</b>	: 1.8 - 2.2

## 29. KORBI

<b>Geographical pocket/places</b>	: Korba (Chhattisgarh)
<b>Forest type</b>	: Tropical dry deciduous
<b>Food Plant</b>	: <i>Shorea robusta</i> , <i>Terminalia</i> sp.
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 22°20'44"N
<b>Longitude</b>	: 82°41'46"E
<b>Altitude</b>	: 289 m.
<b>Cocoon colour</b>	: Light Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 7.50 – 9.50
<b>Female</b>	: 8.50 – 11.52
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.95 – 1.88
<b>Female</b>	: 1.25 – 2.32
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 15.0 – 18.0
<b>Female</b>	: 12.0 – 17.0
<b>Cocoon length (cm)</b>	: 4.5 – 4.7
<b>Cocoon breadth (cm)</b>	: 2.3 – 2.5
<b>Peduncle length (cm)</b>	: 3.2 – 5.3
<b>Volume (cc)</b>	: 27 – 31
<b>Silk Recovery (%)</b>	: 40 - 50
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 900 - 1200
<b>Denier</b>	: 8 - 11
<b>Reelability (%)</b>	: 25 - 35
<b>Teenacity (g/d)</b>	: 1.8 - 2.4

### 30. TIRA

<b>Geographical pocket/places</b>	:	<b>Purulia (West Bengal)</b>
<b>Forest type</b>	:	<b>Tropical dry deciduous</b>
<b>Food Plant</b>	:	<i>Lagerstroemia parviflora</i> <i>Lagerstroemia speciosa</i>
<b>Soil type</b>	:	<b>Red loamy</b>
<b>Latitude</b>	:	<b>23°19'50"N</b>
<b>Longitude</b>	:	<b>86°21'46"E</b>
<b>Altitude</b>	:	<b>255 m.</b>
<b>Cocoon colour</b>	:	<b>Yellowish Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>4.40 – 8.84</b>
<b>Female</b>	:	<b>5.34 – 10.15</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>0.79 – 1.47</b>
<b>Female</b>	:	<b>0.81 – 1.99</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>11.0 – 16.0</b>
<b>Female</b>	:	<b>10.0 – 15.0</b>
<b>Cocoon length (cm)</b>	:	<b>2.5 – 2.7</b>
<b>Cocoon breadth (cm)</b>	:	<b>2.0 – 2.3</b>
<b>Peduncle length (cm)</b>	:	<b>4.2 – 4.6</b>
<b>Volume (cc)</b>	:	<b>13.0 – 15.0</b>
<b>Silk Recovery (%)</b>	:	<b>45 – 55</b>
<b>Elongation (%)</b>	:	<b>18.0 – 25.0</b>
<b>Filament length (m)</b>	:	<b>590 – 700</b>
<b>Denier</b>	:	<b>7.0 – 9.0</b>
<b>Reelability (%)</b>	:	<b>20 – 30</b>
<b>Teenacity (g/d)</b>	:	<b>1.8 – 2.0</b>

### 31. BANKURA

<b>Geographical pocket/places</b>	:	<b>Bankura (West Bengal)</b>
<b>Forest type</b>	:	<i>Lagerstroemia parviflora</i>
<b>Food Plant</b>	:	<b>Tropical dry deciduous</b>
<b>Soil type</b>	:	<b>Red loamy</b>
<b>Latitude</b>	:	<b>23°13'56"N</b>
<b>Longitude</b>	:	<b>87°04'17"E</b>
<b>Altitude</b>	:	<b>94 m.</b>
<b>Cocoon colour</b>	:	<b>Yellowish Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>4.82 – 6.14</b>
<b>Female</b>	:	<b>5.80 – 7.52</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>0.68 – 1.05</b>
<b>Female</b>	:	<b>0.92 – 1.58</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>15.0 – 19.0</b>
<b>Female</b>	:	<b>15.0 – 18.0</b>
<b>Cocoon length (cm)</b>	:	<b>2.5 – 2.8</b>
<b>Cocoon breadth (cm)</b>	:	<b>2.1 – 2.3</b>
<b>Peduncle length (cm)</b>	:	<b>4.2 – 4.6</b>
<b>Volume (cc)</b>	:	
<b>Silk Recovery (%)</b>	:	<b>40 – 50</b>
<b>Elongation (%)</b>	:	<b>17 – 20</b>
<b>Filament length (m)</b>	:	<b>575 – 725</b>
<b>Denier</b>	:	<b>7.0 – 9.0</b>
<b>Reelability (%)</b>	:	<b>18 – 25</b>
<b>Teenacity (g/d)</b>	:	<b>1.8 – 2.0</b>

