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Population Dynamics in the al-Karak Region in the Byzantine and Islamic Periods

The “Fallahin and Nomads” Project: Aims and Methods

Launched in 2008 by C. Dauphin and M. Ben Jeddou, the Project, *Fallahin and Nomads in the Southern Levant from Byzantium to the Crusades: Population Dynamics and Artistic Expression*, aims to trace demographic fluctuations in the marginal arid zone, an area of interaction between the settled *fallahin* and the nomadic *bedu* (Dauphin and Ben Jeddou 2009: 13-16; Ben Jeddou, Castex and Dauphin 2011; Dauphin and Ben Jeddou 2012a: 84-85; 2012b: 207-209; 2013: 18 and 20-21; Dauphin, Ben Jeddou and Castex 2013: 32-33).

Combining archaeological demography, Geographical Information Systems (GIS) analysis, and literary and historical sources, the initial region covered was the Province of *Palaestina Tertia* of Byzantine administration – an irregular polygon stretching eastwards from Dayr al-Balah on the Mediterranean coast of Palestine to al-Karak, south of the latter to Ma’an on the border between “the desert and the sown”, and down to Aqaba (Byzantine Ayla) on the Red Sea with the desert as hinterland. In 2011, the region was extended northwards and eastwards to encompass the “golden triangle” of Mount Nebo, Mādabā and Umm ar-Raṣāṣ, thus coinciding with southern *Bilād ash-Shām* (FIG. 1).

For the area west of the Jordan Rift Valley, the *Ghawr*, a database of 1,099 Byzantine and Arab sites was created by GIS expert Ben Jeddou on the basis of the *Catalogue* of Dauphin’s *Palestine Byzantine* (1998, III), updated thanks to the data published by the Negev Emergency Survey and the results of recent excavations augmented by Arab sites listed in the Archaeological Archives of the British Mandatory Government of Palestine (1919-1948) and of the State of Israel.

For the area east of the *Ghawr*, which corresponds to Southern Jordan, the corpus of Byzantine, Umayyad, Abbasid, Fatimid, Crusader and Mamluk archaeological sites is essentially based on JADIS, the Jordanian Archaeological Database and Information System (Palumbo 1994 ed.). Since MEGA (Middle Eastern Geodatabase for Antiquities), elaborated by the Getty Conservation Institute in Los Angeles in cooperation with the Department of Antiquities of Jordan, has not yet integrated all the data provided by JADIS it was used solely as a check for updates on JADIS. Out of a total of 1,170 sites, the vast majority (945) were Byzantine (FIG. 2), clustering around urban centres and bishoprics. The number of sites declined in the Islamic period (that is, the Umayyad, Abbasid, and Fatimid periods) to 424 and their distribution



1. Palaestina Tertia (P. III) and the extended zone of study of the "Fallahin and Nomads" Project (M. Ben Jeddou and C. Dauphin).

was sparser with a southwards shift to the edge of the desert (FIG. 3). A further decline to 329 sites was noted for the Crusader, Ayyubid and Mamluk periods, characterized by a return to the Byzantine pattern of clustering around urban centres, and fewer sites in the desert (FIG. 4). Future research will enable us to date sites individually with more precision.

Within the context of a GIS Project, our archaeological database is twinned with an

environmental database, which comprises several layers; including 1) relief (Digital Elevation Model or DEM) with its derivative layers (slope and orientation, geology, pedology and land-use, hydrography, springs and road networks), 2) statistical analyses (density calculations, directional distribution, standard distance, and linear directional mean), and 3) spatial analyses (expressing distribution of sites in relation to altitudes, to agrological potential,



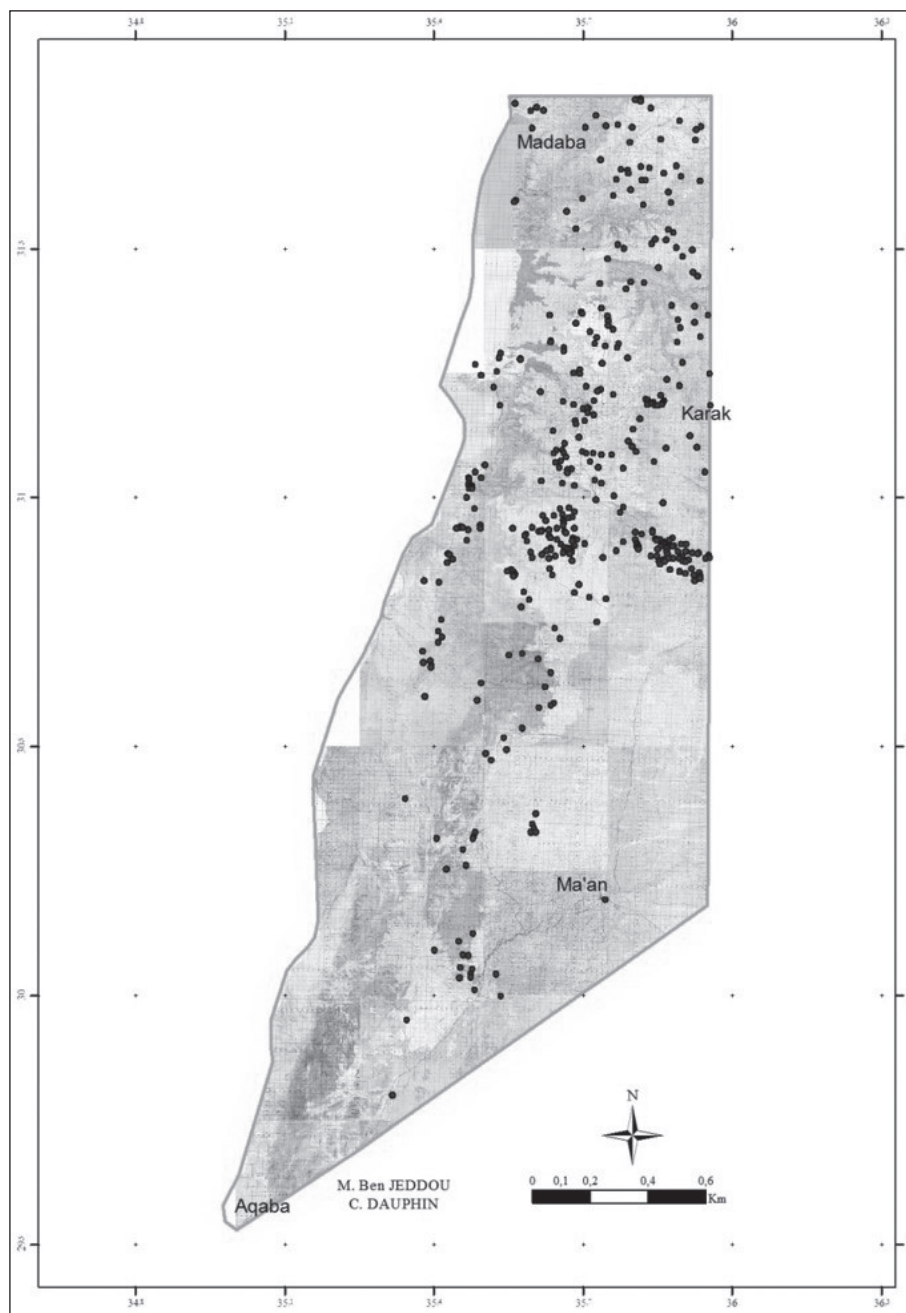
2. Distribution of Byzantine sites in southern Jordan (M. Ben Jeddou and C. Dauphin).

visibility, distance to hydrographic network, to springs, and to ancient roads).

Al-Karak (Charachmoba) in the Byzantine Period (BH)

Within the conversion from a macro to a micro study, the permanence of al-Karak (Byzantine Characmoba) as a centre led us to delimit a zone of seventy sites in its orbit and to focus on nine sites in particular, one to the north-east and the others to the south (FIG. 5).

This area was partially surveyed in the 19th century by Burckhardt (1822), Seetzen (1859), Tristram (1873), Klein (1879), Doughty (1926) and Horstein (1898), and subsequently in the 20th century by Bruennow and Domaszewski (1904), Musil (1908), Glueck (1939), and analytically by Canova (1954), who paid particular attention to the Byzantine features of the settlements. More recently, some of these sites were visited by the team of the “al-Karak Resources Project” (Mattingly1995: 4; 1996a:



3. Distribution of Islamic sites in southern Jordan (M. Ben Jeddou and C. Dauphin).

349-352; 1996b: 511-512; 1996c: 89-99).

