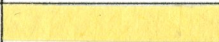


















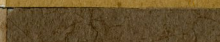




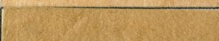


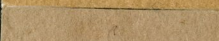




























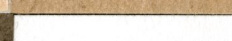











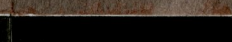






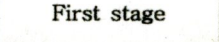
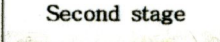
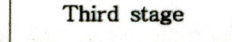










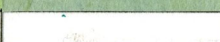




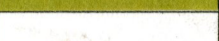
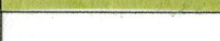

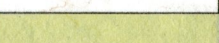


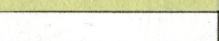
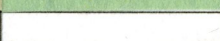









The reproduction of colors on Hanji

Color	Dye	Mordants	First stage	Second stage	Third stage
Yellow	Gardenia jasminoides Ellis	alum			
	Phellodendron amurense	alum			
	Coptis chinensis Franch	alum			
	Sophora japonica L	alum			
		iron			
Brown	Alnus japonica steudel	alum			
		iron			
	Diospyros kaki				
	EngeniaCaryophata Thumb	alum			
		iron			
Red	Caesalpjmasappan	alum			
		caustic soda			
		iron			
	Carthamustinctorius				
					
	Cochineal	alum			
		iron			
	allium capa L	alum			
		iron			
Blue	Persicariatinctoria				
					
Black	Rusjavanica L	iron			
	Muck (Ink stick)				
Etc.	Loess				
	Dye	Dye	First stage	Second stage	Third stage
compound color	Gardenia jasminoides Ellis	Persicariatinctoria			
		Caesalpjmasappan			
	Phellodendron amurense	Persicariatinctoria			
		Caesalpjmasappan			
	Coptis chinensis Franch	Persicariatinctoria			
		Caesalpjmasappan			
	Sophora japonica L	Persicariatinctoria			
		Caesalpjmasappan			
	Alnus japonica steudel	Persicariatinctoria			
		Rusjavanica L + Persicariatinctoria			
	Caesalpjmasappan	Cochineal			
		Carthamustinctorius			
Total dyed cloth Count			Color		

Phellodendron Amurense

황벽 黃蘗



Amur cork tree is a deciduous tree that belongs to the family of rutaceae and its inner layers are yellow coloured. Its yellow also has a suggestion of green and it generally stays on a subject in deep and vivid colour.

황벽나무의 학명은 *Phellodendron amurense*이며, 운향과에 속하는 낙엽교목이다. 나무껍질은 두텁고 코르크층이 잘 발달하여 골이 깊이 패여있다. 속껍질이 노란색을 띤다. 황벽에서 얻은 노란색은 녹색기가 있다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Phellodendron Amurense Stock dyeing

황벽 黃蘗 선염법



Amur cork tree is a deciduous tree that belongs to the family of rutaceae and its inner layers are yellow coloured. Its yellow also has a suggestion of green and it generally stays on a subject in deep and vivid colour.

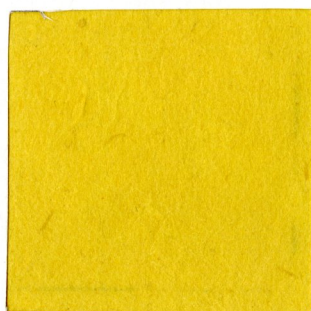
황벽나무의 학명은 *Phellodendron amurense*이며, 운향과에 속하는 낙엽교목이다. 나무껍질은 두텁고 코르크층이 잘 발달하여 골이 깊이 패여있다. 속껍질이 노란색을 띤다. 황벽에서 얻은 노란색은 녹색기가 있다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Phellodendron Amurense

Color Compounding

황벽 黃蘗 간색



Amur cork tree is a deciduous tree that belongs to the family of rutaceae and its inner layers are yellow coloured. Its yellow also has a suggestion of green and it generally stays on a subject in deep and vivid colour.

황벽나무의 학명은 *Phellodendron amurense*이며, 운향과에 속하는 낙엽교목이다. 나무껍질은 두텁고 코르크층이 잘 발달하여 골이 깊이 패여있다. 속껍질이 노란색을 띤다. 황벽에서 얻은 노란 색은 녹색기가 있다.

