



HISTORICAL DISCOVERY

# The Purple *of Royalty*



# A GLIMPSE INTO THE WARDROBES OF DOVID HAMELECH AND SHLOMO HAMELECH FROM 3,000 YEARS AGO

By Lawrence H. Schiffman



Fragment of the rare purple fabric from 1,000 BCE excavated in the Timna Valley



Rembrandt's "David and Goliath" (1655)

a recent report from Israeli archaeologists should be of great interest to all of us. Excavations at Timna, just north of Eilat, have revealed a hoard of textiles, including some dyed purple, from the era of Kings Dovid and Shlomo, almost 3,000 years ago. No, Timna was not part of the Jewish kingdom at that time, but this is very much a story of significance for the history of *Bnei Yisrael* in the time of the *Tanach*. In fact, we will see that it is even connected to our understanding of the building of the *Beis Hamikdash*.



Excavations have been going on for years at ancient Timna, where copper has been mined from virtually the earliest biblical times until the 1980s. When I first visited Israel in 1963, we were taken to see some of the rock formations there, called Solomon's Pillars, and were told, somewhat incorrectly, that Shlomo Hamelech had mined copper from these rocks. It was only soon after, in 1964, that archaeological excavations began. These excavations revealed that copper had been mined and smelted there during the period of Egyptian domination of Canaan, prior to the conquest of Eretz Yisrael by the tribes of *Bnei Yisrael*. The Egyptians even built a temple to one of their gods. But by the time the empire of Kings Dovid and Shlomo (the United Monarchy) was coming into being, the site was dominated by Edomites. This is clear from the name Timna, which appears in the list of Edomite clans in *Bereishis* (36:40; cf. 36:22). So by the time Shlomo Hamelech built the *Beis Hamikdash*, the mines were already being operated by Edomites in an area directly south of his kingdom.

Although excavations have gone on for years, there was a break, and a new team began excavating regularly in 2013 under Israeli archaeologist Erez Ben-Yosef of Tel Aviv University. All kinds of advances in understanding the site have occurred, and now, in excavating an area that was a large camp for metalworkers, a large number of textiles have been discovered, including beautiful examples of ancient royal purple.

There are two kinds of ancient purple: One is usually referred to as true purple and is derived from murex shells, some of which are of the same varieties that yield *techeiles*, the blue dye on the *tzitzis*, often described as the color azure. Alongside this dye, various kinds of vegetable dyes also provided a lower quality of purple. But we are talking here about the real thing—



*Slaves' Hill in the center of the Timna Valley*



*Species of murex found on Israeli coasts from which the purple dye originate*



what is known in *Tanach* as *argaman*, a prominent feature of the *Mishkan*, the *Beis Hamikdash*, and royal clothing. We will soon read the description of Mordechai emerging wearing Achashveirosh's clothing, including both the royal blue and purple, as the city of Shushan rejoiced at the deliverance of the Jewish people (*Esther* 8:15). It's no coincidence that this is one of the verses that everyone reads out loud!

While the announcement was made just recently, the discovery of the textiles was made several years ago, and detailed scientific analysis of the purple dye has

been going on ever since. In a recently published scientific article, the interdisciplinary team, including representatives of Tel Aviv University, Bar-Ilan University, and the Israel Antiquities Authority (IAA), released a full technical report on the dye. The chemical analysis employed in determining the exact composition and origin of the purple dye involves highly sophisticated processes that are described in detail in their scientific paper. Further, carbon-14 dating has confirmed a date of approximately 1,000 BCE for the cloth. IAA's textile expert, Dr. Naama Sukenik, has confirmed that this is the first true



purple dyed textile from the time of Kings Dovid and Shlomo ever found in Israel or the surrounding region.

Evidence of purple dye derived from mollusks had been previously found in industrial waste, proving that the industry of purple dye extraction existed, but this is the first time that actual cloth has been found. The existence of such fancy textiles at a site of copper mining and smelting is surely the result of the fact that the ancient metalworkers and those who supervised them were part of the upper levels of ancient Edomite society. Happily for us, the textiles were preserved because of the especially dry desert climate, a phenomenon that ensured that textiles were also preserved at Masada and in the Judean Desert caves. The excavators could not help but notice the beautiful color as they cleared away the rubble in what had been the residence area for these workers. In addition, the site has also yielded ropes, basketry and other things that are usually destroyed by the ravages of time.