The main centre, Characmoba $\chi\alpha\rho\alpha\chi\mu\omicron\upsilon\beta\alpha$ ¹ which belonged to *Palaestina Tertia* in the second half of the Fourth century, as attested by Libanius (*Epistula* CCCXXXIV, Foester 1921-22: 315, 1.7), is mentioned in AD 451 by Theodoretus of Cyrus (*PG* LXXXI, col. 340), by Hierocles in his *Synekdemos* (751, 5), by Stephanus Byzantinus (26, 1.10) and by Georgius Cyprius (1047) as under the

jurisdiction of the Patriarchate of Jerusalem. This was a bond that endured even during the relatively short Crusader domination. Although the sources and epigraphic documents trace the origins of the episcopal see to the fifth century, information concerning its bishops is limited; the conciliar lists provides no hint as to the local ecclesiastical community. The first mention is of Bishop Demetrius attending the local Synod of Jerusalem in AD 536 (Canova

1. The city is mentioned in the Old Testament as the main centre of Moab under the names of *Kir Moab* (Is 15, 1), *Kir Haresht*

(Is 16, 7) and *Kir Haresht* (Gr 48, 31). See also Spijkerman 1978: 108-115; Abel 1938: 418.



4. Distribution of Crusader, Ayyubid and Mamluk sites in southern Jordan (M. Ben Jeddou and C. Dauphin).

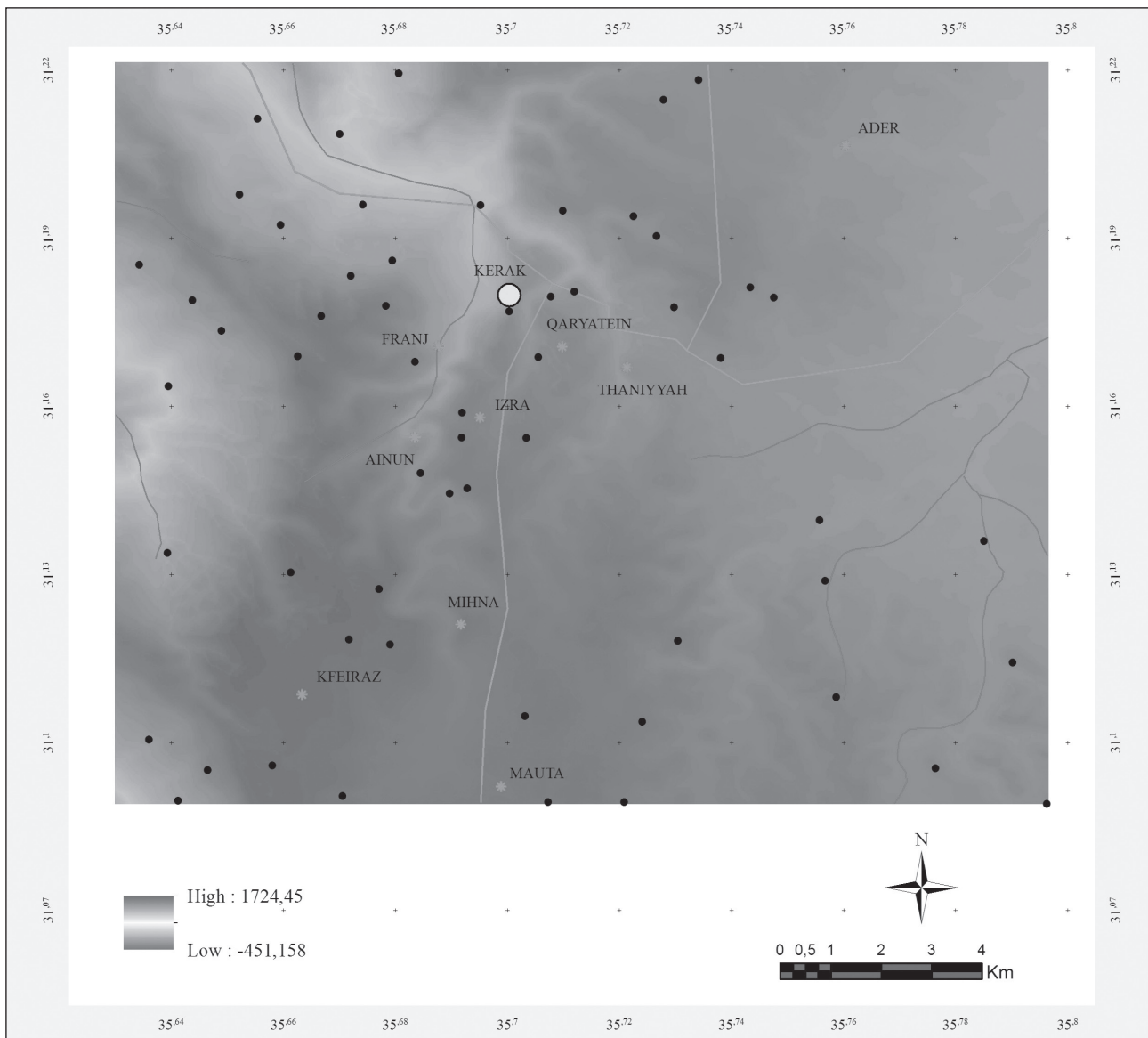
1954: LXII). The historical gap extends to the 8th century, when John the Healer is described in the *Life of St Stephen the Sabaite* as bishop of Charachmoba (Pirone 1991: 158). The city, originally Moabite, probably underwent a considerable urban development in the Byzantine period, as appears from its depiction in the Madaba Mosaic Map, dated to the second half of the 6th century (Piccirillo 1989: 83 and

88-89)².

On the Madaba Map, although incomplete, the city of Charachmoba is shown, set on a rocky spur enclosed by fortification walls with a church in the centre, and a second church of smaller proportions is shown in the vicinity of a city gate flanked by two towers (FIG. 6); in the foreground is a covered colonnaded street (Piccirillo 1993: 86). Although the location of the

2. Peter, a local notable, having been healed of death-carrying tuberculosis through the intercession of Saints Cyrus and John, wished to express his gratitude by building a church in their

honour in Charachmoba. See Sophronius, *Laus Ss. Cyri et Joannis et miraculorum quae ab eis gesta sunt ex parte narratio*, in *Patrologia Graeca* LXXXVII: cols 3629-3632.



5. The nine sites of a micro study within the territory of Byzantine Characmoba (M. Ben Jeddou and C. Dauphin).

churches remains uncertain, Patriarch Sophronius' account of the life and miracles of Saints Cyrus and John mentions a church dedicated to them by a local notable of Characmoba. It is also worth mentioning that the town of Characmoba was also depicted on the eighth century mosaic pavements of the Church of Mā'īn and of St Stephen at Umm ar-Raṣāṣ³.

The few surviving Byzantine remains on the north-western offshoot of the escarpment on which the modern city of Karak stands, includes

a cave that still bears the name of al-Ḥabīs (Canova 1954: 17-18; Hamarneh 2014: 364). The cave was accessible by means of ladders or ropes reaching a few steps cut into the rock next to the side entrance. The interior consisted of a central room, a cistern and a small apsed cell. This attests the close link between an urban centre and a community of ascetes and lends credence to Ibn Shaddad's (1285) observation that the city developed around a *coenobion* with a large monastic community⁴.

3. The Church of the Acropolis at Mā'īn was built in 719-720 (see Piccirillo 1989: 233; Piccirillo 1993: 201). The Church of St Stephen at Umm er-Rasas was dated to 718 and to 756 (see Piccirillo 1989: 296; Piccirillo 1993: 238).

4. Ibn Shaddad relates a story that Karak Castle was originally a Christian monastery. See Ibn Shaddad, *al-A'laq al-Khatira* (Dahan 1963 ed.: 3 and 69).



6. Byzantine Characmoba on the Madaba Mosaic Map, and pockets of terraced agriculture seen from al-Karak castle (Photos C. Dauphin).

Other cells, carved on two floors, are located on the left bank of Wadi Defali, not far from Karak. The caves are equipped with an originally vaulted cistern covered with *opus signinum* (tiles broken up into very small pieces, mixed with mortar, and subsequently beaten down with a rammer). The cave is located at the highest level. On its northern wall, a cross painted in red is flanked by the letters IC XC and other extremely deteriorated motifs. In a second cell, a little further south, two contiguous niches to the east were also painted. Canova (1954: 19-22) remembers having seen in the first niche the image of a haloed Christ flanked by two figures portrayed in the act of praying; in the second, stood a haloed figure, perhaps a saint.

The Territory of al-Karak (BH)

The territory of Characmoba (FIG. 5) stretched from Sail, north of al-Karak, to Wādī al-Ḥasā - Zared to the south, and was limited by the Dead Sea escarpment to the west. The nine

sites chosen for the micro study were part of that *chora*. These are:

Adir, located 7 km to the northeast, had at least one church. Inscriptions from the local Byzantine cemetery were dated from the sixth and seventh centuries, and more particularly between AD 506 and AD 665 (Canova 1954: 174-191), one undated inscription of which refers to a *diaconos*⁵.

Al-Firanj, located to the south-west of Karak, on the eastern slopes of Jabal al-Firanj, near Wadi al-Bawwāb, was also known as al-Basatin for the fertility of its surroundings. It seems to have reached its peak of development in the sixth century (AD 515-516 to AD 560)⁶. The settlement was also associated with a hermitage on the eastern edge of the village, on the slope of Umm ath-Thalij mountain. It consisted of cells on three levels, communicating with each other via steps and passages. A niche, now extremely deteriorated, in the eastern wall of the upper cave, was decorated with fragments

5. Inscription n. 208 mentions the burial of Asmathos *diaconos* of 80 years of age, with his son John (Canova 1954: 186).