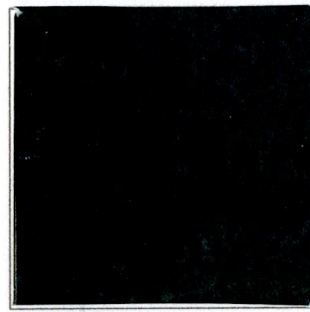
황벽 + 쪽 | *Phellodendron amurense* + *Persicaria tinctoria*



Primary dyeing



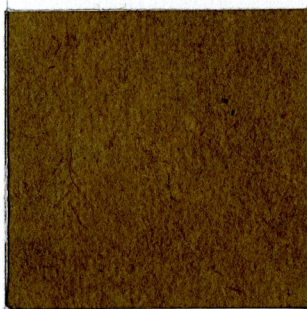
Secondary dyeing



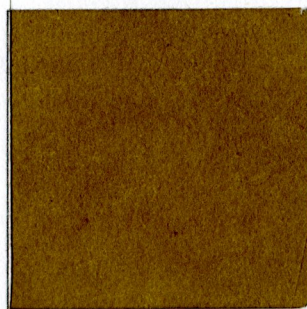
Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

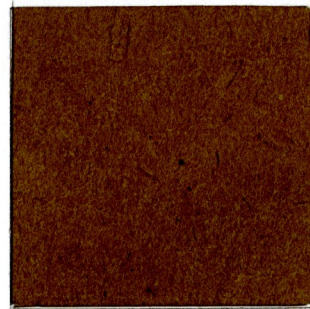
매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Coptis Chinesis Franch Stock dyeing

황련 黃連 선염법

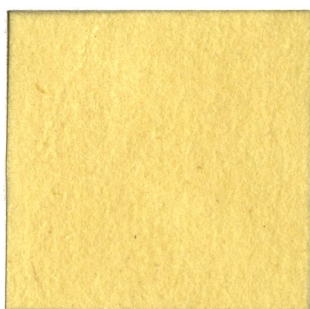


This is a perennial plant that is a member to the family of ranunculaceous. Since it reacts sensitively to acidity, dark yellow is extracted by using caustic soda and alum.

황련(黃連)은 미나리아재비과에 속하는 여러해살이 식물이다. 산도에 민감하게 반응하므로 잿물이나 백반을 사용한다. 견뢰도가 높고 약간 어두운 노란색이 추출된다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



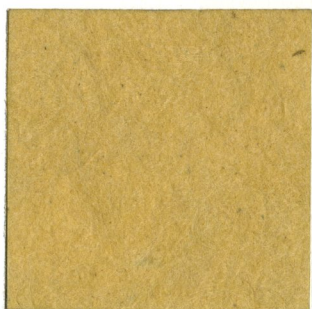
Secondary dyeing



Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

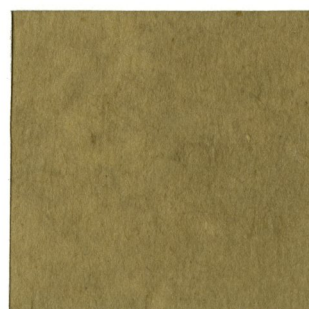
매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Coptis Chinesis Franch

황련 黃連

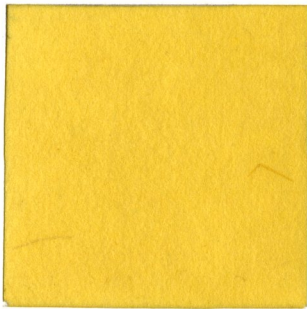


This is a perennial plant that is a member to the family of ranunculaceous. Since it reacts sensitively to acidity, dark yellow is extracted by using caustic soda and alum.

황련(黃連)은 미나리아재비과에 속하는 여러해살이 식물이다. 산도에 민감하게 반응하므로 잿물이나 백반을 사용한다. 견뢰도가 높고 약간 어두운 노란색이 추출된다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



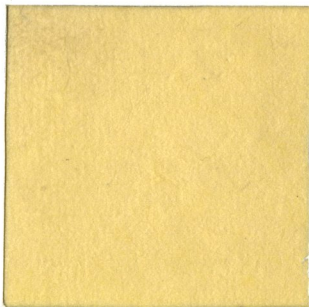
Secondary dyeing



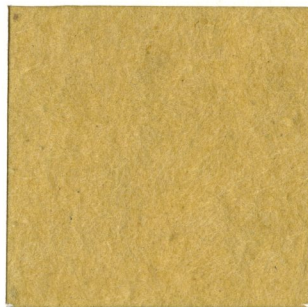
Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Gardenia jasminoides Ellis Stock dyeing

치자 梔子 선염법



This is a tropical or subtropical evergreen broad-leaved shrub that belongs to the family of rubiaceae. It is the most widely used yellow dye.

치자(梔子)는 노란색 염색에 가장 많이 사용되는 대중적인 염료이다. 치자나무는 열대 또는 아열대 식물로서 꼭두서니과에 속하는 상록활엽 관목이다.



