

## Wine presses on mosaic pavements of Jordan, Palestine and Lebanon

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**Abstract.** *Archaeological projects carried out in Jordan pointed out that this country was extensively populated in the Byzantine period where the churches were numerous. Amphorae grape or vine scrolls were depicted in mosaics and scenes of daily life. A common motif depicted on the mosaic pavements is the agricultural scenes especially the cycle of the wine harvest. An attempt will be made here to discuss the representation of six wine presses on mosaic pavements of Jordan, Palestine and Lebanon. The materials of these devices represented on the mosaic floors have much common, in terms of their style of representation and in the iconography of the grape treaders figures. We can propose the existence of a broader Mediterranean vocabulary of the wine presses existing in the Levant as well.*

### Introduction:

During the Byzantine period the present borders of Jordan embraced a great number of population and a great number of settlements, especially along Via Nova Traiana and inside the villages and towns of the province of Arabia. This fact led to the presence of churches and houses beyond the enclosure walls of several settlements such as Gerasa, Kherbeh El Samra, Madaba and Um er Rasas (Kennedy 1981-21-24). The natural justification of such a condition is that the settled population was continuously increasing in the region where the population was originally Arab as indicated by numerous inscriptions.

Prosperity extended throughout the pagan and the Christian eras; however, during the Christian period churches began to replace pagan temples in the classical cities of Philadelphia, (Zayadine, 1977-1978, 20-56) Gerasa (Browning, 1982, 94-95), Esbus (Horn, 1973, 87-88), and Petra (Schick et al, 1993, 55-56).

The significant discovery in the archaeological sites of Jordan is the size and shape of

churches, which explains the density of population and the prosperity of the country during the Byzantine period. The basic architectural plan of the churches in Jordan was that of the basilica used extensively in the Mediterranean region.

The most impressive features of Byzantine churches in the Mediterranean region are the development and the extensive use of the art of mosaics in the ornamentation of floors. These mosaic floors can also be a valuable source of information on rural and urban lives, and on the religious administration of Jordan during the Byzantine period.

This paper aims to shed light on the agriculture features of Jordan between the sixth and the seventh centuries through selected wine-presses depicted on mosaic pavements. The paper seeks to highlight a connection between the construction of wine presses and their depiction on the mosaic floors. It is an attempt to understand the technique of wine pressing and the importance of wine in Christian liturgy. This kind of study has the potential of

