

# Cochineal Reds in Iberia and France

## A comparative study of wool dyeing recipes from 18th-Century sources

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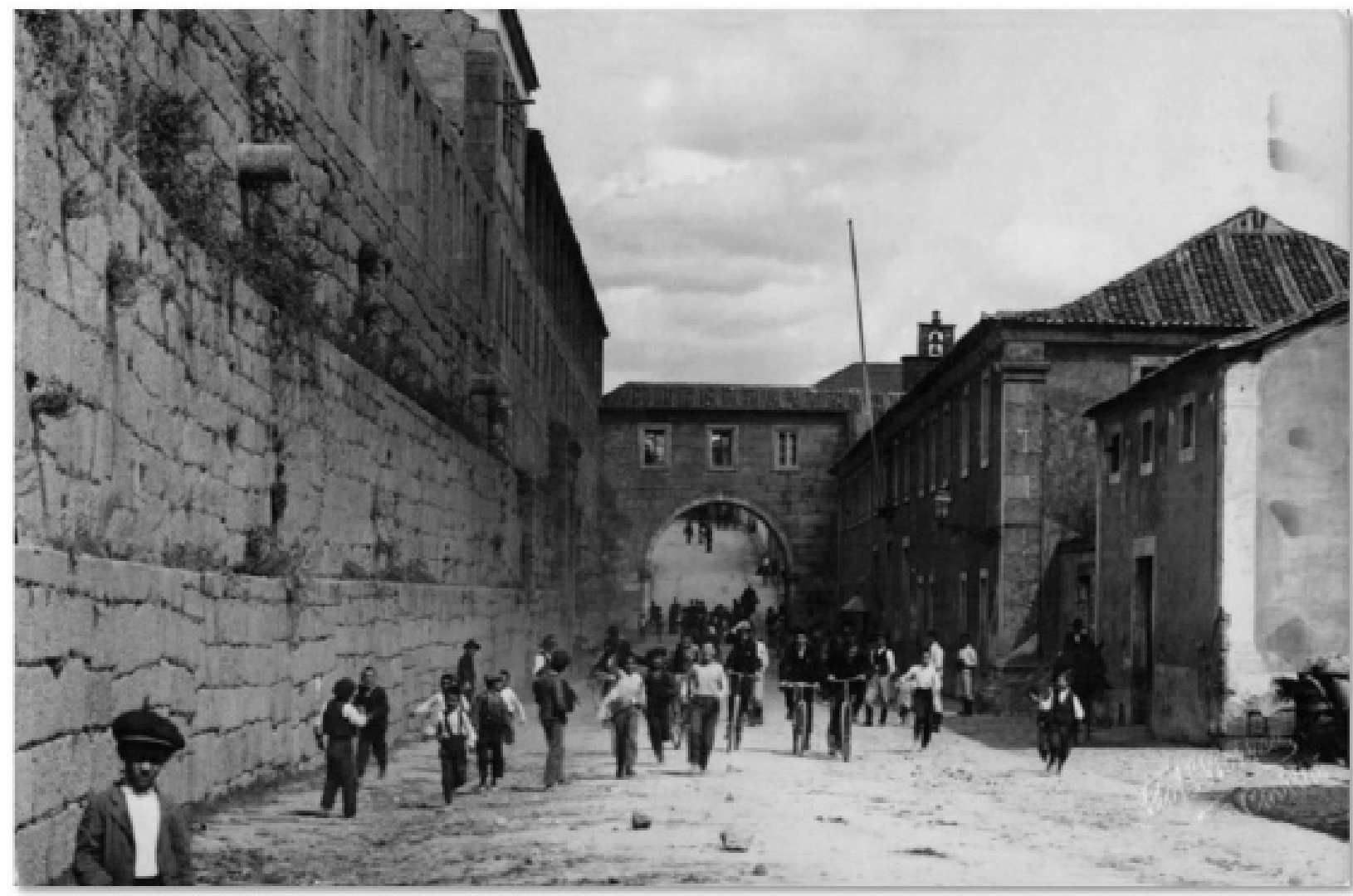