Primary dyeing



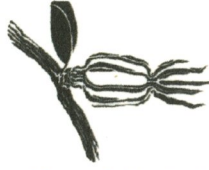
Secondary dyeing



Tertiary dyeing

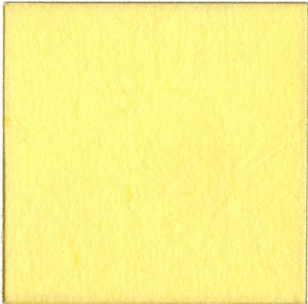
Gardenia jasminoides Ellis

치자 梔子



This is a tropical or subtropical evergreen broad-leaved shrub that belongs to the family of rubiaceae. It is the most widely used yellow dye.

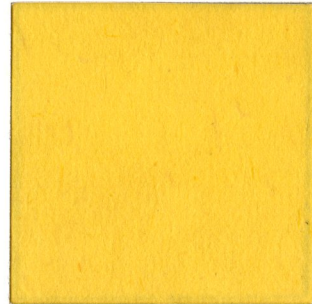
치자(梔子)는 노란색 염색에 가장 많이 사용되는 대중적인 염료이다. 치자나무는 열대 또는 아열대 식물로서 꼭두서니과에 속하는 상록활엽 관목이다.



Primary dyeing



Secondary dyeing



Tertiary dyeing

Sophora Japonica.L Stock dyeing

괴화 槐花 선염법

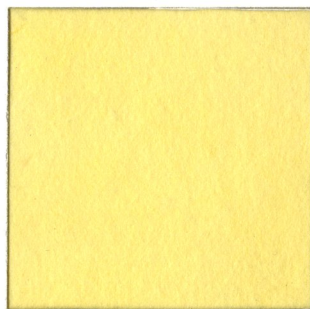


Sophora japonica L is a flower bud of a sophora tree. It is a species of tree in the family of fabaceae and its height reaches up to 15~20meters. It gives out diverse colours depending on different mordant agents. In iron mordanting the colour becomes olive and in alum mordanting the colour becomes yellow (bluish and have a suggestion of red compared to *phellodendron amurense*).

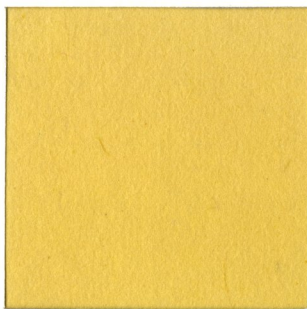
괴화는 회화나무의 꽃을 말한다. 회화나무의 학명은 *Sophora japonica* L.이다. 콩과식물이며 높이가 15~20m에 이르는 낙엽 교목으로 위로 곧게 자란다. 다색성 매염염료이며 철매염에서 올리브색, 백반 매염에서 노란색(황벽에 비해 푸르고 붉은 기가 돈다)이 된다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

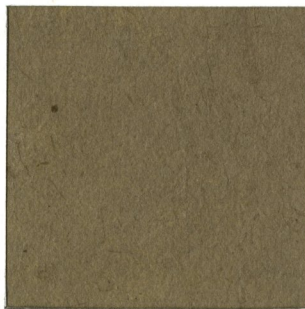
매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Sophora Japonica.L

괴화 槐花

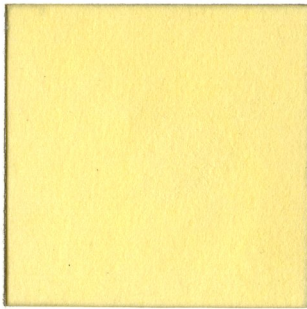


Sophora japonica L is a flower bud of a sophora tree. It is a species of tree in the family of fabaceae and its height reaches up to 15~20meters. It gives out diverse colours depending on different mordant agents. In iron mordanting the colour becomes olive and in alum mordanting the colour becomes yellow (bluish and have a suggestion of red compared to *phellodendron amurense*).

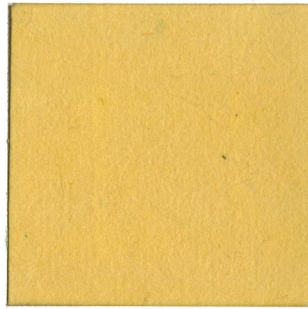
괴화는 회화나무의 꽃을 말한다. 회화나무의 학명은 *Sophora japonica* L.이다. 콩과식물이며 높이가 15~20m에 이르는 낙엽 교목으로 위로 곧게 자란다. 다색성 매염염료이며 철매염에서 올리브색, 백반 매염에서 노란색(황벽에 비해 푸르고 붉은 기가 돈다)이 된다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Curcuma Longa L.

