Recreating Renaissance Reds
By Drea Leed (Mistress Drea di Pellegrini)

Madder (Rubia Tinctorum)

Plictho 48: For each pound of wool take 4 ounces of roche alum and make it boil one hour and a half. Wash it very well in clear water. Then after it is well washed, take for each pound of wool 4 ounces of madder and make it boil in clear water. Throw in the madder when it is about to boil, then the wool, and let it boil for half an hour, stirring constantly. On washing it becomes well dyed, that is, red.

To dye wool red (from A Profitable Book)
Ye shall put too four pound of woollen yarne, tenne ounces of Allom, and seeth it with branne water so much as ye shall thinke good, then take your yarne out, and put that water out of that Kettle, and put therein againe three parts of fresh branne water, and one part of faire cleere water, and warme it a little on the fire, then put therein two pound of grening weede, and let it so warme a while, then put therin your wooll, and stirre it wel with a sticke the space of three houres, but let it not seeth in any wise, so done, then take out your wooll againe, and put it againe into your Kettle, and put thereto halfe a glassefull of unsleakt lime, with as much of common ashes, and thereto put your wooll againe, and stirre it with a staffe sixe or seuen Paternoster whiles, than take foorth your wooll, and ye shall haue a faire colour. But if yee will haue it yet a more sanguine colour, then must you put into your Kettle halfe a little glasse full of more lime, and a little glasse full of common ashes, and thereto put your wooll againe, and stirre it well still foure or fiue Paternoster whiles, then take foorth your wooll and wash it, and so ye shall haue a verie faire colour.

Brazilwood (Caesalpinia Sappan)

Plictho 120: To dye silk in brazil color

Measure a small cauldron of one and a half buckets that be half of bran and half of hot water and that it not be boiling, but that it has lost the chill. Put the cauldron to the fire, and take for each pound of silk 3 pounds of brazil. Put one bucket of water above said that is strong and make it pass through a sieve, and you will make boil the above said things for two hours.

Then have another small cauldron with fresh water, and divide the brazil in two parts and one of these parts you will put into said small cauldron and the other you save to make a new bath.

The next morning you will have your silk set up on the rods which has been alumed as I have told you many times in their places, and to alumate said silk needs four ounces for each pound of silk. Take, after aluming, the small cauldron you set up for brazil and make it cook said brazil. When it is hot, put the silk inside the cauldron with its rods and treat it by hand until it has taken the color that you think the silk has acquired. Then take it out and cool it and return to give it the aluming, and if the water is little add some alum and do as you did above.
Take the other half of the brazil that you saved and give it the other bath, and be alerted in boiling, that it does not heap up, and observe the rule abovewritten and you will have color of brazil to your manner.

**Kermes**

**Kermes qualities from the Plictho:**

Grain of Corinth for each Pound of Silk, 4 to 6 ounces according to how good.
Grain of Valencia for each pound of silk, 5-7 ounces.
All other grain suffice for each pound of silk, 12 to 14 ounces.
Grain of Provence for each pound of silk, 7 to 8 ounces according to goodness of grain.
Grain of Corinth, coarse for each pound of silk, 8 to 10 ounces, some 12, some 14 ounces per pound.
Grain of Barbary for each pound of silk, 8 to 10 ounces
Spanish grain for each pound of silk, 10 to 12 ounces.

**Plictho 61. To make wool scarlet by means of grain for workers cloth.**

When you are about to mordant your wool take 4 pounds of alum for each dozen pounds of wool by weight and one and a half pounds of grain. Make it boil two hours and allow it to stand in the bath for the space of three hours. When it is about time to give the grain you will have it washed very well and take 5 pounds of grain of Provence and 4 pounds of grain of Certio or Corinth for each dozen pounds by weight, and two dippers of strong water. Put it into the cauldron while the water is little more than tepid, stir well and then put in the wool and rake it well and make it boil thus for the period of an eighth of an hour. Then remove it and have it well washed in the baskets as is usual. Then give it a clean bath that is near the boil and when you put in the wool make it reach the boil. Then remove it and you will have beautiful wool.

**Modern redaction of #61 For 1 lb wool:**

**Mordant:**
Take 4 oz alum and 2 oz cochineal. Boil the wool for two hours; let it stand in the bath until it cools, for 3 hours.

**Dyebath:**
12 oz kermes (6 oz cochineal, it being stronger than kermes and quite expensive, will do the job
one cup of fermented bran water
Add the wool when the dyebath is tepid, bring to the boil, and boil for 8-10 minutes.

