



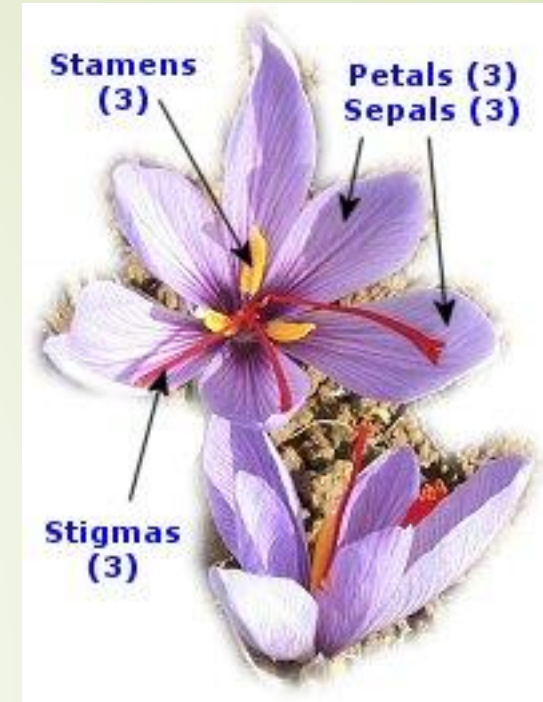
Making Color

Orange



Saffron

- Red stigma of crocus satirlus
- Flowers open only in morning and for one day
- Most expensive spice in the world (100,000-140,000 flowers needed for one kg of dye)
- In medieval manuscripts, used to imitate gold
- Will fade faster if closer to yellow, longer-lasting if closer to blue



➤ <https://reconstructinghistory.com/dyeing-with-real-saffron/>

Saffron without
mordant>



Madder

- Oldest known dye substance globally
- Root of *Rubia Tinctoria*
- Red lake
- Entire medieval European towns had economies based on use of madder in textiles
- Needs to be cooked at low temp for at least 12 hours
- Not a rich red and can fade to orange



Madder Root

COTTON BROADCLOTH

COTTON JERSEY

SILK DUPION

RAW SILK

SILK VELVET

Madder and
alum, $\frac{1}{2}$ hr in a
cool pan



Madder and
alum



Madder and
alum



Madder, alum
and iron



Madder and
alum

