***\* I would like to thank Dagie Brundert & Ricardo Leite for support in this venture into `Green’ motion pictures processing! – P. Hoffman***

 **‘GREEN’ Processing Recipes for 3378**

use red light with 3378 (for conventional filmstocks like plus-x or double-x process in complete darkness and add approx. 50% more time)

 The following process is suitable for processing 30 ft (10 metres) of film.

X 3 of quantities for processing 100 ft (30 metres) of film.

**A. COFFEE DEVELOPER (Cafenol)**

Time:10 min developing time 25 degrees celcius 75 farenheit

(50% more time if you do a 2nd batch with same chemistry)

**For 30 ft of Film**

Water at 25 C = 32 oz

Washing Soda (laundry detergent) = 50 grams

Vit C (Ascorbic Acid) = 15 grams (David’s tea container)

Coffee = 50 grams

**X 3 for all ingredients for processing 100 ft**

1. Mix **Washing Soda into water** (laundry detergent..inexpensive)

(Try ‘Signal’ for cost cutting or a Biodegradeable product for environmental safety)

stir well

2. Then **Vit C powder (Ascorbic Acid)**

(try NutriBiotic from Iherb online which is $5 for 2.2 lbs , fast delivery: https://ca.iherb.com/pr/NutriBiotic-Ascorbic-Acid-Crystalline-Powder-2-2-lbs-1-kg/30240

stir well

3. **Coffee (inexpensive brand)**

Stir very well

4. **wash** for 2 minutes

5. **Fixer:** For Neg use conventional Fixer for 3 to 4 minutes after developing process, orfor green fixer use salt water at a ratio of 3:1…submerge for 3 days!!!)

6. **wash** for 5 minutes

7. be sure the coffee grinds are not left in the sink, the majority of them can be dumped in the garbage

**B. FLOWER/PLANT DEVELOPER -** (organic materials with cafeic acid…with various flowers/plants times may differ)

**Making Plant/Flower Extract:** Fill a large pot with 192 oz of water (6 litres) – you will loose some water (approx. 96 oz) after boil – ok

Put the flowers/plants into the water so they fully submerged in the water and quite dense

Boil plants for 30 minutes then let cool to around 26 C or 77-80 degrees (you want to process at 25 C or 75-77 degrees approx ) –

Strain out plant material so you just have fluid

\*you can freeze for future use)

Time:10-15 min developing time (SEE CHART BELOW FOR VARIOUS PLANTS/FLOWERS

 25 degrees celcius 75 farenheit

(50% more time if you do a 2nd batch with same chemistry)

**For 30 ft of Film**

**Plant /Flower Extract** at 25 C = 32 oz

Vit C (Ascorbic Acid) = 15 grams (David’s tea container)

Washing Soda (laundry detergent) = 50 grams

**X 3 for all ingredients for processing 100 ft**

1. Mix **Vit C powder (Ascorbic Acid)** into **Flower/Plant Extract**

(try NutriBiotic from Iherb online - Vit C is $50 for 2.2 lbs , fast delivery: https://ca.iherb.com/pr/NutriBiotic-Ascorbic-Acid-Crystalline-Powder-2-2-lbs-1-kg/30240

stir well

2. Mix **Washing Soda into water** (laundry detergent..inexpensive)

(Try ‘Signal’ for cost cutting or a Biodegradeable product for environmental safety)

stir well

3. **wash** for 2 minutes

4. **Fixer:** For Neg use conventional Fixer for 3 to 4 minutes after developing process, orfor green fixer use salt water at a ratio of 3:1…submerge for 3 days!!!)

5. **wash** for 5 minutes

6. be sure the soap suds are not left in the sink, the majority of them can be dumped in the garbage

*In 2017 I conducted many tests on flowers and plants and found the following results. Processing time varied from 10 minutes to 15 minutes depending on the strength of the acid in the plant. Mostly at 26C or 80F. Yje processing occurred*

*from late April to September, as flowers bloomed and plants developed.*

**Plant Developing Time Temperature Observation**

Magnolia Blossoms 15 min.26C/80 f warm neg, turns blue in pos spots

Hyacinth 10 min. warm orig ..pos is sepia pink

Hydrangia 15 min. “

Daffodil 15 min. “

Rodedendrum 15 min “

Pond Algae 10 min “

Lilac 20 min. warm neg, turns blue in pos spots “

Oregano (with blooms) 10 min. blue spots turns yellow as positive

Comfrey (with blooms) 10 min. “

Roses 15 min “ slightly pink

Mint 12 min. “

Goldenrod 12 min “yellow/sepia turn blue in pos

Hostas buds after flowering 13 min “

Wild Garlic seeds (bowlful) 15 min “

Echinasea 13 min

Tansy 13 min

Aster: Blue flower on roadside 13 min

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