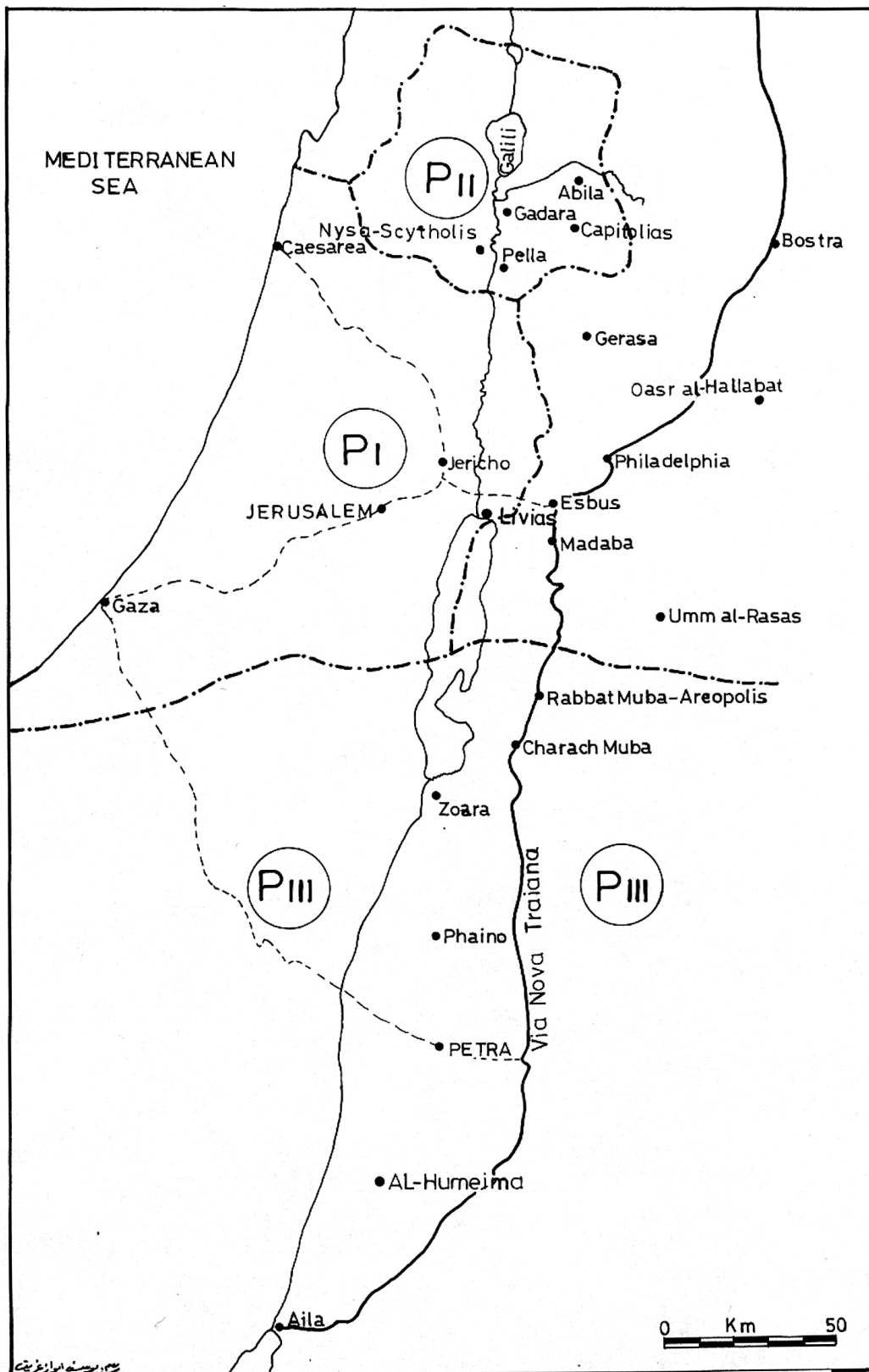


Fig. 1: Subdivision of Jordan Territory in the Byzantine Period.

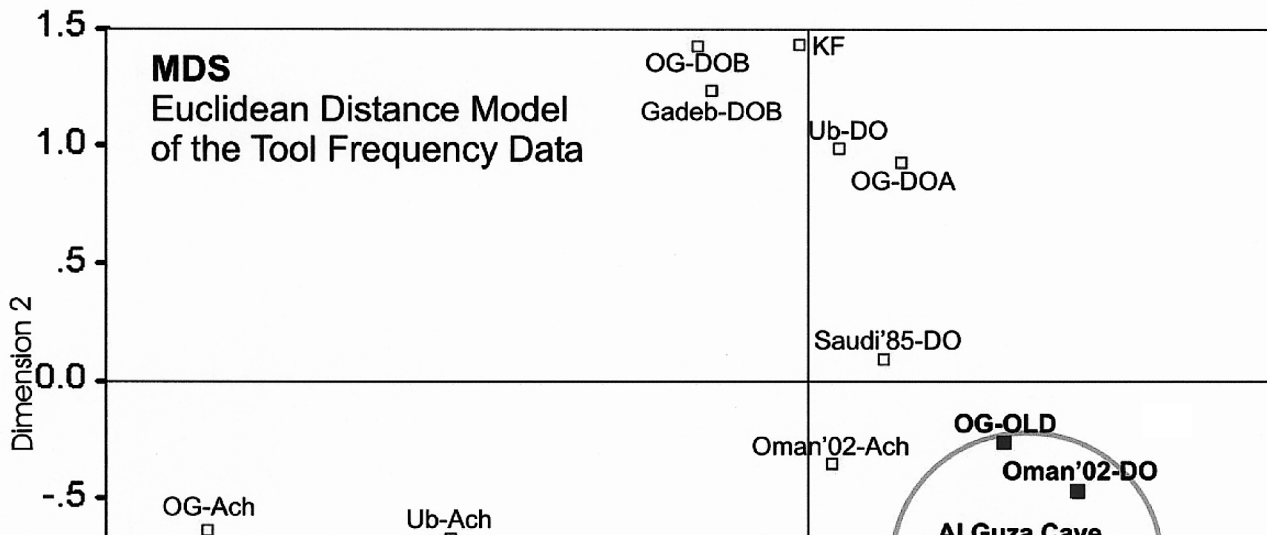


Fig. 2: Drawing of Wall - Paintings in the Tomb of Nakht at Thebes.

shedding light on rural and religious practices in Jordan during the Byzantine and early Islamic periods. It will offer new insights into wine presses in Jordan and enrich our acquaintance with the art of mosaics. It will hopefully add some more practical information about the significance of wine and grapes and their symbolic function in the Christian liturgy.