6. These dates are mentioned in epitaphs (Canova 1954: 222-228).

of red-brown painted plaster. Below this niche, a rectangular rock-cut structure may have been an altar (Canova 1954: 220-221).

‘*Aynūn*, is situated to the south of Characmoba, from which it is separated by two deep *wadis*, Wādī al-Bawwāb and Wādī ‘*Aynūn* to the west and east. The settlement was extensive and flourished between the fifth and the seventh centuries (AD 477-478 to AD 621) according to funerary inscriptions (Canova 1954: 234-256). One church was identified in 1938⁷, and three vast cemeteries were defined to the north and west of the village, and to the southeast, a third *necropolis* was wedged between Wādī al-Bawwāb and Wādī ‘*Aynūn*.

Ath-Thaniyyah, located 4 km east of Karak, is set on a hilltop not far from the *Via Nova*. The settlement was served by three cisterns which stored water from Wādī al-Hawīyyah. One church was probably located in the village, as can be surmised from a lintel inscription invoking Christ *Sōter* (Canova 1954: 258). In the sixth century, the settlement reached the acme of its development as evidenced by dated inscriptions from AD 507-508 to AD 576-577 (Canova 1954: 259-262).

‘*Azra* – ‘*Izra*, to the south of Karak, near ath-Thalij and Wādī al-Bawwāb, was also a well organized settlement from the fifth to the sixth century (AD 460-461 to AD 577) (Canova 1954: 265-274).

Khirbat al-Qaryatayn, was a twin hilltop settlement bisected by Wādī al-Qaryatayn (Miller 1991: 91; Mattingly 1996: 357-358). The settlement was served by four cisterns⁸. It also had a stone quarry and traces of agricultural terraces have been detected. The site yielded poor epigraphic material generally dated to the 6th century.

Mahna (Mihna) is mentioned in the *Chronography* of Theophanes. It is located 8 km to

the south, on the road that connects Characmoba and al-Ḥasā. It dominates a fertile area overlooking Wādī al-Bawwāb. One church was recorded. Few epigraphic material indicates a peak of development in the fifth-sixth centuries.

Mu'tah, is the southernmost site in our sample. It is situated on a road parallel to the *Via Nova* running from ath-Thaniyyah. Mentioned by Theophanes in his *Chronography*, it witnessed the first major battle in AD 629 between the Byzantines and the Arab Conquerors as they surged out of Arabia. Although the Muslims were defeated, the fact that the nascent Muslim army had reached so far north heralded future catastrophes for the Byzantines. The settlement of *Mu'tah* is attested from the fifth to the seventh centuries (AD 437 to AD 652-653)⁹.

Digital Elevation Model, Geology, Pedology and Hydrology (CD, MBJ, JMC)

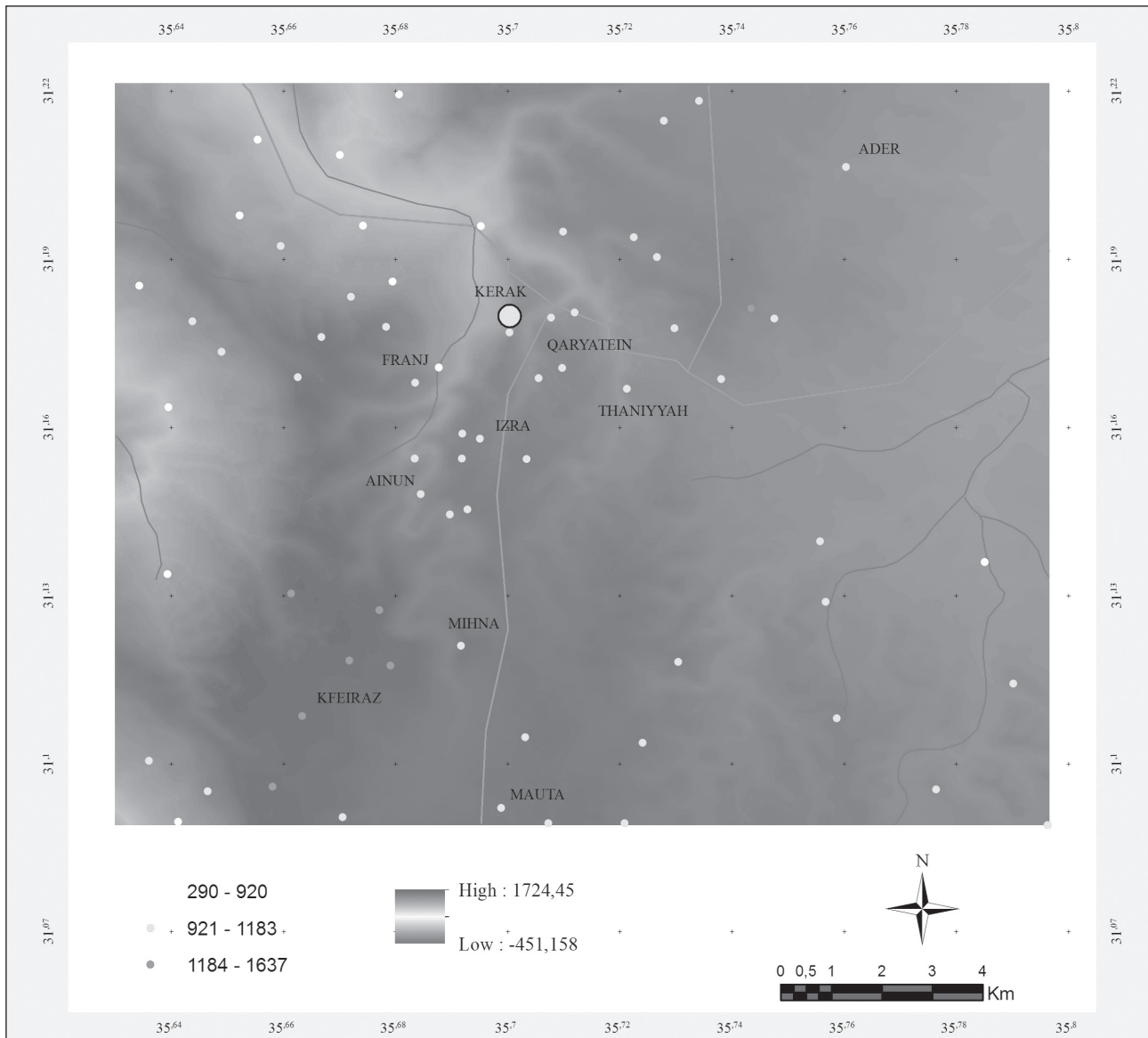
The Digital Elevation Model (DEM) resulting from georeferencing the scanned topographic map of the al-Karak region at the scale of 1: 50 000, obtained from the Royal Jordanian Geographic Centre (FIG. 7), shows that our nine sample sites lie on the edge of a mountainous area. The majority of sites in the al-Karak region, including eight out of our nine sample sites, are situated between 921 m and 1183 m. Kfeiraz and five sites around it are even higher, between 1184 m and 1637 m. This may be for three reasons, security, inter-site visibility, or control of roads. The latter factor is one of the characteristic elements of the southern Jordanian landscape in the Byzantine and Crusader periods.

The geological map of the al-Karak region (FIGS 8 and 9), georeferenced and digitised, shows that Adir, the northernmost site, is situated in a dry valley of a karstic plateau. Firanj and ‘*Aynūn* are built on dolomitic limestone (Wādī

7. The church was discovered during the building of a house, the uncovered materials including various liturgical objects and marble columns (Canova 1954: 230-231).

8. Four well-preserved cisterns may still be seen on the site, including a large bell-shaped cistern on its southern edge (Mattingly 1996: 358).

9. Most of the examined sites were established in the Roman period and probably served to provide agricultural products to military installations and *castra* along the *Via Nova*, especially in the IIIrd and IVth centuries. We are grateful to Thomas Parker for suggesting at ICHAJ 2013 this working hypothesis, still to be fully investigated by us.