울금 鬱金

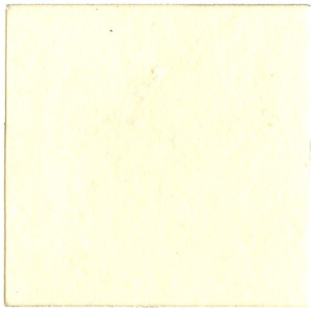


A perennial herbaceous plant that belongs to the family of zingiberaceae. It is a direct dye where yellow is extracted from its roots. Having the colour and scent of a mustard, it is also used as the ingredient of curry and as a yellow colouring in various foods. The colour pigments of Curcuma longa L is usually extracted from the roots and the colour changes according to the applied mordants (multicoloured dye).

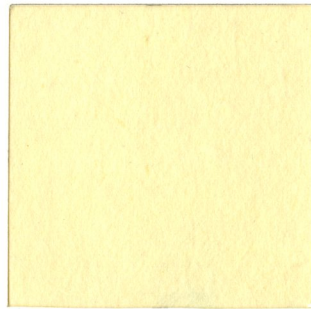
울금(鬱金)은 생강과에 속하는 다년생 초본식물로 학명은 Curcuma longa L.이다. 뿌리에서 노란색을 얻는 직접성 염료이다. 각종 식품의 착색제로 이용되기도 하며 카레의 원료이다. 울금의 색소는 주로 뿌리에서 얻어지며 매염제에 따라 색상이 변하는 다색성 염료이다. 울금의 노란색 결정성 분인 쿠르쿠민은 산에서는 노란색으로 알칼리에서는 붉은색으로 변화한다.

Mordant | Caustic soda NaOH

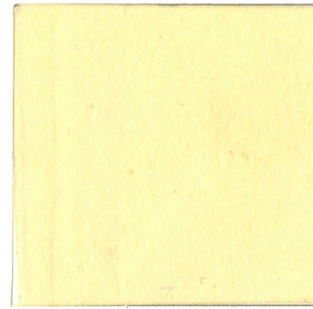
매염제 | 가성소다 NaOH



Primary dyeing



Secondary dyeing



Tertiary dyeing

매염제 | 구연산 FeCl2H2O



Primary dyeing



Secondary dyeing



Tertiary dyeing

Carthamus Tinctorius

홍화 紅花

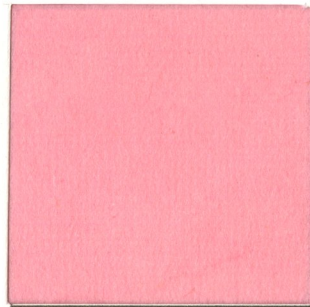


Safflower is a biennial plant of compositae and its origin is Egypt and the Mesopotamia region. Flowers are used for dyeing and they can be employed to gain red and yellow, but generally red pigments are mostly used.

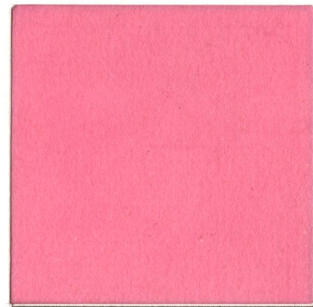
홍화는 이집트 또는 메소포타미아 지방이 원산인 국화과의 2년초이며, 염색에는 꽃을 이용한다. 홍화는 노란색 염색도 할 수 있으나 주로 붉은색 색소를 많이 쓴다.



Primary dyeing



Secondary dyeing



Tertiary dyeing

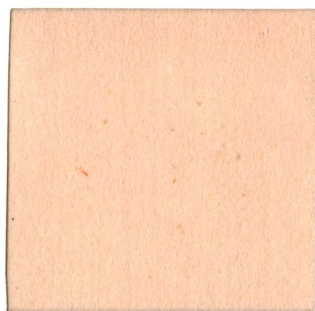
Carthamus Tinctorius

홍화紅花 선염법



Safflower is a biennial plant of compositae and its origin is Egypt and the Mesopotamia region. Flowers are used for dyeing and they can be employed to gain red and yellow, but generally red pigments are mostly used.

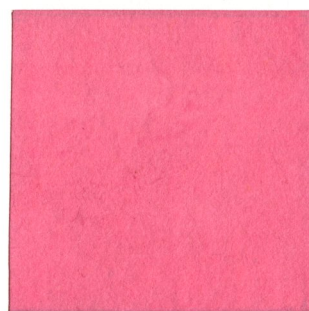
홍화는 이집트 또는 메소포타미아 지방이 원산인 국화과의 2년초이며, 염색에는 꽃을 이용한다. 홍화는 노란색 염색도 할 수 있으나 주로 붉은색 색소를 많이 쓴다.



