

*Cochineal is derived from the dried bodies of the female of the *Dactylopius coccus* insect which live on the prickly pear cactus in Mexico. Central and South American and the Canary Islands. Most commercial Cochineal is exported from Peru and is used in food, cosmetics, and drugs. As a natural dye Cochineal gives a huge range of reds, fuchsias, pinks, and purples. It is usually available as a dried insect or as a concentrated powder extract. It has excellent light and wash fastness.*

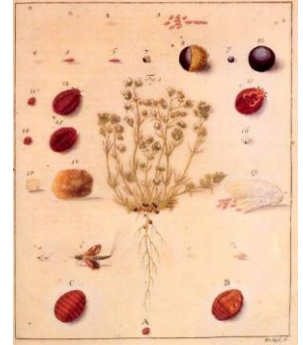
For a medium depth of shade:

- **Dried insects:** Use 3-8% weight of fibre (WOF)
- **Extract:** Use 1% WOF

MORDANTING

Protein Fibre: Use Alum at 15% WOF

- Dissolve Alum in hot water in a stainless steel, glass, or plastic container.
- Add to dyebath with enough warm water to cover the fibre. Stir well.
- Add wet fibre to and slowly bring to around 85°C for 45 mins.
- Stir gently every now and then.
- Allow to cool in the bath then remove. Rinse well.
- Fibre can be stored for future dyeing but should be wet before use.



Cellulose Fibre: Use Tannin at 8% WOF and Alum at 15% WOF or Aluminium Acetate at 6% WOF

- Dissolve Tannin in hot water and add to dye pot with enough warm water to cover fibre
- Add wet fibre and bring to about 85°C for 45 mins. Stir gently every now and then.
- Cool, remove and rinse well then mordant with dissolved Alum.
- If you allow the fibre to sit for 24 hours to steep in the Tannin, you will get much stronger colours from your dye.

CREATING STOCK SOLUTION

Dried insects:

- Grind or crush the insects into a fine powder.
- Cover with water and boil for 30 minutes then strain the liquid and put to one side.
- Put the cochineal pulp back into the saucepan and boil again for another 30 minutes.
- Repeats this twice more.
- The remaining pulp can be stored in water in a glass jar for several weeks and be reused.

Extract: Dissolve the powder in hot water.

DYEING

- Use the stock solution from either the dried insects or the extract to make up your dyebath and adjust the depth of shade with the amount of stock solution.
- Add the mordanted fibre and bring the dyebath slowly to the boil.
- Continue to simmer until you are happy with the depth of shade.
- Rinse well in warm water.
- The remainder of the dyebath can be saved for future use.

NOTES: Cochineal is sensitive to acids and bases. Cochineal can be turned orange by adding white vinegar to the dyebath, fuchsia by adding soda ash to the dyebath, fire-engine red can be achieved by adding cream of tartar at 6% WOF and by adding ferrous sulphate at 2-4% WOF Cochineal will yield purples in either the mordanting dyebath or the cochineal dyebath. Be careful to wash your fibre with a pH neutral detergent or your dyeing may change colour.