

Dyeing with Plants



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Already in the Stone Age humans used colours, like cave painting in the southwest of Europe testify – containing iron oxide earth for yellow red to brownish-red, lime & gypsum for black-and-white and coal for. These colours were from large light fastness, but humidity and mechanical load did not resist it. By antique writers we have of the fact knowledge that Germanic and Celtic peoples painted themselves before battles at the whole body multicoloured. Particularly the Celts are well-known for their blue Body Painting /Body Tattoo . But colouring with planting & animal excerpts was the only possibility of colouring materials durable.

Our ancestors coloured with the plants, which the nature of their homeland for it gave them:

- Brown: Oak and Birch bark
- yellow: birch leaves, broom & reed
- red: Tormentil (bloodroot), cleaver- & woodruff root
- blue: Woad



The Romans extended the colouring material selection by walnut for brown, Reseda for yellow, Madder for red. With the development of the cities, guilds generate and in such a way became also soon colouring wool and materials a branch of profession. However its own guild to end of the Middle Ages was refused the Dyers. They stood in direct dependence to the guilds of the cloth dealers and wool weaver, who imposed upon strict regulations to them, in order to prevent a falsifying of the colours, and high tariffs from them demanded. Dyeing was made in special colouring houses, which belonged to the clothier and it was allowed only a certain quantity cloth or wool on day is coloured, which was examined thereafter by the guild masters. One offended against the regulations, the cloth could be burned and dyer & clients had to pay high fines. If the poor dyer could not pay like usually, his hand was reduced. Such circumstances caused naturally all kinds of rebellions and revolts. So also in 14. Century in the most important Clothier metropolis Florenz. Here have the dyers had themselves in religious brother shank of the Onofrio, which was the Patron Saint of all Dyers, before them called 1371 to the rebellion. This dyer streik took whole 8 years and ended with the establishment of 3 new guilds, one of them was the Dyer guild. Not all have so much luck. In Germany the Dyer guilds came out in the 16th century on there own.



Generally it gave 3 different kinds of dying:

- the black dyeing or also simply dyer, coloured black and all simple colours
- the Palliator, coloured finer goods in nobler colours –
- the silk dyer, gave it only at places, where silk culture & weaving mill flowered. They had never a guild, but were "free artists"

The colour splendour of the dresses was indication of the lordship of its carrier and lasted it in such a way before there were the first dress regulations. So it was Karl the large one, who specified in its land goods regulation around 800, that woad and madder is to be cultivated and the Cochenille(*Coccus ilicis*), which supplied the scarlet red. But by its Christian inclination to simple clothes he approved the multicoloured –dresses folk only 6 “ellen”(3,60m) in grey or brown crude linen, A monk describes the clothes of the Carolingian as rather multicoloured . They wear red trousers and blue coats, just like multicoloured caps in the eastern style In the 12th century, after the first crusades, gave it also some become rich traders , who could buy them multicoloured clothes. This doesn't appeal the aristocracy.

Some colours exclusively reserved to the aristocracy, like green, which was an expensive mixed colour. So also indigo blue, gold-yellow and scarlet red. Black was reserved to the low Clergy & the Masters degrees. The Woad blue and the Madder red was the fixed colour for citizens & farmers. Pale-yellow was the Disgrace colour for Jews & prostitutes. Purple was carried only by the high aristocracy and the high Clergy, since it was the most expensive colouring material. It is won from the gland secretion of different purple snails, for which one for 1g purple 8000 - needs 10000 snails. The Turks terminated the purple production in Europe as it 1453 Constantinople conquered and the purple facilities were destroyed. But prohibitions and dress regulations did not hold the people of it starting from ever more splendid garbs to carry. Thus the aristocracy thereby began to carry its coat of arms colours and embroider its coat of arms animal itself. Thus those developed for Mi-Parti Fashion, which divided the body in 2 or even 4 different colour strip. But citizens and even the farmers copied even. By the discovery of the sea route to India & America the offer of the colouring colours in Europe changed much. Over this new ways, stronger colouring materials came to Europe, like Brazil wood, Sandalwood, saffron, safflower, litmus and Indigo. In the 16.Jh. the Indigo was partly forbidden as "harmful devil colour", because they was afraid for the Woad culture in Saxonia and Thuringia. But 1610 were already waived in Hamburg the prohibition again, which entailed the fall of the Woadcultures. Madder remained the most important red colouring material by that Antique ones in the 19th century. From thenceforward began the triumphant advance of the tar colours and the chemical colours.