**Vine and Branches**

For ages, the Levant has been famous for the quality and quantity of its wine. The grapevine, along with its primary grapes product, is mentioned more than any other plant in the ancient sources, particularly in ancient Egyptian sources, and in the old and the New Testaments. In the book of Genesis, Noah was presented as the father of viticulture (Genesis 9:20). However, the Egyptian sources of the sixth Dynasty describe the grapes of Syria, while Sinuhe, the Egyptian Prince who lived in the land of Canaan, describes the wine of Palestine during the Middle Bronze Age (Ross 1962, 785; Prag 1974, 99).

The wall painting of Tomb 62 at Thebes in

the region of Amenhotep III reveals the importation of wine from Canaan to Egypt inside jars with lids (Amiran, 1969, 141).

The cycle of the wine harvest, including the gathering of grapes, treading them and storing wine in jars in the form of spindle amphoras, was shown on the wall painting of the tomb of Nakht at Thebes during the Fifteenth century (Fig 2; Ross 1962, 785, Fig 16).

These scenes reveal the significance of wind and grapes for the Egyptians; the representation of the cycle of the wine harvest on the wall painting of the Egyptian tombs demonstrate the importance of the wine in the Egyptian liturgy.

As is pointed out below, viticulture has provided an abundant store of images in both the Old Testament and the New Testament:

Vineyards and vines are symbols for wealth and fertility (2 Kings 18:31)

Wine is one of the graces of the goods of lands. The point is made in the Bible as follows: (He [the lord] will also bless the fruit of thy womb and the fruit of thy land, thy corn, and thy wine) (Deut 7:13).

In Isaiah (36:17) the same point is made: (until I come and take you away to a land like your own land, a land of corn and wine, a land of bread and vineyards). This expression appears again in Jeremiah (31:12). It is also repeated in: (yea, the Lord will answer and say unto his people, behold, I will send you corn and wine and oil and ye shall be satisfied therewith) (Joel 2:19).

Wine appears in the Old Testament as a symbol of spiritual gifts. This symbol is observed in the following verses (she [wisdom] hath killed her beasts, she hath mingled her wine) (Prov. 9: 2). The same symbol appears in the book of Isaiah (55:1). The Old Testament points to the cycle of harvest (Jeremiah 6:9), and mentions the joy of treading during the work (Jeremiah 48:33).

The Bible addresses the installation of the wine press as follows:

(Now will I sing to my wellbeloved a song of my beloved touching his vineyard. My well beloved hath a vineyard in a very fruitful hill: and he fenced it and gathered out the stones thereof and planted it with the choicest vine and built a tower in the midst of it and also made winepress therein) (Isaiah 5:1-2).

In the New Testament we can observe the significance of wine and grapes, their symbolic functions in the Christianity, the importance of the wine in Christian liturgy, and the cycle of the wine harvest. The information concerning these subjects and the connection between Jesus and wine is clearly made. According to Saint Matthew the red wine symbolizes the blood of Jesus as he has sacrificed himself to save his people. The reference to this personification appears in the following:

(For this is my blood of the New Testament, which is shed for many for the remission of sins. But, I say unto you, I will not

drink henceforth of this fruit of the vine, until that day when I drink it new with you in my Father's kingdom and he went a little further and fell on his face and prayed, saying, O my father, if it be possible, let this cup pass from me: nevertheless not as I will, but as thou wilt) (Matthew 26: 28-29; 39). The greater significance of the vine is when Jesus describes himself as the true vine and his father as the vinedresser. This point appears clearly in the following verse: (I am the true vine, and my father is the husbandman) (John 15:1).

The grapevine, along with the olive and fig trees, is one of the most distinctive plants of Jordan and Palestine today as they were in ancient times; the climate is particularly well suited for growing vines. Besides, there is enough rainfall, heat and fertile land especially on hills where the vineyards were planted because such places were less suitable for cereals crops. It was customary to present wine to guests at feasts and marriages. In the New Testament (John 2: 1-11; John 4:46), we see Jesus miraculously turn water into wine for the marriage celebration at Cana.

Furthermore, Christ chooses the vineyards in his parable to strongly emphasize the intimate bond between him and the churches. He said, "I am the vine, you are the branches" (John 15: 5).

