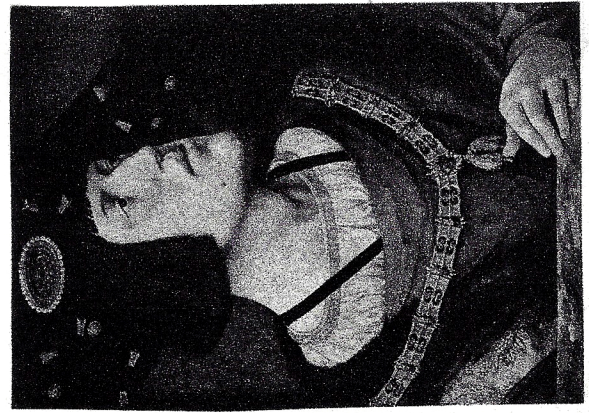


A Brief History of
Red
 in the Western Tradition

2008
 Small Science Collective
<http://smallsciencezines.blogspot.com>



In Medieval and Renaissance Europe, red dyestuff was subsequent in value only to the precious metals gold and silver. It was extremely rare, a very expensive color reserved for the wealthiest and most important people. Kings and Cardinals wore it often.

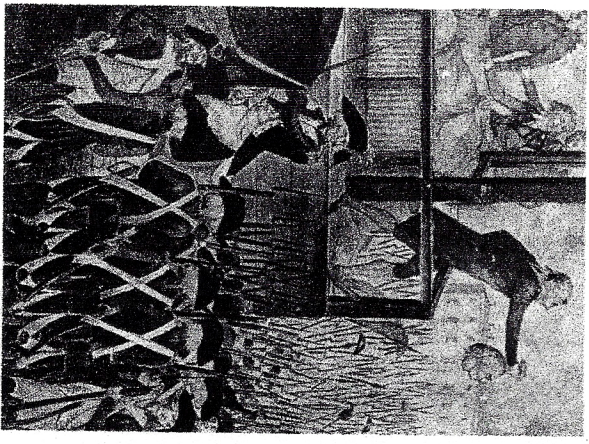
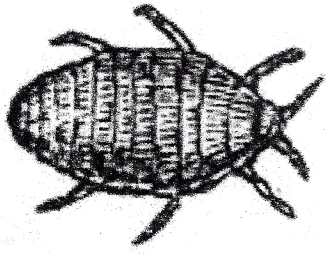


They had only three sources of the most brilliant red: *Kermes vermilio*, oak-kermes, *Porphyrophora polonica*, St. John's blood, and *Porphyrophora hameli*, Armenian red.

Each is a different scale insect, subject to the scruples of its environment. The insects were killed with vinegar and steam, dried, crushed, and sold as dye.



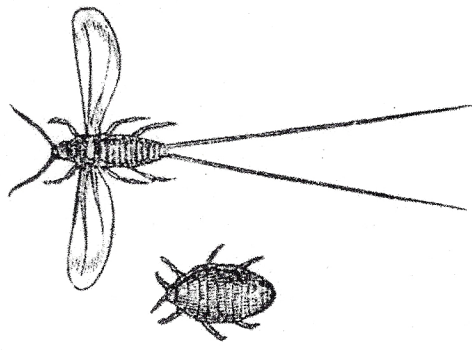
Cochineal production was not eliminated completely, however. Carmine red is still occasionally used as a pigment in oil and watercolor paints and cosmetics as well as a dye for fabrics, food, and medical slides. Lipstick and yogurt are two common places to find carmine today, often labeled E120. Perhaps you have been an unwilling entomophagist!



In the 1700s, the era of the gullotine, red garments were considered distasteful. Red clothing became available to the lower classes, and eventually was identified with prostitution. Once these attitudes faded however, synthetic coloring was discovered, and cochineal production experienced a permanent decline.



Spain's conquistadors arrived in the New World to a society saturated in the most vivid red they'd seen. The people of Mexico and Peru had long been using dye from the cochineal scale insect to heal wounds and ailments, color foods and fibers, and stain women's necks, cheeks, hands and breasts. They had developed a method of cultivating the insect, *Dactylopius coccus*, ensuring two to three harvests a year. The Spanish exploited this knowledge and the labor of the Mexican people to gain enormous profits from the sale of the dye throughout Europe. It largely contributed to Spain's increase of power.



Female cochineal insects far outnumber the males and cluster together on prickly pear plants. The females are wingless, and so produce carminic acid to ward off predators. This is the deep red that escapes the insects when they are crushed. It takes about 70,000 cochineal insects to produce one pound of carmine red dye.