

## TEXTILES AND SPAIN

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## COTTON

Professor Gilbert Raes of the Ghent Institute of Textile Technology in Belgium was allowed to study some linen threads that had been removed from the Holy Shroud by a scientific team in 1973. Raes determined there were traces of cotton among the linen threads and suggested this could indicate the Shroud had been woven on equipment previously used for cotton. On the basis of this discovery, many who have written about the Shroud (including me) have rushed to conclusions concerning the location of the Shroud's manufacture. From at least 1978 to 1990 Shroud authors have stated that cotton is not grown in Europe, but that it does grow in the Near or Middle East. Four examples of this are as follows:

1. Mr. Ian Wilson in his book *The Shroud of Turin* (1978) wrote:

What is significant ... is that cotton should be found at all, its very presence determining conclusively that the fabric of the Shroud came from the Middle East since cotton is not grown in Europe.<sup>1</sup>

2. Mr. Kenneth E. Stevenson and Mr. Gary R. Habermas in their book *Verdict on the Shroud* (1981) wrote:

This discovery helped pinpoint the location of the Shroud's manufacture: Cotton is not grown in Europe, but it grows abundantly in the Middle East.<sup>2</sup>

3. In my book *The Letter* (1983), I wrote:

Since cotton is not grown in Europe and because cotton is grown throughout the Middle East, a significant conclusion can be reached...<sup>3</sup>

4. Father Charles Foley wrote an article entitled "The Genuine Holy Shroud", presented in *Shroud News*, February 1990, which stated:

Because cotton is a tropical plant it is not and has never been grown in Europe. It was and is being grown in the Near East....<sup>4</sup>

**Diametrically Different**

Although the above authors have shown a consistency in their statements, information acquired from encyclopedias present facts

that are diametrically different. Two illustrations of this are as follows:

1. The *World Book Encyclopedia*, in an article entitled "Cotton", reports:

In Europe, cotton grows in Bulgaria, Greece, European Russia, southern Spain, the lower part of the Italian peninsula, and Yugoslavia.<sup>5</sup>

A map is presented showing where cotton grows throughout the world. About 350,000 bales are grown in southern Spain.

2. Under "Granada" (southern Spain) the *Encyclopaedia Britannica* reports:

Crops include wheat, maize, beans, potatoes, beetroot, sugar cane, tobacco, and cotton.<sup>6</sup>

## History

In *The World Book Encyclopedia*, in the article "Cotton" under the subtitle "History" the following is reported:

The army of Alexander the Great first brought cotton goods into Europe in the 300s B.C. The cloth cost so much that only the very rich could afford it. In the A.D. 700s, Moslem invaders brought cotton-manufacturing process to Europe. Italians and Spaniards wove some cotton, but the art spread northward slowly.<sup>7</sup>

## LINEN

It is also interesting to note what *The World Book Encyclopedia* states about linen-making. In an article entitled "Flax", we read:

The book of Exodus in the Bible mentions flax as one of the products of Egypt under the Pharaohs. Roman emperors wore linen that came from Phoenicia, Babylonia, Colchis, Greece, Egypt, Gaul, Germany, and Spain. The early people who lived in what is now Belgium brought the art of linen-making to England about 100 years before the Romans invaded Britain in A.D. 43. Charlemagne developed linen-making in France during the 700s. From then until the 1700s when cotton became the chief textile, flax fiber was the most important clothmaking material of Europe.<sup>8</sup>

And in the *Encyclopaedia Britannica*, in an article entitled "Linen Manufacture" under the subtitle "Fabric Manufacture" under the subheading "Weaving", the following is reported:

The various operations connected with linen weaving, such as winding, warping, sizing, beaming and drawing-in, are similar in essential features to processes used in cotton weaving; neither is there any significant modification in the looms employed.<sup>9</sup>

And again, in *The World Book Encyclopedia* under "Islamic Art", subtitle "Textiles", we read:

The art of weaving on a loom reached a high development in Islamic countries. Fine textiles date from the A.D. 700s.<sup>10</sup>

And finally, in Mr. Ian Wilson's book *The Mysterious Shroud* (1986) the following is stated:

Perhaps the most curious feature of the Shroud samples studied by Raes is his observation that they included traces of cotton. These, of the Middle Eastern variety *Gossypium herbaceum*, suggest that, wherever the weaving of the Shroud was done, it was done on equipment also used for cotton. While this in turn suggests a Near or Middle Eastern manufacture, it has to be acknowledged that during the medieval period cotton was being produced in Italy, and cotton cloth was manufactured in France, Italy, and Flanders. Overall, Raes's evidence is ambivalent. It shows the Shroud could have been produced in first-century Palestine, but equally plausibly it could have been produced in fourteenth-century Europe or in a fourteenth-century Muslim country, from which commercially expanding countries like France and Italy were importing heavily. Troyes, only twelve miles from Geoffrey de Charny's Lirey, was one of Europe's most important centers for precisely this form of trade.<sup>11</sup>

Although Mr. Wilson did acknowledge the medieval production of cotton in Italy and the manufacture of cotton cloth in other European countries, he failed to mention Spain, unless Spain was meant to be included by the references to "fourteenth-century Europe or a fourteenth-century Muslim country," both of which could include Spain, or at least a kingdom therein. For it should be noted, the Muslims had conquered almost all of Spain during the period of A.D. 711 to 718 and even though their territory had been reduced to the Kingdom of Granada by the late thirteenth century, they were not completely defeated until the Christian forces of Ferdinand and Isabella, in 1492, finally conquered Granada, the last center of Muslim control on the Iberian peninsula.<sup>12</sup>

## **Conclusion**

In conclusion, cotton is in fact produced in Spain and cotton-manufacturing processes were there probably as early as the eighth century A.D.

## REFERENCES

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2. KENNETH E. STEVENSON and GARY R. HABERMAS. *Verdict on the Shroud: Evidence for the Death and Resurrection of Jesus Christ*, Ann Arbor, MI: Servant Books, 1981, p. 62.
3. DONALD M. SMITH, *The Letter*, Rancho Palos Verdes, CA: DMS Publishing Co., 1983, p. 18.
4. CHARLES FOLEY, "The Genuine Holy Shroud", *Shroud News*, February 1990, No. 57, p. 9-19.
5. *The World Book Encyclopedia*, Chicago: Field Enterprises Educational Corporation, 1976, s.v. "Cotton", 4:864-73.
6. *Encyclopaedia Britannica*, Chicago: William Benton, 1970, s.v. "Granada", 10:670.
7. *The World Book Encyclopedia*, s.v. "Cotton".
8. *Ibid.*, s.v. "Flax", 7.204-5.
9. *Encyclopaedia Britannica*, s.v. "Linen Manufacture", 14:62-5.
10. *The World Book Encyclopedia*, s.v. "Islamic Art", 10:379-81.
11. IAN WILSON, *The Mysterious Shroud*, Garden City, New York: Doubleday, 1986, p. 36.
12. *The World Book Encyclopedia*, s.v. "Spain" 18:574-88.

*Two men will recognize Christ: the man who loves Him and the man who hates Him.*  
 Romano Guardini, *The Lord* (1945)