

## In Search of the Lost Ashkelon Varieties – from Hajji Firuz, via Phoenicia, to Ashkelon

We now know that the domesticated European vine originated in the extensive geographical region known as the Fertile Crescent, which covered many sub-regions stretching from northern Iran across the countries of the Caucasus to the highlands of eastern Anatolian.

We can identify two sub-species of the European vine:

1. The wild vine, *Vitis Vinifera Sylvestris*, which grows as a climbing plant in woods and on the banks of streams and rivers (with dioecious reproductive morphology).
2. The domesticated vine, *Vitis Vinifera Sativa*, from which thousands of different cultivars have developed, from the Neolithic B period to the present day (this vine has a distinct advantage over its wild cousin because of its monoecious reproductive morphology).

The wild vine was domesticated in the ancient world in the sixth millennium BCE, based on rough chronological estimates corresponding to the oldest archaeological find, of a nine-liter pottery vessel that, without any doubt, contained traces of a fermented alcoholic beverage made of grapes, that would in later years come to be called wine. This took place in the Neolithic B period, also known as the Pottery Neolithic period, and the important find described is dated to 5,000–5,400 BCE, from archaeological excavations at the site of Hajji Firuz in the northern Zagros Mountains in Iran. Scholars believe that the production of wine from ‘wild grapes’ began before the period to which the Hajji Firuz finds are attributed, however the establishment of this ‘industry’ (based on the finds that have been recovered) occurred in the period during which the Hajji Firuz site was occupied. Researchers believe that the domestication or cultivation of the wild vine occurred at approximately the same time as the establishment of wine production.

The domestication of wild vines took place in two stages: In the initial stage, man learned to identify the species of grape that produced the best-tasting fruit, from which wine was produced, and also planted sporadic vines close to his dwelling sites. The second stage was the establishment and planting of clusters of vines, to create ‘organized’ vineyards containing a large number of vines. During this period, man began to transfer the domesticated and cultivated vine from its place of origin in Firuz, Iran, the Caucasus and upper Anatolia southwards and westwards towards Phoenicia, initially during the Chalcolithic period (4,000–3,300 BCE) and later on, towards the end of the Chalcolithic period and in the first stage of the Early Bronze Age (3,300–3,000 BCE), to Israel and the Jordan Valley; the final part of this stage commenced in the early third millennium BCE, when the wine industry became established in the Old Kingdom of Egypt, in the Nile Delta, during the Third Dynasty (in about 2,700 BCE).

The first written references attesting to the existence of the vine in Israel can be found in Ancient Egyptian inscriptions; in one of these, dating from the reign of Pepi I in about 2,375 BCE, we read that the Egyptian military governor Eti sent his army to suppress a revolt in Israel, and that his soldiers “ruined her cities and cut down her fig and vines.”

Unfortunately, we have little written evidence about the species of grapes growing in Israel in historical periods. In the Bible, the Mishnah and the Talmud, a number of varieties are mentioned, some of whose names are connected to the regions in which they were grown. The economic archives dealing with viticulture in Israel under Hellenistic, Roman and Byzantine rule and until the Muslim conquest in 637 CE have not survived the frequent wars and conquests that swept through the country, leaving us with historical sources rather than the agro-economic evidence we are familiar with from the Roman Empire.

Despite the fact that the Talmud and other written sources contain detailed information about the cultivation of vines, work in vineyards and wine production, no mention is made of the names of the various vine cultivars.

The cultivation of vines and the wine industry in Israel declined considerably after the Muslim conquest but, despite what many people believe, never ceased completely. There are many descriptions up to modern times, throughout the Muslim regimes from 637 CE onwards and up to the fall of the Ottoman Empire in 1917, written by rulers, authors and local geographers, and especially by travelers and Jewish and Christian pilgrims to the Holy Land, among them clerics, scholars and artists.

We find an interesting and rather unusual reference by the Arab historian and writer Mukaddasi, who mentions two species of grape whose names can still be found today; at the end of the tenth century CE, two varieties of grape grew in the Jerusalem region, “Ainuni” and “Duri,” which were “so famous that they were exported to neighboring lands.”

The many descriptions, especially those of travelers and pilgrims to the Holy Land, all mention the grape vines when writing about the regions where they were cultivated, and some of the varieties are named after these places.