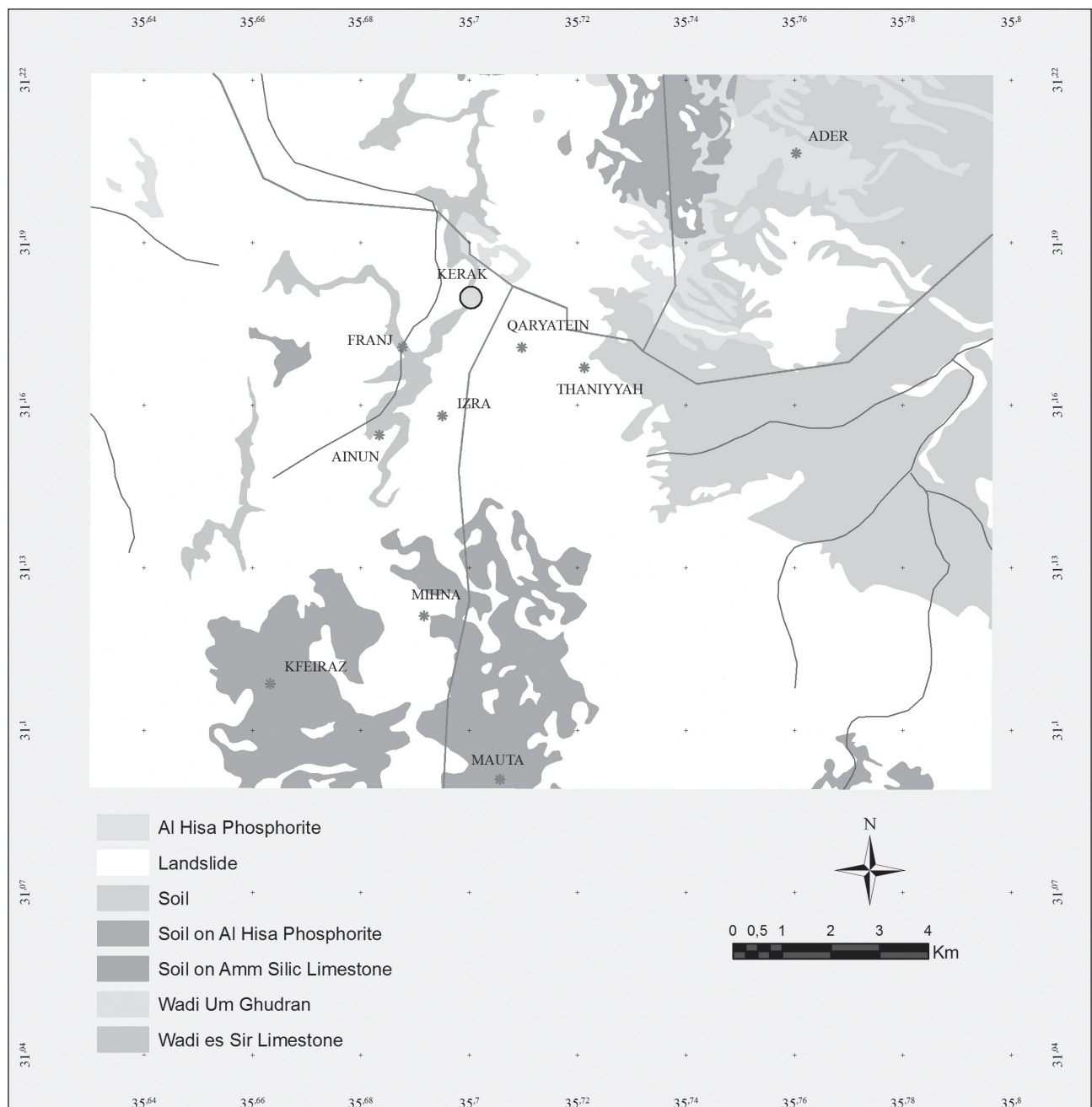
7. Digital Elevation Model (DEM) of the al-Karak region (M. Ben Jeddou).

as-Sir Limestone), Kfeiraz and Mu'tah on karst (Amman Silicified Limestone), and Qaryatayn, Thaniyyah, 'Izra and Mihna are on Landslides – areas difficult to cultivate.

It is important, however, to differentiate between the geological formations on which settlements stood and the pockets of soil in their vicinity which the Byzantine farmers cultivated. The pedological maps provided by the Jordanian Ministry of Agriculture classify soils into several categories based on their types. According to these, our greater area comprises 18 types of land regions and 147 units of soil associations. The agrological potential of the

majority of sites in our sample observable on the pedological map of the al-Karak region, georeferenced and digitised by M. Ben Jeddou (FIG. 10) was good, ranging from cereals and fruit trees for Mu'tah, Kfeiraz and Izra, and cereals, fruit trees and grazing for Qaryatayn and Adir. The agrological potential of the lands of Mihna, 'Aynūn, Firanj and Thaniyyah was even better, with diverse crops and high yields.

Owing to the lack of man-made modifications of the hydrographic network in southern Jordan, its present state is similar to that in antiquity. In general, in the al-Karak region, the sites form two groups: one in the northwest



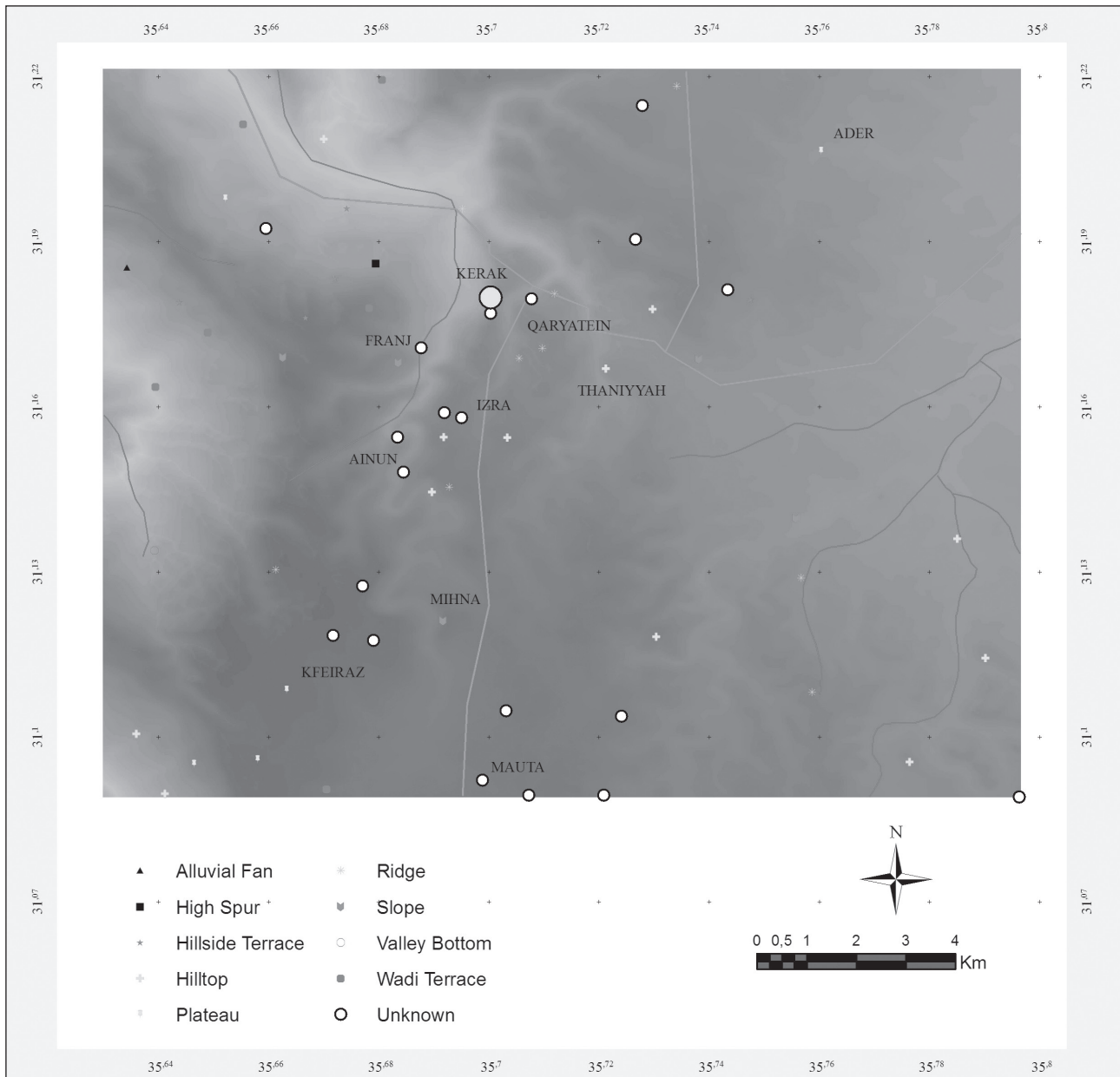
8. Geological Map of the al-Karak region (M. Ben Jeddou and J.-M. Castex).

connected with Wādī al-Karak, and another to the southeast watered by Wadi Batrak and its tributaries. The sites of this latter group tend to hug the *wadis*, according to the dendritic system, thus conforming to a well-attested pattern in southern Jordan in the Byzantine period (Dauphin and Ben Jeddou 2013: 26; Dauphin, Ben Jeddou and Castex 2013: 46-47). Of the sites in our sample, only two, Franj and ‘Aynūn were directly connected to the main hydrographic network. The relief is dissected

by the remains of valleys of intermittent *wadis* accessible by most of our nine sites, but the hydraulic system relied on cisterns cut into the limestone, recorded at ath-Thaniyyah and Khirbat al-Qaryatayn (Pace 1996: 369-372).

