

# Agronomic and Botanical Areas in Al-Andalus: The *Munya* in Andalusian and North-African Arabic Sources

V́ctor M. BARRASO ROMERO

This paper is the result of a philological analysis of the Arabic term *munya* (pl. *munā*) — which has given rise to the Spanish term *almunia* and the Portuguese term *almuinha* — in Arabic dictionaries and lexicographical works, Andalusí agronomic and botanical treatises, and other historiographical works, both Andalusí and North-African, written in different periods of the history of Al-Andalus and the *Magrib*.

This study attempts to define the concept of the Andalusí *munya*, to investigate its origin, to discover its structure and the agricultural and botanical activities which were carried out in these spaces, to describe some of the most important *munyas* from each period, and to establish a link with other concepts related to the *munya* which appear frequently in Andalusí and North-African Arabic sources, such as *janna*, *bustān* or the Berber term *agdāl*, which we shall also analyse briefly. All these terms, which refer to residential and agricultural structures which were located on the outskirts of cities, have been vaguely and indiscriminately translated into European languages as “garden”, which has often led to errors in their interpretation.

**Keywords:** Al-Andalus, Agronomy, Botany, Islamic Gardens, *Munya*

## 1. The Andalusí *Munya*, the “Object of Desire”

The study of each of the aspects of architecture, agriculture, botany and landscape which are integrated into the concept of the Andalusí *munya* has aroused great interest. Despite their origin being essentially as agricultural structures used for growing different species of plants, which were generally located on plots of land a short distance from cities, in some cases they

achieved such a level of development that they gave rise to the creation of peripheral districts, and even became aristocratic towns in their own right and centers of power where important decisions were made.

However, many agricultural structures, especially those built in the earliest period, were destroyed during the times of greatest upheaval and instability in the history of Al-Andalus. As such, archaeological excavations have played an extremely key role in reconstructing *munyas*. Of equal importance is the study and philological analysis of medieval Andalusī Arabic texts, agronomic treatises and historiographical and geographical works. These provide very interesting data on the *munya*, its origin and its location, and even describe some of the practices, which were generally experimental in nature, which were carried out in the *munyas*.

The task of searching for this term in some of the dictionaries and glossaries reveals certain interesting issues, such as the fact that in the majority of these works the concept of the Andalusī *munya* has been defined in a very imprecise way as “vaste jardin”<sup>1</sup>, or simply as “garden”, “vegetable garden” or “farm” indiscriminately, without providing any kind of qualification or more specific details in this respect. Furthermore, it can also be observed that although almost all dictionaries include the original meaning of the term *munya* or *minya*, which is “wish, desire, object of desire”,<sup>2</sup> in the vast majority of these lexical works no meaning is found which refers to a purely Andalusī type of space for agricultural cultivation, and which boasted, in many cases, a residential palace and various other elements of architecture (a mosque, pools, an irrigation system, walls, etc.), as portrayed in various sources. On the other hand, although the Andalusī *munya* is only defined in the most specialised works, it is at least common to find the definition of other terms which are closely related to the *munya* in most Arabic dictionaries and lexical works, such as *bustān*<sup>3</sup> and *janna*,<sup>4</sup> which also denote

<sup>1</sup> R. Dozy. (1956). *Supplément aux dictionnaires arabes*, p. 620.

<sup>2</sup> H. Wehr. (1994). *A Dictionary of Modern Written Arabic (Arabic-English)*, p. 1088.

<sup>3</sup> E. W. Lane. (1863). *Arabic-English Lexicon*, p. 202.