This expression explains clearly the symbolic importance of vine for Christians.

The agricultural scenes of daily life are often shown in the mosaic floors of the churches in Jordan. In these the common motif usually represents the cycle of the wine harvest, and is always depicted as follows: 1- The harvester, a basket beside him, cuts grapes with a short billhook. 2- A basket full of grapes. 3- The transport of grapes on the back of a donkey, or on the back of a man. 4- The treading in the wine press. 5- Usually the cycle of the wine harvest is accompanied by a flute-player.

(Fig.3). This cycle is retrieved, for example, in the church of SS Lot and Procopius at al-Mekhayat (Saller and Bagatti 1949, 55-67, fig. 7). Other details included in these scenes are an isolated central pole of the winepress showing the sharp spirals of the screw in the church of Bishop Sergios and the vat receiving the red wine in the church of Saint Stephen at um Er-rasas. From this it was drawn off into an amphora depicted full with red wine (Fig 4. d). (Atiat 1994, 147-154).

It is well known that the scenes of daily life are often depicted in colored mosaic floors of the churches in the Mediterranean region of which Jordan part. These scenes are often represented inside rows of vine scrolls in the form of branches of grape.

According to Dauphin, the period between the fourth and the seventh centuries shows the predominance of the vine scroll in the Levant (Dauphin 1987, 185). This observation seems rather accurate and is especially supported by the corpus of winepresses included in figure 4 below. Although it is difficult to gauge the significance of the predominance of the vine scroll in Jordan during those centuries, it seems reasonable that this motif was connected to the importance of grapes and wine in Christian liturgy.

### Wine Production:

The cities and towns in the Levant of the Bronze Age were basically agricultural communities. Because of the suitable climate and soil, the grapevine, along with the olive and fig trees, is one of the most distinctive plants of Jordan and Palestine today. As mentioned earlier, the earliest evidence for the yield of vine in the region is referred to by Sinuhe the Egyptian Prince who lived in the land of Canaan during the Middle Bronze Age (Ross 1962,785). Piny, the Roman Historian, speaks of four colors of wine: white, brown,

blood red and black. It seems clear that different colored grapes produce different colored-wine, but the red wine was considered a fine wine, and the best of all is the red fragrant wine (Frankel 1999, 200).

It will be useful here to provide some background information about the land of Jordan and its people during the Byzantine period. The abundance of towns and villages in the country in that period was supported by intensive farming of precious food, especially vine and olive and water resources. The existence of several small winepresses and oil presses in the Western plateau of Jordan proves that the lands were poor as they might have been used for farming some types plants in certain periods. A considerable number of small wine presses, usually hewn in the rock, have been found in this plateau, particularly in the central sector. The size and the distribution of these presses, according to Watson and O'Hea, reveal that such industry was of a small scale, and it was limited to serving local consumption rather than trade (Watson and O'Hea 1996, 63-76).

The archaeological surveys elsewhere in the northern hilly region reveal a similar pattern for these installations where the archaeological sites in the region are characterized as well by remains of wine and oil presses, reservoir and various agricultural implements (Wals, 2001, 481-482). A quick comparison between wine presses in Jordan and Palestine during the Byzantine period reveals different aspects. In Palestine wine installations are of larger scales than they have been in Jordan. In fact, the storage compartment is much larger, accommodating thereby larger quantities of grapes. If the small scale industry in Jordan meant to serve a local, small community, the larger scale in Palestine suggests that it was meant to serve a much larger community (Roll and Ayalon 1981, 111-125, Fig 7):