In 1848, Avraham Shor founded the first industrial winery in *Eretz Israel*, in the Jewish Quarter of Jerusalem. This marks the beginning of the new era of vine growing and wine production in Israel. For its wine production at the time “Shor Vineyard,” like many small domestic wineries, used the local varieties of grapes, which usually grew in the vicinity of the winery. During the preceding centuries and at the time, most of the vine varieties in Israel had already been named. We do not know exactly when the names were given, but this fact testifies to advanced viticulture practices for various purposes: wine for the Jewish and Christian minorities, dessert grapes for those of all religions, and raisins and *debess* (grape molasses, also called grape honey), which was especially favored by the country’s Arab

population. Most of the names are in Arabic, which was the country's dominant language from the end of Crusader rule in 1299 CE until the end of Muslim rule following the British conquest in 1917.

After the seventeenth century, no one in Israel could ever have imagined that, in a country in Western Europe, in the city of Reims in France, a number of vines were growing with the name of 'Ashkelon Vine,' or 'Vigne D'Ascalon.' The Ashkelon Vine is estimated to be 400 years old (according to another source, it is 300 years old) and historically it dates from the years immediately following the construction of the Jesuit College, in about 1620 CE.

The further one delves into the research and continues the search for additional evidence about the types and names of vines in Israel in general and in the Ashkelon area in particular, the more one discovers new and interesting details. In 1835, the second volume was published in the series *Outlines of Botany: A General History of the Vegetable Kingdom*, written by Gilbert Thomas Burnett under the auspices of the American University of Harvard. Gilbert writes:

(3490)

*The 'Ascalon' or 'Black Corinth' called also the grape of 'Zente', is important, as affording the Corinths or currants of commerce.*

(3492)

*The 'White Corinth' or 'Ascalon' is often without pips, and this variety it is which, when dried, is known as 'Sultana raisins'.*

My curiosity was aroused by this, and I immediately consulted Prof. Pierre Galet's *Encyclopedia of Grape Varieties*, where I found absolutely no mention of any link with Ashkelon among those varieties that Gilbert had recorded in his book. Prof. Pierre Galet's encyclopedia has other names for this variety of grape.

In Jancis Robinson's book, *Vines, Grapes and Wines*, and in her newest work, *Guide to Wine Grapes*, they are called 'Currant,' and 'Korinthiaki,' which is the Greek name for this variety. Another enticing mystery for our Ashkelon region researchers to investigate!

The French explorer Victor Guerin, one of the great early scholars of Israel, visited the country, traveling its length and breadth eight times. His first visit was in 1852, and his last in 1888. His research produced many publications about *Eretz Israel*, or the Holy Land. His most important work is his description of the country in seven volumes, published between 1869–1880 (all of which have been translated into Hebrew). His books are among the most important studies of Israel of all times.

In his books, Victor Guerin makes frequent mention of the vines encountered on his travels through the country. Yet even Victor Guerin does not study, record or classify by name any of the many vines he found. However, his record of their precise location has already helped, and will continue to help us, in our comprehensive study of the vines of Israel. Some of the vines were discovered by me during our research, and are alive and flourishing in the exact same locations described in his books one hundred and fifty years ago.

In the second volume: Judaea (II), Chapter 34, Victor Guerin reaches Ashkelon and visits both it and several neighboring villages. His numerous varied descriptions make an important contribution to the study of Ashkelon to this day.

Victor Guerin mentions the vines he sees several times. In his important description (which helped us a great deal later on in our research) he writes, "Vines, henna and scallions still grow today in the gardens of Ashkelon, but as wild plants. The vine itself, indeed, is more of an ornamentation, here and there, for the ruins, which it surrounds and garlands with its tendrils, and is less valuable as a producer of fruit for the inhabitants of Djoura" (Djoura being an Arab village on the eastern outskirts of ancient Ashkelon). A few days later, Guerin

travels south to Gaza, and adds an important and more detailed description of the same phenomenon he had seen in Ashkelon, in Chapter 36, "...pines, sycamores with climbing vines wound around them." In the region of Ashkelon we find hundreds of sycamore trees with climbing vines on them. This phenomenon is mentioned later on, in the beginning of the twentieth century, by researchers and vine experts from the Jewish *Yishuv* in the country, yet here too without naming the variety of vines climbing up the sycamores!!! Remember this sentence, as we shall return to it later.