The Road Network (CD, MJB and BH)

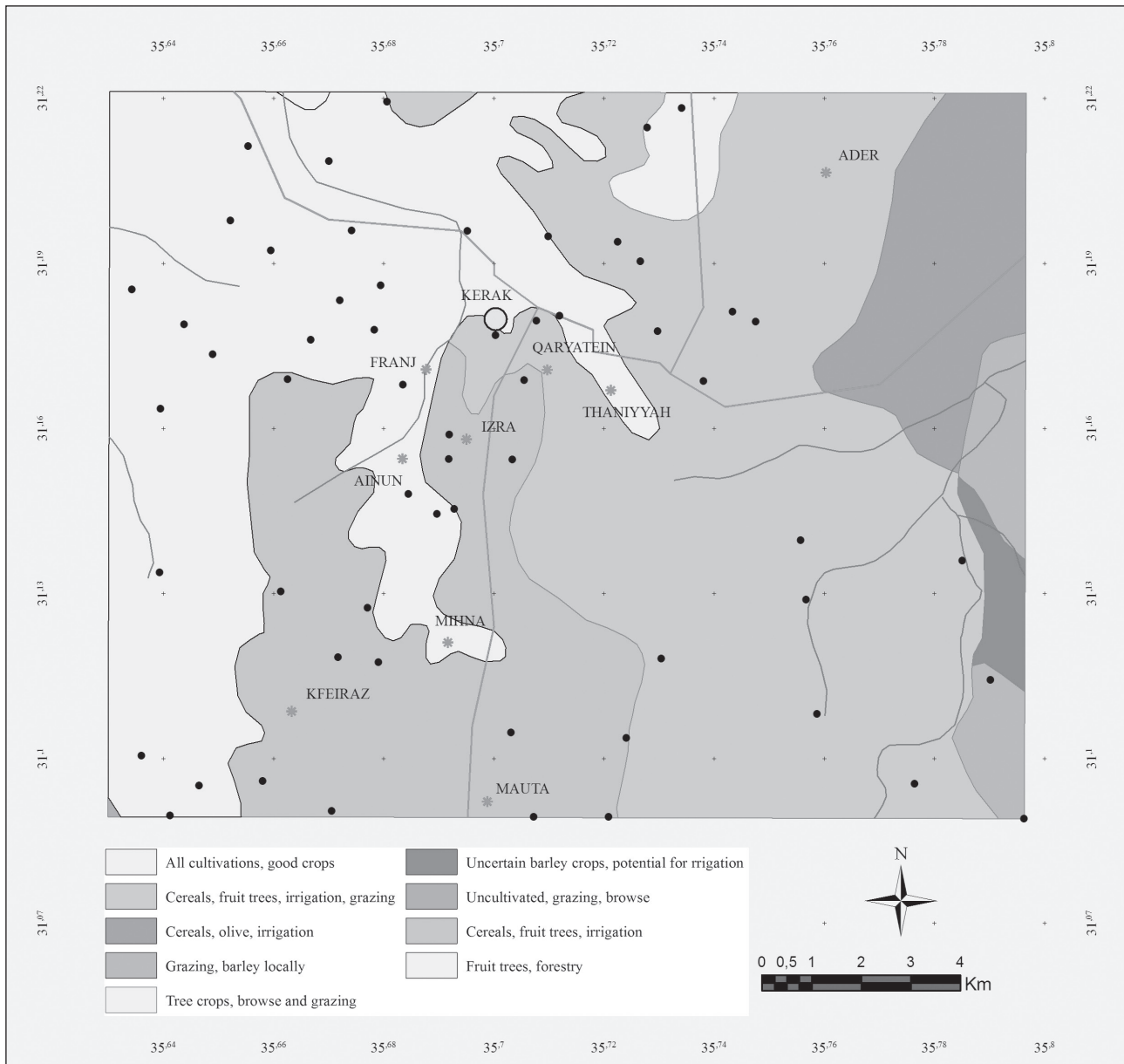
The ancient road network played a central role in the al-Karak region (FIG. 5). Characmoba was at the junction of the north-south *Via Nova Triana* and the east-west road linking the



9. Topozones of the al-Karak region (M. Ben Jeddou and J.-M. Castex).

eastern desert to the Dead Sea. Thaniyyah and Qaryatayn were just south of the east-west road to the immediate east of al-Karak. Thaniyyah was immediately south-west of the first junction of the north-south *Via Nova* with the east-west road, and Qaryatayn lay to the south of the second junction nearest al-Karak, at equal distance from the east-west road and the north-south *Via Nova*. Izra and Mihna were at no great distance west of the *Via Nova*. There is a preference for several settlements in our sample to being closely located to the road network, mostly at a distance of 30 mins' walk (Dauphin

and Ben Jeddou 2013: 26-27; Dauphin, Ben Jeddou and Castex 2013: 48). This explains the establishment of settlements at places devoid of fertile land for agriculture or water, such as Minha or Thaniyyah, whose population was probably engaged in moving agricultural produce and goods between settlements in the district. The *Via Nova* was followed in the Roman and Byzantine periods by auxiliary troupes or by commercial caravans from Ayla to Damascus, but after the Muslim Conquest the direction was reversed with the Muslim pilgrims travelling from Damascus southwards down through



10. Pedological Map of the al-Karak region (M. Ben Jeddou and J.-M. Castex).

Jordan to Ma‘ān¹⁰, Tabuk, Madina and finally Macca (Dauphin and Ben Jeddou 2012a: 85-86; 2013: 27-28; Dauphin, Ben Jeddou and Castex 2013: 48-49). According to Ibn Battuta (d. 1377), Thaniyya served as a pilgrim stop and an annual market place for caravans travelling to the Hidjaz (Ibn Battuta, in Defrémery and Sanguinetti 1853-1858 eds: 255-257; Petersen 2012: 14-15 and 36-37). The road network also served the *al-Barid* service, in particular

dispatches and postal communications between Cairo and Damascus, of vital importance under the Mamluks (Ibn al-Furat, *Ta’rikh Ibn al-Furat* IX: 138, Zurayq 1936-1942, ed; al-Maqrīsi, *as-Suluk fī ma’rifat dual al-Muluk* III: 656). Sources mention stations at Karak, ar-Rabba (Ghawanma 1992: 40) and another three located between Karak and Shaubak (al-Zahiri, *Zubdat kashf al-mamalik wa bayan at-Turuq wa ‘l-masalik*: 119, Ravaisse 1894 ed.)

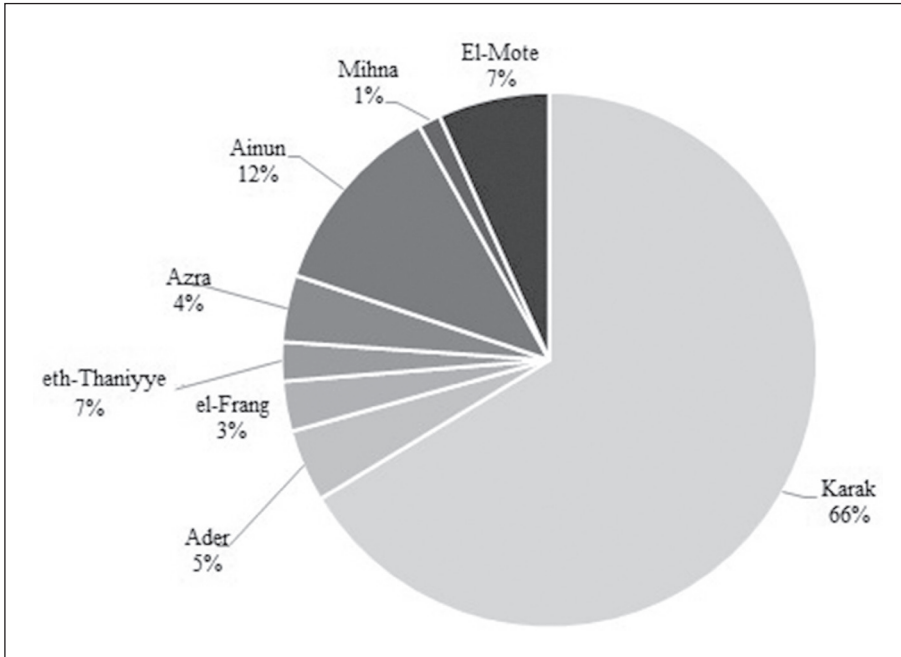
10. On the Early Islamic *hajj*, see Kennedy 2012: 76-107. On the *hajj* road from Damascus across Jordan, see Petersen 2012: 9-16; Dauphin, Ben Jeddou and Castex 2015. The *hajj* road was

improved under the Ayyubid Sultan al-Mu‘azzam ‘Isa, although only the section between Mu’ta and Ma’an was completed according to Ibn al-Jawzi (1907: 429).