Primary dyeing



Secondary dyeing



Tertiary dyeing

Caesal Pjma Sappan Stock dyeing

소목 蘇木 선염법

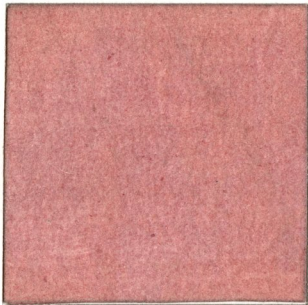


Sappanwood is a specie of indeciduous trees in the leguminous family, usually called Sappan Wood. To improve the speed of dyeing process using Sappan wood, pre-mordanting of tannin is required. This is done using gallnuts which are formed by insects and parasites that live on the leaves of Sumac trees.

소목은 콩과에 속하는 상록나무이다. 소목의 색견뢰도를 향상시키기 위해서는 오배자를 사용하여 탄닌 선매염이 필요하다.

Mordant | Caustic soda NaOH

매염제 | 가성소다 NaOH



Primary dyeing



Secondary dyeing



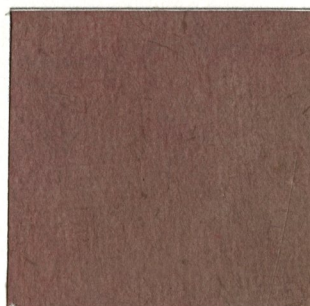
Dyeing after mordanting
with aluminum sulfate

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Caesal Pjma Sappan

소목 蘇木



Sappanwood is a specie of indeciduous trees in the leguminous family, usually called Sappan Wood. To improve the speed of dyeing process using Sappan wood, pre-mordanting of tannin is required. This is done using gallnuts which are formed by insects and parasites that live on the leaves of Sumac trees.

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Mordant | Caustic soda NaOH

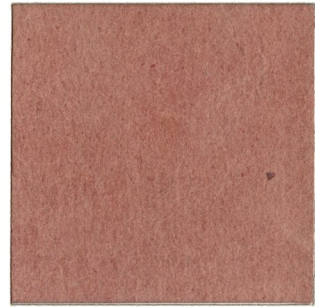
매염제 | 가성소다 NaOH



Primary dyeing



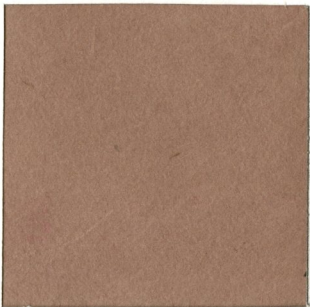
Secondary dyeing



Dyeing after mordanting
with aluminum sulfate

Mordant | Iron $\text{FeCl}_2 \cdot 2\text{H}_2\text{O}$

매염제 | 철 鐵 $\text{FeCl}_2 \cdot 2\text{H}_2\text{O}$



Primary dyeing



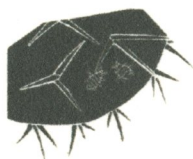
Secondary dyeing



Tertiary dyeing

Cochineal

코치닐

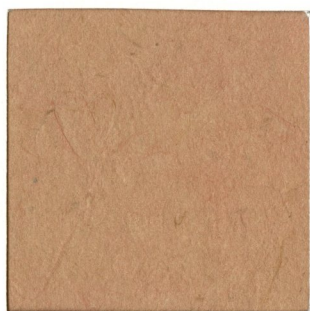


Cochineal is a scale insect that is parasitic on spontaneous cactuses that are grown in desert areas of Central and South America. It is desirable to carry the dyeing process in a high temperature and since cochineal responds rapidly to acidity, premordanting is necessary.

코치닐(Cochineal)은 중남미 사막지대에서 자생 선인장에 기생하는 각지벌레라는 곤충에서 얻어진다. 염색은 높은 온도에서 하는 것이 빨리 되고, 산성에 대한 반응 속도가 빠르기 때문에 선매염을 하는 것이 좋다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Persicaria Tinctoria Stock dyeing

쪽藍 선염법



Persicaria tinctoria is an annual plant that is a species of *polygonaceae* and it is the first plant dye to be used in the history of mankind. Since the colour is formed from fermentation of microorganisms, skilled labour and great efforts are required.

