

Dye Plant of the Month: Madder, Dyer's Madder (*Rubia tinctorum*)



Plant Family: Rubiaceae

Description: Perennial herbs, sprawling or climbing, 2 – 4' tall, with tiny yellow flowers. Stems 4-angled, leaves in whorls of (2-) 4-6 (-8).

Origin and Current Range: Origin unclear, but thought to be from the Mediterranean, the Middle East and Asia Minor; widely cultivated and sometimes escaped and established in Europe, China, India, Southwest Asia, the Mediterranean, and some parts of the U.S.

Habitat: Rather dry, open ground. Full sun, well-drained soil. The plants produce more alizarin if the soil is well-limed.

Reproduction and Cultivation: Reproduces from seeds. The plants can also be subdivided. The plants spread by underground parts and can be very invasive. Some dye gardeners recommend growing these plants in containers to control the spread of the plants.



Dye Color and Parts Used for Dye: Roots produce colors ranging from deep brick red to purple, orange-red, orange and tan depending on the mordant and fibers used. Plants should be at least 3 years old before being harvested.

Other Information: Madder is one of the oldest dyes known. Fabrics dyed with this material have been found in archeological sites in India from the 3rd Millenium BCE, from Egypt, and in Viking Age sites in York, England, and use of the plant is mentioned in ancient manuscripts by Dioscorides and Pliny the Elder. Textiles dyed with madder were found in the grave of the Merovingian queen Arnegundis in Saint-Denis near Paris (between 565 and 570 AD). Turkey Red dye was made from madder using a long, complex process, initially in India and Turkey, and later used in Europe and America. Discovery of synthetic dyes based on the same chemical ingredients (alizarin and purpurin) as in madder enabled the more economical manufacture of red fabrics and prints that became popular in the late 1800s.

References:

There is a wealth of information about madder in books on natural dyes as well as online; here are a few to get you started.

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3. Dean, Jenny. 2007. *Colours from Nature – A Dyer's Handbook*. Search Press, Ltd, U.K.
4. Furry, Margaret S. and Bess M. Viemont. 1935. *Home Dyeing with Natural Dyes*. U.S. Dept of Agriculture. (Reprinted by Thresh Publications).
5. Lambert, Eva and Tracy Kendall. 2010. *The Complete Guide to Natural Dyeing – Techniques and Recipes for Dyeing Fabrics, Yarns, and Fibers at Home*. Interweave Press, Loveland, CO.
6. Reagan, Jeanie. 2003. *Want Natural Colour? – A “How To” Guide for Natural Dyes on Protein Fibers, with Tips, Techniques, Mordanting and Afterbath Processes*. Published by Jeanie Reagan, Dahlonega, Georgia.
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<http://animpartationofcolor.blogspot.com/2014/02/madder-rubia-tinctorum-2013.html>
8. Priest-Dorman, Carolyn. 1991, 1997, 1998, 1999. *Colors, Dyestuffs, and Mordants of the Viking Age: An Introduction*. <http://www.cs.vassar.edu/~capriest/vikdyes.html>
9. Wikipedia. *Rubia tinctorum*: http://en.wikipedia.org/wiki/Rubia_tinctorumtml
10. Wikipedia. *The Turkey Red Process*: http://en.wikipedia.org/wiki/Turkey_red