

# TEXTILES AND DYES

IN THE MEDITERRANEAN  
ECONOMY AND SOCIETY



#### Scientific Committee

Carmen Alfaro, Universidad de Valencia (Spain)  
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John Peter Wild, University of Manchester (UK)

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#### Conference Website

<http://purpureaevestees.weebly.com/>

17 – 18 OCTOBER 2016  
**Padova, Orto Botanico**

19 OCTOBER 2016  
**Este, Museo Archeologico Nazionale**

20 OCTOBER 2016  
**Altino, Museo Archeologico Nazionale**

Università di Padova, Progetto di Ateneo "Textile Roman Archaeology: Methods and Analysis.  
Tools, technology, products" (TRAMA) (CPDA142705/14)

European Research Council under the European Union's Seventh Framework Programme, Project "Production and Consumption: Textile Economy and Urbanisation in Mediterranean Europe 1000-500 BCE" (PROCON) (FP/2007-2013-312603)

Università del Salento, FutureInResearch Project "L'attività tessile nell'Italia  
meridionale preromana: tecniche, tecnologie, materiali e protagonisti" (JPCNYJ5)

VI PURPUREAE VESTES  
INTERNATIONAL SYMPOSIUM

# **TEXTILES AND DYES**

**IN THE MEDITERRANEAN  
ECONOMY AND SOCIETY**

Padova - Este - Altino, Italy  
17 – 20 October 2016

## **BOOK OF ABSTRACTS**

Università di Padova, Progetto di Ateneo “Textile Roman Archaeology: Methods and Analysis.  
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### **Acknowledgements**

The VI *Purpureae Vestes* International Symposium is being organized with the support of:

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Venice Textile Manufacturing - Tessitura Bevilacqua (Venezia)

Cantina dei Colli Euganei s.c.a. – Vo' Euganeo (Padova)

# PROGRAMME

**Monday, 17 October**  
**Padova, Orto Botanico, Sala Convegni**  
**Via Orto Botanico 15**

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**14.30-15.00**

*Welcome:* Jacopo Bonetto (Head Dept. Cultural Heritage, University of Padua)

*Introduction:* Maria Stella Busana

**Chair: Margarita Gleba**

**15.00-16.15**

J. Cutler: *Tools, tablets and textiles: interweaving strands of evidence for Bronze Age textile economies on Crete*

M. Siennicka, A. Ulanowska: *The economics of textiles in Bronze Age Greece*

C. Minniti, G. Recchia: *New evidence of purple dye production from the Bronze Age settlement of Coppa Nevigata (Apulia, Italy)*

E. Bianchin Citton: *Strumenti per la filatura e la tessitura dall'abitato protostorico di Montagnana Borgo S. Zeno/Spinning and weaving tools from the protohistoric settlement of Montagnana Borgo S. Zeno (Veneto, Italy)*

J. De Grossi Mazzorin, C. Minniti: *Caprine varieties in Italy in the Iron Age. The evidence from archeozoological data*

**DISCUSSION - COFFEE BREAK**

**17.00-18.15**

H. Landenius Enegren: *Ancient Cyprus: Bronze Age/Iron Age textile remnants and tools. A strategic crossroads of spinning and weaving cultures?*

I. Benda-Weber: *Early Greek garments: indications for weaving techniques and textile ornaments on representations and evidence of contemporary textile remains*

C. Margariti: *A 5th century BC textile find with evidence of embroidery from Attica, Greece*

S. Spanditaki: *Investigating maritime textiles in Classical Greece: sails and rigging of the Athenian fleet*

M.D. Kechagias: *Spinning the lifeless thread of Thanatos: funerary textiles and burial rituals from Macedonia, Greece*

**DISCUSSION**

**Tuesday, 18 October**  
**Padova, Orto Botanico, Sala Convegni**  
**Via Orto Botanico 15**

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**Chair: Massimo Vidale**

**9.00-10.00**

M. Gleba, J. Cutler, B. Marin Aguilera, S. Harris: *Production and Consumption: Textile Economy and Urbanisation in Mediterranean Europe 1000-500 BCE*

B. Costa, C. Alfaro: *Spinning, weaving and vestimenta at the necropolis of Puig des Molins, Ibiza (Spain)*

B. Marín-Aguilera: *Producing purple on the other side of the Mediterranean: raw material procurement and relations between local people and Phoenician settlers in the Early Iron Age Southern Iberia*