Wash the wool, and then place it in a bath of near boiling (180F) water until no more dye escapes.
Hang to dry.
**Plictho 59: To make dyeing of red berets.**
First mordant your berets well. Then take the madder; if there are six berets you will take one pound of madder well pestled, and make it boil half an hour. Then take half a glass of lye, which I will tell of here below, and stir with said madder. Then throw in thy berets and let them boil half an hour and stir very well and remove them out and make them aerate two or three times according to your mind. Then when they seem right, remove them out and wash them well in running water. Then return and take clear water in the cauldron, and then take a glass of the lye that you will have ready, and stir with said water and put the berets inside. Make as much fire so that the water begins to reach the boil and then pull out the berets and set them to the son.

**To make the aforesaid lye.**
Measure tartar of wine and make of it loaves and set them to dry in the sun until said loaves become moldy and as they form mold they are dry. Then take branches of dried vines, or vine twigs as if they were a faggot. Set those loaves on the faggot and make a fire beneath, so that the faggot of vine and the tartar become ashes. And with that ash you will make your lye.

**Plictho 64: Cardinal Shade.**
For each cloth to be mordanted 20 pounds of alum and 3 pounds of grain. Then give over this a new bath of 10 pounds of madder of medium lumps, with a portion of roggia (good quality madder) and let there by 8 pails of strong water (fermented bran water) and then it needs 7 pounds of brazil and then demadder (post-bath to remove the madder dye) it with three pails of brazil. Then one must give the bath twice and the second time is given a little master, that is ashes, alum of lees and lime. (ashes of wine lees precipitate into cream of tartar in solution)

**How to make your branne water, wherewithall you shall use to dye red. (From A Profitable Book)**
Ye shall take a hat full of wheat branne, and take so much water as will go into thre smal kettles, so let it haue a welling or two on the fire. Then poure it into a fatte, then take two other kettelfuls of water and warme it, and put it therein also, but first stirre it well, and so couer it wel. The first day you must stirre it often, and then it will be the better, then shall ye let it stand foure or fiue dayes till it waxe the riper, and which will be the better for your purpose, and then ye may occupie as yee shall see cause.

**Sources**


- This is the earliest known English book focused on dyeing and spot cleaning. The majority of the recipes come from earlier dutch commonplace books, like T'Bouck va Wondre, and some are copied from the Secrets of Alexis of Piedmont.
Today’s Red Recipe

Plictho 46: To dye cloth a very beautiful scarlet, in the manner of this City of Venice.

First weigh your cloth, and for each piece (pound/lire in the original doc) of cloth use about 6 ounces of grain. For the mordanting, for each pound of cloth, use a half ounce of roche alum, and one ounce of white tartar well pestled and sifted. Have a cauldron, and have clear water and put into it the alum and the tartar. Make beneath a good fire to the end that it wants to boil. Then put in the cloth and make it boil continually for one hour with a good fire below. Then you will take out the cloth and send it to be washed in water that is well running and wash well and then prepare the full cauldron. Set it on the fire and see that inside there be four pails of strong water, well fatted and well pungent, together with the water. As it shows signs of wanting to boil, put in the grain but first see that it is well pestled. When it is about to boil put in the cloth and dive it, that is, poke it beneath, and give if four or five rounds on the turn wheel. Then remove out the cloth and let it cool. Then send it to wash in running water. Then prepare a new bath and give it two or three baths, that is with the bran, and for each bath one pound of roche alum and one pound of tartar. If the cloth is too open, give it a new bath, that is a quarta of bran without tartar, and one pound of arsenic well pestled. Note that it needs to boil one quarter of an hour, each and every new bath, with bran. Also, if the cloth were to be overloaded, give it a new bath with bran without tartar, with a pound of roche alum.

The original Italian said "for each pound (lire) of cloth" rather than "for each piece of cloth", which makes more sense, as 6 oz of grain is hardly enough to dye 23 yards of wool broadcloth scarlet. My assumption for cloth: similar to broadcloth wool, 28-30 yards long & 80 lbs in weight (as required Anno 6 of Elizabeth Ith.s reign, per statute law). This works out to 2 2/3 lbs yd.

Modern Redaction for 1 lb wool

Boil 1 oz tartaric acid and ½ oz alum until dissolved. Enter the wetted goods and stir for an hour, boiling. Take out the fabric and rinse it.

Boil 2 gallons of fermented bran water + 2 gallons of water to fill the pot. Add in well-ground cochineal. When it comes to the boil, add the cloth. Stir constantly for about 10 mins.

Wash well in clean water.

For the afterbath: stir .5 oz alum and .5 oz tartaric acid and a cupful of bran into 4 gallons of water. Bring to the boil enter the goods and stir for 15 mins. Repeat once or twice more as desired.

The original instructions said a pound of alum and pound of tartar, but these proportions are wildly out of sync with the amounts used for modifying in other Plictho recipes; experiments have shown that .5 oz alum and tartaric acid work very well.