

# WHITEFLY – THE BLACK STORY

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Three years in a row, the whitefly has been on a song in north India. Two weeks ago, I went to Punjab, Haryana and Rajasthan. Clearly the whitefly was on a high. There was hardly any cotton hybrid that was unaffected with the whitefly and the cotton leaf curl virus disease that it transmits. Some hybrids were more susceptible. A few hybrids were tolerant to whiteflies and the leaf curl virus disease as well. August is generally not the peak month

for the whitefly. Late September and October are expected to have the highest peaks of the insect. Are we to expect a menace of the whitefly in north India by this month-end? If proper timely steps are not initiated, this insect will grab the national headlines in the next 4-5 weeks time.

WHITEFLY: The whitefly was first reported in Greece 125 years ago. It became a major pest on cotton in India only after 1984. Whitefly is a small white insect of 1.0 mm length. It feeds on more than 500 plant species and transmits a

range of viral diseases in plants. Whiteflies suck sap from under surface of leaves causes yellowing and upward curling of the leaves. Though, the ideal conditions for growth are 27oC and 71% relative humidity, hot and humid conditions favour the insect. The insect excretes sticky honeydew which promotes a fungal sooty mould formation on leaves and cotton bolls. The black mould interferes with photosynthesis in leaves and reduces quality of the cotton fibre. Sticky cotton is not accepted by ginners and the textile industry. Cotton losses were estimated to be in the range of 15-20% and sometimes up to 30%.

The scientific name of the whitefly is Bemisia tabaci. But in 1994, a new aggressive biotype 'B biotype' was debatably categorized as a new species Bemisia argentifolii.

The presence of a wide range of hosts such as vegetables, pulses, citrus all through the year helps the whiteflies to survive and proliferate. But clearly, it is human interventions that aggravate the crisis.

COTTON LEAF CURL VIRUS (CLCuD): The whitefly transmits the dreaded cotton leaf curl



Dr K.R. Kranthi

virus disease in Pakistan and north India. There are no control measures for the leaf curl virus. Disease affected plants are stunted with fewer number of bolls and reduced yields. Infected plants serve as source of inoculum and infestation for the remaining healthy fields. Almost all the Bt-cotton hybrids in north India were found to be affected by the disease. However a few hybrids were found to be tolerant to whiteflies and the virus. Interestingly, early sown crop was found to be less affected.

INSECTICIDE INDUCED WHITEFLY OUTBREAKS: Why is the whitefly having fun in north India? It is interesting that this small insect emerged as a major menace on cotton in India only after 1984. There were severe outbreaks in 1987-88 in Andhra Pradesh and later in Maharashtra, Gujarat and Punjab. Clearly the trigger was a group of insecticides called 'synthetic pyrethroids' that were introduced into the country in 1981. There was clear evidence that indiscriminate use of the pyrethroids was aggravating the problem. A small experiment conducted in Arizona almost two decades ago by Peter Asiimwe showed that when acephate was sprayed four times at biweekly intervals, the treated plots sustained heavy damage from whiteflies leading to plant death. Imagine a tank-mix of pyrethroid + acephate being sprayed repeatedly. This leads to a quick surge in whiteflies resulting in outbreaks. This is what happens more frequently in north India. There have been many such cases with many insecticides that aggravate whitefly infestation in crops, especially in cotton. DDT was known to have caused it in several parts of the world. Fipronil is a recent insecticide that was found to cause whitefly resurgence in north India. Thus it is clear that broad spectrum insecticides and insecticide mixtures cause high levels of whitefly resurgence.

WHAT CAUSES OUBREAKS: Whitefly is an invited guest and an induced pest. Human interventions are responsible for the insect to survive, reproduce, spread and proliferate. A combination of factors such as a) susceptible hybrids, b) hairy or bushy genotypes, c) late sowing, d) high nitrogenous fertilizers, e) inadequate phosphorus and Potassium in the soil, f) indiscriminate use of pyrethroids, acephate, fipronil and mixtures, g) whitefly resistance to insecticides, i) scant regard for proper choice of control measures, j) improper spray application methods and k) favourable weather.