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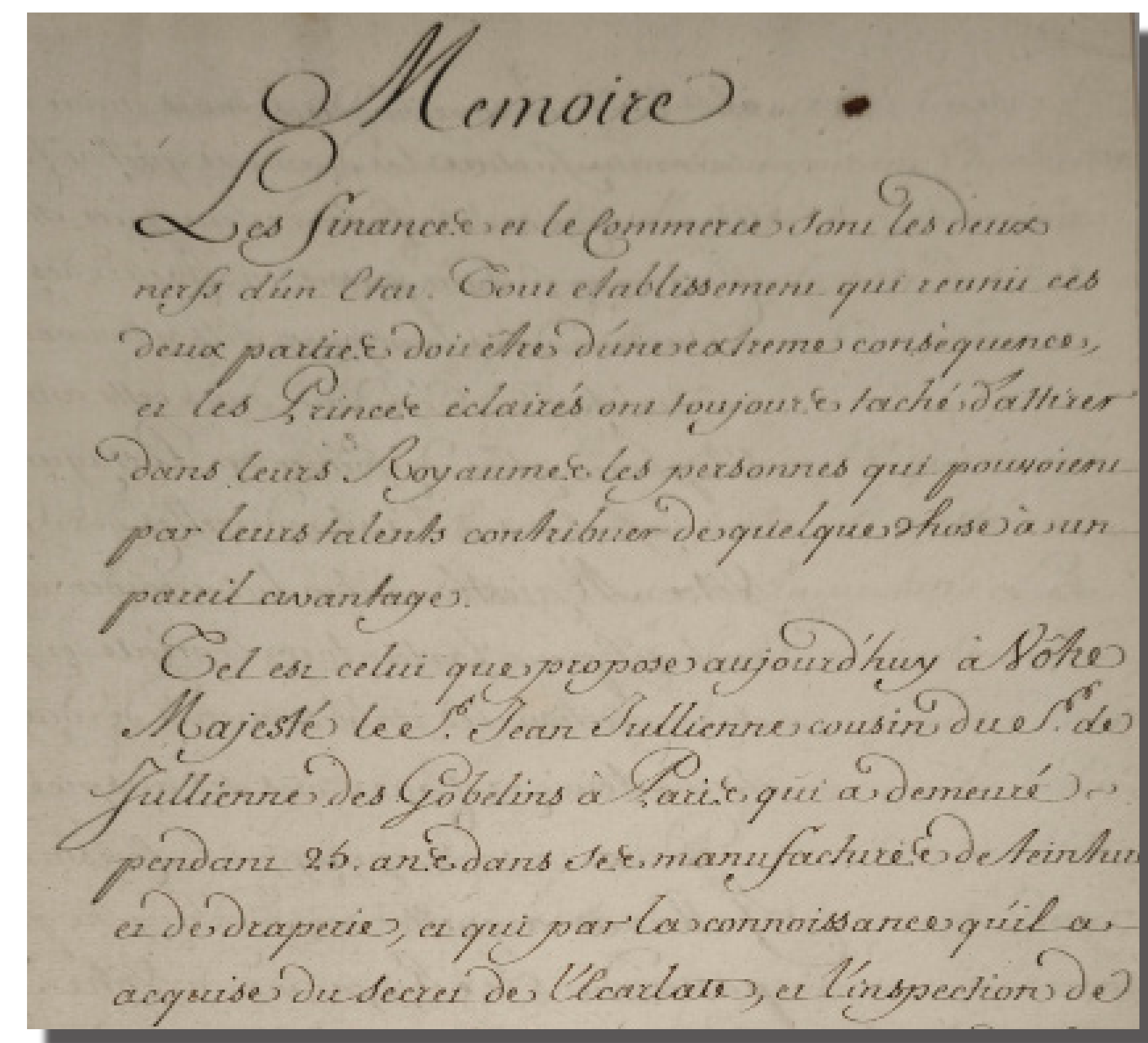
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### 1. SECRET DE ECARLATE