쪽은 마디풀과에 속하는 한해살이 풀로 인류 역사상 가장 먼저 사용된 식물성 염료이다. 살아있는 미생물의 발효작용으로 색이 만들어지기 때문에 시간과 숙련된 노동, 노력이 필요하고 매우 복잡한 과정을 거쳐야 한다.



Primary dyeing



Secondary dyeing



Tertiary dyeing

Persicaria Tinctoria

쪽藍

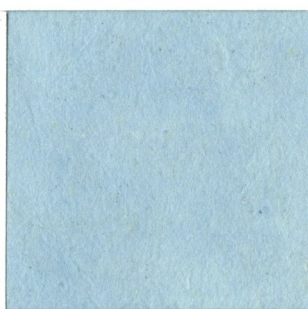


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Primary dyeing



Secondary dyeing



Tertiary dyeing



Fourth dyeing



Fifth dyeing



Sixth dyeing

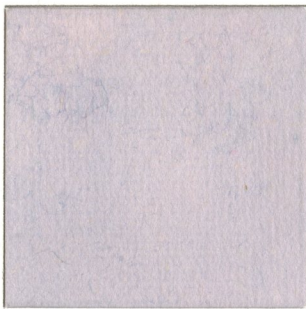
Compounded color with polygonum indigo plants – Acquisition of Violet

쪽 藍을 이용한 간색 間色 - 보라색

Dyeing reddish color on blueish colored fabric is a way of acquisition of purplish violet colours. A safflower(Carthamus Red), Sappan wood and a madder are used mostly as a red dye at this time.

청색위에 적색 계통의 염료로 염색하면 보라색 계통을 얻을 수 있다. 이때 주로 사용하는 적색 염료는 홍화, 소목, 쪽두서니 등이다.

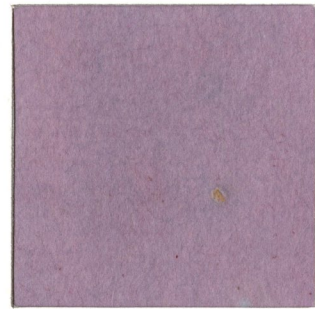
홍화 紅花 | 붉은빛 Carthamus Tinctorius



Primary dyeing

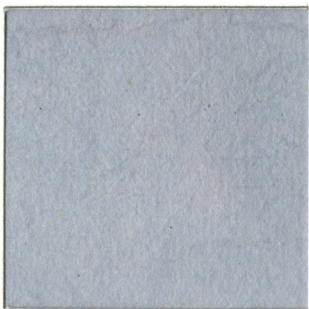


Secondary dyeing

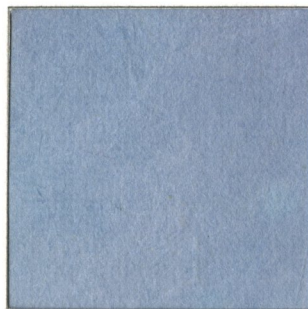


Tertiary dyeing

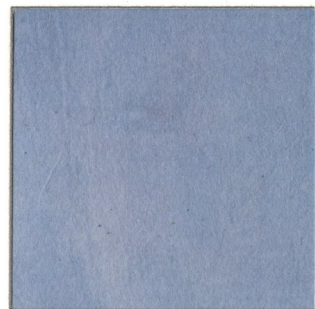
홍화 紅花 | 푸른빛 Carthamus Tinctorius



Primary dyeing



Secondary dyeing



Tertiary dyeing

Compounded color with polygonum indigo plants – Acquisition of Greenish colours

쪽 藍을 이용한 간색 間色 - 초록색, 연두색 계통

There are yellowish pigments from amur cork-tree, dardenia seeds and sophora as dyeing solution for compounding colours. The most important principle here is balancing the concentrations of blue and yellow.

간색에 사용되는 염액은 황색 염액으로 황벽, 치자, 울금, 괴화 등이다. 염색의 원칙은 푸른색 농도와 황색 농도를 맞추는 것이다.

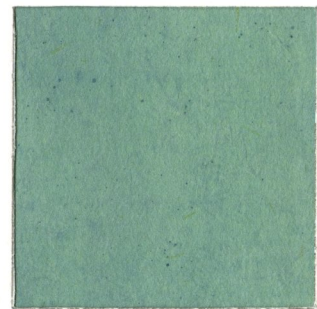
괴화 槐花 | *Sophora Japonica.L*



Primary dyeing



Secondary dyeing



Tertiary dyeing

황벽 黃蘗 | *Phellodendron Amurense*



Primary dyeing

황련 黃連 | *Coptis Chinesis Franch*



Primary dyeing

Lithospermum Erythrorhizon

Sieb. et zucc.