HOW CAN INSECTICIDES INDUCE PEST OUTBREAKS?: Of course they do. At CICR we found that synthetic pyrethroids and acephate induce bollworms and whiteflies and; spinosad induces mealybugs. Insect pests, including whiteflies are naturally controlled by predators and parasites called 'natural enemies' in the field. The natural enemies are generally more susceptible to insecticides than the insect pests. For example, the whiteflies have a waxy coating over the body which protects against insecticides; but its natural enemies are not protected. The whiteflies feed from under surface of the leaf where insecticides do not easily reach. The natural enemy predators and parasites are generally present all over the plant and get exposed to insecticides. Insect pests become resistant quickly to insecticides whereas natural enemies take a longer time for resistance development. Additionally there is a phenomenon reported with whiteflies and American bollworms, called 'hormoligosis' which causes insects to rapidly reproduce and multiply when the surviving insects perceive chemical stress, especially at sub-lethal doses. An insecticide mixtures such as cypermethrin+profenophos was found to induce strong hormoligosis in bollworms in our laboratory. Some reports also describe insecticide-induced physiological changes in the plant which become more favourable to insect pests. Thus more the insecticide sprays -more the problem.

CURRENT STATUS: During the cotton season

2015-16 an epidemic of whitefly incidence was noticed during August in the cotton growing areas of Haryana, Punjab and Rajasthan. The white fly populations were above economic thresholds in almost all the regions surveyed in Punjab, Haryana and Rajasthan. Whitefly infestation and the CLCuV disease were first noticed in early June. The menace increased in July-August. The insect infestation and whitefly incidence were higher than the previous three years. The virus caused leaf curl symptoms during August in >90% of the hybrids surveyed in the three states, except in early sown crop. Whitefly incidence ranged from 1.6 to 90 adults /3 leaves during July-August in Sirsa. Thus far, high levels of whitefly infestation were noticed in the second week of August in all the three states.

Fields sprayed with repeated insecticide sprays, insecticide mixtures, fipronil and pyrethroids had the highest levels of whitefly infestation. In Rajasthan, the initiation of whitefly infestation started in the last week of June. The white population ranged between 20- 140 whiteflies/3 leaves. In Punjab, whitefly incidence was very severe in Abohar, Faridkot, Fazilka, Muktsar and Mansa districts, to an extent of about 60-90 insects per leaf in some fields. Infestation was also severe in Hansi and Hisar region of Haryana mainly due to planting of susceptible Bt cotton hybrids.

SOME BITTER FACTS: Global experimental data affirms that majority of recommended insecticides disrupt naturally occurring biological control thereby leading to whitefly outbreaks in cotton across the world. This season insecticides such as fipronil and synthetic pyrethroids were used frequently also as mixtures with organophosphate insecticides (monocrotophos, acephate and triazophos) in north India right through July-August. These insecticides severely aggravate pest populations leading to resurgence and outbreaks.

Majority of the Bt-cotton hybrids grown in north India are susceptible to whiteflies and the CLCuV. This year, in many parts of the north, there was delay in sowing by 15-20 days, which helped the whitefly. High levels of urea (nitrogenous fertilizer) were used mostly in Haryana and Punjab. Insecticide mixtures mostly with pyrethroids plus acephate were sprayed indiscriminately. Spray application methods were bad. Deficient rainfall of less than 100 mm up to July coupled with cloudy conditions and high humidity created favourable weather for the insect pest. Everything is working out well for the whitefly.

Bt cotton hybrids cultivated in north India were released directly without subjecting them to rigorous screening for tolerance to whitefly and the leaf curl virus. More than 90% of the Bt-cotton hybrids under cultivation are highly susceptible to the whiteflies and the cotton leaf curl virus.



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The weather during July 2015 was ideally suited for whiteflies. Prolonged cloudy conditions and intermittent scanty rains caused high humidity and hot weather leading to whitefly outbreaks.

Late sowing after second week of May caused high levels of CLCuV infestation coupled with whitefly outbreaks. This year sowing was delayed due to late harvesting of wheat and late release of canal water. Therefore the CLCuV disease is high. As per the CICR survey conducted during the third week of August 2015, crop sown before the first fortnight of May is relatively healthy and crop sown subsequently was stunted and more vulnerable to whitefly and the CLCuV disease. Late sown crop has tender foliage in June-July which coincides with whitefly peaks thus leading to higher pest infestation. Whitefly incidence at high levels early in the season caused sooty mould in some hybrids due to the honey dew excreted which resulted in poor growth of plants.

Whiteflies are present continuously in north India due the availability of wide range of crops all through the year. Crops such as rice, guar (cluster bean), and moong, groundnut and kharif vegetables are predominantly grown during the season. Both guar and moong crop are a good alternate host of whitefly. The insect is continuously subjected to selection pressure by insecticides used for its control. Several weeds serve as hosts for the whitefly and the CLCuV disease. Severity of the disease depends on the level of weed infestation in the vicinity of fields.