Normally the spinning yarn is coloured and not the finished cloth. One does not obtain an intensive colour, by letting wool lie for a long time in the dye bath, but by over-colouring it



repeated with the same colour. The colour result depends on many often imponderable factors, so e.g. the water hardness and the mineral material content. The same colouring herb can result in completely different Colour saturation in the case of different water hardness. The most important when modern colouring is mordant. It is the chemical bridge between colouring material and fibres. In addition, with natural colours only natural substances can be coloured, like wool & linen. The materials may not contain chemical portions, which do not accept the colour, the result would be otherwise spotted. As if mordant in former times vinegar and ammonia in the form of urine used, today uses one chrome, iron, tin, tartar and alum, particularly often latter both. It is not occupied, which one already used in the early Middle Ages, just as one does not know reliably when and which one used for mordanting in the later Middle

Ages.

Manuel for colouring with vegetable materials

The handicraft of colouring is already age-old, because already our stone time ancestors could manufacture colour. Humans in time noticed certain planting, roots and before all berries a certain colour to leave to be able.

This experience was used ever more consciously and it became its own handicraft from it. The variety of the means from the Flora and the Fauna give to be able to manufacture us the possibility a large pallet at colours. These possibilities for the beginning of the time calculation and is today feasible existed already until to manufacture colours themselves.

In the Middle Ages it has the colours of yellow, orange, over red too blue, up to grey given, colouring is possible already with nearly all plants also without mordant, but the colours become then rather pale. Do you want strong colours you must consider, that the plants must oxidize, either with the suitable plants or with urine. All the same for which you decide, it will in any case stink. With chemical mordant it goes faster and they obtain the same effect.

In the following, I describe you colouring, what you need for it and what you have to consider. I will keep the prescriptions general, because they only different in the quantity specifications of the plants and mordant. The only dyeing method which strongly from the others deviates is colouring with Indigo. In addition in the connection a prescription to her will find. I wish you much fun and much success for colouring



Colouring and what you need for it

Implements:

- fire place
- Several directly heat able washing tuber, depending upon colouring
- must colander, scales, mixer, mortar, thermometer, funnel, large spoons, pliers, towels, bucket, gloves

which your favourite material for use is ,you have to decide on your own. You can used Wood, Plastic or metal, as well.. However, which the tools the colours hardly still loose will, before all if it considers from wood is. Equipment made of high-grade steel apparice themselves at most. You need dark glasses for the mordant. Remembers please, which some solvents contain and so that are poisonous, therefore closes it particularly for children well away.

I colour at home with the stove and an enamel pot :He take up the colours more badly and am better suitable therefore than a high-grade steel pot .I have for colouring special wood spoons, which I use ever again, so like different dish in which I the Colour brew set and which wool rinses afterwards and dries.

Dyeing:

1. Material (yarns, materials, raw material) washes and dries
2. Mordant
3. Colour brew prepares
4. Colouring
5. Re-treat
6. Rinses and drying

Wash and drying

This work procedure is beautifully simple. Weigh the material in the drying condition . The gram data in the colouring table always stand to 100g wool or other material which can be coloured (if I write in the following text only of wool).

That is called e.g. 100g wool to 200g Birk leaves.

Mordant:

It becomes now already a little more complex

The mordant is dissolved in hot water, wool is inserted and cook about one hour . The gram data for the mordant are approximate data. Please be careful with proportion, the more ypu take of the mordant , the dark becomes the material. I can't unfortunately give exact data to you, because in each book and recipe satnds something else . With the ironsulfat it behaves in such a way,if you like it darker took more,if you like it lighter took lees of it.You can see it ,when you adding it in to the wool. The mordant receive you in pharmacies.

Vegetable mordants:

As replacement for alum is suitable: Lycopod and Chickweed. For ironsulfat take Gallapples, Sorrel or Alder. Cook these plants in a rough Aluminium pot . They must be received a reaction with aluminium, the metal must be open to attack. Leave this brew untouched for a few days, till it begins to putrefy. Then take the plant components out and carry it away . The liquid you can use like the mordant up there.

