Mineral pigments:
Soy milk as a binder on cloth

Pigments need a binder so that they can stick to the painting surface. Typically, acrylic binders are used. However, acrylic is not very environmentally friendly. So some artists are turning to things like soya. Soya has huge amount of protein. It is the protein that bonds the soluble fibres of the cloth to the pigments.
As a result, the sizing is permanent and once subsequent soya paint solutions (soya milk + pigment) are applied, the protein acts as an agent to reinforce the bond between the cloth and the pigment.

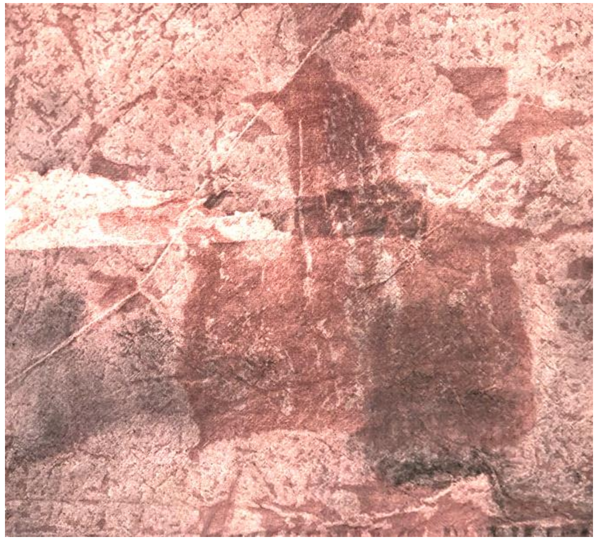
Soy pigment is good for working on cloth. The cloth needs to be a natural fiber. Cotton, silk and linen are all good choices.
First the cloth needs to be sized. Working on a large flat table, with a thick plastic sheet under the cloth, I vigorously brush the soy mixture evenly over the whole well scoured cloth, making sure there are no wrinkles. Let the soy milk sit in the fabric for 30 minutes and then wring it out. Smooth the fabric out again with a brush on the plastic and leave to dry.

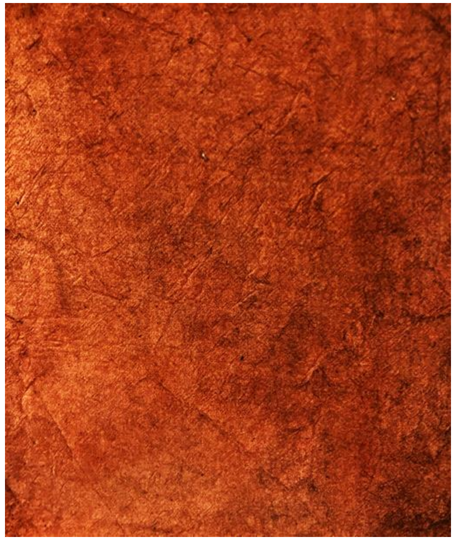
You can work on a damp cloth or leave it to dry. Do not iron.

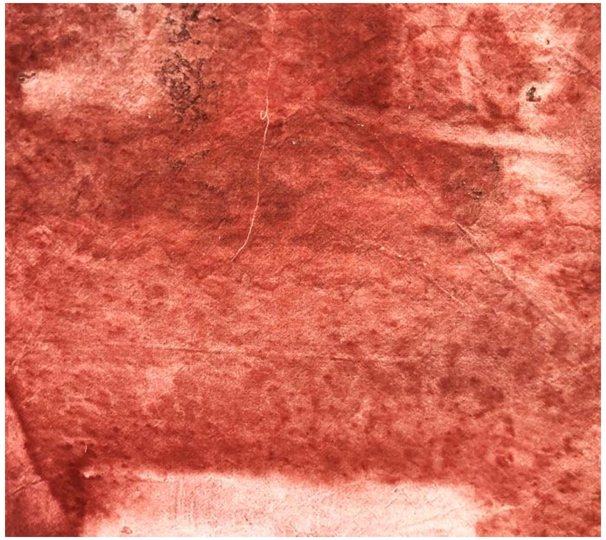
How to make soy milk.

Buy a kilo of whole, dried soy beans (not split or husked) and store in a dry airtight container. The beans must be soaked overnight. So 50 grams of beans goes into 100ml of water. This is about the right amount soy milk for one piece of cloth 60x60cm.
Do this the night before you need the soy milk. Soy milk goes off quickly .
You can store soaked soy beans in small batches in the freezer.
To make the soy milk you need to put the drained, soaked beans into a bowl with 750ml of cold water. Use a stick blender and blend for 30 seconds. Strain this liquid through a piece of sheer curtain fabric or muslin and squeeze to get all the milk out. You will be left with a chunk of pulp. Put this pulp back in the bowl and add 250ml of warm water and blitz again. Strain and squeeze the milk out of the pulp. Throw the pup on the compost.
Soy milk has to be used on the day it is made, it does not keep.