### 32. DADAR & NAGAR HAWELI

<b>Geographical pocket/places</b>	<b>:</b>	<b>Dadar &amp; Nagar Haveli</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical dry deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Terminalia crenulata</i></b>
<b>Soil type</b>	<b>:</b>	<b>Black Clayey</b>
<b>Latitude</b>	<b>:</b>	<b>20.27°N</b>
<b>Longitude</b>	<b>:</b>	<b>73.02°E</b>
<b>Altitude</b>	<b>:</b>	<b>16 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Whitish Grey / Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>4.60 – 10.32</b>
<b>Female</b>	<b>:</b>	<b>5.23 – 11.71</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.90 – 1.88</b>
<b>Female</b>	<b>:</b>	<b>0.98 – 1.86</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>14 – 20</b>
<b>Female</b>	<b>:</b>	<b>18 – 20</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.2 – 4.2</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.2 – 2.6</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>2.5 – 3.6</b>
<b>Volume (cc)</b>	<b>:</b>	<b>18 – 21</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>35 - 40</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>450 - 600</b>
<b>Denier</b>	<b>:</b>	<b>8.0 - 9.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.7 - 2.0</b>

### 33. SHIWALIKA

<b>Geographical pocket/places</b>	: <b>Batote (Jammu and Kashmir) Palampur (Himachal Pradesh)</b>
<b>Forest type</b>	: <b>Mountain Sub-tropical</b>
<b>Food Plant</b>	: <i>Zizyphus jujuba</i>
<b>Soil type</b>	: <b>Forest hill and Alluvial</b>
<b>Latitude</b>	: <b>32°06'52" N</b>
<b>Longitude</b>	: <b>76°33'24"E</b>
<b>Altitude</b>	: <b>1355 m.</b>
<b>Cocoon colour</b>	: <b>Light yellow</b>
<b>Cocoon shape</b>	: <b>Oval</b>
<b>Cocoons weight (g)</b>	
<b>Male</b>	: <b>1.96 – 6.09</b>
<b>Female</b>	: <b>3.15 – 8.75</b>
<b>Shell Weight (g)</b>	
<b>Male</b>	: <b>0.70 – 1.57</b>
<b>Female</b>	: <b>0.91 – 1.70</b>
<b>Shell Ratio (%)</b>	
<b>Male</b>	: <b>20 – 25</b>
<b>Female</b>	: <b>17 – 21</b>
<b>Cocoon length (cm)</b>	: <b>3.3 – 4.5</b>
<b>Cocoon breadth (cm)</b>	: <b>2.2 – 2.8</b>
<b>Peduncle length (cm)</b>	: <b>4.2 – 4.6</b>
<b>Volume (cc)</b>	: <b>21 - 24</b>
<b>Silk Recovery (%)</b>	: <b>40 - 50</b>
<b>Elongation (%)</b>	: <b>15 - 25</b>
<b>Filament length (m)</b>	: <b>550 - 750</b>
<b>Denier</b>	: <b>8.0 - 9.5</b>
<b>Reelability (%)</b>	: <b>20 - 25</b>
<b>Teenacity (g/d)</b>	: <b>1.7 - 2.1</b>

### 34. MONGA

<b>Geographical pocket/places</b>	: Deoria (Uttar Pradesh)
<b>Forest type</b>	: Tropical dry deciduous
<b>Food Plant</b>	: <i>Terminalia arjuna</i> , <i>Terminalia tomentosa</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 26°30'06"N
<b>Longitude</b>	: 83°46'45"E
<b>Altitude</b>	: 82 m.
<b>Cocoon colour</b>	: Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 3.20 – 6.38
<b>Female</b>	: 6.20 – 11.31
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.42 – 0.92
<b>Female</b>	: 1.20 – 1.82
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 17.0 – 21.0
<b>Female</b>	: 12.0 – 15.0
<b>Cocoon length (cm)</b>	: 4.4 – 4.6
<b>Cocoon breadth (cm)</b>	: 3.6 – 3.8
<b>Peduncle length (cm)</b>	: 3.3 – 6.2
<b>Volume (cc)</b>	: 24 – 27
<b>Silk Recovery (%)</b>	: 50 – 67
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 790 – 850
<b>Denier</b>	: 9.0 – 10.0
<b>Reelability (%)</b>	: 20 - 25
<b>Teenacity (g/d)</b>	: 1.5 - 2.0

