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TEXAS INTERNATIONAL COTTON SCHOOL

The second Texas International Cotton School was held at the International Center for Textile Research and Development from January 15 through February 2, 1990. Twenty-two students from twelve countries attended. As we reported in an earlier issue of *Topics*, this school is sponsored by the Lubbock Cotton Exchange.

Students attending are listed below by country, name and company:

- from *Argentina* Juan Carlos Platero, Alpargatas S.A.I.C., Buenos Aires;
- from *Australia* Roger Tomkins and Dorcen Walters, Colly Farms Ltd., Moree, NSW;
- from *Belgium* Roger Decanniere, Commission C. E., Brussels;
- from *Brazil* Fabio Borger, Norfil S.A. Industria Textil, Sao Paulo;
- from *England* James Howarth, Courtaulds Spinning, Oldham, Lancashire;
  Adam Merith Jones and Shaun Stone, A. Meredith Jones & Co., Inc., Liverpool;
- from *France* Gerald Estur, Compagnie Francaise Pour Le Develoment Des Fibres, Paris;
- from *W. Germany* Alexander Gansch, Baumwoll-Kommissions-und Lagerhauser Gesellschaft mbH, Bremen;
- from *Korea* J. D. Cho, Dong Il Corporation, Seoul;
- from *Taiwan* James K. M. Wang, Sung-I Industries, Ltd., Taipei;
- from *Thailand* Iwan Sondjaja, P. T. Sinar Pusaka Textile Industry, Bangkok;
- from *Venezuela* Ivan Umbria, Sudamtex de Venezuela, Maracay;
- from the *U.S.*
  - *Alabama* James L. Loeb, Jr., Loeb & Company, Montgomery;
  - *Louisiana* Noble E. Ellington, III, Noble Ellington Cotton Co., Inc., Winnsboro;
  - *N. Carolina* Eugene Frye, Parkdale Mills, Gastonia; and Quay D. Williford, III, Amcot, Inc., Charlotte;
  - *S. Carolina* Carl Bierau, Milliken & Company, Greenville; and George J. Boltz, Gerbers Childrenswear, Inc., Greenville;
  - *Tennessee* Vance Charlton Shoaf, C & S Cotton Co., Milan;
  - *Texas* Roger Pearson, SouthWest Irrigated Cotton Growers Association, El Paso.

Lubbock Cotton Exchange officers (front) are shown with students attending the January Texas International Cotton School

We are pleased that these participants came from high positions in their organizations. This indicates the various companies have a desire for greater

knowledge of cotton. We have found that those attending the two schools conducted in recent months have demonstrated keen interest in the fiber itself, methods of testing the quality of it, and how it is used for producing quality yarns and fabrics.

The Lubbock Cotton Exchange has announced the next two schools will be held October 1-19, 1990 and April 1-19, 1991. Those interested in further information should contact the Exchange at 1517 Texas Avenue, Lubbock, Texas 79401.

COTTON FIBER STRENGTH

In the October 1989 issue of *Textile Topics* we carried an article on cotton fiber strength and reprinted information that dealt with zero-gauge Pressley strength and the 1/8-inch Stelometer grams/tex measurement. We offered that information because we continue to receive inquiries about the best method of identifying cotton fiber strength. We are well aware that in many countries the Pressley measurement is still used.

In the October article, we stated that we occasionally are asked to suggest a method for converting from one system to the other. We know of no means of doing this accurately, although we have seen a number of attempts to do so. During the last few months, we have received several letters asking that we publish additional information on this subject. One letter coming from Europe included a formula that was offered as a means of meeting "practical requirements" for the company represented by the writer. His formula was:

$$Pressley = 17.5 \times \sqrt{grams/tex}$$

We would like to go back to an article we published in October 1985 that dealt with this. At that time John B. Price, now Assistant Director of the International Center for Textile Research and Development, prepared the following statement:

"The comparison of zero-gauge Pressley strength vs. Stelometer 1/8-inch gauge strength was studied in detail in the TRC project 885. It was learned that the scatter of bale sample data [see graph on next page] for the 36 cottons used in the study was sufficiently excessive to indicate a rather poor relationship between the two measurements. The regression line in the graph is the first equation in the accompanying table. The error of estimation is about 3.6, which means that 67% of the time an actual value of Pressley strength will lie in the range "Estimated Pressley" ± 3.6 MPSI, which is not very good as has been emphasized in a previous report.