The Royal Factory from Covilhã, founded in 1764 by the Marquis of Pombal, is the perfect example of the Portuguese Industrial and Cultural Heritage [1,2]. But this wool industry, although rich in history, lacks a comprehensive study of the dyeing processes used in the 18th-century, as well as a thorough documentation of its production.

The Royal Factory of Wool of Covilhã mainly produced army uniforms. Therefore the main colours dyed were red and blue. The reds were mainly prepared using madder and cochineal.



However, a recent letter from Jean de Jullienne to the Portuguese king, has shed some light on the importance of cochineal recipes in the Factory's history. In this letter, the manager of the Manufacture de Gobelins, proposes that Portugal should build a similar manufacture in its territory, and that the Gobelins were willing to share their secret scarlet recipe.



Uncover recipes for scarlet: formulations | chemical similarities | stability.

Understand the influence France and Spain had in the Portuguese wool manufacture.

### 2. SCARLET RECIPES FROM THE 18th c.

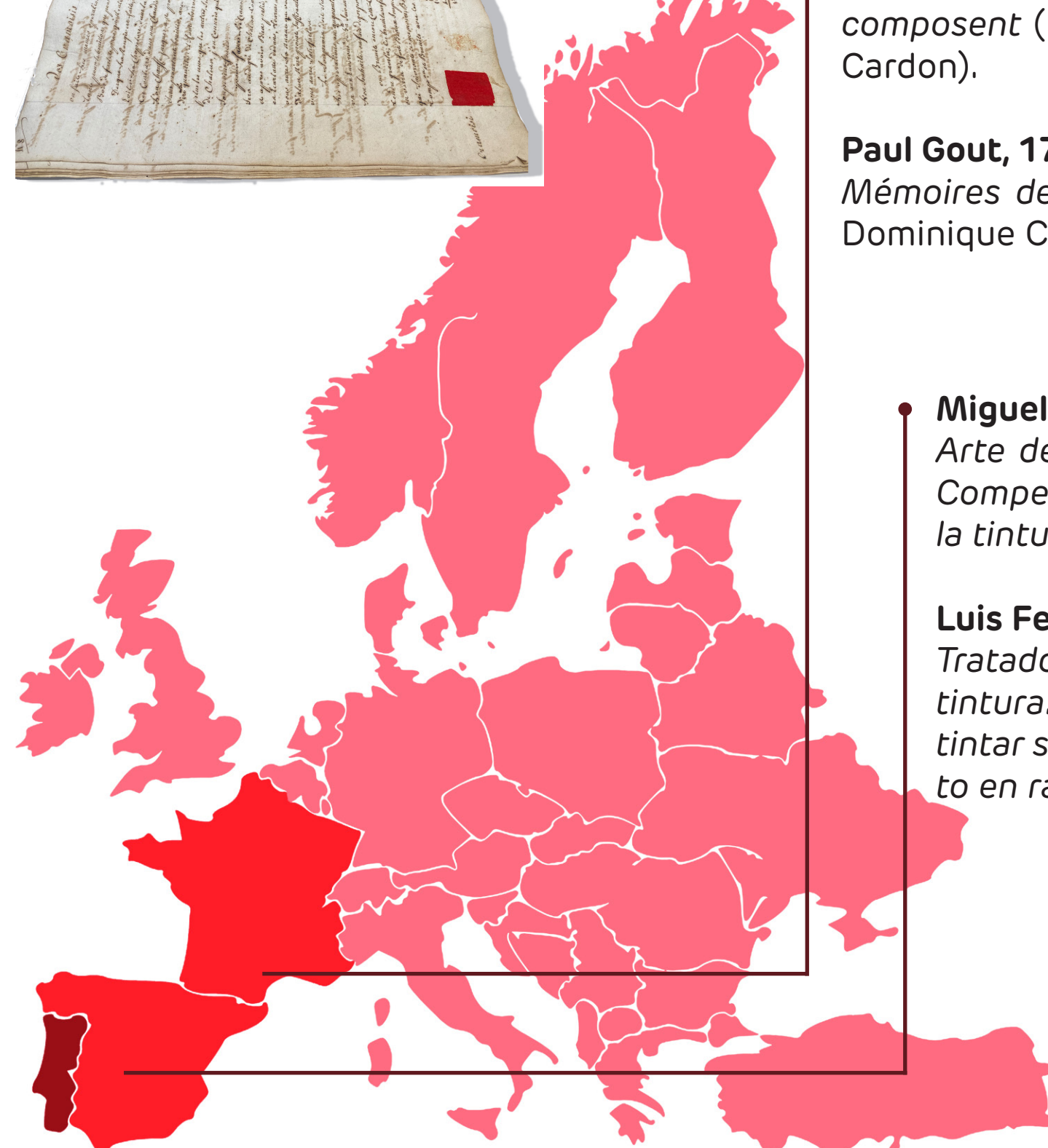


**Antoine Janot, 1744-1747**  
*Mémoire - on trouvera les opérations de la teinture du grand el bon teint des couleurs qui se consomment en Levant avec la quantité et qualité des drogues qui les composent* (translated and interpreted by Dominique Cardon).

**Paul Gout, 1744**  
*Mémoires de teinture* (translated and interpreted by Dominique Cardon).

**Miguel Jeronimo Suarez y Nuñez, 1779**  
*Arte de teñir las lanas, sedas, hilo, y algodón, ó Compendio Universal de la teoria, y practica de la tintura, y quanto a ella corresponde. Tomo I.*