### 35. MIRZAPUR

<b>Geographical pocket/places</b>	<b>:</b>	<b>Mirzapur (Uttar Pradesh)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical dry deciduous</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Zizyphus jujuba</i></b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>25°08'44"N</b>
<b>Longitude</b>	<b>:</b>	<b>82°34'11"E</b>
<b>Altitude</b>	<b>:</b>	<b>89 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Light Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>4.42 – 10.82</b>
<b>Female</b>	<b>:</b>	<b>6.33 – 12.60</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.75 – 1.02</b>
<b>Female</b>	<b>:</b>	<b>1.04 – 1.50</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>16.0 – 19.0</b>
<b>Female</b>	<b>:</b>	<b>13.0 - 15.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.5 – 3.6</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.2 – 2.4</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.1 – 4.2</b>
<b>Volume (cc)</b>	<b>:</b>	<b>18 – 25</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>25 - 30</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>750 - 900</b>
<b>Denier</b>	<b>:</b>	<b>9.0 - 10.5</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 30</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.7 - 2.1</b>



### 36. SULTANPUR

<b>Geographical pocket/places</b>	: Sultanpur (Uttar Pradesh)
<b>Forest type</b>	: Tropical dry deciduous
<b>Food Plant</b>	: <i>Terminalia arjuna</i> , <i>Terminalia tomentosa</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 26°15'35"N
<b>Longitude</b>	: 82°04'23"E
<b>Altitude</b>	: 104 m.
<b>Cocoon colour</b>	: Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
Male	: 4.25 – 7.60
Female	: 5.80 – 9.75
<b>Shell Weight (g)</b>	
Male	: 0.51 – 1.56
Female	: 0.69 – 1.58
<b>Shell Ratio (%)</b>	
Male	: 14.0 – 16.0
Female	: 13.0 – 15.0
<b>Cocoon length (cm)</b>	: 2.7 – 3.0
<b>Cocoon breadth (cm)</b>	: 2.4 – 2.6
<b>Peduncle length (cm)</b>	: 3.0 – 4.5
<b>Volume (cc)</b>	: 22 – 29
<b>Silk Recovery (%)</b>	: 25 - 30
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 600 - 800
<b>Denier</b>	: 8 - 10
<b>Reelability (%)</b>	: 20 - 30
<b>Teenacity (g/d)</b>	: 1.7 - 2.0

### 37. TESERA

<b>Geographical pocket/places</b>	:	<b>Sahabad (Rajasthan)</b>
<b>Forest type</b>	:	<b>Thorn forest</b>
<b>Food Plant</b>	:	<b><i>Zizyphus jujuba</i></b>
<b>Soil type</b>	:	<b>Red loamy</b>
<b>Latitude</b>	:	<b>28°34'00"N</b>
<b>Longitude</b>	:	<b>79°00'34"E</b>
<b>Altitude</b>	:	<b>189 m.</b>
<b>Cocoon colour</b>	:	<b>Whitish Grey</b>
<b>Cocoon shape</b>	:	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	:	<b>4.82 – 6.14</b>
<b>Female</b>	:	<b>5.80 – 7.52</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	:	<b>0.68 – 1.05</b>
<b>Female</b>	:	<b>0.92 – 1.58</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	:	<b>15 – 19</b>
<b>Female</b>	:	<b>14 - 17</b>
<b>Cocoon length (cm)</b>	:	<b>3.2 – 3.7</b>
<b>Cocoon breadth (cm)</b>	:	<b>2.5 – 2.9</b>
<b>Peduncle length (cm)</b>	:	<b>4.2 – 4.3</b>
<b>Volume (cc)</b>	:	<b>20 - 24</b>
<b>Silk Recovery (%)</b>	:	<b>25 - 35</b>
<b>Elongation (%)</b>	:	<b>20 - 25</b>
<b>Filament length (m)</b>	:	<b>700 - 900</b>
<b>Denier</b>	:	<b>8.0 - 10.0</b>
<b>Reelability (%)</b>	:	<b>20 - 30</b>
<b>Teenacity (g/d)</b>	:	<b>1.7 - 2.0</b>

### 38. NOWGAON

<b>Geographical pocket/places</b>	: Nowgaon (Assam)
<b>Forest type</b>	: Tropical wet ever-green
<b>Food Plant</b>	: <i>Zizyphus jujuba</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 25°03'39"N
<b>Longitude</b>	: 79°26'29"E
<b>Altitude</b>	: 234 m.
<b>Cocoon colour</b>	: Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 5.45 – 7.49
<b>Female</b>	: 8.78 – 11.13
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.71 – 0.98
<b>Female</b>	: 0.83 – 1.35
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 12.0 – 16.0
<b>Female</b>	: 10.0 – 15.0
<b>Cocoon length (cm)</b>	: 4.5 – 6.5
<b>Cocoon breadth (cm)</b>	: 2.6 – 3.5
<b>Peduncle length (cm)</b>	: 5.5 – 8.5
<b>Volume (cc)</b>	: 15 – 20
<b>Silk Recovery (%)</b>	: 40 – 50
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 850 – 989
<b>Denier</b>	: 8.0 – 9.0
<b>Reelability (%)</b>	: 25 - 35
<b>Teenacity (g/d)</b>	: 1.6 - 2.2