INSECTICIDE RESISTANCE: Studies conducted by CICR showed that whiteflies in north India have developed resistance to all the commonly used insecticides. 'Neonicotinoid' group insecticides are most commonly used in north India. Whitefly resistance to the neonicotinoid insecticides is high in north. There are very few insecticides that are effective. This has resulted in excessive indiscriminate insecticide sprays that disrupted ecosystems, which led to the severe whitefly outbreaks and further development of resistance.

CICR is monitoring for insecticide resistance development against 12 insecticides in whiteflies and jassids collected from 24 locations across the country. Insecticide resistance monitoring carried out by CICR showed high level of insecticide resistance to acetamiprid, thiomethoxam, imidacloprid, monocrotophos, clorpyriphos, triazophos and acephate. The institute is also monitoring for resistance development in bollworms to Bollgard-II. Based on the results, IRM strategies will be developed and disseminated across the country.

HYBRID SUSCEPTIBILITY: CICR is conducting a multi-location experiment with 143 Bt-cotton hybrids this year at five locations (Hisar, Sirsa, Sriganganagar, Bhatinda and Faridkot) in the three north India states of Haryana, Rajasthan and Punjab to evaluate for tolerance/susceptibility to CLCuV and whiteflies. Recommendations of tolerant Btcotton hybrids to be preferred for 2016, will be finalized from the trial data.

**RECOMMENDATIONS FOR MANAGEMENT:** For effective management of the pest, crop ecosystems must be least disturbed. Never use Fipronil, synthetic pyrethroids or any insecticide mixtures. Avoid excessive urea application. Use NPK mixed fertilizers as split doses. Plant yellow sticky traps at 5 traps per 100 sq metre. For best long term results, neem-oil and castor oil based insecticides, soap sprays and insect growth regulators are recommended. Initially use vacuum suction traps followed by a sequential use of water sprays, soap sprays and neem-oil based neem seed kernel extracts. If needed insect growth regulators such as difenthiauron, buprofezin, spiromesifen, and pyriproxifen can be used after mid-August. These insecticides are effective on whiteflies and are relatively safer to its natural enemies.

NEED FOR A ROBUST POLICY: If cotton has to survive in north India, it is important that some policies are formulated. 1. Never allow CLCuD susceptible varieties/hybrids to be permitted for cultivation. 2. Create facilities for early sowing before the end of April by providing irrigation and enforcing a ban on sowing after 7th May. 3. Insect pest management must be based on sticky traps, reflective sheets, suction traps, soap emulsions of neem oil, castor oil, fish oil rosin soap and insect and insect growth regulators. 4. Appropriate spray methods must be used to ensure that the spray fluid covers the under-surface of leaves. 5. Fields and vicinity must be kept weed free

I must mention here that during my visit to north India in August, I was delighted to see that all the varieties of the Desi cotton species Gossypium arboreum were immune to the virus and were absolutely unaffected by the whitefly. In fact there were hardly any whiteflies on the Desi varieties. But the area under Hybrid cotton is about 1.46 million hectares in north India, while the Desi cotton species is now cultivated in just about 0.04 million hectares. My respect for Desi cotton jumped a few notches above than the current high levels. Desi cotton species Gossypium arboreum is immune to CLCuV. Desi cotton species Gossypium arboreum is highly resistant to the whiteflies. Therefore, for next year, farmers should be advised to choose either Desi cotton varieties or whitefly tolerant and CLCuV tolerant varieties / hybrids in the American cotton species, Gossypium hirsutum and sow early.

(The views expressed in this column are of the author and not that of Cotton Association of India)

World cotton area is projected down 7% in 2015/16 to just under 31 million hectares due to significantly lower prices in 2014/15. The world average yield is expected to decrease by 3% to 764 kg/ha with world production down 10% to 23.7 million tons. India's cotton area is estimated down 5% to 11.6 million hectares, although the decline in production is likely to be limited by improved yields. India's average yield is forecast up 3% to 547 kg/ha, close to its 3-year average, and production down 2% to 6.5 million tons. China's cotton production is

set to decline by 16% to 5.4 million tons due to a 12% reduction in area and a 5% decrease in the average yield as a result of unfavorable weather in its largest cotton producing province, Xinjiang. After a 24% expansion in 2014/15, cotton area in the United States has receded 16% to 3.2 million hectares, with production declining 17% to just under 3 million tons. Pakistan's production is projected down 11% to 2.1 million tons due to reductions in planted area and yields.