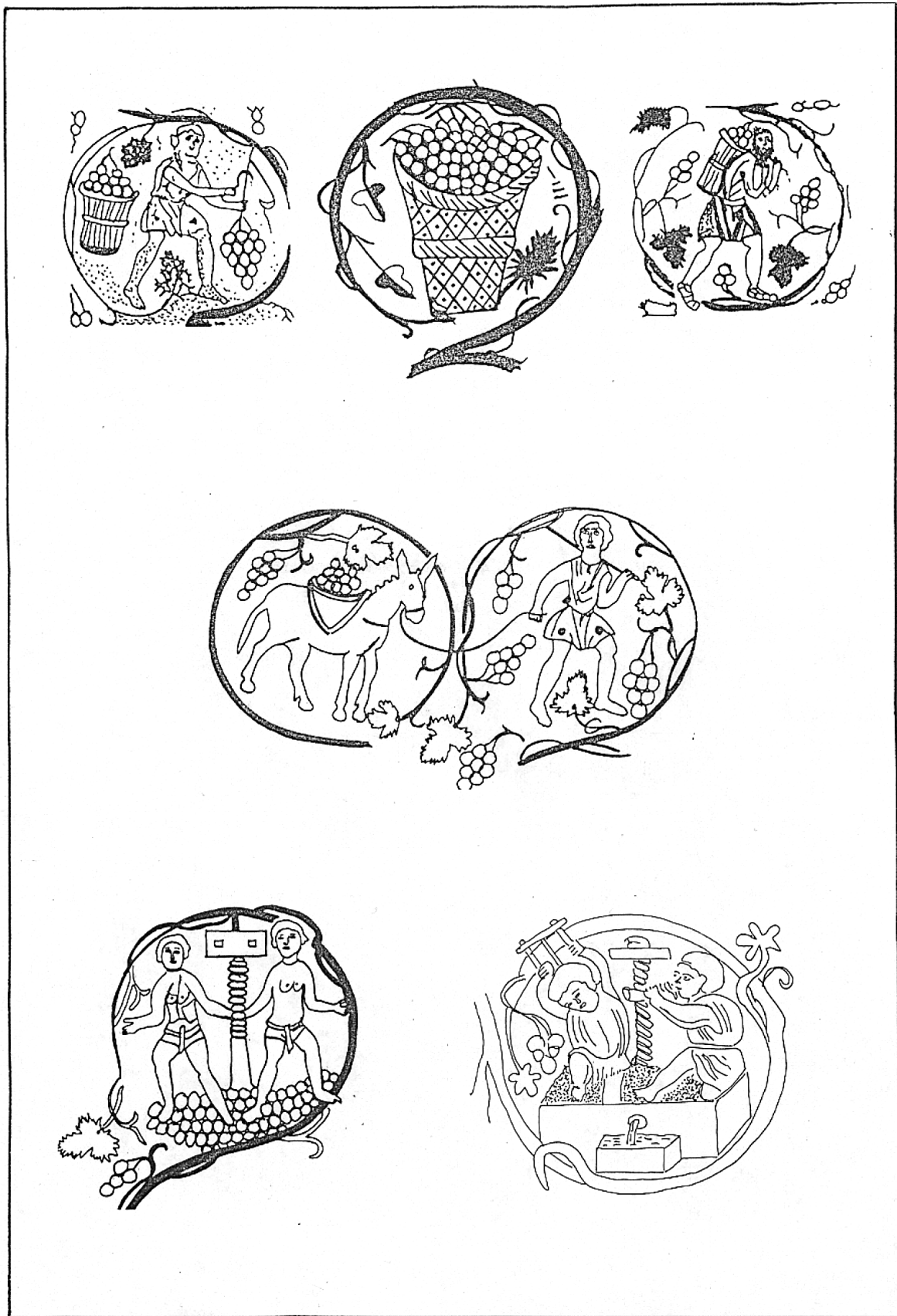


Fig. 3: The cycle of the wine harvest.

Hirschfeld 1983, 211-212, fig 5).

The wine presses in Jordan were located at the western edge of the western plateau which was heavily settled during the Roman, Byzantine and Early Islamic periods. The economy of these settlements was based on agriculture and the processing of agriculture products, especially wine and olive oil. The wine presses show that there had been a considerable number of farms and villages (Piccirillo 1985, 257-261).

According to Pamela Watson the wine presses are classified under seven types as follows:

A large shallow squared pressing or treading basin with white mosaic floor, connected to a receiving vat located outside the pressing floor.

A large circular or oval pressing or treading basin with white mosaic floor and central rectangular vat with conduits which channeled the juice after treading into the receiving vat.

A deep rectangular basin cut into the bedrock with oval or circular receiving vat connected with the basin by a canal cut into the bedrock. This type is the most common in Jordan (Fig.5); eleven wine presses of this type are recorded by Pamela Watson (Watson 1996, 72, Fig 8).

A shallow irregular treading basin with circular receiving vat.

A small circular or squared treading basin with central depression.

A number of small irregular basin connected by channels.

A small flat shallow basin with channel.

Analysis of the elements of wine presses above shows a parallel with the wine presses in Palestine, and the symmetry existing between winepresses in to two countries enables us to emphasize this conclusion (Ahlstrom 1978, 19-49). However, it seems more prudent to read the red wine as a

Christian religious symbol. The following verse bears out this reading: (and as they were eating, Jesus took bread, and blessed [it] and brake [it] and gave [it] to the disciples and said, take, eat; this is my body and he took the cup [of wine] and gave thanks and gave [it] to them saying drink ye all of it; for this is my blood of the new testament which is shed for many for the remission of sins) (Mat 26: 26-28).