"Regressions of Pressley were run on individual instrument fiber properties to give the other equations shown in the accompanying table. After tenacity, elongation as measured by Stelometer entered next, followed by length. The error term fell from 3.6 to 2.7 to 2.5 by these statistically significant entries into the equation. The equation containing tenacity, elongation and length is the best we have derived, yet the error term is still quite large.

"Thinking that the elongation term may have entered because of maturity, an equation was derived using only tenacity and maturity. The relationship was inferior to that of tenacity and elongation.

"The lack of usefulness of the Pressley strength measurement can also be gleaned from correlations with yarn strength. Typically, correlations with count-strength-product were about 0.7 for Pressley, but were 0.93 for Stelometer tenacity.

"If we perform a regression of Pressley on $\sqrt{grams/tex}$ *for the 36 cottons used in our study, then:*

$$Pressley = 11.20 + 15.6 \sqrt{grams/tex}$$

with a correlation coefficient, r = 0.7688 and residual standard deviation (error) = 3.55, which is very similar to the simpler, but linear, equation shown in the table.

"Forcing this equation to pass through the origin, that is, making the intercept = 0, we obtain the following formula:

$$Pressley = 17.86 \times \sqrt{grams/tex}$$

which is very similar to the equation quoted in the letter from our friend in Europe."

We have found this review of cotton fiber strength to be interesting, and we hope it will be informative to our readers.

VISITORS

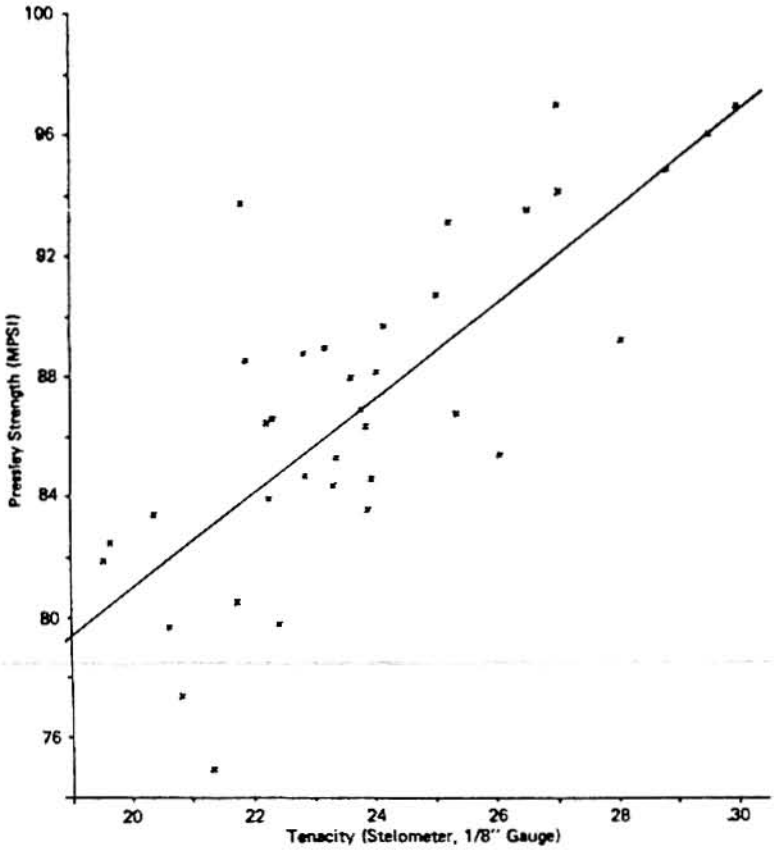
On January 15, Kees Verbeek, International Cotton Advisory Committee, Washington, DC, brought a delegation of cotton industry leaders to visit the International Center. The group included Zadok Mkono, Tanzania Cotton Marketing Board, Dar-es-Salaam, Tanzania; Mohamed Mousallati, Cotton Marketing Organization, Aleppo, Syria; Jan Bjorklund, Boras Wafueri, Sweden; Roberto Correa, Compania Textil El Progreso S.A., Lima, Peru; Ibrahim Malloum, Cotton Chad, Paris, France; Bambe Dansala, Cotton Chad, N'Dmajena, Chad; and Schlomo Peles, Cotton Production & Marketing Board, Tel Aviv, Israel.

