## DYE FASTNESS IS CONFUSING (25)

On March 27<sup>th</sup> at the Hoke library in Jensen Beach I gave a seminar on buying serviceable fabrics. One woman in the audience brought in several of her husband's shirts with discolorations on the collar. She said that the discolorations are happening on only some of his shirts and wanted to know why. Was it his perspiration or after shave lotion that he was using.

Answer-Manufacturers use many different dyes to dye fabrics. Some of these dyes are called vat, sulphur, azoic, direct, acid, chrome and others. The dye fastness can vary to being fast or stable or to poor fastness. Another problem is proper application of the dye in manufacture. For example a blue cotton shirt can be dyed with a sulphur or vat dye. When wearing a cotton shirt with a vat dye it will be very stable to normal wear, perspiration and deodorants. If the manufacturer used a sulphur dye poorly applied it can have poor wear characteristics. This means it can fade easily from exposure to light, perspiration and general wear. Professional launders have a similar problem when laundering shirts. The washing formula that they use may cause color loss on only some of the shirts in an entire load. There was a period of time when striped shirts were losing color and deteriorating due to poor dyes put in by manufacturers. This caused professional launders to change their washing formulation to handle shirts with poor dyes. There are several other problems associated with poor dyes applied in manufacture.

- (1) Dye crocking-This is color loss due to rubbing and friction. An example of this is the color loss that you see on a pair of blue jeans after wear.
- (2) Fume fading-This is fading caused by the action of air borne gases found in various degrees of concentration. Dark colors can turn lighter or red while hanging in a closet. Acetate dyes are known to fume fade easily.
- (3) Sublimation of dye-This is yellow streaks you may find on a garment after hanging in a closet. Dyes evaporate from one fabric and then settle in streaks on another fabric.
- (4) Fugitive dye-This is dye bleeding from contact with moisture during wear or from routine washing procedure.
- (5) Light fading-Garments with poor dye stability are subject to fading from sunlight and even indoor light.

## WHAT TO DO

Manufacturers can provide serviceable fabrics if they want to. For example, JC Penney and others have a high standard for quality. They have their own testing facilities and will not accept goods for sale unless it is properly tested. Some manufacturers may concentrate on style with little regard to wear serviceability. This means that they may anticipate garment returns from the customer and may even build this into the price. The bottom line is that you should expect the dye on fabrics to withstand conditions of normal wear and cleaning. If not the garment should be brought back to the place of purchase.