Plants used for extracting dye

Natural plant-based dyes have been in use since ancient time. Researchers have also realized eco-friendly effect of natural dyes hence many reports have been published in recent years on natural dyes. During the ethnomedicinal studies the weavers in villages of West Bengal especially Baluchuri designers at Bishnupur-Banka, Rajagram-Banka, 24-Parganas and Medinipur were contacted and information on plants used as natural dye was collected.

Following plants are used by villagers for extracting natural dye:


* Diospyros peregrina* (Gaertn.) Gurke (Hindi—Gab) fruit extract is smeared on the thread to increase its longevity and extract from bark of *Mimusops elengi* Linn. (Hindi-Bakul, Maulsari) is used in textiles to increase the luster.

Indigenous process for developing clay dye

*Banak* clay dye is an excellent natural dye obtained from underground soil. It is in use since 250 years and the age of the clay is approximately 65 million years. The *Banak* clay occurs at a depth from 1-2.5 m in the crop fields in Anantapur, Rajnarayan-Chak, Dobandi, Maity Chalk, Maguri, Tulya and some other villages. In these villages nearly thousand families are engaged in clay dye industry. *Banak* clay yields lustrous showy red dye, which is used in tiles, earthen pitcher, cooking pots, bricks and walls.

For preparing clay dye *Banak* clay is collected from fields during summer. Usually 500 kg *Banak* clay yields 50 kg dye. Clay is put into a series of covered earthen vessels along with sufficient amount of demineralised water (preferably rain water) for 3 days. After three days clay is stirred manually by legs followed by precipitation. In second phase of processing the upper supernatant solution is placed in earthen pots kept in sunlight for seven days. In the third phase the water is transferred into covered earthen pots containing clay and pots are again put in sunlight for ninety days. Black coloured clay cakes gets deposited in the inner wall of the pots which is the ready for use as clay dye. The shelf-life of the clay dye is quite stable at the temperature ranging from -4 to 20º C. For the commercial preparation of this dye minimum 4000-5000 linearly arranged earthen pots and exposure to sunlight are the two essential requirements. The potters who prepare this dye harvest about 88, 000 litres/100m² rain water both for dyeing and drinking. The dye gives protection against salinity to earthen pots and other items.