The single fixed-screw press was the main wine press in Jordan and the surrounding countries. This device was meant to squeeze out the must left in the grapes skins after treading. (Fig 4). It appears on six mosaic floors in the Mediterranean region: one in the church of ST Christopher at Tyre-Qabr Hiram in Lebanon; two at el-Mekhayat in the Church of SS Lot and Procopius and in the church of ST George; two others at um er-Rasas in Jordan, in the church of St. Stephen and in the Church of the Bishop Sergios (Piccirillo and Atiat 1986,341-351); and one in the mosaic floor of Baisan-Scythopolis in Palestine (Frankel 1999, 140; Saller and Bagatti, 1949,55-67,67-78; Piccirillo, 1993, 178-179,238-239; Avi-Yohna 1935 19-55).

It will be observed that the single fixed-screw press, exposed in figure 4, shows assemblages in the composition. The treaders in the wine press are drawn with darker contour lines, since the bodies of the treaders are almost nude. They wore only a "cinctus" or loin-cloth.

In fact, many differences in the technique of pressing the grapes can be seen in winepresses of figure 4. We can see the production wine by treading and using a screw press in figure 4.a (found in Lebanon). The winepress in this figure is of few elements: a rectangular passing vat connected with a small rectangular receiving vat.

In the wine press of figure 4.b (found in Jor-

dan), we can observe a production of wine by treading and by using a screw without the presence of the receiving vat; however, the winepress of figure 4.c (found in Jordan) shows the production of wine by using a screw press but without the presence of the treaders.

The wine press of figure 4.d (found in Jordan) shows the production of wine by means just of treading, without the usage of a screw press. The wine press is made up of a few elements: a treading floor, a rectangular receiving vat, and the filling up of wine into an amphora which was depicted full with red wine beside the receiving vat.

It is clear that the mosaicist intended to present a real wine harvest rather than an ideal one. The depiction of the red wine, flowing from the treading floor to the receiving vat through a small canal and an amphora with two loop handles full with red wine, shows a representation of the end of the cycle of the wine harvest.

In the winepress of figure 4.e (found in Jordan), we can see the production of wine by treading and usage of a screw press, whereas the winepress of figure 4.f (found in Palestine) shows the production of wine by treading only, without the usage of a screw press. This figure shows the representation of three treaders intent upon their work while the others show only two treaders. Perhaps the mosaicist intended to show that the treading work needed more treaders.

The corpus of winepresses recorded in this paper are limited to only few elements; namely, the grapes, the screw in the center of the press and the depiction of two treaders represented almost nude on both sides of the screw. These elements are enclosed inside five volutes of vine, and one is represented inside an acanthus scroll. (Fig. 4). This observation may enhance the theory of Dauphin about the predominance of the vine scroll in Jordan during

the Byzantine period.

From the previous compositions we understand that in the ancient times, grapes were certainly always first trodden and then pressed. This information was confirmed by classical literature, from which we learn the process of the pressing operation. Since treading was taken for granted, the representation of only the spirals of screw on mosaic pavements does not help us understand the manner in which this device functioned (Frankel 1999,42).

The mosaic pavements are standard features of almost all Byzantine churches in Jordan; these pavements include depictions of people and animals, as an element of the design. Such images are usually depicted inside volutes of vine.

The range of this composition can be observed in the churches. Beside the geometrical scenes, common are the scenes of branches of grape shooting forth from an amphora to form rows of vine scroll in which scenes of the daily life are often depicted. Those scenes include the scene of hunting, the scene of shepherd with his flock, and the scenes of the cycle of the wine harvest including the picking, transporting, and pressing of the grapes (Dauphin 1987,186).

It is most probable that the vine scroll in the art of mosaics was drawn as a Christian religious symbol after the parable of Christ where the intimate bond between Christ and the church is strongly emphasized.