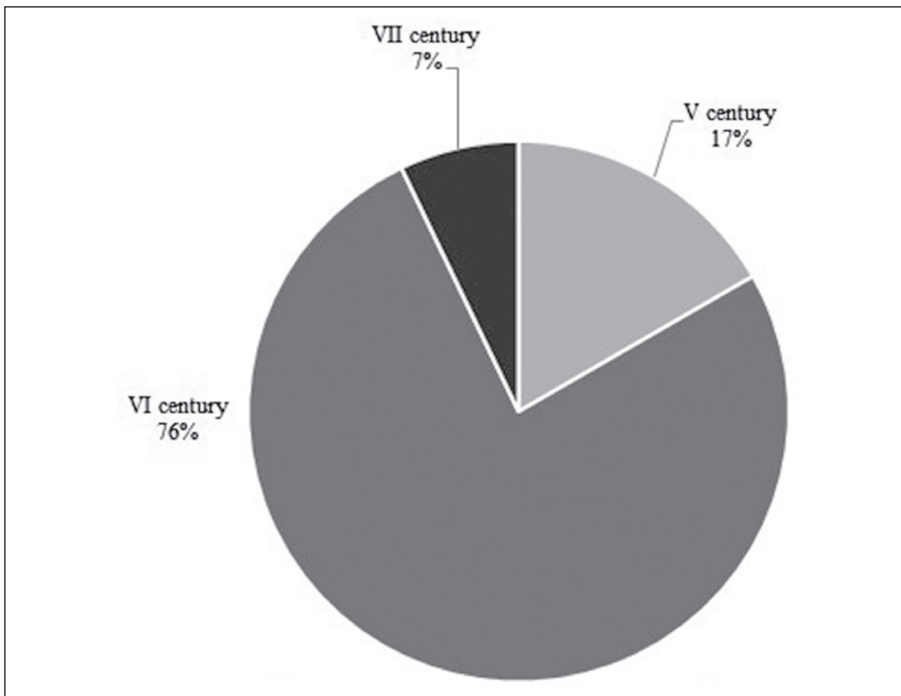
Demography (BH and CD)

Another type of evidence, although limited, enables one to reconstruct population trends in the Byzantine period in the hinterland of al-Karak; most of the dated documentation being epitaphs originating from cemeteries that formed an integral part of suburban topography (FIG. 11). These tombstones predominantly be-

longed to the fifth to seventh centuries, more specifically between AD 449-450 and AD 661) (FIG. 12). From the examined sixth century funerary inscriptions, it appears that high infantile mortality was a problem (FIG. 13)¹¹. The main body of our sample of inscriptions, although undated, relates to adults, mostly males, some surviving until their late 80s (FIG. 14). Most

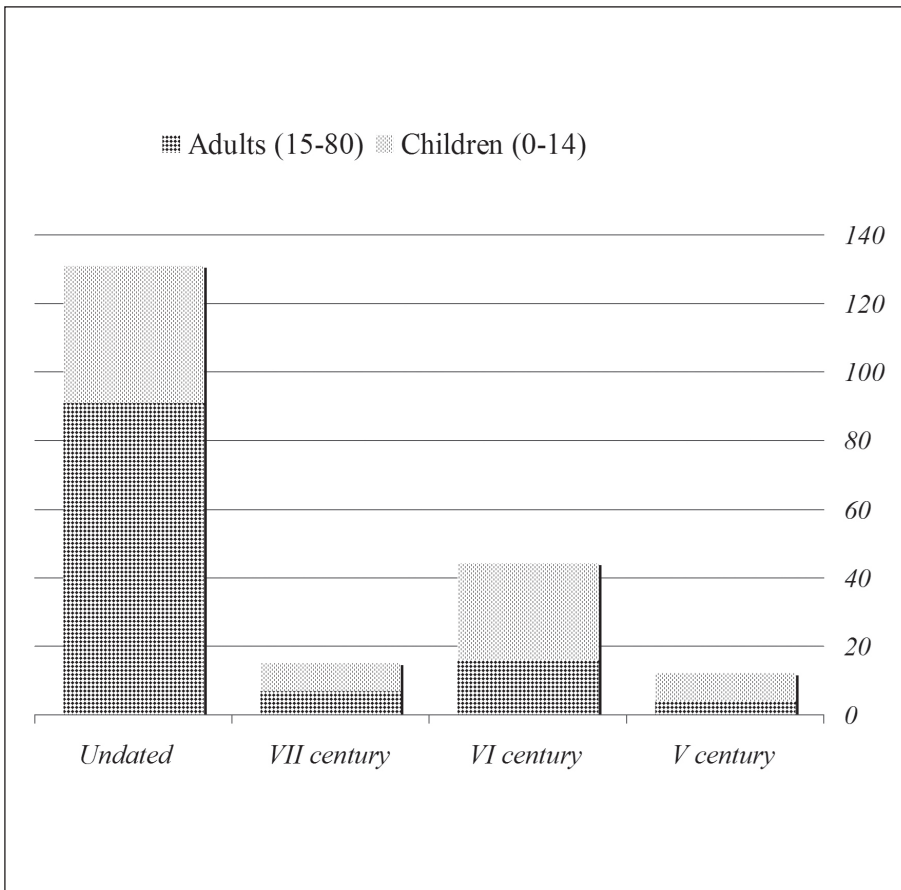


11. Byzantine Inscriptions from the sample area.

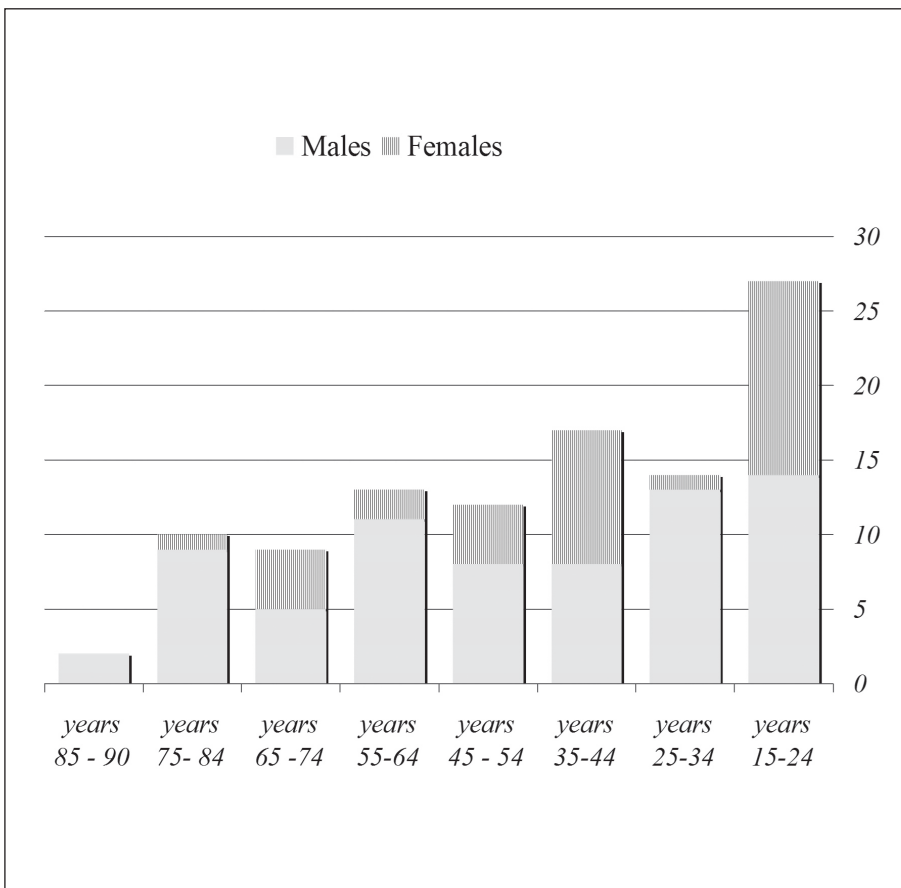


12. Dated Byzantine Inscriptions from the sample area.

11. This is in keeping with the high infantile mortality recorded in Byzantine Palestine (Dauphin 1998, II: 399).



13. Inscriptions classified according to age at death.



14. Age at time of death.

female deaths are recorded as being between 15 and 24 years of age, the prime child-bearing years (Pomeroy 1976: 169)¹². The greatest number of male deaths are between 15 and 34 years¹³.

No evidence connects mortality cases in the al-Karak region to the first outbreak of the Justinianic plague (AD 541-542), perhaps because the territory (*chora*) of Byzantine Characmoba relied principally on its own resources of grain production rather than on the importation of grain from Egypt where the pandemic peaked¹⁴. It seems rather that the al-Karak area was affected by subsequent waves of the plague in the period between AD 577 and AD 584¹⁵.

The difference in the distribution of sites between the Byzantine and Islamic periods (Umayyad, Abbasid, Fatimid) in the hinterland of al-Karak is considerable (FIG. 15). The number of sites fell from 70 to 6, the existence of 5 out of these 6 being related to the *Darb al-Hajj*. Thaniyyah's role as a pilgrim encampment

on the *Hajj* road and market place for caravans to the Hedjaz has already been mentioned. After the Arab Conquest, Mu'tah developed into a pilgrimage centre¹⁶.