High domestic cotton prices and low polyester prices in China, the world's largest consumer of cotton, have made its cotton spinning sector less competitive. The Cotlook A Index and the price of polyester in China were essentially equal during most of the 2000s, with cotton sometimes the cheaper of the two. The price series diverged in 2009/10, and cotton prices have remained substantially above those of polyester since then. During the build-up of official reserves, domestic cotton prices, as measured by the China Cotton Index, were around 144 cents/ lb, but quickly fell when the government announced it would no longer buy cotton for its stockpile. In 2014/15, domestic prices fell from an average of 126 cents/lb in August 2014 to 98 cents/lb in July 2015. Prices continued to fall in August 2015, averaging 95 cents/lb, narrowing the gap with international cotton prices. However, polyester prices have also fallen during the same period, maintaining the spread between cotton and polyester. The lack of competitive pricing for cotton, coupled with turmoil in its stock markets, has curtailed growth in China's cotton spinning sector. Consumption is projected to reach around 7.7 million tons, far below the peak of ten million tons in the mid-2000s. In recent years, mill use has shifted to lower cost countries, primarily in Asia, as cotton spinning has become less competitive in China. This trend is likely to continue in 2015/16. However, world consumption growth

will be limited, because international cotton prices remain higher than competing manmade fibers. World cotton consumption is forecast to grow by 2% and reach 25 million tons, which remains below the volume consumed just before the global economic recession. In addition to China, India and Pakistan are the largest consumers of cotton and these three countries alone account for 64% of world cotton consumption. Consumption in India and Pakistan is anticipated to increase by 3%, to 5.6 million tons and 2.6 million tons respectively. After contracting

2% in 2014/15 due to financial stress in the spinning sector, Turkey's consumption could rise 5% to 1.4 million tons in 2015/16. Consumption in Bangladesh grew by an average of 9% per year in the last ten years, but is expected to slow for a second consecutive season with mill use increasing 4% to 974,000 tons. In 2014/15, Vietnam overtook Brazil to become the world's sixth largest consumer of cotton and its mill use is projected to rise by 13%

to 953,000 tons.

World cotton imports are projected to remain stable in 2015/16 at 7.6 million tons. China's imports are forecast to decrease by 12% to 1.6 million tons, marking the fifth season of decline after the peaking of 5.3 million tons in 2011/12. Imports outside of China would offset China's decline, rising by 3% to 6 million tons with gains in the next three largest importers. Bangladesh could see a modest 1% increase in imports to 972,000 tons while Indonesia's are forecast up 3% to 790,000 tons. Vietnamese imports are expected to grow by 2% to 956,000 tons, which is more than five times the volume it imported ten years ago. While exports from the United States are projected to decrease by 9%, due largely to reduced production, it will remain the world's largest cotton exporter. After falling 51% in 2014/15, India's exports may recover by 21% to 1.2 million tons in 2015/16 with greater gains limited by its growing domestic use.

With world consumption projected to overtake world production in 2015/16, world ending stocks are expected to contract for the first time in six seasons. However, the limited growth in demand will not make a large impact, and world ending stocks are expected to be reduced by 6%, or just over 1 million tons, to 20.4 million tons.

Source: ICAC Cotton This Month, September 1, 2015.