Colour brew

First you cut up the plants; after possibility took fresh ones (with dried plants it goes however just as well) and yield these over night in water. On next day ,you cook the plants into this water for one hour. Pour off the plants (took it not away,you can use it later again),because you need only the brew. Thus you have not the work to remove Plant pieces from wool. You can use the brew either directly or let stand her again one day, whereby the colours become more intensive. After this, the Plant pieces still continued use for colouring, if you do them in colouring bags. Put the colouring Bag into the dyeing water. I use as colouring bags, old sock or tea bags. I fill in the plant pieces and hang them in the dyeing pot

Colour

Moist the Mordant wool . Put them into the colour brew and bring them together to cook. You may not agitate the wool,but only suppress . As best you lift out and let it fall again (into the pot). If the wool have boil, then simmer it with small heat still about one hour. Differently mordant wool can be coloured at the same time. The wool have to be moisten after, for better and constant gathering the colour

Treatment

You can implement this step , if you want to change the colour again. If you want to re-treated your wool,you should make right after colouring; wool must not rinsed out. The appropriate mordant will admitted directly to the colour brew . Took the wool therein for 15-20 minutes .I already turns the stove plate off or takes the pot of the fire.

Rinses and drying

Rinse wool with soap solution into water, still it's clear.To dry the wool ,hang up. Don't wring out the wool,it can be felting. Shampoo can be also taken as a substitute and if everything is not available, rinse it in clear water , until no more colour came out. If you had only cold water available, then cool the wool out. Permits that Wool likes no extreme temperature changes and felts then fast.



Yellow Dyes

1. Wax Yellow

Yarn.....250 gr.
Alum.....32 gr.
Fresh bayberry leaves.....500 gr.

Mordant the material first. Boil the leaves for one hour, drain, add material and boil for one hour.

2. Greenish Yellow

Yarn.....250 gr.
Alum (mordant).....35 gr.
Fresh wild parsley.....1 kg.

Boil the parsley for one hour, drain, add the alum, stir well until alum has dissolved. Boil material in solution from half to one hour.

3. Greenish Yellow

Yarn.....250 gr.
Alum (mordant).....32 gr.
Fresh alder.....500 gr.

Mordant the material first. Boil the leaves for one hour, drain, add material and boil for a half hour.

4. Strong Greenish Yellow

Yarn.....250 gr.
Alum (mordant).....32 gr.
Bayberry leaves.....500 gr.

Mordant the material first. Boil the fresh leaves for 2 hrs, drain, add materials and boil from one to two hours, according to darkness of color desired.

5. Greenish Yellow

Yarn.....250 gr.
Alum (mordant).....32 gr.
Dry birch leaves.....500 gr.

Soak the leaves for a day before using. Boil the soaked leaves for one hour and drain. Add the alum to this solution and boil yarn in it from half to one hour. If the yarn is dried without rinsing and then placed in a weak birch ash lye, the colour becomes a reddish yellow.

6. Reddish Yellow

Yarn.....250 gr.
Alum (mordant).....40 gr.
Dry apple bark.....250 gr.

The material is first mordanted in the alum water. Cut the bark into small pieces and soak for a day before using. It is then boiled for two hours and strained. Boil the mordanted yarn in the bark liquid from half to one hour. By using more bark and boiling longer a darker yellow is obtained. This color fades a little if it is not very dark.

Red Dyes

9. *Dark Red*

| | | |
|----------------------|---------|---------|
| Yarn..... | 250 gr. | |
| Cream of tartar..... | 16 gr. | |
| Alum..... | 65 gr. | Mordant |
| Madder..... | 250 gr. | |

Mordant the yarn for two hours and let it remain in the liquid till cool, then rinse in lukewarm water. The yarn may be allowed to dry after removing from the mordant; then it is rinsed in warm water before it is put in the madder liquid. The madder is put to soak for a day before it is used in enough cold water to make a very thin solution. If there are hard lumps they must be rubbed apart in order to thoroughly soak. When ready to dye, the soaked madder mass is put in clean cold water and when luke-warm the mordanted yarn is added. This is heated slowly to 60 or 70 degrees centigrade or hot enough to burn ones fingers. Stir the yarn constantly and keep the solution at the same temperature as long as the yarn is in it. It *must not boil*. If the yarn is not stirred it becomes spotted as that part of the madder liquid that heats the quickest gives a stronger colour than the other. The red colouring matter in the madder dissolves without boiling, but with boiling the other ingredients in the madder are also dissolved and these cause the red colour to lose its brightness and change it to brown. When the yarn has been in the madder liquid for the required time it is allowed to remain in the solution until cool. Keep stirring until cool. It is then rinsed and washed in several waters to remove the loose madder. When the yarn is allowed to dry after being mordanted, the red color becomes a little darker. All dark madder colours are absolutely fast. The lighter ones fade a little as the years go by.