This discovery touched off a new round of scientific research regarding the making of the dye, led by Bar-Ilan's Professor Zohar Amar of the Department of Land of Israel Studies. He has dedicated his entire career to the scientific study of plants and animals connected with Jewish ritual, texts and history. He had already written a book about purple dye, which also goes into relevant issues pertaining to *techeiles*. The new research found that the purple dye was derived from the glands of three types of mollusks, each a variety of the *murex*. One of these was *murex trunculus*, the same shellfish from whose secretion *techeiles* was made. I remember that in 1986, when I participated in the excavation of Dor, on the coast of Israel, enormous numbers of *murex* shells were dug out of a pit that abutted an industrial area that included dyeing installations dated to the period of domination by the Persian Empire. Some of the purple pigment was actually found. Indeed, these same shellfish have been used in the various modern attempts to revive the wearing of *techeiles* today. It is generally accepted by scholars that both true purple and the blue of *techeiles* are produced from the same mollusks, except that when hidden from light, a purple color is obtained, whereas exposure to light as part of the process yields the blue.

Advanced scientific instruments were used to determine the content of the purple dye and these were then tested by Prof. Amar and Dr. Sukenik by reconstructing these dyes in the laboratory. Recreating the dyes took Amar to Italy and involved the help of his Italian mother-in-law. It fully

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**In recent years, archaeologists have been excavating a relatively new site referred to as Slaves' Hill. The name may be misleading since, far from being slaves, the laborers were highly skilled metalworkers.**

confirmed the accuracy of the analysis. There was no question that these textiles had been made from the true and quite expensive purple, and that the garments from which they came would have been those of people of high prestige. Indeed, Prof. Bar-Yosef argues that the presence of such textiles among the essentially nomadic Edomites should lead to some reconsideration of the nature of Edomite society since it apparently had some form of economic stratification. Clearly, Edomites must have participated in trade that could bring either purple dye or purple cloth from the Mediterranean seashore to what was essentially a mining installation.

But the significance of this find is even greater. It was the archaeologist Nelson Glueck who first connected the mines at Timna with Shlomo Hamelech. He gave the name Solomon's Pillars, and generations of tour guides have told travelers that it is from here that Shlomo Hamelech got the copper for the *Beis Hamikdash*. From *Tanach*, we learn that Shlomo Hamelech conducted widespread trade, way be-

yond the borders of Eretz Yisrael. Shlomo Hamelech's palace and *Beis Hamikdash* required wood, gold and precious stones. He traded with King Chiram of Tyre (Tzur in Hebrew), who supplied him with cedar wood (*Melachim I* 5:15-24). A trade agreement between them gave Chiram the right to use Eretz Yisrael's port at Ezion-Gever (near modern Eilat). Chiram, in return, provided Shlomo Hamelech with trained seamen when he sent an expedition to Ophir (believed to be in either India or Africa) to obtain gold (*ibid.* 9:26-28). Shlomo Hamelech also traded with the Queen of Sheba (*ibid.* 10:1-10). He bought horses and chariots from Egypt and southeast Turkey (*ibid.* 10:28-29). And this is only part of the picture. So it is indeed extremely likely that Shlomo Hamelech traded with the Edomites who ran the mining and smelting industry directly south of his kingdom, in order to provide the metal that he needed for construction of the palace and *Beis Hamikdash*.

No doubt, Shlomo Hamelech's widespread trade network also brought true

purple dye as well as *techeiles*. He even covered the cushion of his palanquin with purple cloth (*Shir Hashirim* 3:10).

The main center for the production of these dyes was along the coast of Phoenicia (present-day Lebanon) and the northern coast of Israel. Evidence of extensive production of this dye has been found at Tel Shikmona, on the Mediterranean seashore a bit south of Haifa, and, as mentioned, at Dor, a bit farther south on the shore, near Zichron Yaakov. But these sites seem to have produced the dye somewhat later, and it is most likely that it would have come to Eretz Yisrael during the time of Shlomo Hamelech as a result of his trade with Chiram, whose city, Tyre, was famous for producing it.

Had I asked you a few weeks ago how purple and copper were related, I doubt you would have told me that both were used in the building of the *Beis Hamikdash*. Not only is that the case, but from learning about the recent report on the textiles excavated from the copper mines at Timna, we can even get an understanding of the complex international trade relations that allowed the flourishing of the United Kingdom of Israel. If ancient Egyptians could mine and smelt copper in southern Eretz Yisrael, and if later on purple dye could come from Phoenicia or elsewhere on the coast to an Edomite team of miners and metalworkers, certainly it is not surprising that Shlomo Hamelech conducted such extensive trade. Whoever wore the fancy purple garments was probably involved in exporting copper north to the kingdom of Shlomo Hamelech. Generations of tourist guides are probably correct. ●

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