SUPPLY AND DISTRIBUTION OF COTTON										
	September 1, 2015									
Seasons begin on August 1	Seasons begin on August 1 Million Metric Tons									
0 0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16				
				Est.	Est.	Proj.				
BEGINNING STOCKS						,				
WORLD TOTAL	9.362	10.203	15.236	17.980	20.30	21.75				
CHINA	2.688	2.087	6.181	9.607	12.09	12.66				
USA	0.642	0.566	0.729	0.903	0.65	1.00				
PRODUCTION										
WORLD TOTAL	25.453	27.845	26.701	26.287	26.19	23.70				
INDIA	5.865	6.239	6.205	6.770	6.51	6.37				
CHINA	6.400	7.400	7.300	6.929	6.48	5.41				
USA	3.942	3.391	3.770	2.811	3.55	2.96				
PAKISTAN	1.948	2.311	2.002	2.076	2.31	2.05				
BRAZIL	1 960	1 877	1.310	1 734	1.51	1 47				
UZBEKISTAN	0.910	0.880	1.000	0.940	0.94	0.92				
OTHERS	4 429	5 746	5 114	5 028	4 90	4.52				
CONSUMPTION		011 10	0.111	0.020	100	1.0-				
WORLD TOTAL	24.607	22,786	23,588	23,611	24.47	25.03				
CHINA	9 580	8 635	8 290	7 517	7 70	7 74				
INDIA	4 470	4 231	4 817	4 939	5.43	5.60				
PAKISTAN	2.170	2 121	2 216	2 476	2 53	2.60				
FAST ASIA	1 833	1 780	2.210	2.470	2.00	2.00				
FUROPE & TURKEY	1.550	1.700	1 560	1 611	1.58	1.65				
BRAZII	0.958	0.897	0.910	0.862	0.81	0.79				
LISA	0.250	0.0718	0.762	0.002	0.01	0.81				
CIS	0.549	0.710	0.762	0.773	0.77	0.60				
OTHERS	0.377	0.330	0.301	0.390	0.00	0.60				
EXPORTS	2.020	2.337	2.333	2.551	2.50	2.00				
	7 600	0.827	0.084	8 000	7.00	7.60				
	7.090 3.130	9.027 2.526	<b>9.904</b> 2.836	0.999 2 202	7.90	7.02 2.21				
	1.085	2.520	2.000	2.2)5	0.98	1 10				
	0.545	1.010	1.005	1.037	0.50	0.45				
RP A 711	0.345	1.010	0.038	0.485	0.03	0.45				
CEA ZONE	0.435	0.597	0.938	0.400	0.87	1.00				
UZBEVISTANI	0.470	0.597	0.628	0.962	0.60	1.00				
UZDERIJIAN IMPORTS	0.000	0.330	0.000	0.050	0.01	0.39				
	7 7 7 7	0.795	0.614	9.646	7 (2	7 (2				
	2.600	5 242	9.014	<b>0.040</b> 2.075	7 <b>.03</b>	7.02 1.50				
	2.009	1.007	4.420	0.075 0.255	1.60	1.39				
EAST ASIA	1.020	1.997	2.555	2.555	2.09	2.72				
EUROPE & TURKEY	0.973	0.725	0.833	1.077	1.01	0.88				
DANGLADESI	0.045	0.000	0.651	0.967	0.97	0.97				
TRADE IMPALANCE 1/	0.314	0.190	0.411	0.248	0.22	0.46				
I KADE IMBALANCE I/	0.037	-0.042	-0.370	-0.354	-0.27	0.00				
SIUCKS ADJUSTMENT 2/	-0.041	0.018	0.001	0.000	0.00	0.00				
	10 000	15.000	17 000	00.000	01 75	20.42				
WUKLD IUIAL	10.203	15.236	17.980	20.303	21.75	20.42				
	2.087	6.181	9.607	12.088	12.66	11.92				
	0.566	0.729	0.903	0.651	1.00	0.95				
ENDING STOCKS/MILL USE (	70)				- /	10				
WUKLD-LESS-CHINA 3/	54	64	55	51	54	49				
CHINA 4/	22	72	116	161	164	154				
COTLOOK A INDEX 5/	164	100	88	91	71					

1/ The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports.

2/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated.

3/ World-less-China's ending stocks divided by World-less-China's mill use, multiplied by 100.

4/ China's ending stocks divided by China's mill use, multiplied by 100.

5/ U.S. cents per pound.

Source : ICAC Cotton This Month, September 1, 2015.

## Cottonology School Contact Program Arya Vidya Mandir, Bandra, 28th April 2015



Children assembled in the central hall for the presentation



EM explaining educational display panels on cotton to students



King Cotton engages with the students





Distribution of goody bags by King Cotton

(Continued from Issue No.18)

### SAGA OF THE COTTON EXCHANGE By Madhoo Pavaskar Chapter 4 The Golden Age

#### **Blind Surveys**

But even long before the Wiles Committee submitted its report, the East India Cotton Association was seized with the issue of blind survey. It all began with a letter received by the Association in January 1925 from a cotton firm of Hamburg by the name Eiermann & Lucas. The Hamburg Cotton Exchange had then decided to introduce a futures contract for East India Cotton and the Hamburg firm, which was on the Committee appointed to frame rules for that contract, desired to know whether the cotton shippers from Bombay would prefer the arbitration system at Bremen to

the one prevailing at Liverpool. At Bremen the disputes were referred to sworn surveyors, to whom even the identities of the parties to the dispute were not disclosed, while Liverpool had the same system as at EICA. In fact, the prevailing system at EICA was adapted from the Liverpool model itself.