지초 芝草



Surface of its roots is purple and inside is off-white. The root is called scion root and it is used as a dye agent. The root's inner side skin contains pigments of purple variations and they can be easily extracted by using diverse solvents including alcohols types and others except for ether and petroleum.

뿌리의 표면은 자주색이며 안쪽은 황백색이다. 뿌리는 자근이라 하는데 이것을 염재로 쓴다. 뿌리의 속껍질에 자색 계통의 색소가 포함되어 있으며 석유나 에테르를 제외한 알코올류 및 기타용제에 의하여 쉽게 추출할 수 있다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



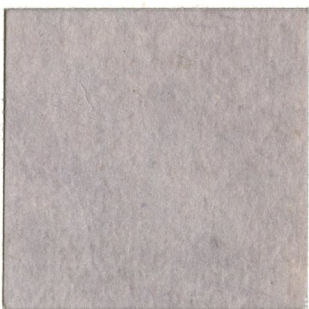
Tertiary dyeing

Mordant | Caustic soda NaOH

매염제 | 가성소다 NaOH



Primary dyeing



Secondary dyeing



Tertiary dyeing

Diospyros Kaki

감 柿 樹



A broad-leaved deciduous tree that is an endemic species of temperate regions of East Asia. Dyeing methods include using a stalk end of the persimmon, unripe persimmons or fermented persimmons.

감나무는 낙엽활엽교목으로 동아시아 온대의 특산종이다. 염색은 감꼭지를 이용하는 방법과 팽감 또는 발효감으로 염색하는 방법이 있다.



Primary dyeing



Secondary dyeing



Tertiary dyeing

Alnus Japonica Steudel

오리목



This deciduous tree is a species of tree in the family of butulaceae and it is spread throughout Korea. Its barks and fruits can be used as a dye as well as leaves and stems.

오리나무는 우리나라 전역에 분포하는 자작나무과에 속하는 낙엽교목이다. 나무껍질이나 열매를 붉은색과 갈색 염색에 써왔다.

Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

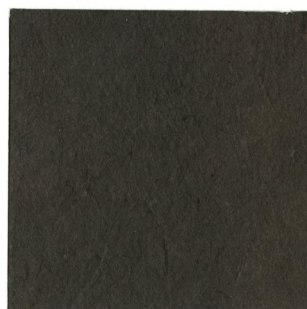
매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Alnus japonica steudel

Colour Compounding

오리목 간색

Colour Compounding | 간색

Colour Compounding means creation of new colours mixed with existing colours. Compounding colours is a way of dyeing a colored fabric another colours. At this time, Dyeing according to priority makes better colour formations. Compounding colours is a way of dyeing a colored fabric another colours. At this time, Dyeing according to priority makes better colour formations. A rich colour should be permeated earlier, and a light colour be permeated afterward. Also, dyeing colours has to be proceeded from low fastness of colour to the high fastness of colour in the least possible degree. Compounding colours is not a just simple consistency of pigments. It is a way for seeking colours from layering each colours on fabric.

간색은 색을 섞어서 새로운 색을 만드는 것을 말한다. 간색은 염색한 옷감을 다른 염료로 물을 들어서 색상을 낸다. 또한 순서에 따라 염색해야 제대로 된 색이 나온다. 짙은 색을 먼저 쓰고, 밝은 색을 나중에 써야 한다. 또한 가능한 한 색상견뢰도가 낮은 것에서 높은 것으로 진행해야 한다. 간색을 내는 것은 색의 농도를 보는 것이 아니라, 각각의 색이 얹혀 섞여서 보이는 색상을 찾는 작업이다.

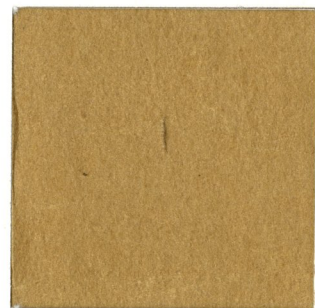
오리목 + 쪽 | *Alnus japonica steudel* + *Persicaria tinctoria*



Primary dyeing



Secondary dyeing



Tertiary dyeing

오리목 + 오배자 + 쪽 | *Alnus japonica steudel* + *Rus javanica L.* + *Persicaria tinctoria*



Primary dyeing

Oriental Lacquer

옷漆

Lacquered paper is a traditional Korean paper varnished with lacquer. The mixture of ethanol and turpentine in 1:5 ratio create the deep brown color we see in lacquered paper. It becomes tough like leather after dyeing multiple times, and provide functionality of sterilization and antieczematic to ward off bugs or moths.

