

“BRAZILWOOD ONLY COMES FROM BRAZIL”

(AND IS THEREFORE ONLY USED FROM THE LATE FIFTEENTH–EARLY SIXTEENTH CENTURY)

BUSTED!!

Brazilin, the substance that provides the color to brazilwood lakes is found in several trees of the *Caesalpinia* Genus. *Caesalpinia sappan*, also known as Sapanwood, is native to Southeast Asia¹ where it was exported to Europe and the Mediterranean region. *Caesalpinia Echinata* is the species found in South America. It is worth noting here that the trees were named after the “brasil wood” that the Portuguese recognized as a valuable dye substance already available in Europe. Brazil was named for the trees that became its first valuable export to Europe, not the trees for Brazil.⁴

An Arabic bookmaking manual² c. 1025 AD has the earliest mention I have found of brazilwood:

Description of dyeing leather and paper: The red in the dyeing is of many types. In one, the best possible sapanwood is taken. There are two types; one is the "little" and the other is the "princely." An ounce is taken of the powder. It is immersed in water a night or a day. It is then put into a copper pot, a clean utensil. On it is poured ten rats of water and the best powdered, sieved wild qali. It is then boiled on a good fire until half of the water is lost. The essential of the process is that a rod is left in it. Drip it on your thumb. If it remains and does not drip, then it is successful. It is taken down and purified. If desired, this may be repeated on that type which is sold. The first is the better of the two. It is left until it cools. Then dye with it. For dyeing, paper is put in the solution with care and then spread out in the shade. For leather, put sapanwood in a vessel to which has been added water of sapanwood. It soaks it up. A hair brush is put in the water of sapanwood, or a piece of felt is wound on the head of a rod and immersed in the sapanwood, then rubbed on the leather.

(As an additional confirmation that the author is indeed talking about Sapanwood, brazilwood is not a lightfast dye. His need to spread the paper out in the shade to dry, as opposed to sunlight is due to the fugitive nature of the dye.)

Europe imported many of its red lakes from the Mediterranean/Southeast Asia region, including kermes and lac, the Indian stick dye that also was found in South East Asia. It's reasonable to assume that brazilwood also made the trip under the ubiquitous term “lake.” According to Hunt, in his article “Early Anglo-Norman receipts for Colors,” brazilwood was known and used by illuminators in England by the twelfth century.^{5,6} There is an interesting recipe for adding brazil scrapings directly to glue size in the British Library manuscript Cotton Titus D.XXIV.⁶ For further confirmation that it was in use for manuscripts, in Merryfield’s translation of Jehan le Begue’s



Sapanwood

1431 treatise, "Colors and Paints in Ancient Manuscripts," he mentions "Braxillium or brexillium" and describes its preparation as excerpted below. :

To make a fine rose color – Take fine brexillium and scrape it fine, and take strong lye made with the ashes of oak, and make it boil, and pour it over the brexillium into a glazed earthen saucer, so as to cover the brexillium and let it stand for an hour. Then take egg-shells, pound them well, and grind them very fine on a porphyry slab with clear water, and lay them on a new hollow brick, that the water may be absorbed. Afterwards put them into a glazed earthen jar and pound up some roche alum, and mix with the powdered eggshells; afterwards strain the lye in which the brexillium is put, and pour the lye which is dyed red with the brexillium upon the egg-shells, and mix, that the whole may be incorporated together; and afterwards, dry the lake, not in the sun, but on a hollow brick, straining it through a linen cloth, and you will have a perfect rose color.

Brazilwood is an extremely useful dye, being pH sensitive enough to create colors ranging from a bright orange-red, to a deep purple, similar to the way madder or folium could be used. It is less difficult to extract than madder, since boiling it in water is sufficient to extract the dye. It is transparent, so to be used as a pigment, it has to be mordanted onto a substrate like chalk, lead white, or as Jehan le Begue suggests, finely ground eggshell. It should be noted that using lye will cause the brazilwood to shift more towards the purple hues, as lye is a strong base. Adding lemon juice, vinegar, or another acid will move it back towards the orange-red side of the scale.

Daniel V. Thompson⁴ discusses the importance of brazilwood to the medieval painter for five full pages though he does not provide a specific start date of use. Whether this is due to accidental negligence or the ambiguity that plagues the artist studying the history of vegetal lakes is unclear. Regardless, his emphasis that brazilwood is one of the three most important reds to the medieval palette is a powerful affirmation.

In summary, brazilwood was a dye known and used for dyeing leather and as a pigment of great importance to the medieval illuminator. It has been documented in use back to the 12th century in Europe, and the 10th century in the Mediterranean, though I suspect it was known and used in Byzantium as well. It was one of the first riches discovered in the new world, and gave its name to the country of Brazil, as the Portuguese explorers recognized the new world siblings of the valuable dye wood, and named the country for its valuable resource.

References Cited:

- 1) http://en.wikipedia.org/wiki/Caesalpinia_echinata - July 21, 2010
- 2) "Mediaeval Arabic Bookmaking and Its Relation to Early Chemistry and Pharmacology", translated by Martin Levey, Transactions of the American Philosophical Society, vol. 52, no. 4, 1962, pp 43
- 3) Merryfield, M.P., Medieval and Renaissance Treatises on the Arts of Painting: Original Texts with English Translations, Courier Dover Publications, 1999, ISBN 0486404404
- 4) Thompson, Daniel V., The materials and techniques of medieval painting, Courier Dover Publications, 1956, pp 116-121. ISBN 0486203271
- 5) Hunt, T., 'Early Anglo-Norman receipts for colors', *Journal of the Warburg and Courtauld Institutes*, **58**, (1995) 203-209
- 6) Clarke, M., 'Anglo-Saxon Manuscript Pigments', *Studies in Conservation*, **49**, No. 4, (2004), pp 231-244