On June 24, 1925, the Board of the East India Cotton Association appointed a committee under the chairmanship of its President, Sir Purshotamdas Thakurdas, to consider whether the Association should adopt the Bremen system. While recommending the blind survey system, the sub-committee suggested two alternatives-one

involving appointment of whole-time, paid professional surveyors and the other in which the Board would appoint a panel of arbitrators from amongst the members of the Association. The subcommittee actually favoured the first alternative. Surprisingly, the Board rejected altogether the subcommittee's proposal for the blind survey system, and thus the efforts of some of the enlightened members of the association to introduce a valuable reform were set at naught, albeit for the time being.

After the release of the Wiles Committee report, the proposal for blind survey was once again revived. In 1931, the Board accepted the proposal in principle, but could not decide on the method of its working. Subsequently in February 1934, the Board appointed yet another sub-committee to work out the details for the introduction of the blind survey system. One of the members of the sub-committee, Mr. R.G. Saraiya even went to Bremen and Rotterdam to study, at first hand, the arbitration practices in vogue there. Based on his report, but keeping in view the prevailing attitude and sentiments of the cotton trade in Bombay, the sub-committee decided to hasten slowly with the arbitration reforms and recommended that the blind



Finally, after much hesitation and long debates and discussions, the East India Cotton Association adopted a scheme of blind survey system at its Extraordinary General Meeting held on November 23, 1936. The scheme received the assent of the Government of Bombay in 1937 and the first survey under the new system was held on October 20, 1937 and the first appeal on October 22, 1937.

Under the new arbitration system, the Board appointed every year a Survey Committee consisting of 25 persons with sound knowledge of cotton, its quality, class and staple. Every week the Committee was divided into panels of five persons each by drawing lots. The results of these draws were kept secret, and members of the panel were informed only an hour or so before they had to act as surveyors. All disputes as to quality were referred to two surveyors from amongst the panel working on that day. Neither were the surveyors informed of the names of the parties to the dispute and the marks on the bales under dispute, nor



were the names of the surveyors disclosed to the parties concerned. An appeal against the award of the surveyors or the umpire lay with the Appeal Committee.

The Appeal Committee consisting of 16 persons, also appointed by the Board and worked in two panels of 7 each formed by drawing lots. In addition, a Super-appeal Committee, consisting of 3 persons appointed by the Board decided appeals against the awards of the Appeal Committee with respect to only the staple of the cotton tendered against the hedge contract.

The blind survey scheme introduced in 1937 marked the beginning of the reform in arbitration system in the East India Cotton Association and eventually paved the way for the appointment of whole-time, sworn professional surveyors later after Independence. The blind survey system worked so well, that since its introduction the East India Cotton Association rose in high esteem among all sections of the Cotton trade and industry for the impartiality and integrity of its survey results, so much as that today even the public sector cotton marketing agencies submit to the survey decisions of the EICA.

#### The Golden Age

When the Great War broke out in 1939, the East India Cotton Association was at its pinnacle of success. The 1930s was indeed a Golden Age for King Cotton. The painful trials and travails, after the initial teething troubles, were long over. From his newly established throne in a magnificent, palatial house in Marwari Bazar, King Cotton ruled his subjects with pride and love. Although the unitary control was still denied to him, his sovereignty was recognised by one and all and his writ ran large over the entire cotton trade of Bombay.

The Cotton Exchange was humming with ceaseless activity, almost day and night. Yet, with the dawn of a new era of regulation and discipline, manipulations and corners became relics of history. Though the yoke of foreign rule was still around the neck of cotton merchants, its hold had loosened considerably. Imbued with the spirit of nationalism and courage, they served King Cotton and the country alike with great devotion and patriotism. Not surprisingly, much to the chagrin of the ruling British Government, the Indian National tricolour then flew high over the Cotton Exchange buildings at both Sewree and Kalbadevi. It was indeed the hour of triumph for King Cotton.

World Cotton Prices
Monthly Average Cotlook A Index (FE) from 2012-13 onwards
(Cotlook Index in US Cents per lb.)

