



ABSTRACT

The most popular and the oldest way to identify the person is fingerprint identification. Every person living or lived in this world had unique fingerprints that did not match to any other person even twins have different fingerprints. In present era, especially in developing countries, number of crime is increasing day by day due to low literacy rate and unemployment. To stop this increase in crime rate forensic science plays a vital role in solving the puzzle of crimes. Fingerprints play very important part in forensics. As we know that in developing countries, budget is the main issue so that the objective of this study was to find a good, cost effective and easily available powder to develop fingerprints on crime scene. Five different powders, that were white cement, gray cement, Henna powder (*Mehndi*), turmeric powder (*Haldi*) and kohl (*Hashmi Surma*), were used for fingerprints development on eight different substrates that are usually found at crime scene. These substrates are porcelain cup, stainless steel plate, glass surface, tin can, ceramic tile, pet bottle, compact disk and polished wood. In this study, kohl gave best result on almost all substrates. White cement also gave very good results. Henna powder and gray cement also gave good result but turmeric powder failed to produce good quality fingerprints. Kohl (*Hashmi Surma*) and white cement can be used for fingerprints development on light and dark surfaces respectively. Each powder was compared with itself on different substrates.