Sites in the al-Karak Region During the Crusader, Ayyubid and Mamluk Periods (BH)

The distribution map of sites in the Crusader, Ayyubid and Mamluk periods indicates a remarkable revival of the agrarian landscape (FIG. 16). All nine sites in our sample were apparently resettled. The Mediaeval Arab geographers recognized the Karak plateau as fertile, arable and able to support a large population. Notably Khalil al-Zahiri¹⁷, al-Muqaddasi¹⁸, al-Umari¹⁹, Yaqut²⁰ and Abu al-Fida²¹ pictured a varied and flourishing agrarian economy and reported that the land of al-Karak grew mainly cereal crops – wheat and barley²². Vine, olive trees, almonds²³ and fruit trees (including apricot, pomegranate,

12. On female deaths due to precocious conception resulting from the marriage of nubile girls, abortions, miscarriages, still-births and difficult labour, see Dauphin 1998, II: 387-389. She emphasizes that because deaths connected with child-bearing are spectacular, they mask female deaths due to exhaustion and an iron-deficient diet, which provoked pernicious anaemia and had a noteworthy impact both on female mortality and procreation.

13. This does not conform to the pattern in Byzantine Palestine, whereby age at death for men oscillated between 30 and 39 years (Dauphin 1998, II: 438-439).

14. Byzantine Palestine, west of the *Ghawr*, has yielded greater epigraphic evidence for mortality in 541/542 (Kirk and Wells 1962: 168 and 179-181; Tsafirir 1988: 161; Di Segni 1997: 911-912; Dauphin 1998, II: 512-13; Stathakopoulos 2004: 280-81; Stathakopoulos 2007: 101). Cyril of Scythopolis (525-559), in the *Life of Cyriacus*, mentions that the plague spread to the Judean desert monasteries: "After he (Cyriacus) had spent seven years at Sousakim, the fathers of the laura of Souka in the days of the great and terrifying mortality, out of fear of the impending terror, came with one accord to supplicate him and, after long entreaty, brought him back from Sousakim to the laura" (Cyril of Scythopolis, *Life of Cyriacus*, Price 1991 transl.: 10 (229)). The links between plague and famine are examined by Dauphin 1998, II: 508-517.

15. Kennedy (2007: 88) has argued that plague was basically an urban phenomenon. However, notwithstanding references to Isaiah 63: 2-3, Joel 4: 13 and Lamentations 1: 153, John of Ephesus describes the population of villages and hamlets of Palestine totally wiped out by the plague of AD 541-542 (*Hist. Eccl.*, Frag. II E; Van Douwen and Land, 1889 eds, 228: 4-5 and 229: 27-29). Yet, is impossible to ascribe with any confidence the general demographic decline to plague alone, the decline being due to a combination of factors (Dauphin 1998, II: 517-518). Cemeterial areas are very extensive in the al-Karak region, although poor in

epigraphic material. It may therefore be suggested that the new waves of the epidemic of plague in the second half of the VIth century caused changes in funerary rites and burial customs. As noted by Patlagean (1977: 94), during outbreaks of plague, there was no time to engrave epitaphs, in view of the rapid turnover of deaths. Moreover, most of the plague-stricken bodies were probably burnt in order to avoid contagion. Thus, the archaeological proofs of "This plague in every place, accompanied", according to John of Nikiou by a "great famine" (*Chron.* 94: 18; Charles 1916 ed.: 150), are in no way proportionate to the extent and intensity of the epidemic described by Cyril of Scythopolis as resulting in a "very great and terrifying mortality" (*Vit. Kyr.* 229: 1; Schwartz 1939 ed.; Festugière 1963 ed: 46).

16. The shrine of Ja'afar Ibn Abu Talib and his companions in Mu'ta received much attention under Fatimid rule (Walmsley 2001: 536).

17. Although Al-Zahiri (*Zoubdat Kachf al-mamalik wa bayan al-turuq wa al-masalik*, Ravaisse 1894 ed.: 43) does not provide a detailed account, he notes that there were many villages.

18. Al-Muqaddasi (*Kitab ahsan al-taqasim fi ma'rifat al-aqalim*, de Goeje 1877 ed.: 180) records that the area contained trees and water springs.

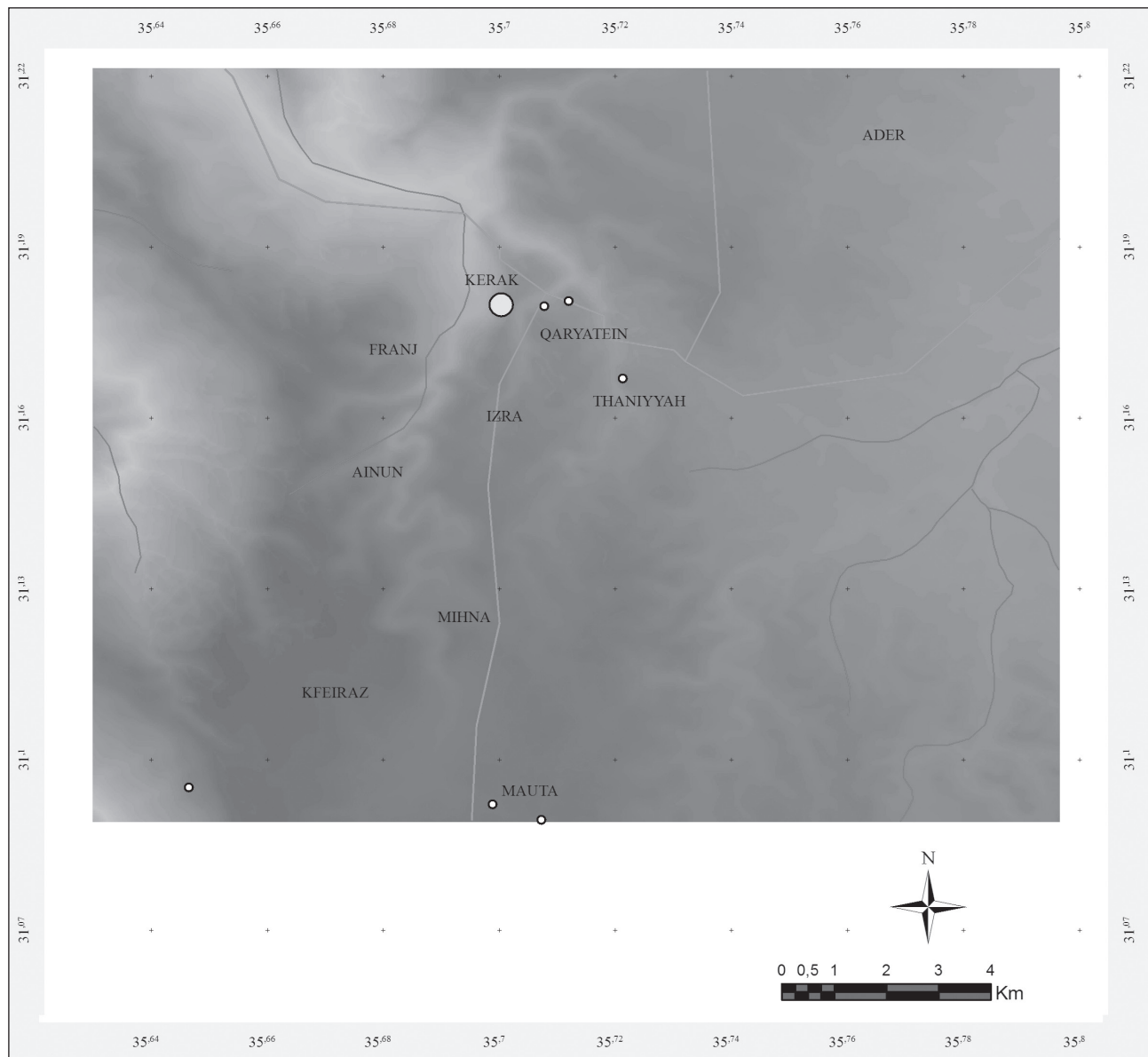
19. Al-Umari (*al-Ta'rif bi'l-mustalah al-sharif*, Shams al-Din 1988 ed.: 237-238) stresses that the land around Karak is very fertile.

20. Ya'qut (*Kitab mu'jam al-buldan*, Wüstenfeld 1866-1870 ed.: 677) describes the production of swords of high quality in Mu'ta.

21. Abu al-Fida, *Taqwim al-Buldan*, Re naud and MacGuckin de Slane 1840 eds: 274.

22. See also Cuinet 1896: 48-50; Doughty 1926: 22.

23. Al-Muqaddasi (*Kitab ahsan al-taqasim fi ma'rifat al-aqalim*; de Goeje 1877 ed.: 178 and 180) notes that many villages cultivated almonds and grapes. He even mentions that the production of sugared almonds (*qulub al-lawz*) was a reknown local speciality.