옷칠지는 한지에 옷을 칠하여 만든 한지로, 옷을 에탄올이나 테레핀에 1:5로 희석하여 칠해 짙은 갈색 한지를 만들 수 있다. 여러번 칠하면 가죽처럼 질겨지며, 좀이나 벌레를 방지할 수 있어 방균, 향습 기능을 지니고 있다.



Primary dyeing



Secondary dyeing



Tertiary dyeing

Rhus Javanica L Stock dyeing

오배자 五倍子 선염법



Gallnut is a sumac formed by insects that parasite on the leaves of sumac trees. Very light brown can be extracted by aluminum mordant, purplish dark grey can be extracted by iron mordant and yellowish brown can be extracted with copper mordant or lye. When gallnut is piled up on another dye, it does not interfere with the colour of the other dye and therefore, it is used as a mordant material.

오배자(五倍子)는 붉나무 잎사귀에 벌레가 기생하면서 생긴 주머니를 말한다. 오배자의 색상은 무색이나 다름없다. 다른 염료에 중첩하여 염색하더라도 색상에 영향을 미치지 않으므로 흔히 매염제로도 사용된다. 철매염을 하면 보랏빛을 띠는 쥐색으로 염색된다. 신선한 것을 이용하면 보라색이 나온다. 알루미늄 매염에 의하여 극히 옅은 갈색을 얻을 수 있으며, 잣물 또는 동매염에서 황갈색으로 염색된다.



Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$
매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Mordant | Iron $\text{FeCl}_2 \cdot 4\text{H}_2\text{O}$
매염제 | 철 鐵 $\text{FeCl}_2 \cdot 4\text{H}_2\text{O}$

Rhus Javanica L

오배자 五倍子

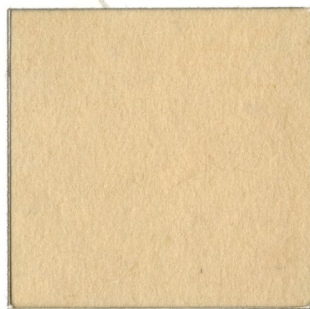


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Mordant | Alum $\text{Al}(\text{CH}_2\text{COO})_3$

매염제 | 백반 白礬 $\text{Al}(\text{CH}_2\text{COO})_3$



Primary dyeing



Secondary dyeing



Tertiary dyeing

Mordant | Iron $\text{FeCl}_2\text{H}_2\text{O}$

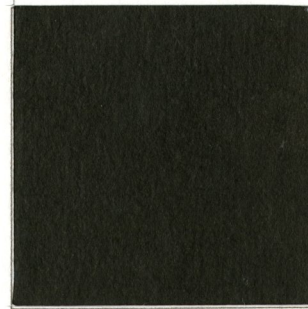
매염제 | 철 鐵 $\text{FeCl}_2\text{H}_2\text{O}$



Primary dyeing



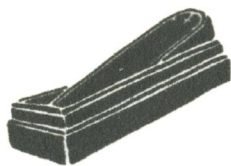
Secondary dyeing



Tertiary dyeing

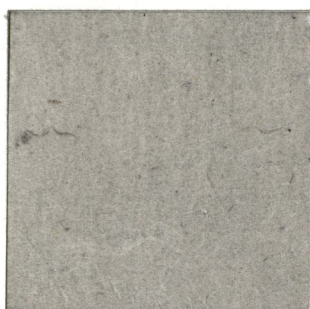
Muck(Oriental Black)

검은색 黑



'Muck' is what Seon-Bi (Korean classical scholar) used to write and draw with. To use the muck, one has to pour water into an ink stone and rub the muck on it. The most important thing to consider in using the muck is to strain the grease from the ink before using it. Moreover, adding salt into the ink is effective as small particles of salt help the ink to penetrate into gaps of fiber. After applying the ink to the dye subject, dip the subject into cold water for washing. This makes the dye adhere to fiber and the colour outcome to be more desirable.

벼루에 물을 붓고 갈아서 글씨를 쓰거나 그림을 그릴 때 쓰는 먹도 염료로 쓸 수 있다. 먹은 기름을 태워서 나오는 그을음을 모아 만든 유연묵과 소나무 그을음으로 만든 송연묵이 있다. 화려하지는 않으나 오래되어도 변치 않는 빛이 먹빛이다. 소금을 넣어주면 효과가 더 좋아진다. 미세한 입자가 섬유 사이에 침투하기 좋게 처리를 하는 것이다. 그 다음에 곧바로 찬물에 담가 수세를 하면 섬유 속에 염료가 고착되어서 색상이 잘 나온다.



Primary dyeing



Secondary dyeing