Other visitors during January included Trevor Rowe, Bolton Institute of Higher Education, Bolton, England; Kurt Sengstschmid, Textilmaschinenfabrik Dr. Ernst Fehrer AG, Linz, Austria; Franco A. Bisceglia, American Savio Corporation, Charlotte, NC; Herman Demmink, Pignone Textile Machinery Inc., Spartanburg, SC; George Blomquist, Parkdale Mills, Inc., Lexington, NC; John Pitt, Pennwalt Corporation, Bryan, TX; Paul McHugh and G. Robert

RELATIONSHIPS BETWEEN PRESSLEY STRENGTH (Zero Gauge) and OTHER FIBER PROPERTIES

Regression Equation	Correlation Coefficient (r)	Coefficient of Determination (r^2)	Residual Standard Deviation
$p = 49.57 + 1.57\ s'$	0.7690	0.5913	3.55
$p = 74.17 + 1.41\ s' - 3.87\ e'$	0.8744	0.7645	2.74
$p = 39.07 + 1.40\ s' + 0.191\ m_a$	0.8558	0.7323	2.92
$p = 85.87 + 1.94\ s' - 4.36\ e' - 21.3\ \ell'$	0.9059	0.8170	2.45

s' = 1/8" Gauge Strength (gms/tex)
e' = Elongation
m_a = Percent Mature Fibers
ℓ' = Length



GRAPH 1

McDowell, Crosrol Inc., Greenville, SC; Joseph Ready, Batson Yarn & Fabrics Machinery Group, Inc., Greenville, SC; and Wesley W. Masters, Cepex, Inc., Amarillo, TX.

In addition, several groups visited the Center, including 45 Agricultural Economics students from Texas Tech University; 5 students from Texas State Technical Institute, Sweetwater, TX; 48 Lubbock area elementary students, and 15 members of the Lubbock New Neighbors Club.

FOOD FOR THOUGHT

Because we at the Interntional Center are involved in education, and in the interest of life-long learning, we offer the following 10 rules for being human. The source is anonymous, but we understand it is credited to a refrigerator door somewhere in Canada.

We believe it should have a place on everyone's refrigerator door.

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10 RULES FOR BEING HUMAN

1. You will receive a body. You may like or hate it, but it's yours.

2. You will learn lessons. You are enrolled in a full-time informal school called life. You will like some lessons and find others irrelevant and stupid.

3. There are no mistakes, only lessons. So-called failures are as much a part of the process as the experiment that ultimately works.

4. A lesson is repeated until learned. A lesson will be presented to you in various forms until you have learned it. Once learned, you proceed to the next lesson.

5. Learning never ends. There is no part of life without lessons. If you are alive, there are lessons to be learned.

6. *There* is no better than *here*. When your *there* has become a *here*, another there is bound to arise that looks better than here.

7. Others are mirrors of you. You cannot love or hate something about another person unless it reflects something you love or hate about yourself.

8. What you make of your life is up to you. You have the tools and resources you need. The choice is yours.

9. Your answers to life's questions lie inside you. Look, listen and trust.

10. Some of you will forget all of this.