K. Caulfield: *The hand-held distaff also known as the underestimated stick*

**DISCUSSION – COFFEE BREAK**

**10.45-12.00**

F. Meo: *Textile production in Magna Graecia*

F. Merlati: *Versabat pollice fusum. Manufatti relativi alla produzione tessile nelle sepolture femminili di età orientalizzante dalla Piana del Sarno/Versabat pollice fusum. Artefacts related to textile production in Orientalising female burials from Piana del Sarno, Italy*

A. Quercia: *Weaving in the archaic societies of South Italy (6th-first half of the 5th century BC): two key studies*

M. Kleibrink: *From labyrinths to swastikas: an iconography of the Timpone della Motta (Italy) loom weights*

M. Corrente, M.C. Laurenti, E. Catalli: *A well-warped fabric: the case of Herdonian women (Ortona, Italy)*

**DISCUSSION**

**13.00: LUNCH**

**Chair: Giovanna Gambacurta**

**14.00-15.00**

R. Laurito: *Etruscan textile tools: spinning and weaving in Southern Etruria*

E. Pizzuti: *Tessitura a tavolette: tecniche esecutive e loro riconoscimento/Tablet weaving: techniques and their identification*

L. Ambrosini, S. Gatti: *Strumenti in osso per la tessitura da vecchi e nuovi scavi di Palestrina/Bone textile tools from the old and new excavations at Palestrina, Italy*

G. Leonardi, I. Albertini, M. Cupitò, P. Michelini, C. Reggio, M. Vidale: *The visibility of textile manufacturing in Padua (Italy) in the 1st millennium BC*

**DISCUSSION – COFFEE BREAK**

**Presentation V *Purpureae Vestes* International Symposium**

**17.00: VISIT OF BOTANIC GARDEN**

**20.00: OFFICIAL DINNER**

**Wednesday, 19 October**

**Este, Museo Archeologico Nazionale**

**Via G. Negri, 9/C**

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**Chair: Francesco Meo**

**9.30- 10.30**

M. Gamba, G. Gambacurta: *The loom. From excavation to textile in pre-Roman Veneto (Italy)*

M. Ruta, M. Gleba: *Evidence of ossuary dressing in the funerary ritual of pre-Roman Veneto (Italy)*

M. Tirelli, M. Rottoli: *Astucci con tracce di tessuto dal santuario del dio Altino/ Bronze cases with traces of fabric from the sanctuary of the god of Altino, Italy*

M. Marchesini, M. Migliavacca: *The inscribed loom weights from Monte Loffa, Monti Lessini (Verona, Italy): can we "crack" the code?*

**DISCUSSION – COFFEE BREAK**

**11.15-12.30**

F. Coletti, D. Döppes, S. Mitschke: *Cultura tessile a Pompei: materiali, tessuti, tecniche, calchi/Textile culture at Pompeii: materials, textiles, techniques, casts*

E. De Carolis, M. Galli, C. Lemorini, V. Forte: *Cultura tessile a Pompei: attori, contesti, instrumenta textilia/ Textile culture at Pompeii: agents, contexts, instrumenta textilia*

A.R. Tricomi: *Textile tools from Roman Venetia (Italy): an overview*

M.S. Busana, M. Gleba: *Textile Production and Consumption in Roman Venetia (Italy): preliminary results of the study of mineralized fibers and textiles*

C. Rossi: *Tibi...sunt castae Palladis artes. Textile tools in Roman funerary practice*

**DISCUSSION**

**13.00: LUNCH**

**14.00: VISIT OF ESTE MUSEUM**

**Chair: Lise Bender Jørgensen**

**15.00-16.00**

M. Rigoni, M. Rottoli: *La conservazione di frammenti di tessuti attraverso il processo di mineralizzazione: due casi del Veneto/ The preservation of textile fragments through the mineralisation process: two cases of Veneto, Italy*

M. Rottoli, G. Cavaliere Manasse: *La sepoltura longobarda di Verona, vicolo Bernardo da Canal: un caso insolito di conservazione dei resti tessili/ The Longobard burial of Verona, vicolo Bernardo da Canal: an unusual case of preservation of textile remnants*