10. *Medium Madder Red*

| | | |
|----------------------|---------|-----------|
| Yarn..... | 250 gr. | |
| Cream of tartar..... | 16 gr. | } Mordant |
| Alum..... | 40 gr. | |
| Madder..... | 175 gr. | |

Treat the same as No. 9.

11. *Light Madder*

| | |
|---------------------|---------|
| Yarn..... | 250 gr. |
| Alum (Mordant)..... | 40 gr. |
| Madder..... | 125 gr. |

Mordant the yarn for one hour and keep it in the warm colour liquid from a half hour to 1 hour.

12. *Light Yellowish Red*

| | |
|---------------------|---------|
| Red..... | 250 gr. |
| Alum (Mordant)..... | 40 gr. |
| Madder..... | 75 gr. |

Mordant as in No. 11 but keep the yarn in the colour liquid only for a half hour.

13. *Pale Red*

| | |
|-----------|---------|
| Yarn..... | 250 gr. |
|-----------|---------|

Alum (Mordant).....32 gr.
 Madder.....25 gr.

Treat as No. 12.

14. *Rose Red*

Yarn.....250 gr.
 Alum (Mordant).....40 gr.
 Madder.....50 gr.

Mordant the yarn as usual; when cool, wrap the wet material in a cloth so it does not dry out. Allow it to lie in this way from 6 to 8 days. It is then treated with madder as above mentioned. The yarn should be squeezed in a little lukewarm water before putting it in the colour liquid.

15. *Terra Cotta*

Yarn.....250 gr.
 Cream of tartar.....16 gr. }
 Alum.....48 gr. } Mordant
 Madder.....125 gr.
 Oak Gall.....13 gr.

Mordant the yarn as usual. When the madder liquid is lukewarm add the yarn and heat slowly, allow it to boil for a half hour. Remove the yarn and to the liquid add the finely powdered oak galls. The yarn is again placed in the colour liquid and boiled for a half hour, when it is removed and allowed to dry. If more colour is used the yarn will be darker, and if from 3 to 10 gr. of iron vitriol is added it becomes browner.

How to Add Vitriol: When the vitriol is to be added, the yarn is first removed and the vitriol is allowed to melt in the boiling liquid. This is cooled by adding a little cold water. The yarn is now returned and boiled for a few minutes, then it is removed, cooled and rinsed. The lighter madder colour may be had by colouring the mordanted yarn in the cool liquid left in No. 9, 10 or 11. These colours are somewhat more of a yellowish colour than when fresh madder is used. By using stronger or weaker mordants and more or less madder many colours not mentioned in these recipe's may be made. Always remember that a strong mordant is used when a dark colour is required.

16. *Cardinal*

Yarn.....250 gr.
 Tin.....4 gr.
 Nitric Acid.....50 gr. } Mordant
 Water.....150 to 200 gr.
 Cream of tartar.....50 gr.
 Cochineal.....100 gr.

The cream of tartar and the cochineal are soaked. When the water for the colouring is boiling, add the cochineal and cream of tartar and boil for ten minutes. Keep the liquid well skimmed. After the scum has been removed add the yellowish solution of tin, water and acid and stir well. Put in the dry yarn, turning it quickly around and later more slowly. Boil from 1 to 1 1/4 hrs., according to darkness of colour desired. Remove, cool and dry.

17. *Purple Red*

| | | |
|----------------------|---------------|---------|
| Yarn..... | 250 gr. | |
| Tin..... | 4 gr. | |
| Nitric Acid..... | 25 gr. | Mordant |
| Water..... | 75 to 100 gr. | |
| Cream of tartar..... | 50 gr. | |
| Cochineal..... | 50 gr. | |

Treat the same as No. 16.