(I have put a coil of twine under the sized cloth and am painting it with a yellow pigment and soy milk solution)





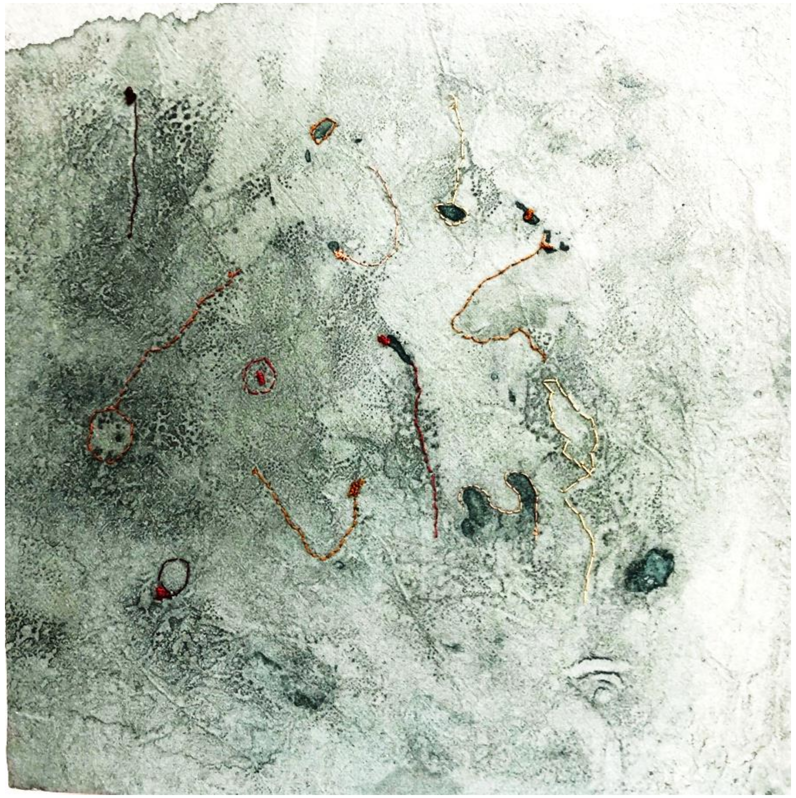


Working with soy pigment.

The particles in the soy pigment have many different weights. Therefor they will travel through the cloth at different rates and in different ways. This can be seen when you peel the cloth off the plastic. (see the four samples)

These natural abstract patterns can be used in the art piece.

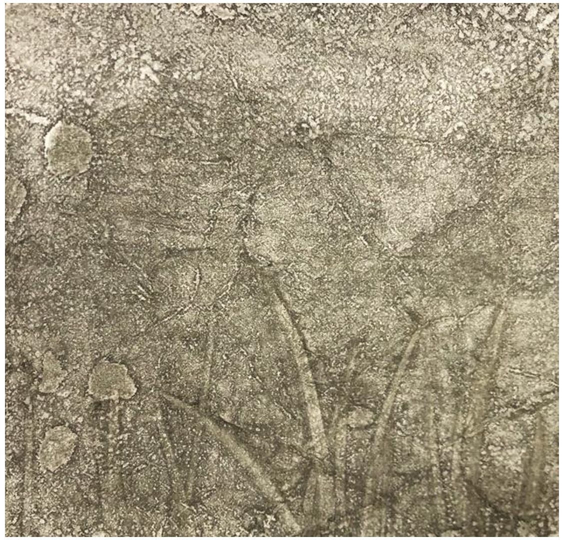
Two cloths - on the right is what happened to the bottom cloth when some seeds were placed between the two cloths. On the left is the top cloth painted.

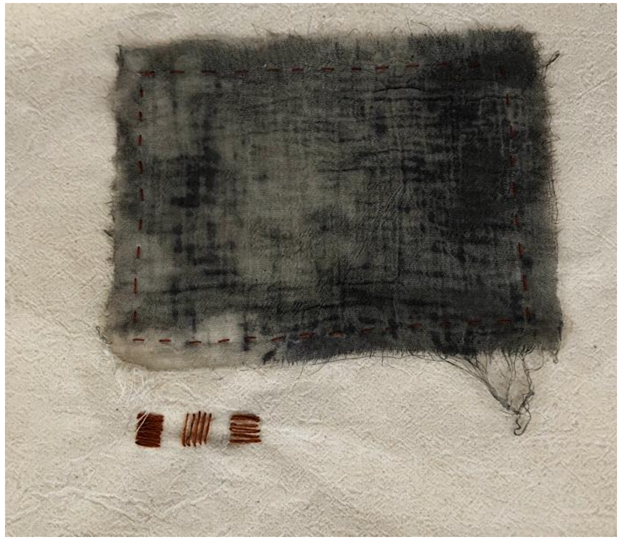


The patterns on this piece look very much like microbes that live in the soil. Some of the marks were stitched to draw attention to the ‘microbes’.

