## TIMNA TEXTILES Nancy Arthur Hoskins

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## New web site forthcoming Sept 2021

Recently, a report was published about the discovery of rare, three-thousand-year-old woolen fibers, yarn, and woven fragments found at Timna, Israel, an arid, 1100-900 B.C. copper smelting area in the Southern Levant. The dyed woolen bits and pieces probably came from clothing and other functional fabrics that were made in other areas of the ancient Near East. Over a hundred samples were found. Most were wool, and three special samples were dyed with 'royal purple' from murex sea shells. Nineteen fragments had dyed yarns of red from madder and blue from woad. Undyed yarns with a beige or yellow tint completed the palette. The woven remnants seem to be weft-faced weaves on finely spun warps. The Timna textiles are important because there is so little archeological or artistic evidence to verify the materials and methods of 'The Wool Age' textiles from the Levant that appear in the costumes of kings, gods, and goddesses in Egyptian paintings.

I wove samples of these three Timna textiles based on what I thought I saw in the photos. They are not replicas, but trial examples of what the interlacement of warp and weft could have been.

## MATERIALS AND METHODS

All of the samples were woven of woolen yarns that I had at hand. I guessed at the yarn colors and the number of warp ends and weft picks per inch. All of the samples were woven on simple frames and interlaced by hand or with a needle. They were not intended to be facsimiles, but only first efforts to understand these important fragments.

Warp: Paternayan 2-ply wool

Weft: Paternayan 2-ply wool or Glimakra Mora 2-ply wool

Sett: 10-12 EPI





2 A weft-faced fragment with one purple weft yarn and ecru warps





2014-9257

A weft-faced weave with bands of different colors





2014-9255 A weft-faced weave in red with a possible tapestry woven section of blue and natural





2013-9053





2013-9053 The red warp yarns on this fragment were larger than the blue and natural weft yarns. The fragment seemed to be weft-faced, but with red warps showing through because of the size difference or degradation. It is difficult to tell if there was an attempt at patterning, or just the appearance of an attempt at a 'pick and pick' pattern. Either there was a deliberate change in the pattern rows, o, a simple error in the sequence of the two colors that change the order of the columns or blocks of color.

## **REFERENCES**

Online Resource: <a href="https://journals.plos.org/plosone/article:id=10.1371">https://journals.plos.org/plosone/article:id=10.1371</a>. Sukenik, Naama, David Iluz, Zohar Amar, Alexander Varvak, Orit Shamir, Erez Ben-Yosef. "Early Evidence of Royal Purple Dyed Textile from Timna Valley (Israel)." Woolen, woven fragments dyed purple, red, and blue were found at Timna.

also: Online Resource: <a href="https://journals.plos.org/plosone/article:id=10.1371">https://journals.plos.org/plosone/article:id=10.1371</a> Sukenik, Naama, David Iluz, Zohar Amar, Alexander Varvak, Vanessa Workman, Orit Shamir, Erez Ben-Yosef. "Early Evidence (late 2<sup>nd</sup> millennium BCE) of plant-based dyeing of Textiles from Timna, Israel."

also: "Biblical Purple Dye Found by Israeli Archaeologists." *The Journal for Weavers, Spinners and Dyers.* 278 Summer 2021. p. 4.

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