18. *Bright Red*

| | | |
|----------------------|----------------|---------|
| Yarn..... | 250 gr. | |
| Tin..... | 8 gr. | |
| Nitric Acid..... | 50 gr. | Mordant |
| Water..... | 150 to 200 gr. | |
| Cream of tartar..... | 50 gr. | |
| Cochineal..... | 25 gr. | |

When the water for the colouring comes to a boil, put in the cream of tartar and let it dissolve; add the cochineal. Boil for ten minutes, keeping the scum skimmed from the surface of the boiling mixture. Add the yellowish tin solution as in No. 17 and put the dry yarn into the boiling mixture, turning it quickly around and later a little more slowly. Boil 1 hour.

26. *Red from Brazil Wood*

| | | |
|----------------------|---------|---------|
| Yarn..... | 250 gr. | |
| Alum..... | 40 gr. | |
| Cream of tartar..... | 16 gr. | Mordant |
| Madder..... | 40 gr. | |
| Brazil wood..... | 40 gr. | |
| Potash..... | 7 gr. | |

Mordant as usual, after which the yarn is placed in the madder solution described in No. 9 and allowed to remain for 1 hour. The brazil wood which has been soaked is placed in a bag and this is boiled in clean water half hour. The bag is now removed and the madder coloured yarn is then boiled in the solution from half to 1 hour. Let it lie in the solution till cooled a little. Then it is taken out and the potash, which has been well dissolved is added to the solution and the yarn is put in again and left for 10 to 15 minutes. Allow the yarn to remain in the solution till cool, and then wash in strong soap suds. This is an inexpensive red blue colour.

37. *Dark Blue with Chickweed*

| | | |
|----------------------|---------|--|
| Yarn..... | 250 gr. | |
| Fresh chickweed..... | 1 pail. | |
| Alum (Mordant)..... | 32 gr. | |
| Logwood..... | 50 gr. | |

The chickweed is boiled for an hour, and drained. The alum is added to the liquid and well stirred. The wet unmordanted yarn is taken, and added to the liquid and boiled for an hour, and taken out. A small bag filled with the soaked logwood is boiled in the liquid for a half hour. Add the yarn and let it boil for an hour, with the logwood bag. Allow the yarn to remain in the liquid until cold. If a darker dye is wanted, use more logwood.

Green Dyes

The pure green colours are always composed of a yellow and blue dye stuff. These are mostly made by first dyeing the material blue, and then boiling it in a yellow dye. To obtain a dark green the blue foundation must be made dark enough the first time. No amount of boiling in the yellow dye will make the material darker. By adding madder or iron sulphate, the green will become darker but it is another tone, grey or brownish.

Certain plants give a green dye without using blue. The yellow dye in these plants will, by addition of an iron or copper salt, become green, but the yarn will have a shade of grey or brown.

Green with Birch Leaves.

For these dyes, fresh and dried leaves may be used. Three kg. fresh leaves make 1 kg. dried leaves.

The recipes are made on the basis of dried leaves. The leaves are soaked the day before and are boiled in water to make the necessary dye liquid and are then strained. The boiling is done so that all dye material in the leaves may be had. After straining, the leaves are rinsed with a little clear water, and this is added to the liquid which is cooled while the yarn is being dyed blue.

The yarn is mordanted with the amount of alum called for in the recipe.

Variations of the birch-leaf dyeing are endless.

38. *Dark Blue Green No. 1*

| | |
|----------------------|---------|
| Yarn..... | 250 gr. |
| Alum (Mordant)..... | 40 gr. |
| Olum (Blue Dye)..... | 5 gr. |
| Birch leaves..... | 1 kg. |

Boil in birch-leaf liquid for 1 hour.

Brown Dyes

Brown is obtained by mixing yellow, red and black dyestuffs.

Several brown-stuffs are found complete in certain barks and roots and in a number of lichens. From herbs and leaves, brown is seldom obtained.

To bring out the brown colours, a copper or iron salt must often be added to the yellow or red dyestuff. When these salts, such as iron or copper vitriol, are added, they must be well dissolved and the dye must be cooled before the goods are put back into the liquid.

In all dyes to which iron or copper vitriol is added, the material must not lie still after it is through boiling. It is best to take it out immediately, cool quickly and rinse in clean water until it is washed.

A dark scum will always form on the dye when it cools and this will spot the material. The same effect will be produced if the dyestuff is allowed to run down a part of the material after

69. *Yellow Brown with Alder Bark*

Yarn.....250 gr.
Alum (Mordant).....32 gr.
Alder Bark (Dry).....5 kg.

