

Rubia tinctoria

MADDER is a prickly evergreen perennial. Native to Asia Minor and south-eastern Europe it has small greenish-yellow flowers.

It is also known as *Bacho* (Hindi, Punjabi), Dyer's madder, *Färberröte* (German), *Garance* (French), *Krapp* (English, German, Swedish), *Mořena barvířská* (Czech), *Robbia*, and *Rubio tinktura* (Esperanto); and in flower language is said to be a symbol of backbiting, calumny, and tranquility.

The process for obtaining the dye from the roots is thought to have been similar to that used in India with a related species.

Warning – the plant will temporarily stain urine or bones (and milk) a red colour.

Tinctoria is derived from Latin *tincti-* (dyed, stained, tinged) meaning 'used in dyeing'.

Archaeologists excavating the ancient Egyptian tombs (including that of the 18th dynasty boy-king, Tut'ankhamun who died c.1340 BC) have found wall paintings and cloth remnants especially wrapping mummies, for which the dye must have been used. (As the plant is not native to Egypt and would find the climate unacceptable the dye had probably to be imported.) During the 5th Century BC Libyan women were using this dye to colour their cloaks. Madder root also gave its brilliant colour (which is brighter than that obtained from Indian madder, *Rubia cordifolia*) to the traditional scarlet fez worn by Muslims and this colour became a symbol of courage.

Until replaced by synthetic alizarin (the colouring matter contained naturally in madder's roots) madder was the traditional source for the permanent brilliant red dye known as 'Adrianople Red' or 'Turkey Red'. When one learns that in Turkey the traditional dyeing process involved the use of various animal dungs, the blood of several animals as well as the liquid contents of their stomachs, fish or whale oil which was allowed to go rancid, and charcoal (and took a month to complete) it is not surprising to note that it was carried out in villages inhabited only by the dyers and their families. Dependent upon the mordant with which the roots were processed, many different shades including pink, lilac, purple, orange, brown and black, could also be obtained. These dyes and the roots were important trading commodities at the eastern end of the Mediterranean for centuries and it was from here that they eventually permeated Europe.

Authorities believe that madder was introduced to Italy and France at the time of the Crusades (roughly the 10th to 13th Centuries) – and to the Netherlands in the 16th Century by the Moors. Until its appearance in the Netherlands however spasmodic supplies of dried madder root had been carried on part of their journey by camel caravans across the Arabian deserts to the trading points in south-eastern Europe and Turkey. Now the Dutch, and subsequently the French and Germans, learnt quickly how to cultivate the plant and process the roots (whether by the traditional Turkish method or not is uncertain) thus providing a more reliable source for their European neighbours, and this new industry lasted for well over a hundred years until the introduction of synthetic alizarin in 1868 which gradually superseded the natural dye.

While the natural dye continued to be made in Western European countries farmers there found a new, lucrative crop - one so remunerative that its growth in the hinterlands of the cloth towns began to be at the expense of food crops. England was a less significant user of the

dye initially but eventually she was also to forfeit agricultural land in this way. By the time synthetic alternatives were beginning to replace their natural peer in the late 18th Century the cultivation of madder was a fundamental part of a local community's economy in the vicinity of the established cloth centres in Europe. Thus the synthetic replacements were not unanimously welcomed as too many livelihoods were at stake and the manmade interlopers took many decades to achieve any material foothold. The French army for instance was still wearing uniform trousers dyed with the natural colouring until at least 1918, the end of the 1st World War.

Today madder is still grown in central Europe and western Asia. Despite the existence of the alternative synthetic dyes the renewed and growing enthusiasm for crafts has re-awakened interest in the plant as a dye source as it is believed to be able to produce more subtle shading than its synthetic counterparts, both for artists' paints and in dyeing cloth.

If madder is mixed in with animal fodder the animals' bones will acquire a reddish hue. It is hardly surprising therefore that there used to be a superstition that if you held madder in the hand the colour of your urine would become that of blood.

Medicinally, madder used to be prescribed by herbalists for treating jaundice, fluid retention, urinary disorders and female ailments. Today the roots offer a commercial ingredient for proprietary medicines and are used in homoeopathic treatments.