



Good day Worthy Knights,

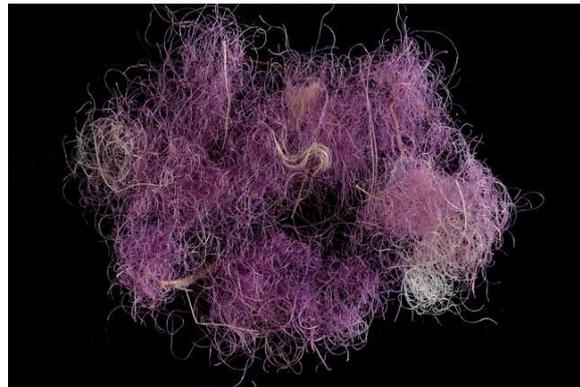
In this part 92, the Royal Purple of Solomon

Wikipedia

The Labarum Standard should be of imperial purple...

For the first time, rare evidence has been found of fabric dyed with royal purple dating from the time of King David and King Solomon.

While examining the coloured textiles from Timna Valley, an ancient copper production district in southern Negev, Israel, in a study that has lasted several years, the researchers were surprised to find remnants of woven fabric, a tassel and fibres of wool dyed with royal purple. Direct radiocarbon dating confirms that the finds date from approximately 1000 BCE, corresponding to the biblical monarchies of David and Solomon in Jerusalem.



Wool textile fragment decorated by threads dyed with Royal Purple ~1000 BCE, Timna Valley.

In antiquity, purple attire was associated with the nobility, with priests, and of course with royalty.

"The gorgeous shade of the purple, the fact that it does not fade, and the difficulty in producing the dye, which is found in minute quantities in the body of molluscs, all made it the most highly valued of the dyes, which often cost more than gold. Now, for the first time, we have direct evidence of the dyed fabrics themselves, preserved for some 3000 years."

Prof. Erez Ben-Yosef from Tel Aviv University's Archaeology Department says, "Our archaeological expedition has been excavating continuously at Timna since 2013. As a result of the region's extremely dry climate, we are also able to recover organic materials such as textile, cords, and leather from the Iron Age, from the time of David and Solomon, providing us with a unique glimpse into life in biblical times.

According to the researchers, true purple [argaman] was produced from three species of mollusc indigenous to the Mediterranean Sea, 300 km from Timna. The Banded Dye-Murex (*Hexaplex trunculus*), the Spiny Dye-Murex (*Bolinus brandaris*) and the Red-Mouthed Rock-Shell (*Stramonita haemastoma*). The dye was produced from a gland located within the body of the mollusc by means of a complex chemical process that lasted several days.

Today, most scholars agree that the two precious dyes, purple and light blue, or azure were produced from the purple dye mollusc under different conditions of exposure to light. When exposed to light, azure is obtained whereas without light exposure, a purple hue is obtained. These colours are often mentioned together in the ancient sources, and both have symbolic and religious significance to this day. The Temple priests, David and Solomon, and Jesus of Nazareth are all described as having worn clothing coloured with purple.

The analytical tests conducted at Bar Ilan University's laboratories, together with dyes that were reconstructed by Prof. Zohar Amar and Dr. Naama Sukenik, can identify the species used to dye the Timna textiles and the desired hues.

The dye was identified with an advanced analytical instrument (HPLC) that indicated the presence of unique dye molecules, originating only in certain species of mollusc. According to Dr. Naama Sukenik, "Most of the coloured textiles found at Timna, and in archaeological research in general, were dyed using various plant-based dyes that were readily available and easier to dye with. The use of animal-based dyes is regarded as much more prestigious and served as an important indicator for the wearer's high economic and social status. The remnants of the purple-dyed cloth that we found are not only the most ancient in Israel, but in the Southern Levant in general.

We also believe that we have succeeded in identifying the double-dyeing method in one of the fragments, in which two species of mollusc were used in a sophisticated way, to enrich the dye. This technology is described by the Roman historian Pliny the Elder, from the first century CE, and the dye it produced was considered the most prestigious."

Prof. Ben-Yosef identifies the copper-production centre at Timna as part of the biblical Kingdom of Edom, which bordered the kingdom of Israel to the south. According to him, the dramatic finds should revolutionize our concepts of nomadic societies in the Iron Age. "The new finds reinforce our assumption.



Species of murex found on Israeli coasts (right to left): Spiny Dye-Murex (*Murex brandaris*); Banded Dye-Murex (*Murex trunculus*), and Red-Mouthed Rock-shell (*Murex haemastoma*) (Shachar Cohen, courtesy of Zohar Amar)