The first professional review of Israel's local grape varieties, albeit a partial one and with no reference to the "lost grape varieties of the Ashkelon region," occurred towards the end of the nineteenth century, with the illustration and publication of the first of seven volumes in the series of books on ampelography, *Ampélographie. Traité Général de Viticulture*, by the renowned French scholars, Pierre Viala and Victor Vermorel.

The director of the first agricultural school in Israel, Mikve Israel, Joseph Niego, who graduated from the Faculty of Agriculture at Montpellier University in France, decided to place the varieties of grape in the country on the global ampelography map, and include them in this spectacularly important French research work. In 1901, the first volume was published and the seventh and last volume in the series was published in 1910. In the 1920s, under the British Mandate, many researchers and institutions in Palestine understood the importance of preserving (as a first step) the local varieties of the country's grape vines. Within a few years, three separate collections were started by different institutions, in different geographical locations in Israel, at first for collection and preservation purposes rather than for research purposes.

In 1927, the agronomist Netanel Hochberg, the father of vine researchers in the country who lived and worked at Mikve Israel Agricultural School, planted a special collection of local grape varieties for research purposes. Hochberg conducted scientific

research and experiments on the local varieties for decades, which conformed to the highest scientific international standards. Hochberg built the most updated list of local Israeli grape varieties of the time, and added remarks about the grapes' different uses:

Dessert grapes

Wine grapes

Dried raisins

Traveling south, especially among the Arab villages cultivating grapes in the region of Gaza and Ashkelon, Hochberg passed many kilometers of the same vines climbing on sycamore trees, and wrote about them. We later found, to our surprise, that Hochberg did not concern himself with identifying this specific variety of vine that climbs mostly up sycamore trees and mainly in Ashkelon, but only mentioned the phenomenon in passing. Incidentally, this exact same vine grows in the sandy regions and dunes between Gaza, Ashkelon and Ashdod, covering thousands of dunams, as a climbing vine. This phenomenon is not mentioned in Hochberg's book.

Thank you so much, Mr. Hochberg, for leaving to us the task of researching and identifying this particular 'vine' that you mention in your work.

In 1991, I worked as a photographer for the archaeological expedition at Ashkelon's 'City of Wine,' directed by Dr. Yigal Israel. The numerous amazing, varied and unique discoveries at Ashkelon's 'City of Wine' stirred the imagination of academics and researchers, as well as wine-lovers, journalists and many interested professionals and amateurs in Israel. The find and recovery of traces of a huge industrial area built to produce wine, with industrial-sized wine presses and a wine-jar industry complete with potteries and furnaces, inspired the beginning of a thorough study on the kind of wine jars that had already been identified as the 'Gaza-Ashkelon jar.' Many single wine presses (in smaller

concentration than that at Ashkelon's 'City of Wine') continued to be discovered at the time in Ashkelon and the southern region, with associated wine-jar workshops.

Following the numerous finds of two principal aspects of the ancient wine industry, (a) wine presses and (b) wine-jar production workshops, many ideas were raised in discussions with Dr. Yigal Israel, and we shared our professional thoughts and speculations with vintner and agronomist Koby Gat, Director of the Agricultural Department for Carmel Mizrahi wineries and the Vintners Association; we reached the conclusion that we lacked the third element in our study in order to complete the overall picture of the wine industry, namely the raw material – the grapes for wine production and the vines on which they grow. This was the starting point for our research, as we set off on our fascinating search for the ancient vine. Over the years, the steering team was joined by Prof. Amos Hadas of the Volcani Center Research Institute, who continues to contribute his ideas and knowledge to the research.

The discovery of the 'City of Wine' in Ashkelon encouraged us to press on with our study of ancient wine presses, and to continue our research into the Gaza-Ashkelon jar workshops, while discovering and exposing more sites and facilities throughout the country, particularly in the Ashkelon region.

The Gaza-Ashkelon jars have been extensively studied and written about by researchers in Israel and elsewhere. As well as being the 'trademark' of the Gaza-Ashkelon wines, because of their unique design and size, they represent the important practical stage between the production of wine and its trade, culminating in the wine finally being poured into the cup of the person fortunate enough to be able to purchase the Gaza-Ashkelon wine, which was renowned for its high price and quality.