The yarn is mordanted and dyed like the yellow with alder bark (see No 8). But it is boiled in the liquid for 1 to 2 hours, and left until cold. If wanted still darker it may be dried and boiled again in new alder bark dye. This colour darkens in time.

71. *Bronze Brown with Walnut Leaves*

Yarn.....250 gr.
Alum (Mordant).....40 gr.
Fresh Walnut Leaves.....1 kg.

Boil the leaves for an hour, and strain. The mordanted yarn boils in the dye for 1 to 2 hours,

Madder, santalic acid, mulberry and oak gall are pounded fine, put in a bag and boiled for 3 quarters of an hour. The yarn is put dry into the liquid and boiled with the bag for a half hour, and then both are taken out. Add the iron sulphate and cool, and then boil they yarn for 5 to 10 minutes. If wanted darker, use more iron sulphate.

79. *Dark Red-Brown with Madder*

Yarn.....250 gr.
Alum.....45 gr. }
Cream of Tartar.....16 gr. } Mordant
Madder.....125 gr.
Oak Gall.....12gr.
Iron Sulphate.....10 gr.

Mordant the yarn as usual for 1 hour. Put the soaked madder in clear water. When the liquid is milk-warm, add the wet mordanted yarn. Heat and boil, keeping an even motion for 15 minutes, and then take out. Add the crushed oak gall and stir. Boil the yarn in this for a half hour. Take out, add iron sulphate, cool a little and put yarn back. Boil, stirring evenly for 15 minutes.

Grey Dyes

All plants that contain tannic acid will make grey dyes.

Many kinds of bark contain tannic acid from which, by adding iron salts, grey to black dyes may be obtained.

Boil the plants and the material first in this dye, which will give it a yellow, red or greenish colour. Remove the goods and add the iron sulphate, which will change the colour to grey. This grey will always have a tone of the foundation colour which the plant alone gives: but the more iron sulphate that is added, the darker and more grey the colour will become.

Always maintain accurate proportions between the strength of the dye and the amount of iron sulphate. In a weak dye, a dark grey dye cannot be obtained, however much iron sulphate is added.

80. *Gray Brown with Alder Bark*

| | | |
|--------------------------|--------------|-----------|
| Yarn..... | 250 gr. | |
| Alum (Mordant)..... | 32 gr. | |
| Alder Bark..... | 4 kg. | |
| Iron Sulphate..... | 10 to 30 gr. | |
| Cream of Tartar..... | 16 gr. | } Mordant |
| Fresh Lady's Mantle..... | ½ to 1 kg. | |
| Iron Sulphate..... | 5 to 30 kg. | |

The yarn is mordanted as usual. Boil the lady's mantle for an hour, and strain. Boil the mordanted yarn in this liquid for an hour. Remove this. Add the iron sulphate. Boil the yarn in this liquid until the colour is dark enough.

Black Dyes

Black dyes can, like grey, be made with the aid of iron salts from the plants containing tannic acid. But they can also be obtained from the blue dye-stuff in logwood. This latter is now most generally used. Although the dye-stuff in logwood is blue, black may be obtained from it by using different sorts of mordants. In order that the black will not be too bluish, a little yellow dye should be added to the logwood.

For black dyes, an iron kettle is best. Untinned copper may be used, but not tinned copper kettles.

Logwood is always put in a bag to be boiled and, to save time, the goods may be boiled at the same time as the bag. But it must have plenty of room in the kettle.

Good dyed black must be dried immediately after dyeing, and then washed well in strong soapy water and rinsed in clean water until it is absolutely clear. When the black dyes are well boiled and properly handled, they are absolutely fast.

88. *Black with Sorrel*

| | |
|-------------------|-------------|
| Yarn..... | 250 gr. |
| Fresh Sorrel..... | 1 to 1½ kg. |
| Logwood..... | 175 gr. |
| Birch Ashes..... | 250 gr. |

Boil the sorrel for 1 to 2 hours in a clean scrubbed iron kettle. Strain and scour the kettle before putting the dye back. In this the wet unmordanted yarn is boiled for 2 hours, and lies in the liquid until cold. The yarn should be a dark grey green. Put to soak the logwood, the day before dyeing, and boil in clear water for 2 hours, and take the bag out. The mordanted yarn which has been squeezed out of the sorrel dye and rinsed in lukewarm water is put in the logwood liquid and boiled for 2 hours. When the logwood dye is nearly cold, it is mixed with 1 to 2 litres of dye, which is made by pouring boiling water in the birch ashes, stirred and let stand till cold and clear. Let the yarn lay in the dye for 12 hours, and then dry. Wash later.