The range of this composition can be observed on the lamps and on the mosaics where the decoration around the channel of the lamp consists most often of a vine-scroll. However, sometimes there are engravings of crosses, animals, amphorae and human figures on both the discus and the base (Fig 6). These lamps can be assigned to the Byzantine period and to the second half of the 8th Century and later (Scholl 1986,164, Fig





Figure 4,a Depicting of single fixed- screw wine press shows treading, pressing and collecting vat: mosaic, Tyre, Qabr Hiram in Lebanon ,the church of ST christopher

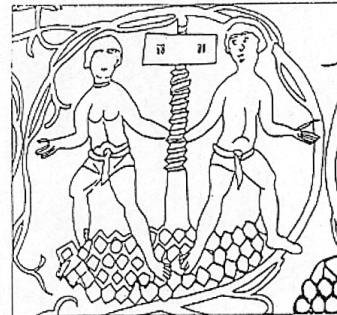


Figure 4,b Depicting of single fixed- screw wine press shows treading and pressing from the church of SS Lot and Procopius, el- Mekhayat in Jordan

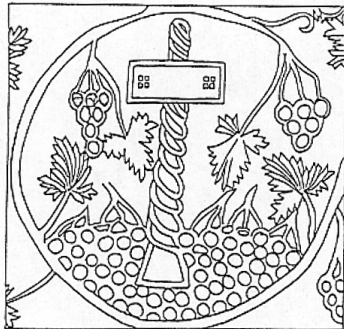


Figure 4,c Depicting of single fixed- screw wine press shows pressing from the church of the Bishop Sergios, um er-Rasas in Jordan.

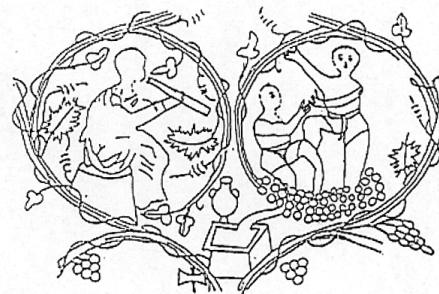


Figure 4,d Depicting treading, and collecting vat from the church of ST Stephen, um er-Rasas in Jordan,



Figure 4,e Depicting of single fixed- screw wine press shows treading and pressing from the church of ST.George, el- Mekhayat in Jordan

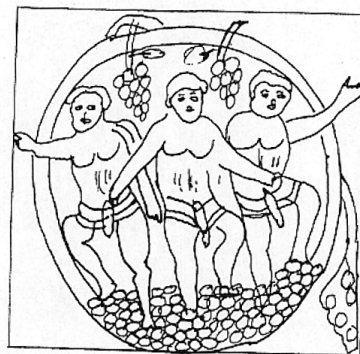


Figure 4,f . Depicting three treaders without depicting screw wine from the mosaic of Hammam Bisn-Scythopolis

