



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 America 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 the dried insect or as a concentrated powder extract. It has excellent light and wash fastness. Use 3-8% of dried insect WOF for a medium depth or 1% WOF of extract.

MORDANTING

PROTEIN

Use alum at 15% WOF

CELLULOSE

Use tannin at 8% WOF

Use alum at 15% WOF or

Use alum acetate at 8%.

For xmas reds add cream of tartar at 6% WOF to the alum mordant bath or the dyebath. For purples add iron at 2-4% WOF to either the mordanting bath or the dye bath

DYEING 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 30mins. Repeat this twice more. The remaining pulp can be stored in water in a glass jar for several weeks and be reused. ** Use the dye solution to make up your dyebath. Cochineal is sensitive to acids and bases so part from using mordants, Cochineal red can be turned orange by adding white vinegar to the dyebath and fuchsia by adding soda ash. Be careful when you wash your fibre after dyeing that the soap you use is neutral PH or your dyeing will change colour.

If you're using Cochineal Extract the dye can be dissolved in hot water and added directly to the dyebath. Follow the same dyeing method from **, And use the same mordanting method.

WELD is the brightest and clearest natural yellow dye. The weld plant is generally classified as a weed and is native to the Mediterranean. It has been cultivated and used as a dye plant since ancient Egyptian times. Very easy to grow, Weld prefers sunny, dry conditions – the same plant will produce for several years with the flower head and stalk being the main source of dye matter. Harvest when the plant is setting seed.

DYEING

MORDANTING

Use alum at 15% WOF on protein Weld gives very poor results on cellulose.

DYEING – Use extract at 4 -6 % on weight of fibre (wof) and plant at 20 – 30% wof. Prepare the dye solution by soaking the dried plant overnight or use the fresh plant immediately after harvest. When using extract dissolve in hot water. After soaking, cover the plant with water and boil for 20 min. Remove from heat and strain out the plant matter. Add a tablespoon of Calcium Carbonate to brighten the colour. Add your pre mordanted fibre to the dyebath and proceed to bring to a gently simmer. Maintain temperature for 30 mins then cover and leave to soak overnight.

Traditionally weld is used with Tin and Chrome but because these mordants are highly toxic and detrimental to the environment, they are no longer recommended.

Weld dyeings overdyed with Indigo will give bright greens.

