

6.2 Dyes

Natural dye

Until the mid 19th century all dyes came from the natural world. There are three types of natural dyes, those from plants, animals and minerals.

Madder dye was widely used in the 19th century and was made from the root of the madder plant. To make the dye, the roots of the plant were washed, dried and ground into a powder. It was used to produce red, orange, rust and brown colours. It was the base of the very popular 'turkey red' colour. Madder was used until the mid 1850s when a synthetic substitute was developed.

Another plant based dye was woad, which was used to dye fabric blue. In the 1600s, woad was replaced by indigo, a very colourfast plant based dye from India.

Indigo was well known to the ancient Egyptians and Indians. The East India Company imported large amounts of indigo in the 1600s and the woad industry diminished.

Mineral dyes produced many colours including: Prussian blue, manganese bronze, chrome yellow,

orange, blue, or green, antimony orange, iron buff and teal green. Ochre is a mineral dye obtained from iron oxide found in red dirt.

An example of animal dye is royal purple or Tyrian purple, which was extracted from the murex sea snail. It took so many snails to produce a small amount of dye only royalty could afford it.

Synthetic dye

William Perkins discovered the first synthetic dye in 1856 while searching for a cure for malaria. It was an aniline dye developed from coal tar and was named mauve. By 1870 this synthetic version had overrun the use of natural dyes made from madder.

The discovery of mauve sparked the rapid development of synthetic dyes. By 1880 a rich red dye could be made synthetically. Synthetic indigo was invented as early as 1880, but its commercial use was delayed until 1897 and had replaced the use of natural indigo by the 1920s. During the 20th century thousands of new synthetic colours were developed.



An example of the natural dye indigo. Womens embroidered cotton and wool shirt, Philippines, 1910–60. Powerhouse Museum collection, purchased 1994. 94/3/2



An example of synthetic dye. Womens silk day dress, 1870–79. Powerhouse Museum collection, gift of the Fashion Group, 1974. A6356