	2012-13	2013-14	2014-15	2015-16
August	84.40	92.71	74.00	71.82
September	84.15	90.09	73.38	69.92
October	81.95	89.35	70.34	
November	80.87	84.65	67.53	
December	83.37	87.49	68.30	
January	85.51	90.96	67.35	
February	89.71	94.05	69.84	
March	94.45	96.95	69.35	
April	92.68	94.20	71.70	
May	92.70	92.71	72.89	
June	93.08	90.90	72.35	
July	92.62	84.01	72.35	

Source: Cotton Outlook

									(111 N111. Kg)
Month	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (P)	2015-16 (P)
April	238.93	242.26	244.50	273.77	268.06	268.20	316.61	328.68	351.30
May	246.71	257.51	247.76	283.69	255.56	286.19	314.97	332.92	349.67
June	242.32	253.65	248.76	284.79	248.29	288.40	317.69	330.69	344.14
July	250.36	250.28	257.65	302.16	256.73	301.34	332.12	340.00	
August	249.81	242.32	256.19	300.34	262.74	302.85	336.30	338.09	
September	248.19	233.56	252.78	297.68	258.97	296.74	326.09	334.03	
October	247.18	225.51	250.82	301.55	241.83	302.65	328.79	323.53	
November	230.24	235.07	257.44	283.52	243.85	282.88	312.13	335.66	
December	252.97	251.88	267.44	308.78	269.82	314.21	341.67	353.96	
January	251.10	236.70	266.69	296.87	279.19	315.07	340.38	349.82	
February	243.41	224.98	256.58	272.99	269.01	302.59	321.31	330.57	
March	247.13	242.44	272.37	283.63	272.29	321.57	340.20	356.64	
TOTAL	2948.36	2896.16	3078.98	3489.78	3126.34	3582.68	3928.27	4054.59	1045.11

## **Cotton Yarn Production**

P - Provisional

Source : Office of the Textile Commissioner

### Update on Cotton Acreage (As on 3rd September 2015)

	•			-				(Area	in lakh ha)			
SI	States	Normal	Normal Area	Area sown (during the corresponding week in)								
No		of Year	as on Date (2010-2014)	2015	2014	2013	2012	2011	2010			
1	2	3	4	5	6	7	8	9	10			
1.	Andhra Pradesh		19.954	22.030	22.810	20.940	21.170	17.750	17.100			
	Andhra Pradesh (23.95%)	4.800	5.000	5.300	6.570	5.015	5.070	4.251	4.095			
	Telangana (76.05%)	15.240	14.954	16.730	16.240	15.925	16.100	13.499	13.005			
2.	Gujarat	26.140	27.154	27.630	29.810	26.880	23.420	29.560	26.100			
3.	Haryana	5.580	5.684	5.810	6.390	5.570	6.030	5.981	4.450			
4.	Karnataka	5.400	4.904	4.840	7.470	5.170	3.620	4.450	3.810			
5.	Madhya Pradesh	6.200	6.296	5.470	5.730	6.210	6.080	7.060	6.400			
6.	Maharashtra	39.800	40.356	38.192	41.210	38.680	41.270	40.950	39.670			
7.	Orissa	0.900	1.086	1.250	1.240	1.240	1.190	1.020	0.740			
8.	Punjab	5.100	5.152	4.500	4.500	5.050	5.160	5.750	5.300			
9.	Rajasthan	4.200	3.876	4.060	4.162	2.930	4.490	5.250	2.550			
10.	Tamil Nadu	1.300	0.100	0.179	0.070	0.070	0.100	0.150	0.110			
11.	Uttar Pradesh	0.000	0.264	0.210	0.260	0.230	0.300	0.300	0.230			
12.	Others	0.360	0.060	0.000	0.050	0.100	0.000	0.150	0.000			
	Total	115.020	114.887	114.171	123.702	113.070	112.830	118.371	106.460			

Source: Directorate of Cotton Development, Nagpur



Announces under

# "LEARN WITH CAI" series

# Programme No. 2014-15/1 on **'LETTER OF CREDIT'**

Faculty: Shri K. Parameswaran,

Corporate Trainer & Advisor, International Trade and Finance

### Date: Saturday, 26th September 2015 Time: 8.30 a.m. to 6.00 p.m.

**Fees for programme** For CAI Members: Rs. 3,000/-For Members of Affiliated Associations: Rs. 3,500/-For Non-Members: Rs. 4,000/-The above fees will include study material, breakfast/lunch and service tax.

> Venue: Conference Room of the Association Cotton Exchange Building, 2nd Floor, Opp. Cotton Green Railway Station, Cotton Green (East), Mumbai 400 033.

