

Lab 1: Pigment Making

Lab Assignment / 20 pts

OVERVIEW

This assignment asks you to read a Renaissance recipe for making cochineal lakes and to interpret it in light of your recent experience of making lake pigments in the lab.

In order to complete this assignment, you will need:

1. This assignment document (Lab1_Assignment.docx)
Please insert all your answers directly in this file, save it, and upload your completed assignment to the submission portal in Canvas.
2. The background document (Lab1_background.pdf)
3. Internet access so that you can search for basic answers using:
 - CAMEO: Conservation & Art Materials Encyclopedia Online (<https://cameo.mfa.org/>)
 - Wikipedia (<https://en.wikipedia.org/>)

OBJECTIVES

- Use art conservation resources to consider the relationship between historical and modern materials and tools.
 - Understand how units of measure were communicated before the age of standardization.
 - Interpret how the steps described in historical recipes might be modernized while still meeting their objectives.
 - Reflect on how pigment-making affects your understanding of art history.
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Your name:

Your lab partner's name:

Which recipe did you follow?

- Cochineal
- Cochineal (reverse)
- Logwood
- Madder
- Weld

PART 1: INGREDIENTS / MATERIALS (8 PTS)

1. In the “Background Information” file for this assignment, you will find an English translation of a Renaissance recipe for cochineal lake, found in the Paduan manuscript. Read the recipe carefully. Identify the “ingredients” and tools / equipment that are explicitly mentioned in this artisanal recipe and list them below. **(2 pts)**

2. Using the search feature of Conservation & Art Materials Encyclopedia Online ([CAMEO](#)), identify the following items from the Paduan manuscript. Give the common name and provide the URL to the CAMEO webpage you got your information from **(3 pts)**:
 - i. ley

 - ii. rock alum

 - iii. fine grana

3. What equivalents did you use in the lab for ley and rock alum? **(1 pt)**

4. In the Renaissance where could artisans find potash and potash alum? Use Wikipedia to find your answers and include the URL to the Wikipedia page you got your information from. **(2 pts)**

PART 2: UNITS OF MEASURE (5 PTS)

5. There are several different units of measurement used in the Paduan manuscript recipe. Identify one unit of time and three units used to measure quantities of materials. **(2 pts)**

6. What do you think is meant by a “grain” of cochineal in the Paduan manuscript recipe? **(1 pt)**

7. What challenges might these units of measurement have posed for early modern makers? Raise at least one specific challenge related to one of the units of measurement. **(1 pt)**

 8. One type of measurement that you took in the lab is not mentioned at all in the Paduan manuscript recipe. What is it and why might that be? **(1 pt)**
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PART 3: MODERNIZING RECIPE STEPS (3 PTS)

9. Consider this excerpt from the Paduan manuscript recipe:

... as soon as this happens [it makes a thick scum] throw it all onto a stretched linen cloth, when the clear ley will pass through leaving the coagulum on the cloth...

Describe the equivalent step you undertook in the lab and how it corresponds to what is described in the Paduan manuscript recipe. **(2 pts)**

10. What role do the “hot cinders” play in the Paduan manuscript recipe? **(1 pt)**
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PART 4: REFLECTION (4 PTS)

11. What did you learn from this lab? Discuss three specific insights and their significance for your understanding of art history. **(3 pts)**

12. What questions do you have about the lab activity, historical pigment making, or pigments in art history? Formulate at least one question and explain your motivation for asking it. **(1 pt)**