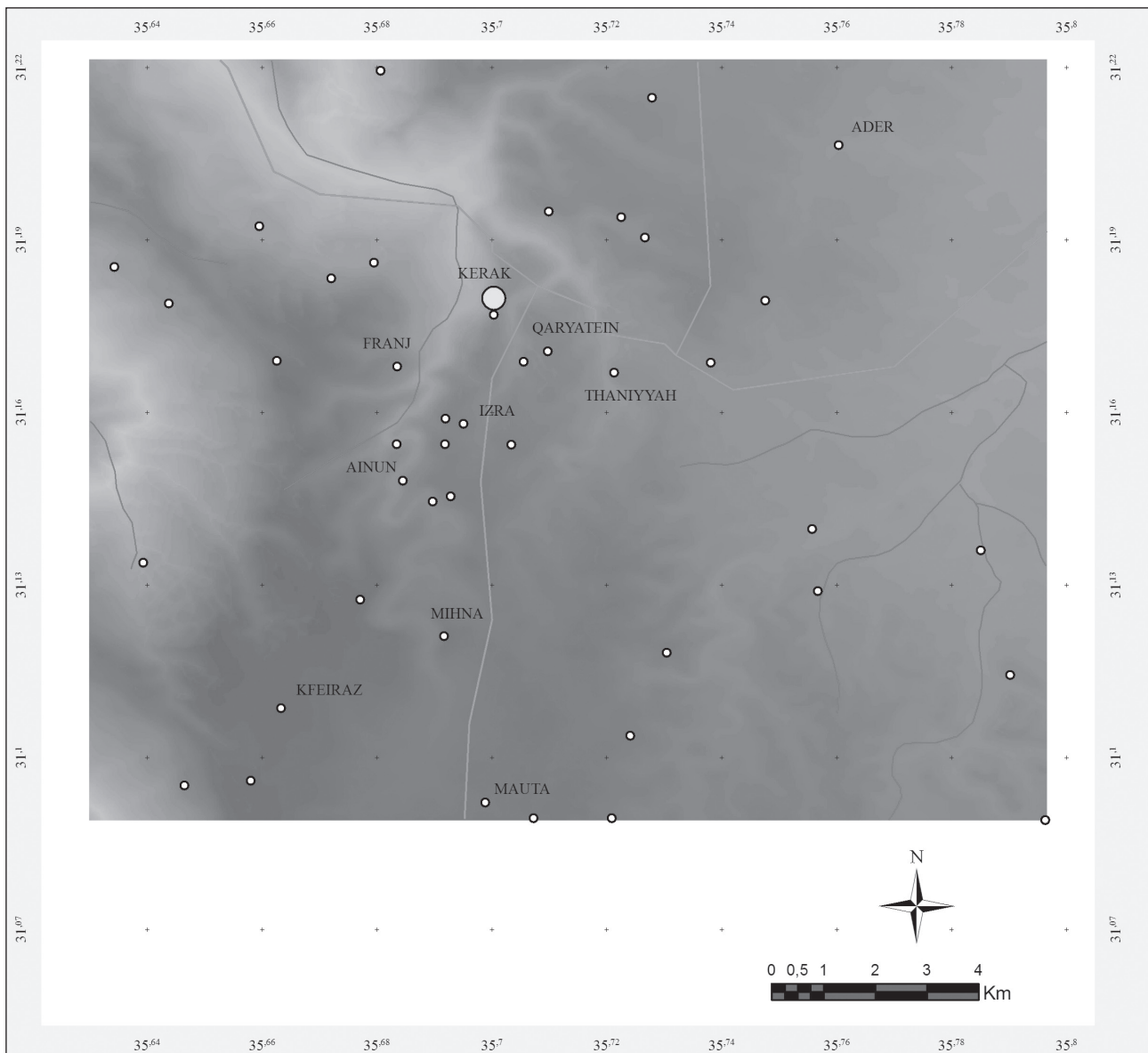


15. Distribution of Islamic sites in the hinterland of al-Karak (M. Ben Jeddou, C. Dauphin and J.-M. Castex).

apple and pear trees) were cultivated in the *wadis* around al-Karak²⁴. The list of *Waqf as-Sultan al-Ashraf Sha'ban* of AD 1375 describes a property in Wadi al-Karak consisting of an orchard, a house and a *hammām* fed by a water reservoir (Ghawanma 1992: 243-44). A second list known as *waqf of Adir* of as-Sulṭan al-Ashraf Sha'bān mentions the use of industrial installations, such as an olive oil press to the south of the same village (Ghawanma 1992: 84) and wheat mills located in Wādī aṣ-Ṣinā'iyah, to the east of Adir (Ghawanma 1992: 86).

What were the reasons for such a revival? The distribution of sites in the Crusader period follows closely that of castles. Thus, the Crusaders exercised control at first on one of the main routes between Cairo and Damascus, in order to levy direct economic benefits from trading and religious caravans. Secondly, the agricultural economy flourished as most of the villages and towns of the region were connected to trading networks operating within *Bilād ash-Shām*. The Karak stronghold had direct access to the cultivated land and

24. This can be deduced from Abu al-Fida's account, *Taqwīm al-Buldān*, Reinaud and MacGuckin de Slane 1840 eds: 247.



16. Distribution of Crusader, Ayyubid and Mamluk sites in the hinterland of al-Karak (M. Ben Jeddou, C. Dauphin and J.-M. Castex).

nearby villages, which were probably inhabited by a Christian population, as attested by al-Qalqashandi (*Kitab subh al-a'sha fi sina'at al-Insha* XII: 231-32; 1913-18 eds) Abu al-Fida (*Taqwim al-Buldan, Géographie d'Aboul Féda*: 247; Reinaud, MacGuckin de Slane 1840 eds.) and al-Maqrîsi (*Kitab al-suluk li ma'rifat duwal*

al-muluk I: 912; Ziada and Ashour 1934-1972 eds). Crusader chronicles also state that in the beginning of the 12th century Arab Christians from the Karak plateau were transferred by the Crusader king across the Jordan river to repopulate Jerusalem and its surrounding areas²⁵. On the other hand, during his military

25. According to William of Tyre (1986 ed.: 535-36), "The King (Baldwin I) felt that the responsibility for relieving the desolation of the City (Jerusalem) rested upon him. Accordingly, he made careful investigations in regard to some source whence he may obtain citizens. Finally he learned that beyond Jordan in Arabia there were many Christians living in villages under hard conditions of servitude and forced tribute. He sent for those people and promised them improved conditions. Within a short time,

he had the satisfaction of receiving them with their wives and children, flocks and herds, and all their households". Though William of Tyre provides no direct indications of which specific area the Christians came from, we may presume that they came from the south around Wadi Mujib. See also William of Tyre (1844 ed.): 500-501, and (1943 ed.): 507-508; Prawer 1972: 496 and 502; Mayer 1992: 48-49; Schick 1997: 80; Millwright 2008: 26; Hamarneh 2012: 182.

campaigns against al-Karak in 1170 and 1183, Salah ed-Din focused on the intentional destruction of farmlands in order to prevent vital access to the natural resources²⁶ as the Latin Kingdom of Jerusalem relied essentially on the fertile lands of the Karak plateau and of the Jordan valley for the supply of basic foodstuffs. The density of settlement and the agricultural wealth of the local economy is indirectly recorded by Ibn Jubayr, who listed 400 villages in the area of Karak (Wright and de Goeje 1907 eds: 287). Ibn al-Dawadari, Al-Maqrиси and Ernoul indirectly indicate the monetary value of the area; during the negotiations between as-Sultan al-Kamil and the Crusaders who held the port of Damietta in 1218-1219, the sum of 30,000 besants/dinars (or 15,000 besants / dinars *per annum* for an unspecified period of time) was offered to compensate the omission of Karak and Shawbak from the list of lands to be restored to the Franks (Ibn ad-Dawadari VII, 1961-1962 eds: 209; Al-Maqrиси *Kitab al-suluk li ma'rifat duwal al-muluk* I: 207, in Ziada and Ashour 1943-1972 eds.; Ernoul, in de Mas Latrie 1871 ed.: 417 and 464). Subsequently, *Mamlakat Karak* was of great economic and strategic value for the Mamluk State: it was the granary of Egypt, the seat of Mamluk power, and the sugar industry was a profitable sector of Mamluk economy (Al-Qalqashandi, *Kitab subh al-a'sha fi sina'at al-Insha* IV: 190, 1913-18 eds; al-Maqrиси, *as-Suluk fi Ma'rifat Dual al-Muluk* II: 584, in Ziada and Ashour 1943-1972 eds, and III: 984; Milwright 2008: 129). Karak under the Mamluks had its own bishopric, as reported by Al-Qalqashandi (*Kitab subh al-a'sha fi sina'at al-Insha* IV: 194, and XII: 425-26; 1913-18 eds). Thus, despite a break in the demography of our sample area during the Islamic period, al-Karak operated as the economic centre of the region with regular markets maintaining its role into the Mamluk period and beyond.

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26. William of Tyre (1986 ed.: XXII. 29. 21-25) writes that during Salah ed-Din's siege of Karak, the houses of the town were "well stocked with grain, barley, wine and oil".

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