

Eco Developing Process for Kodak 3378* Filmstock:

*use goggles and gloves in the darkroom and you may use a redlight with 3378

Flower/Plant Developer 2 to 4 minutes (approx. **)

(I mostly use 2 minutes with plants that work well -Phil)

Wash for 1-2 minutes

Salt Fixing 12 to 24 hours

Wash for 5 minutes

Hang to Dry

*Generally developing times are longer (2 to 3x) using conventional black and white filmstocks like Kodak Double x Negative (7222), and must be developed in complete darkness..no redlight.

** -all plants have different strengths so the developing times can fluctuate. For example at different times in the growing cycle plants have different strengths. When you start to see railroad tracks on the film, under the redlight, then leave the film in another minute. ('railroad tracks' occur when the silver halide crystals which are not hit by light turn a creamy white color. This is most obviously see on the framelines and on both sides of the film, which have not been hit by light. This tells you that the developer is working.

Flower/plant Developer Recipe (for Negative Process):

2 litres for 1 to 30 feet of film (tests) or

4 litres for 100 ft. We use the bucket developing process.

The more film developed at once the more scratches.

The basic principle is to gather:

4 fist fulls of plant materials for 2 litres of water or

8 fistfulls of plant material for 4 litres of water.

Grind and mash with a mortar and pestle (or hammer or rock!).

Cover with 2 litres (4 fistfulls) or 4 litres (8 fistfulls) of boiling water and let cool to 85 degrees Fahrenheit or 30 degrees Celcius.

The plants should steep for at least 1 hour. You can use a double boiler technique to cool or heat up the fluids if necessary.

Once cooled to 85F or 30 C, add in this order.

For 1-30 feet (tests):

2 litres of water (4 fistfulls of plant materials):

180 grams of washing soda (sodium carbonate)

40 grams of Vitamin C in powder form (ascorbic acid in powder form).

For 50 to 100 feet:

4 litres of water (8 fistfulls of plant materials):

360 grams of washing soda (sodium carbonate)

80 grams of Vitamin C in powder form (ascorbic acid in powder form).

Always add the vitamin c last. The more powerful the mixture the more fizz when the vitamin c goes in.

If you want to develop a 2nd roll, add half of the regular mixture of Washing soda and vit C, and get the heat back up to 85 F or 30 C.

*this recipe for flower processing was developed at Anima Casa Rural in Jalisco, Mexico during **the Site and Cycle residency in Feb 2018** given by Zoë Heyn-Jones and Terra Jean Long with Toronto support from Eva Kolcze. I and the participants of this workshop thank Dagie Brudert, Ricardo Leite, and Dawn George via Rena Thomas. All this can be

traced back to a 1995 class at RIT led by Dr. Scott Williams. Some of these techniques and formulas have been modified and adjusted by Phil Hoffman. There is no recipe without a lineage.

Fixing with Salt (for Negative Process):

Add 2 cups (1/2 litre) of **Salt** to 8 cups (2 litres) of **Water**

you need to fix in complete darkness with salt for 12 hours minimum (non iodized `Sea Salt`) and for 24 hours (iodized table salt)

*I also have used Road Salt (used to thaw ice) ... 1/3 salt to 2/3 water should be fine

Plants Ph has used with success:

Mount Forest, for `vulture` (2017-19):

Magnolia Blossoms
Hyacinth
Hydrangea
Daffodil
Rhododendron
Pond Algae
Lilac
Oregano (with blooms)
Comfrey (with blooms)
Roses
Mint
Goldenrod
Hosta buds after flowering
Wild Garlic seeds (bowlful)
Echinacea
Tansy
Aster
Sunflower

Wales, Aberystwyth University (May 2019):

tba

Berlin, Silent Green (June 2019):
tba

Oberhausen (May 2022):
Nettle
Mint
Rhododendron

Film Farm Mount Forest (July 2022):
Wheat
Parsley
Bladder Campion with flower

Dawson City, Yukon, Film Lab KIAC (Sept 2022):
Lichen
Mushroom
Labrador Tea
Spruce needles (boil 1 hour)
Wild Sage
Lupin
Dandelion
Moss
Clover
Tomato Plant
Black Currant
Raspberry