



# ISRAEL

# The Modern Revival of *TECHELET*

By Peter Abelow

**O**ne of the marvels of touring modern Israel is being able to see the *Tanach* come alive as one visits sites where Jewish history unfolded 3000 years ago. We can walk on the ground where our ancestors walked, touch the walls that our forefathers built and see the landscapes of *Eretz Yisrael* precisely as they are described in

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the pages of the Prophets. A particularly exciting consequence of our return to Israel—and a very relevant one when it comes to contemporary Jewish practice—is the discovery off the Mediterranean coast of what many believe to be the *chilazon* (a sea creature that provides the dye for the Biblical *techelet* [the blue thread]) and the reintroduction of the Biblical dyeing process. In many communities, in Israel as well in *chutz la'aretz* (the Diaspora), *tallitot*, containing what many believe to be the Biblically commanded *techelet* are becoming an increasingly common sight.

רבי מאיר אומר... כל המקיים מצות ציצית  
מועלים עליו כאילו הקבול פני השכינה.  
שהתבלת דומה לים, וים דומה לרקיע,  
והרקיע דומה לכסא הכבוד.  
-ספרי, פרשת שלח, טו, לו

"Rabbi Meir says: Whoever  
observes the mitzvah of tzitzit, it is  
considered as if he greeted the  
Divine Presence, for techelet  
resembles the sea, and the sea  
resembles the sky, and the sky  
resembles God's holy throne."

Sifre, Shelach 15, 39

In Numbers  
(15:38), we read:  
"Speak to the people of  
Israel, and bid them that  
they make them fringes  
in the borders of their gar-  
ments throughout their gen-  
erations, and that they put  
upon the fringe of the bor-  
ders a thread of blue." Our  
oral tradition (Talmud  
*Menachot* 44a) teaches that "the  
*chilazon* resembles the sea in its color,  
and in shape it resembles a fish; it

appears once in 70 years,  
and with its blood, one  
dyes the blue thread; and  
therefore it is so expen-  
sive." Extensive research  
has revealed that the  
*Murex trunculus* snail is  
the most likely candidate  
to be the source of  
*techelet*. Somehow, during  
the Roman period, the  
*mitzvah* of *techelet* was  
gradually lost. A few  
years ago, however, the  
P'til Tekhelet organiza-  
tion was founded to rein-  
troduce this long-lost  
*mitzvah*. An Israel-based,  
non-profit organization,  
P'til Tekhelet manufac-  
tures *techelet* dyed from  
*Murex* snails, produces  
*tzitzit* and provides edu-  
cation on this special  
*mitzvah*.

The story of *techelet*  
comes alive in two differ-  
ent places in Israel. First,  
at the P'til Tekhelet facto-  
ry, located in Kfar  
Adumim, approximately  
20 minutes east of  
Jerusalem, just off the  
main highway to the  
Dead Sea area. Visitors to  
the *techelet* factory can see  
the entire wool dyeing  
process, a large aquarium  
display with live snails, as  
well as the manufacturing  
of the *tzitzit* strings.

Additionally, visitors can  
view an excellent film. One of the  
highlights of the visit is the opportuni-  
ty to duplicate the dyeing process as it  
was done by our ancestors more than  
3000 years ago. Have a child carefully  
extract the wool from the beaker and  
amazingly, before your eyes, as the  
wool is exposed to the oxygen in the  
air, it will turn blue. Groups with  
more time can actually spin their own  
*tzitzit* strings.

A visit to the *techelet* factory must  
be arranged in advance with Joel

Guberman; you can reach him at 058-788-138 or 02-590-0577 or send email to [joel@tekhelet.com](mailto:joel@tekhelet.com). You can also visit the factory's web site at [www.tekhelet.com](http://www.tekhelet.com).

The other place you should visit is the Biblical city of Dor where recent archeological excavations served as the initial impetus for the rediscovery of *techelet*. Located on the Mediterranean coast near Caesarea, Dor is mentioned in the books of Joshua, Judges and Kings and was the main port city in this area until Herod built nearby Caesarea in the late first-century B.C.E. In Dor, archeologists have discovered evidence of a dyeing industry dating back to the Roman period. Specifically, they uncovered large dyeing pits with rings of purple (*argaman*) and blue. The discovery of large numbers of broken shells of *Murex* snails around the vats led experts to the conclusion that this snail, which is found in nearby coves along the shore, is indeed the *chilazon* of our tradition.



*Dyeing wool for tzitzit: As wool is exposed to the air, amazingly, it turns blue!*

The Museum of Underwater Archeology is another important site to visit. If you are traveling between Tel Aviv and Haifa, leave the main highway at Zichron Yaakov, turn left on the old road towards Haifa and then left again to Dor and Nachsholim. As you approach the beach, there is a stone building on

your right which appears to be roofless. This structure was originally built over 100 years ago to house a wine bottle factory, which was part of the growing enterprise of the Carmel Wineries in nearby Zichron Yaakov. While the wine business was a great success, the bottle factory failed and the building was abandoned for many years. Recently though, along with the extensive excavations at nearby Tel Dor, the building was refurbished and reopened as a museum.

The museum has an extensive exhibit of artifacts from the Biblical period as well as an exhibit about the *chilazon* and the *techelet* dyeing process. Make sure you ask Yisroel, the museum director, to show you the film on *techelet*. The museum's number is 04-639-0950. In conjunction with the museum, P'til Tekhelet arranges customized group tours, which include snorkeling and hands-on dyeing. These expeditions must be coordinated in advance. ●

## Did you know...?

The secret of *techelet* was lost with the Arab conquest of *Eretz Yisrael* in 683 C.E.

In addition to being required for *tzitzit*, *techelet* was necessary to manufacture the garments of the high priest and the covers of the holy vessels in the Temple.

In ancient times, purple and blue dyes derived from snails were so rare and sought after that they were literally worth their weight in gold. These precious dyes were used to color the robes of the kings and princes of Media, Babylon, Egypt, Greece and Rome. One who wore this color was identified as belonging to royalty.

## How is *techelet* produced?

*Murex* snails possess a gland which secretes a purple dye chemically known as dibromoindigo. When dissolved and exposed to sunlight, the dye changes from purple to blue.

## Where do the snails live?

*Murex trunculus* snails live along the coast of the Mediterranean Sea. In ancient Israel, the tribe of Zevulun, who used to live on the northeast coast, was attributed with possessing the *chilazon*. Archeological digs have since uncovered mounds of broken *Murex* shells and remains of the dyeing industry on the northeastern coast of Israel. Today, since *Murex trunculus* snails are a protected species in Israel, snails for *techelet* are obtained and processed in Greece and Spain where they are caught and sold for food.

## How many snails does it take to complete a set of *tzitzit*?

It takes approximately 30 snails to produce a set of *techelet* strings. However, this number may very well fluctuate based on season, port of origin and extraction technique.

*Information & photos courtesy of the*