More
Experiments

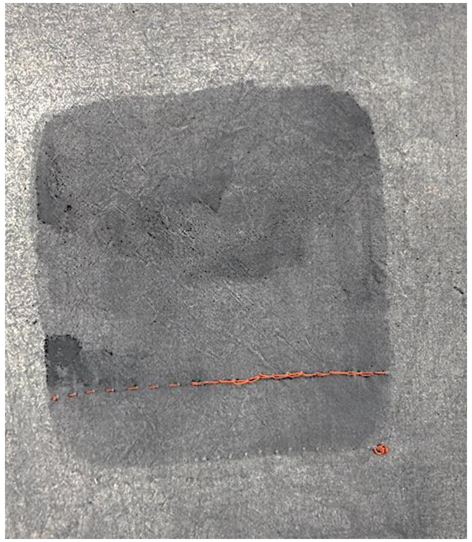
grasses and
flowers under
the fabric.



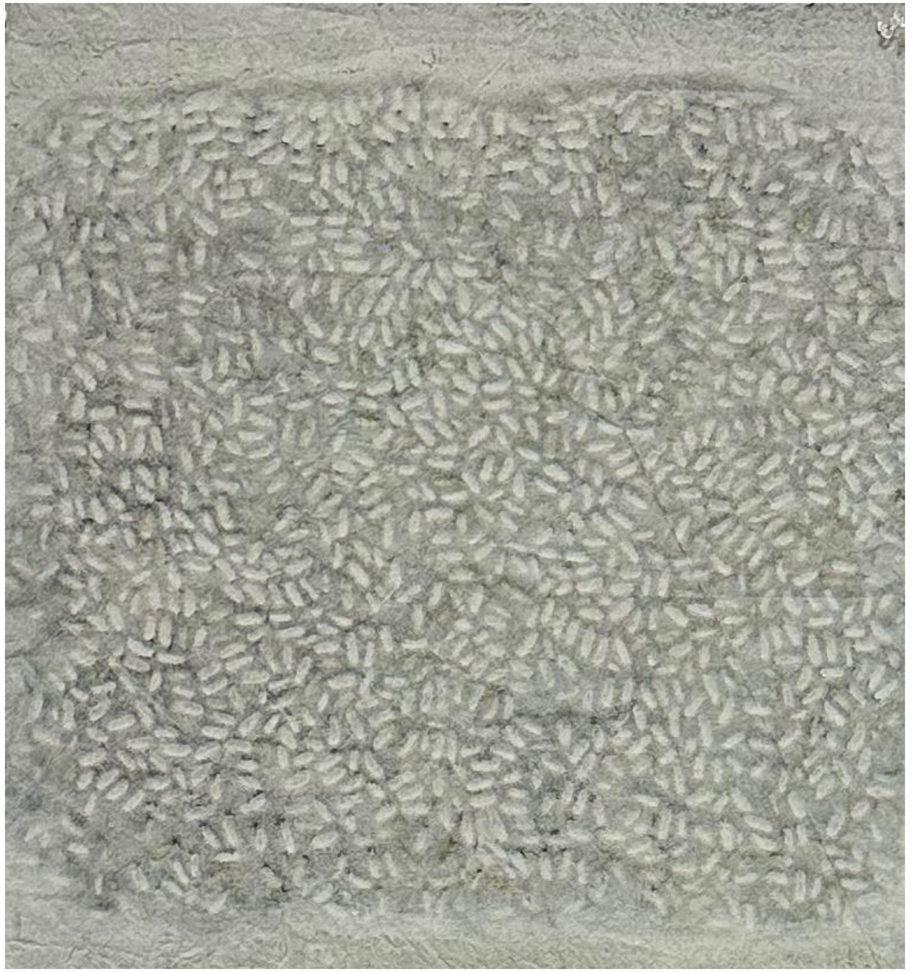


Applique and
stitching

gauze
put on
top of
the
fabric
and
painted



Cloth over
rock



Reverse side of fabric that has been laid over a bed of beans and painted.

Reverse side of fabric that has been laid over a bed of rice and painted.

Photos of mountains as a point of reference

Soy pigment
washes as
landscape