**39. NE 1,95**

<b>Geographical pocket/places</b>	: Boko (Assam)
<b>Forest type</b>	: Tropical wet ever-green
<b>Food Plant</b>	: <i>Zizyphus jujuba</i> , <i>Careya arborea</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 25°58'50"N
<b>Longitude</b>	: 91°14'22"E
<b>Altitude</b>	: 51 m.
<b>Cocoon colour</b>	: Whitish Grey / Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 5.45 – 7.49
<b>Female</b>	: 8.78 – 11.13
<b>Shell Weight (g)</b>	
<b>Male</b>	: 0.71 – 0.98
<b>Female</b>	: 0.83 – 1.35
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 12.0 – 16.0
<b>Female</b>	: 10.0 – 15.0
<b>Cocoon length (cm)</b>	: 4.0 – 4.8
<b>Cocoon breadth (cm)</b>	: 2.5 – 3.5
<b>Peduncle length (cm)</b>	: 5.5 – 8.5
<b>Volume (cc)</b>	: 25.28
<b>Silk Recovery (%)</b>	: 45 – 50
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 750 – 880
<b>Denier</b>	: 7.0 – 8.0
<b>Reelability (%)</b>	: 25 - 35
<b>Teenacity (g/d)</b>	: 1.7 - 2.2

**40. NE2, 95**

<b>Geographical pocket/places</b>	<b>:</b>	<b>Mendipathar, Resubelpara (Meghalaya)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical wet ever-green</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Zizyphus jujuba, Careya arborea</i></b>
<b>Soil type</b>	<b>:</b>	<b>Laterite</b>
<b>Latitude</b>	<b>:</b>	<b>25.51"N</b>
<b>Longitude</b>	<b>:</b>	<b>90.59"E</b>
<b>Altitude</b>	<b>:</b>	<b>38 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Whitish Grey / Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>3.97 – 7.18</b>
<b>Female</b>	<b>:</b>	<b>5.47 – 10.41</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.45 – 1.37</b>
<b>Female</b>	<b>:</b>	<b>0.51 – 1.53</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>16.0 – 20.0</b>
<b>Female</b>	<b>:</b>	<b>15.0 – 16.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.0 – 3.4</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.2 – 2.5</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.4 – 3.6</b>
<b>Volume (cc)</b>	<b>:</b>	<b>24 – 26</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>40 – 55</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>600 – 640</b>
<b>Denier</b>	<b>:</b>	<b>7.0 – 8.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>25 - 30</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.6 - 2.0</b>

## 41. JIRIBAM

<b>Geographical pocket/places</b>	: Jiribam (Manipur)
<b>Forest type</b>	: Tropical wet ever-green
<b>Food Plant</b>	: <i>Zizyphus jujube</i>
<b>Soil type</b>	: Red loamy
<b>Latitude</b>	: 24.80°N
<b>Longitude</b>	: 93.12°E
<b>Altitude</b>	: 41 m.
<b>Cocoon colour</b>	: Whitish Grey / Grey
<b>Cocoon shape</b>	: Oval
<b>Cocoons weight (g)</b>	
<b>Male</b>	: 7.82 – 12.32
<b>Female</b>	: 7.81 – 14.23
<b>Shell Weight (g)</b>	
<b>Male</b>	: 1.10 – 1.82
<b>Female</b>	: 1.62 – 2.93
<b>Shell Ratio (%)</b>	
<b>Male</b>	: 15.0 – 18.0
<b>Female</b>	: 14.0 – 18.0
<b>Cocoon length (cm)</b>	: 2.5 – 3.4
<b>Cocoon breadth (cm)</b>	: 1.8 – 2.3
<b>Peduncle length (cm)</b>	: 3.2 – 3.6
<b>Volume (cc)</b>	: 20 – 22
<b>Silk Recovery (%)</b>	: 35 - 45
<b>Elongation (%)</b>	: 20 - 25
<b>Filament length (m)</b>	: 800 - 900
<b>Denier</b>	: 8.0 - 9.0
<b>Reelability (%)</b>	: 25 - 35
<b>Teenacity (g/d)</b>	: 1.7 - 2.1