F. Médard, D. Djaoui: *Chiffons gallo-romains: un exemple inédit de recyclage/ Gallo-Roman rags: a previously unknown example of recycling from France*

A. Stauffer: *A Roman hairnet from the Rhineland (Germany) and its context*

## **DISCUSSION – COFFEE BREAK**

**16.45-18.00**

H. Granger-Taylor: *Fragments of underwear found at Masada, Israel (c. 30 BCE to 100 CE)*

N. Sukenik: *A re-evaluation of the textile dyes in the Cave of Letters (Israel)*

L. Larson Loven: *Searching for dyers in Roman textile production*

M.J. Martínez-García: *¿Alchemist ou artisan teinturier? Faire la teinture dans l'Égypte romaine/ Alchemist or dyer? Dyeing in Roman Egypt*

C. Broens: *Pigments and dyes: representation of garments in mummy portraits from Fayum (Egypt)*

## **DISCUSSION**

**Thursday 20 October**

**Altino, Museo Archeologico Nazionale**

**Via San Eliodoro, 56**

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**Chair: Mary Harlow**

**9.30-10.30**

I. Bogensperger, A. Koroli: *Qualities of textiles and their terminology*

L. Bender Jørgensen: *The textiles from Mons Claudianus in a North African context*

J. Ortiz-García: *Painted religious cloths from Roman Egypt*

A. Cabrera-Lafuente: *Fibre, dye and mordant analysis of Late Antique and Early Medieval Egyptian textiles from the former Museu Tèxtil i d'Indumentària de Barcelona*

## **DISCUSSION – COFFEE BREAK**

**11.15-11.45**

C. Alfaro: *A new wool fabric from the Roman port of Oiasso, modern Irún (Basque Country, Spain)*

M. Bustamante, A. M. Bejarano: *Recent discoveries from the site of the ancient capital of Roman Lusitania, Augusta Emerita.*

## **DISCUSSION**

**Conclusions: Margarita Gleba**

**12.30: VISIT OF ALTINO MUSEUM**

**13.30: LUNCH**

**14.30: DEPARTURE FOR VENICE**

**16.00: VISIT OF TESSITURA BEVILACQUA (VENICE)**

## POSTERS

- Caneva, S. Ficco: *Spinning and weaving in Mersin-Yumuktepe (Turkey) in the 6th-5th millennium BC.*
- Vanden Berghe, M. Gleba: *Italian textiles from the first Millennium BC - Dye investigation of degraded and mineralised textile remains by non-destructive and micro-destructive techniques*
- A. Tonc, I. Radman Livaja: *Protohistoric dye production on the Eastern Adriatic coast?*
- N. Cuddeback: *The decorated loom weights of Iron Age Southern Italy*
- L. Pedroni: *Tra le pieghe della tradizione. Agatocle inventore della trabea (LYD. Mens. 1.21 W)/ Between the folds of tradition: Agatocles inventor of trabea (LYD. Mens. 1.21 W)*
- F. Saranti, G. Nikolovieni: *Textile tools from Ancient Makyneia, Greece: the case of Buildings A and B*
- M.R. Luberto, F. Meo, F. Rizzo: *Textile production along the Ionic coast of Calabria, Italy: data from Sybaris and Kroton*
- S. Scansetti: *Resti tessili da sepolture tardoceltiche in provincia di Pavia/Textile fragments from Late Celtic burials in the province of Pavia (Italy)*
- L. Russo, I. Fiore: *Manufatti in osso per la produzione e la confezione di stoffe ad Ostia/ Bone artefacts for the production and packaging of fabrics in Ostia, Italy*
- C. Corti, M. Sanfelici: *Bone needles and textile production in the Roman times: a proposal for a re-interpretation*
- F. Médard, F. Maeder: *Too nice to be true - no sea-silk in Pompeii*
- M. Ohrman: *A warped version: manipulating Roman looms for metaphorical effect – Potamius, De Substantia, 5-9*
- C. Corti: *La produzione tessile a Mutina: il caso della villa della Scartazza/Textile production in Mutina. The case of Villa della Scartazza (Modena)*
- S. Cipriano: *Filatura e tessitura nel santuario di Reitia a Este in età romana: permanenza o discontinuità?/ Spinning and weaving in the Reitia sanctuary of Este (Italy) in Roman times: Permanence or discontinuity?*
- D. Francisci: *Statistica multivariata applicata agli strumenti da filatura e tessitura della Venetia romana/Multivariate statistics applied to spinning and weaving instruments from Roman Venetia (Italy)*
- P. Basso, M. Gleba: *Una lucerna con resti di stoppino dalla necropoli di Gazzo Veronese/ A lamp with remains of the wick from the necropolis of Gazzo Veronese, Italy*
- D. Garmi: *Découverte d'une nebula lineae et fibrilles de coton/soie en Gaule au I<sup>er</sup> siècle de notre ère, dans une cité secondaire de Gaule/Discovery of a nebula lineae and cotton/silk fibres in the 1<sup>st</sup> century AD, in a secondary city in Gaul (France)*
- Facen, M. Fiorillo: *Weaving and dyeing: the lexical evidence from Greco-Roman Egypt*
- J. Ortiz-García, M.J. Martínez: *Folding the portrait: manufacturing decorated shrouds in Roman Egypt. A case study from the Egyptian Museum in Berlin*
- M.I. Ruiz De Haro: *The meaning of the votive deposit of spindle whorls on Zacatín (Granada, Spain) and their relationship to the cult of the Darro River*
- Giostra: *Strumenti tessili da contesti altomedievali italiani/Textile instruments from Early Medieval Italian contexts*
- R. Invernizzi, C. Giostra: *Il tessuto dalla tomba della badessa Aripurga: la seta a Pavia tra VIII e IX secolo d. C./The textile from the tomb of the abbess Aripurga: silk in Pavia (Italy) between the 8th and 9th centuries*
- Luciano: *Tessuti per i Santi. L'epoca tardoantica/Textiles for the saints in the Late Antique period*





