



**"Profitable Residue Free Organic Cotton Production"
- new technology platform by Zydex Industries...**

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Environment & Sustainability - Farm to Fashion

Environment & Sustainability for Textile production

- Sustainable resources for production
- Higher yields of fibres per acre
- Reduction in Energy & Environmental impact
- Higher quality
- Durability extension
- Circularity goal

Innovations for sustainability – Farm

Textile & Societal Impact

- Quality of Cotton will improve
- Toxicity in Cotton will be eliminated
- Water tables in fields will be restored
- Agricultural lands will restore their fertility

Innovations for sustainability – Zytonic® Technology

Farm

Chemical-free Cotton
Higher Yield & Better Quality

Monitor soil organic Carbon increase &
water table increase

Deliver end to end Traceability and Certification to ensure quality

Innovations for sustainability – Zytonic® Technology

Prakalp Sanjeevani 5 simple key steps

- Improved organic manure and bio-digestion (Qty & Quality)
- Soft and porous soil (Zytonic Technology)
- Improved biological count in the soil
- Super efficient Photosynthesis
- Protection with Biological methods - Neem (micro encapsulated) & other microbes

Innovations for sustainability – Zytonic® Technology

Chemical Cotton Farming to Biological Cotton Farming

1 Crop cycle profitable switch.....Prakalp Sanjeevni

- Ensures FYM improvement & adequacy
- Higher yields & better quality
- 40-50% less water requirement
- 90-100% of rain water absorption in the farm field itself to improve water table
- Zero pesticide residue

Water savings in Chemical-free Cotton farming

- Typically 20,000 litres of water required for 1 kg
- Estimated savings will be 8-10,000 litres per kg
- Textile industry uses 200 litres to process 1 kg
- Farming practices change is 40-50 times more impactful for sustainability goals

Innovations for sustainability – Zytonic® Technology

100% Bio-farming Zytonic ‘Prakalp Sanjeevni’ protocol

**Group of farmers in Beed district MH are using Zytonic technology
in 1500 acres**

**Group of farmers in Saurashtra GJ in 1200 acres cotton and
successfully transitioned to profitable organic farming**

Ongoing collaboration projects with CITI CRDA and Welspun in MH

CSR- Project with NGO in Gujarat

Location of the project: Chhota Udaipur & Panchmahal districts in Gujarat

- Total 600 farmers have adopted Zytonic Prakalp Sanjeevani in various crops; and 300 are in Cotton
- Cotton quality is as per Kasturi specifications
- No chemical residue – Organic cotton
- Full traceability

Project with CITI CRDA

Location of the project: Wardha district, Maharashtra.

Number of farmers – 25

Sowing window – 14th–24th June 2025

Crop stage – Flowering | boll setting

Farmers response – Improved germination, better growth, low pest pressure, healthy crop

Happy cotton farmers – Zytonic® Technology



Prashant Bhau Lakde – Wardha district, MH
Plant green for longer period
Improved Pest control

Zytonic Technology Vs Farmer Practice Results

Zytonic Technology plot



Farmer Practice plot



Name of Farmer: Dinesh Thonge
Village- Sagara TQ- Bhadravati Dist.
Chandrapur

Zytonic Technology plot



Farmer Practice plot



Name of Farmer: Mahesh Sarode
Village- Sagara TQ- Bhadravati Dist.
Chandrapur)

Zytonic Technology Vs Farmer Practice Results – Welspun project



झायटोनिक उपचारीत



झायटोनिक न उपचारीत

Commercial adoption by farmers in Gujarat

Location : Saurashtra - Gujarat

- Farmer experienced benefits in last year with Prakalp Sanjeevani are moving towards chemical free cotton
- 10 farmers have gone fully organic in this year
- Experienced improved crop growth, higher flowering, improved boll size and yield
- Improved immunity to pest & disease

Happy cotton farmers – Zytonic® Technology



Nandlalbhai Ghevriya, vil. Dedakadi, Bhavnagar

No of Boll and boll size increase..

Plant green for longer period - Continue flowering ...picking

Improved Pest control

NO CHEMICAL INPUT



Ashvinbhai Gelani, Village Lunki, Bhavnagar

Good Growth,

continue flowering, multiple picking

Increased yield

NO CHEMICAL INPUT

Chemical Free Cotton...

Zydex ~ Kasturi

- ❑ Cooperation with Texprocil to enable Ginners source Chemical Free Cotton using Zytonic Technology

Quality standards of Fibre to qualify as Kasturi Cotton

Parameter	Criteria	
Staple length/UHML	30 mm+	29 mm+
Micronaire value	3.7 to 4.5	3.7 to 4.5
RD value	76+	76+
Fibre strength	30.5 (±1.5) g/tex	29.5 (±1.5) g/tex
Uniformity index	84% or more	83% or more
Trash	2% or below	2% or below
Moisture content	8% or below	8% or below



COTTON ASSOCIATION OF INDIA
COTTON TESTING & RESEARCH LABORATORY
Cotton Exchange Bldg., Cottongreen, Mumbai - 400 033.
Tel.No.8657442948



TEST REPORT

Fibre Test Report No : 13736/13738 Mechanical Testing : Textile Date : 28/11/2024

Sample Received on : 25/11/2024

Samples of cotton submitted by: M/s. ZYDEX INDUSTRIES PVT LTD Sample Tested On: 28/11/2024

Lab.	Sample Details Furnished By the Customer					HVI - HVI MODE TEST RESULTS (ASTM : D - 5867-2012 RA 2020)								
						UHML	UI	Strength at	Elong.	MIC	COLOUR			SFI
Ref No	Station	Variety	Lot	P.R.No	S.B	(In mm)	(%)	3.2mm (g/t)	%	µg/inch	Rd	+b	CG	---
			No		No.									
2413736	Dahod	---	1	---	---	32.7	87.9	34.1	6.7	4.7	82.2	5.5	31-2	6.9
2413737	Ghogara	---	2	---	---	32.1	86.8	33.6	6.6	4.0	80.2	6.0	31-2	6.7
2413738	Narwadi	---	2	---	---	32.0	88.1	33.7	6.6	4.0	85.1	5.9	21-2	7.0

Tested :- RH 65 ± 2% and Temp 21 ± 2°C

NOTES:-

1. Samples are not drawn by the laboratory.
2. The test results relate only to the item tested.
3. This report shall not be used for litigation or publicity
4. This report shall not be reproduced in part / full without the written permission of the Laboratory
5. CAI absolves itself of any legal or financial liability pertaining to this test report



Kiran Borole/QM



India...
Golden land
Golden opportunity
Organic India