Gaza-Ashkelon jars have been recovered from many sites across the Roman Empire, from all the important city ports in the Mediterranean, from the Crimean peninsula, at several

sites in the Rhone valley in France, in the city of London in England and—the furthest spot where a Gaza-Ashkelon has ever been found—at Hadrian's Wall in northern England.

The wine industry in Gaza and Ashkelon reached its height in the fourth and early fifth centuries CE. Based on the findings from archaeological excavations, the research shows that the proportion of Gaza-Ashkelon wine, out of the total amount of wine imported from the East (which included Antioch and Syria), was highly significant. Total wine imports from the East accounted for 40 percent of all wine imports at the time.

By the end of the sixth century CE, following political events in the East in the early seventh century CE, the percentage of wine imported from the East had dropped to 25 percent of the total wine imports mainly as a result of the Persian conquest of *Eretz Israel* in 614 CE, which caused tremendous havoc and damage to the country in general and to the wine industry in particular. As a result, the wine region of Gaza-Ashkelon, the largest of the wine-producing regions, was clearly hard hit and it was never to resume its former record wine production. The damage reduced the extent of wine production, and with it the volume of exports to the Roman Empire, to eight percent.

A tremendous wine industry of such a scale could not have existed without the 'backing' of large-scale, organized vineyards, tended professionally and yielding crops of a very high standard.

We identified the geographical boundaries of the Gaza-Ashkelon Wine Region (those parts still within modern Israel) on the basis of the Gaza-Ashkelon jar production workshops and the wine presses which yielded fragments of the jars. In many cases, the wine presses were found near the production workshops. Once we had defined the geographical boundaries of the wine region, we began to study the abandoned vines in the Gaza-Ashkelon Wine Region. Most of the land in the defined area consists of sandy soils, including sand dunes.

We began to map and record large clusters of vines as well as isolated vines, both climbing on trees, and sprawling over the ground. For part of the time, we concentrated on the survey and documentation of vines around the city of Ashkelon. The documentation includes photography of some of the vines and samples of leaves from the vines, which we scanned on the computer in a separate file. Unfortunately, we could not use the photographs of the vine leaves because no Israeli database/recorded collection of vine leaves of the locally-known varieties exists. Today, with modern advances in DNA tests capable of identifying grape varieties, the importance of the leaves, which used to be the basis for classic ampelography, has diminished; nevertheless, we are continuing to record the leaves.

Our dream is to recover DNA from the botanical traces of vines and grapes—from the archaeological excavations in the Ashkelon region, from excavations in the city of Ashkelon and at the many wine presses scattered in the region—that is identical to the DNA of vines and grapes growing near those very same wine presses. To date, unfortunately, none of the botanical material recovered from the vines and grapes has been suitable for DNA testing, since it was recovered in a carbonized condition.

On March 8, 2010, while in Israel, I first heard about the Ashkelon Vine growing in the city of Reims in France. The discovery of the Ashkelon Vine stirred my imagination and those of my partners in the research project on the ancient wine industry in Ashkelon, the survey and exploration of Ashkelon grapes, and the continuation of the study and identification of local grape varieties in Israel. This discovery gave us a new, fresh impetus to press on with our research in earnest.

Soon, contact was made with the city of Reims and the officials responsible for the Ashkelon Vine in the Reims municipality, and today we are about to begin a joint scientific research program between France and Israel under the auspices of the two cities of Reims and Ashkelon, with the participation of joint research teams.

Our first task will be to identify the variety of grape vine that is common to the vine in the city of Reims and to those around the city of Ashkelon, and to use DNA testing to identify all the varieties of vine that still grow in the geographical region we have defined as the “Gaza-Ashkelon Wine Region.”

And finally, for the most important discovery, published for the first time at this distinguished conference. I have found that the unidentified vine with black grapes, climbing mostly on Sycamore trees and spreading across the sand dunes, which the great grape-vine researcher Netanel Hochberg saw and passed by without bothering to identify it, grows throughout the region we defined as the Gaza-Ashkelon Wine Region, and we have not yet found it anywhere else in Israel. An interesting and important detail, that provides much food for thought!