Jonatan Ortiz-García - *Universidad de Valencia (Spain)*

### **Painted religious cloths from Roman Egypt**

Textile studies focusing on Roman Egypt have a long tradition, but not all materials have drawn the attention of scholars in the same way; for instance, painted cloths. The largest surviving ancient collection of these materials comes from Egypt, mainly but not limited to funerary wrappings. This tradition comes down from Predynastic times, and from the Late Period onwards it gradually intensified until the advent of the Roman Empire, when it reached its maximum extension. The aim of this paper is to present an overview of the practice of painting on cloth in ancient Egypt, demonstrating the potential of these textiles for the historical studies on ancient technique, economy, and society.



Ana Cabrera-Lafuente - *Museo Nacional de Artes Decorativas de Madrid (Spain)*

### **Fibre, dye and mordant analysis of Late Antique and Early Medieval Egyptian textiles from the former Museu Tèxtil i d'Indumentària de Barcelona**

This paper presents the results of fibre, dye and mordant analysis from my Ph.D. on the study of 166 objects that make up the collection of ancient Egyptian textiles in Barcelona's Museu del Disseny, formerly Museu Tèxtil i d'Indumentària de Barcelona (MTIB). Among the most innovative aspects of the study is its integrated methodology, which includes the detailed documentation of each textile fragment and scientific analyses, in the absence of an archaeological context for the vast majority of the pieces in question (although some are fragments of known pieces with a clearer context or known origin). The results of the scientific and textile analyses have proven valuable in determining the chronology of the objects, their use, and the type of looms on which they were woven. This is the first time that a study of this kind, focused on Late Antique and Early Medieval Egyptian textiles, has been carried out in Spain. As such, it is not only innovative, but it also contributes with a new interpretation of a largely understudied collection, which includes fragments from periods that range from Imperial Roman times to the High Middle Ages. The scientific analyses performed include the study of fibers with SEM, of dyes with chromatography (TLC and HPLC), of mordants with SEM and of radiocarbon dating of 8 samples. Given the quantity of samples, it has been possible to study the broader use of specific fibers, dyes and mordants that we are presenting for the first time. It is important to note that this is the first study to analyze metallic salts in the fibers, in order to document the use of alum and of iron and copper salts to darken and lighten (respectively) colors. It is also important to note the use of mordants with alum in undyed fibers, probably to soften the fibers and facilitate weaving. The systematic and multidisciplinary study of Late Antique and Early Medieval Egyptian textiles in museums allows us to reevaluate these objects from a historical perspective. Together with new archaeological finds in Egypt, such methodologies are opening new lines of research that continue to develop and deepen our understanding of our cultural past.