Hand Measurements.

| | |
|---|------------------------|
| 15 gr. Soda | = 1 Handful. |
| 100 gr. Greensoap | = 1 Heaped wood spoon. |
| 25 gr. Madder | = 1 Heaped tablespoon. |
| 20 gr. Mulberry | = 1 Heaped tablespoon. |
| 15 gr. Logwood | = 1 Heaped tablespoon. |
| 20 gr. Cochineal | = 1 Heaped tablespoon. |
| 8 gr. Alum | = 1 Heaped tablespoon. |
| 8 gr. Coarse cream of tartar | = 1 Heaped tablespoon. |
| 12 gr. Coarse powdered Potassium Chromate | = 1 Heaped tablespoon. |
| 10 gr. Iron Sulphate | = 1 Heaped tablespoon. |
| 10 gr. coarsely pounded Copper Sulphate | = 1 Heaped tablespoon. |
| 1 gr. Olium | = 5 Drops. |

Links

Zubehör und Anleitungen :

<http://www.ketteundschuss.de/html/farbepflanzen.html> (german)

http://www.mittgard.de/archiv/index_02.html (german)

<http://www.wollknoll.de/> (german)

<http://www.diefliegendespindel.de/> (german)

<http://www.elizabethancostume.net/dyes/mappae.html> (englisch)

Färberezepte aus der Mappae Clavicula

<http://fibers.destinyslobster.com/Dyeing/dyebasics.htm> (Färben Basics in englisch)

<http://www.frojel.com/Documents/Document07.html> (Rezepte Englisch)

<http://www.elizabethancostume.net/dyes/alexis.html> (Original Rezepte von *Maister Alexis of Piemont*)

<http://www.elizabethancostume.net/dyes/lyteldyebook/index.html> (Little dye Book)

Färben und Färbepflanzen :

<http://www.viatores-temporis.de/handwerk/farbexperimente.html>

<http://www.digitalefolien.de/biologie/pflanzen/faerbe/faerbe.html>

<http://www.familia-ministerialis.de/farben.html>

unter Bericht hinter den Entsprechenden Farben ,findet man einen ausführlichen Färbebericht

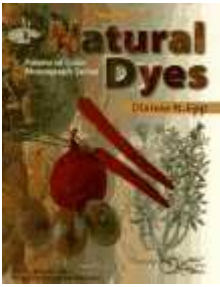
<http://www.rugreview.com/13-3nest.htm> (englisch)

<http://www.ravensgard.org/gerekr/Orchil.html> (englisch)

<http://kws.atlantia.sca.org/dyeing.html> (englisch)

<http://www.silkewerk.com/dyeing.htm> (englisch verschiedene sehr schöne Farbbeispiele)

Favorite Books



The Chemistry of Natural Dyes

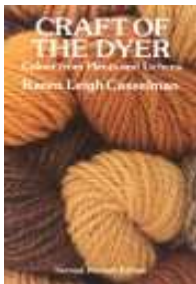
[Dianne N. Epp](#)

Spiralbook

Terrific Science Pr (Juni 1995)

ISBN-10: 1883822068

ISBN-13: 978-1883822064



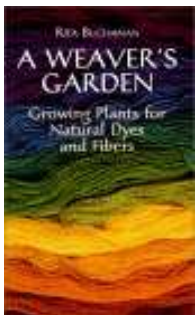
[Craft of the Dyer](#)

By *Karen Leigh Casselmann*

Dover Publications Inc.; Auflage: 2 Revised (November 1993)

ISBN-10: 0486276066

ISBN-13: 978-0486276069



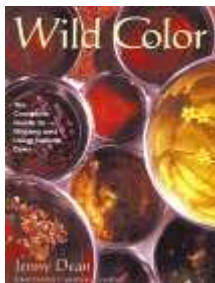
[A Weaver's Garden](#)

by Rita Buchanan

Dover Publications Inc. (September 1999)

ISBN-10: 0486407128

ISBN-13: 978-0486407128



Wild Color: The Complete Guide to Making and Using Natural Dyes

By Jenny Dean

Mitchell Beazley (April 1999)

ISBN-10: 0823057275

ISBN-13: 978-0823057276