For Registration please contact CAI Office, Tel. (022) 3006 3400 – Fax : (022) 2370 0337 Email : school@caionline.in

UPCOUNTRY SPOT RATES (Rs./Qtl)												
	Standard in Millime	Spot Rate (Upcountry) 2014-15 Crop AUGUST – SEPTEMBER 2015										
Sr. No.	Growth	Grade Standard	Grade	Staple	Micronaire	Strength /GPT	31st	1st	2nd	3rd	4th	5th
1	P/H/R	ICS-101	Fine	Below 22mm	5.0-7.0	15	9448 (33600)	9448 (33600)	9533 (33900)	9533 (33900)	9589 (34100)	9673 (34400)
2	P/H/R	ICS-201	Fine	Below 22mm	5.0-7.0	15	9589 (34100)	9589 (34100)	9673 (34400)	9673 (34400)	9729 (34600)	9814 (34900)
3	GUJ	ICS-102	Fine	22mm	4.0-6.0	20	7086 (25200)	7086 (25200)	7142 (25400)	7142 (25400)	7142 (25400)	7142 (25400)
4	KAR	ICS-103	Fine	23mm	4.0-5.5	21	7452 (26500)	7452 (26500)	7508 (26700)	7508 (26700)	7508 (26700)	7508 (26700)
5	M/M	ICS-104	Fine	24mm	4.0-5.0	23	8408 (29900)	8408 (29900)	8464 (30100)	8464 (30100)	8464 (30100)	8464 (30100)
6	P/H/R	ICS-202	Fine	26mm	3.5-4.9	26	9645 (34300)	9645 (34300)	9814 (34900)	9814 (34900)	9898 (35200)	9898 (35200)
7	M/M/A	ICS-105	Fine	26mm	3.0-3.4	25	8239 (29300)	8267 (29400)	8323 (29600)	8323 (29600)	8323 (29600)	8323 (29600)
8	M/M/A	ICS-105	Fine	26mm	3.5-4.9	25	8605 (30600)	8661 (30800)	8745 (31100)	8745 (31100)	8773 (31200)	8773 (31200)
9	P/H/R	ICS-105	Fine	27mm	3.5.4.9	26	9729 (34600)	9729 (34600)	9898 (35200)	9898 (35200)	9983 (35500)	9983 (35500)
10	M/M/A	ICS-105	Fine	27mm	3.0-3.4	26	8548 (30400)	8577 (30500)	8633 (30700)	8633 (30700)	8633 (30700)	8633 (30700)
11	M/M/A	ICS-105	Fine	27mm	3.5-4.9	26	8858 (31500)	8914 (31700)	8998 (32000)	8998 (32000)	9026 (32100)	9026 (32100)
12	P/H/R	ICS-105	Fine	28mm	3.5-4.9	27	9870 (35100)	9870 (35100)	10039 (35700)	10039 (35700)	10123 (36000)	10123 (36000)
13	M/M/A	ICS-105	Fine	28mm	3.5-4.9	27	9111 (32400)	9195 (32700)	9280 (33000)	9280 (33000)	9308 (33100)	9308 (33100)
14	GUJ	ICS-105	Fine	28mm	3.5-4.9	27	9420 (33500)	9476 (33700)	9645 (34300)	9645 (34300)	9673 (34400)	9673 (34400)
15	M/M/A/K	ICS-105	Fine	29mm	3.5-4.9	28	9308 (33100)	9392 (33400)	9476 (33700)	9476 (33700)	9505 (33800)	9505 (33800)
16	GUJ	ICS-105	Fine	29mm	3.5-4.9	28	9673 (34400)	9729 (34600)	9898 (35200)	9898 (35200)	9926 (35300)	9926 (35300)
17	M/M/A/K	ICS-105	Fine	30mm	3.5-4.9	29	9280 (33000)	9308 (33100)	9476 (33700)	9476 (33700)	9476 (33700)	9476 (33700)
18	M/M/A/K/T/O	ICS-105	Fine	31mm	3.5-4.9	30	9589 (34100)	9617 (34200)	9617 (34200)	9617 (34200)	9617 (34200)	9617 (34200)
19	A/K/T/O	ICS-106	Fine	32mm	3.5-4.9	31	9870 (35100)	9898 (35200)	9898 (35200)	9898 (35200)	9898 (35200)	9898 (35200)
20	M(P)/K/T	ICS-107	Fine	34mm	3.0-3.8	33	11951 (42500)	11951 (42500)	11951 (42500)	11951 (42500)	11951 (42500)	11951 (42500)

(Note: Figures in bracket indicate prices in Rs./Candy)