**42. NG, 94**

<b>Geographical pocket/places</b>	<b>:</b>	<b>Dimapur (Nagaland)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical wet ever-green</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Zizyphus jujube</i></b>
<b>Soil type</b>	<b>:</b>	<b>Red loamy</b>
<b>Latitude</b>	<b>:</b>	<b>25°53'02"N</b>
<b>Longitude</b>	<b>:</b>	<b>93°46'15"E</b>
<b>Altitude</b>	<b>:</b>	<b>148 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Whitish Grey / Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>5.82 – 10.82</b>
<b>Female</b>	<b>:</b>	<b>8.56 – 12.79</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.80 – 2.15</b>
<b>Female</b>	<b>:</b>	<b>1.11 – 2.07</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>18.0 – 21.0</b>
<b>Female</b>	<b>:</b>	<b>16.0 – 18.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.0 – 3.4</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.2 – 2.5</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.5 – 4.2</b>
<b>Volume (cc)</b>	<b>:</b>	<b>21 – 25</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>35 - 45</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>750 - 900</b>
<b>Denier</b>	<b>:</b>	<b>7.0 – 8.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>25 - 30</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.8 - 2.2</b>

### 43. BELGAUM

<b>Geographical pocket/places</b>	<b>:</b>	<b>Belgaum (Karnataka)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical wet ever-green</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Hardwickia binata</i></b>
<b>Soil type</b>	<b>:</b>	<b>Laterite</b>
<b>Latitude</b>	<b>:</b>	<b>15°51'07"N</b>
<b>Longitude</b>	<b>:</b>	<b>74°30'16"E</b>
<b>Altitude</b>	<b>:</b>	<b>769 m.</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Whitish Grey / Grey</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>5.25 – 5.50</b>
<b>Female</b>	<b>:</b>	<b>5.28 – 6.98</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.52 – 0.98</b>
<b>Female</b>	<b>:</b>	<b>0.49 - 1.01</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>9.0 – 12.0</b>
<b>Female</b>	<b>:</b>	<b>8.0 – 10.0</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.4 – 5.5</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>3.2 – 4.6</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>5.5 – 6.6</b>
<b>Volume (cc)</b>	<b>:</b>	<b>22 – 25</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>45 - 50</b>
<b>Elongation (%)</b>	<b>:</b>	<b>18 - 22</b>
<b>Filament length (m)</b>	<b>:</b>	<b>550 - 700</b>
<b>Denier</b>	<b>:</b>	<b>7.0 - 9.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.7 - 2.1</b>



**44. KE02**

<b>Geographical pocket/places</b>	<b>:</b>	<b>Moorkanparamba (Kerala)</b>
<b>Forest type</b>	<b>:</b>	<b>Tropical wet ever-green</b>
<b>Food Plant</b>	<b>:</b>	<b><i>Ancardium occidentale</i></b>
<b>Soil type</b>	<b>:</b>	<b>Laterite</b>
<b>Cocoon colour</b>	<b>:</b>	<b>Light yellow</b>
<b>Cocoon shape</b>	<b>:</b>	<b>Oval</b>
<b>Cocoons weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>7.31 – 7.28</b>
<b>Female</b>	<b>:</b>	<b>5.77 – 8.26</b>
<b>Shell Weight (g)</b>		
<b>Male</b>	<b>:</b>	<b>0.88 – 1.07</b>
<b>Female</b>	<b>:</b>	<b>0.53 – 0.78</b>
<b>Shell Ratio (%)</b>		
<b>Male</b>	<b>:</b>	<b>18 – 22</b>
<b>Female</b>	<b>:</b>	<b>15 -20</b>
<b>Cocoon length (cm)</b>	<b>:</b>	<b>3.0 – 4.8</b>
<b>Cocoon breadth (cm)</b>	<b>:</b>	<b>2.0 – 2.5</b>
<b>Peduncle length (cm)</b>	<b>:</b>	<b>3.7 – 4.8</b>
<b>Volume (cc)</b>	<b>:</b>	<b>20 -26</b>
<b>Silk Recovery (%)</b>	<b>:</b>	<b>30 - 40</b>
<b>Elongation (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Filament length (m)</b>	<b>:</b>	<b>575 – 650</b>
<b>Denier</b>	<b>:</b>	<b>7.0 – 8.0</b>
<b>Reelability (%)</b>	<b>:</b>	<b>20 - 25</b>
<b>Teenacity (g/d)</b>	<b>:</b>	<b>1.6 - 2.0</b>

NA - Not Available



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