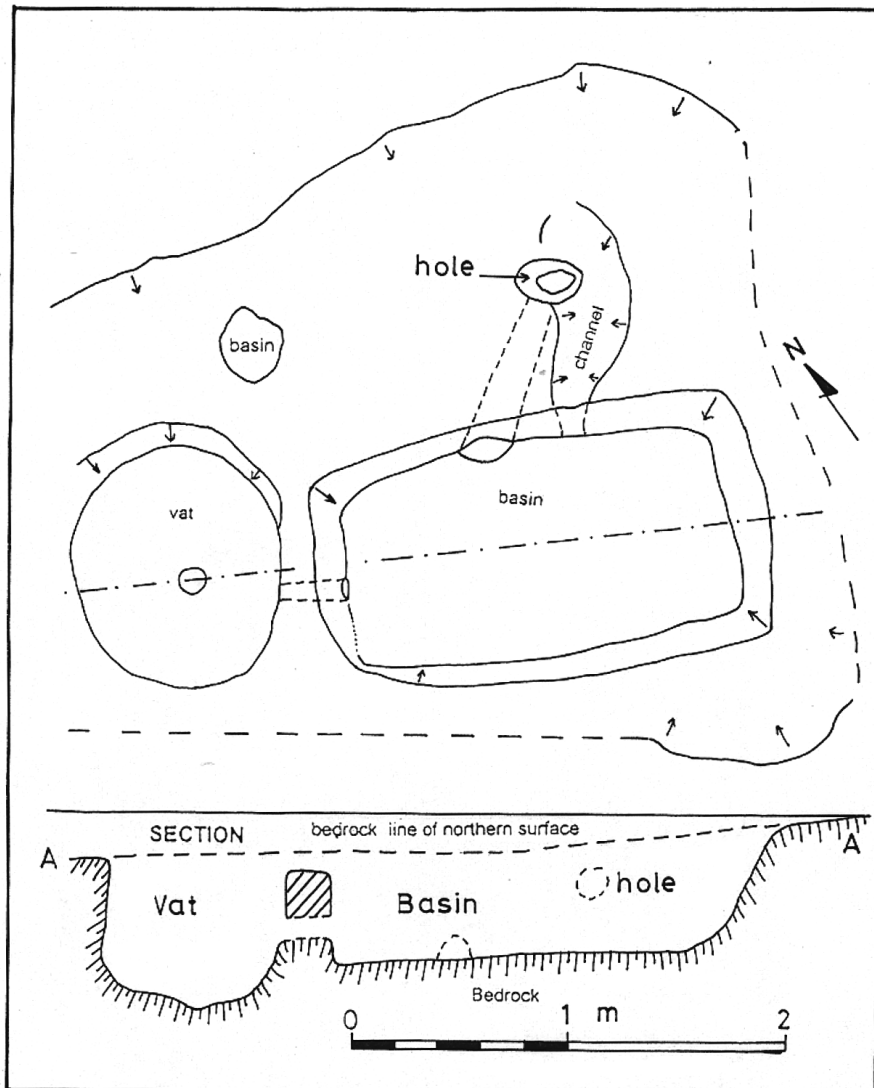


Fig 5 : The most common type of wine press found in Jordan , plan and section (After Watson ,1996, Fig .8 ).

1.11; Bisheh 1982, PI XXXVII; Whitcomb 1994, Fig d.26)

It is well known that the scenes of daily life are the common motifs in the art of mosaics in Jordan and in the Levant during the Byzantine Period.

The presence of an amphora with two loop handles beside the vat, filled with red

wine, seems to practically explain the end of the cycle of the wine harvest.

**Conclusion**

On the bases of the corpus of the wine presses included in this paper, it is interesting to note that the mosaic pavements in Jordan are of great importance to understanding the art, society, and the Christian religion during the Byzantine and early Islamic periods. These pavements proved illuminating in the study of artistic, economic and religious patronages during those periods.

From the material presented in this article, we can conclude that the winepresses have much in common, in terms of material, style of representation, form of the screw press, and a lesser degree the dress of the treaders. Aspects of this presentation are closely paralleled by the depiction of the winepress, where the pattern in the mosaic floors could be derived from the iconography of the winepress on the ground. There is however a difference in certain elements; the depiction of the pressing and treading is mostly represent in the mosaic floors of Jordan during the Byzantine and Early Islamic periods.

It is immediately apparent that mosaicists

take realities in to consideration. The treaders represented are depicted occupied by their work. Their poise suggests movement, especially the raising hands and legs. Aspects of this presentation revealed that the mosaicists intended to represent a real wine harvest rather than an ideal one. Therefore, we can find differences in the technical way of pressing the grapes like using or not using a screw press, two or more treaders. Moreover, other differences can be seen as well in the clothing

of the treaders in the three countries where colthing reflects the different tradition in these countries.

As for color, the mosaicist was guided by realities even though he seems to have had a good deal of freedom. The red wine represented in the churches of St. Stephen at um Er-Rassa certainly indicates the blood of the Christ. It symbolizes the blood of Jesus, when he sacrificed himself to save his people.

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**ملخص:** تشير أعمال التنقيب الأثري في الأردن بوضوح، إلى أن الأردن شهد كثافة سكانية خلال العصر البيزنطي، يدل عليها اكتشاف العديد من الكنائس؛ إذ من المألوف تمثيل أغصان العنب في أرضيات تلك الكنائس، إضافة الى مشاهد من الحياة اليومية، كالمشاهد الزراعية، خاصة مراحل قطف ثمار العنب وعصرها تمهيداً لإنتاج النبيذ، المشروب المقدس في الديانة المسيحية، بوصفه رمزاً لدم المسيح عليه السلام، عندما ضحى بنفسه لانقاذ البشرية، حسب ما جاء في الإنجيل. وهذا البحث محاولة لإبراز التشابه في تمثيل ست معاصر نبيذ، في أرضيات مختارة في كل من الأردن، وفلسطين، ولبنان، حيث يبدو التشابه واضحاً في تقنية العمل، وفي الادوات المستخدمة، وفي تمثيل صور الأشخاص القائمين بهذا العمل. وهذا التشابه يدفعنا إلى الاعتقاد بوجود وحدة عامة في إنتاج النبيذ، في منطقة شرق البحر المتوسط خلال العصر البيزنطي، على الرغم من وجود بعض الاختلاف في التفاصيل.

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