



The Royal College of Pathologists

Pathology: the science behind the cure

Object 28: Logwood



What is it?

Logwood, *Haematoxylon campechianum*, is a tree of the pea family. It grows in Central America and the West Indies, reaching heights of up to 15 metres. The wood of the logwood tree is important in pathology as it is the source of the purple dye haematoxylin, which is used in histopathology departments worldwide.

History

Logwood has been used as a dye for hundreds of years. It was banned in Elizabethan England as it was used by unscrupulous traders to mimic the rich, long-lasting dye, woad. Haematoxylin-dyed fabric looked similar when new but faded when washed. Logwood has many other uses, including as a remedy for diarrhoea.

Pathology

Every routine histology slide is stained with two dyes; haematoxylin and eosin. Haematoxylin stains nuclear material purple, allowing interpretation by histopathologists. Labs buy haematoxylin as a powder or ready-made liquid dye. Synthetic alternatives to haematoxylin have been sought, but none found.

Find out more

If you visit any histopathology lab you'll be able to see haematoxylin in use. Why not find out if there's a lab open day near you and ask a pathologist to point out the parts of a section stained with haematoxylin? You can find out about open days on the [RCPath website](#).

Find out more about logwood on [Wayne Armstrong's website](#).