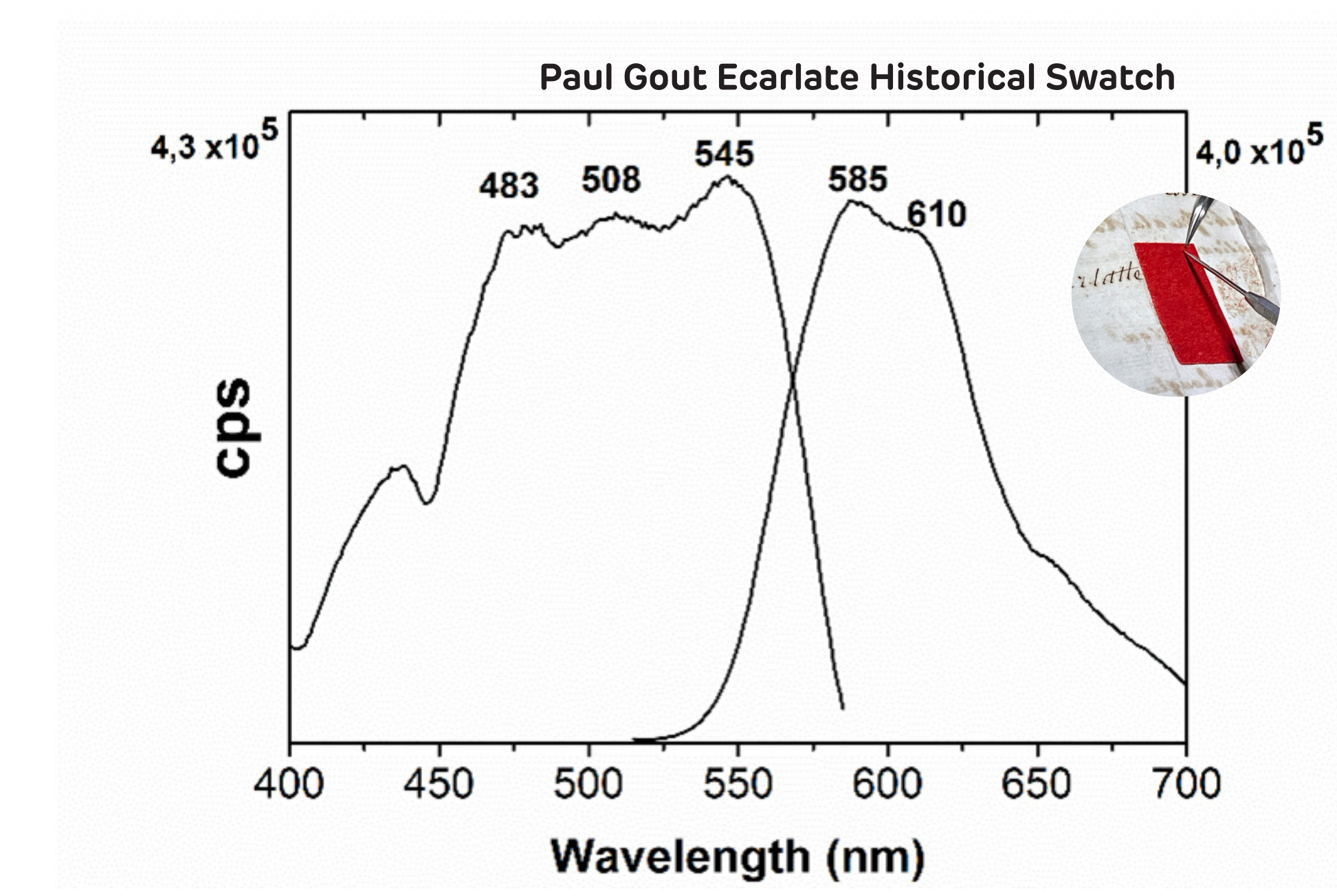
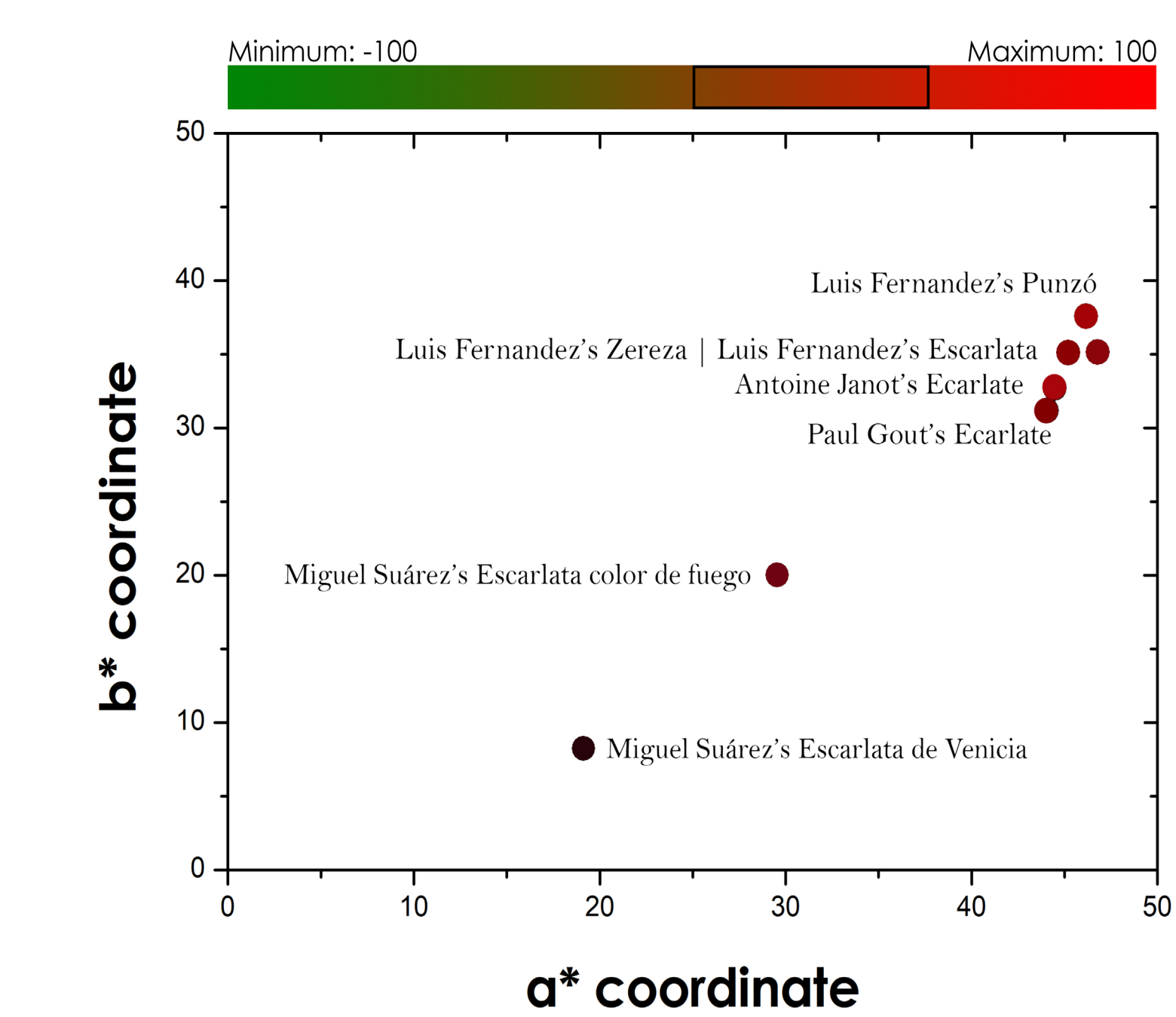
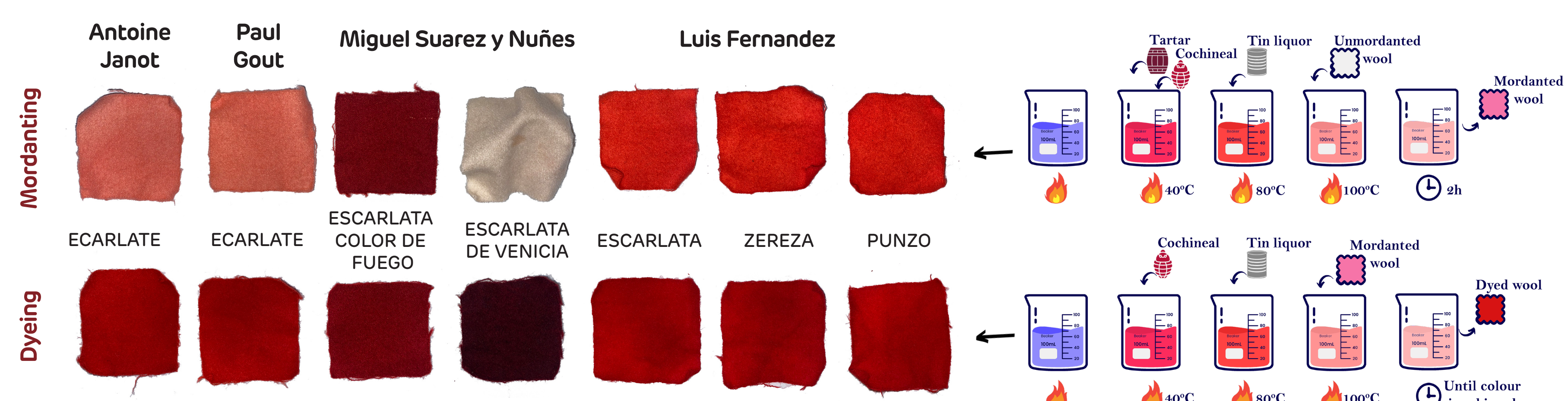
**Luis Fernandez, 1778**  
*Tratado instructivo, y práctico sobre el arte de la tintura: Reglas experimentadas y metódicas para tinter sedas, lanas, hilos de todas clases, y esparto en rama.*



The manuscripts were selected based on their historical context as well as their geographical relevance. The French manuscripts had already been translated and interpreted by Dominique Cardon. It was crucial to consider the quantities used in 18th-century Spain, as these varied by location.

Tin liquor was replaced by  $\text{SnCl}_2$

### 3. NOT ALL COLOURS ARE PREPARED ALIKE



### 4. FUTURE WORK

The PhD thesis "Le Rouge et le Rose: an in-depth study of madder and cochineal reds in the 18th century Portuguese Manufacture of Wool of Covilhã" envisages to disclose the formulations for cochineal and madder reds used in the Royal Factory, and further understand the knowledge transfer between Portugal, Spain and France. It will also aim at understanding the reconstruction of tin liquor.

### REFERENCES

[1] Pinheiro, Elisa Calado. Ubimuseum, n.o 4 (2017): 136-84; [2] "Dec. no 28/82 de Fevereiro." Accessed: Mar. 05, 2024; [3] Pereira, António dos Santos. Ubimuseum, n.o 4 (2017): 30-41; [4] Costa, Mário Alberto Nunes. Callipole: Revista de Cultura, n.o 5/6 (1998 de 1997): 103-19.