<sup>4</sup> *Op. cit.*, p. 462.

agricultural structures which were all located in the outlying districts of population centres. Other terms which should be mentioned are *ḥadīqa*, defined as “a garden surrounded by a wall”,<sup>5</sup> and *rawḍa*, “a garden without a wall, a meadow or a verdant tract of land, somewhat watery, not ploughed, but covered with grass and flowers, and sometimes a garden”.<sup>6</sup> In its Hispanised form, the term *munya* has become the derivative “almunia, almuinha, almuia or amuya” and in Portuguese it is “almuinha, almunha or almoinha”, which has been defined by R. Dozy as “jardin, métairie, hameau”.<sup>7</sup> In the dictionary by F. Corriente, in addition to a whole series of terms derived from the root “*mny*”, we find *munya/munyāt* defined as “country-house”<sup>8</sup> or “farm-house”, the origin of which can be found in the Andalusī Arabic term *almūnya* which is, as described, a semantic development of the classical Arabic term *munya* meaning ‘wish’.<sup>9</sup>

In the work by the great Arabic lexicographer Ibn Manẓūr (1233-1311), the *Lisān al-‘Arab al-Muḥīṭ* (The Arab Tongue) — which is considered to be the most exhaustive classical Arabic dictionary as it compiles a large part of the material found in its preceding lexicographical works — different meanings are also given for the Semitic root *m-n-y*,<sup>10</sup> with its different vocalizations and morphological variants, although, as is the case with nineteenth — and twentieth — century dictionaries, no meaning is found among the quotations and fragments, many of them taken from *ḥadīṭ*, which make reference to the Andalusī concept of *munya*. As such, in the *Lisān al-‘Arab* the term *manà*, *manya* is defined as “death” (*mawt*) “because it is our fate” (*lianna-hu al-qadr ‘alaynā*) and *munà*, pronounced with a *ḍamma* (u) over the letter *mīm* (m), which is the plural of *munya*, means “what man desires” (*mā yatamannā al-rāḡul*).<sup>11</sup> In subsequent lexicographical works such as *al-Qamūs*

<sup>5</sup> *Op. cit.*, p. 532.

<sup>6</sup> *Op. cit.*, p. 1187.

<sup>7</sup> R. Dozy. (1974). *Glossaire des mots Espagnols et Portugais dérivés de l’Arabe*, p. 180.

<sup>8</sup> F. Corriente. (1997). *A Dictionary of Andalusī Arabic*, p. 514.

<sup>9</sup> F. Corriente. (2008). *Dictionary of Arabic and Allied Loanwords*, p. 161.

<sup>10</sup> Ibn Manẓūr. (1981). *Lisān al-‘Arab al-Muḥīṭ*, pp. 4282-4285.

*al-Muḥīṭ* (Comprehensive Dictionary), by the Persian lexicographer al-Fīrūzābādī (1329-1414), the same root of *m-n-y* is also found,<sup>12</sup> although considering that it is based on the work by Ibn Manẓūr, it is scarcely strange to discover that the majority of meanings coincide with those found in the *Lisān al-‘Arab*.

Finally, concerning the etymology of this term, the A. T. Tibi edition of the memoirs of the last emir of the Zirid dynasty in Granada, ‘Abd Allāh b. Buluggīn (1073-1090), features a note on the term *munya* (pl. *munyāt*), about which it states: “of Greek origin, *munya* was borrowed by the Copts and used in Egypt, in the form *minyā*, to indicate a station, port, or monastery”.<sup>13</sup>

## 2. “Maison de plaisance” and Agricultural Functionality: the *Munya* of *Ruṣāfa*

Leaving aside possible etymological interpretations, *munya* is the term which was used in Al-Andalus in the sense of a large country estate, usually with a house in the middle, corresponding to a “huerta” or “cortijo” in Spain today, an *‘izba* in Egypt or an *‘azīb* in Algeria.<sup>14</sup> *Munyas* were a type of residential construction, “country houses” surrounded by gardens and extensive farmland. They were agricultural operations which served as occasional residences for the caliphs and aristocrats, and their origin lies in the Islamic Orient or *mašriq*. The Andalusī *munya* would have served a dual purpose: (1)

<sup>11</sup> *Op. cit.*, p. 4283.

<sup>12</sup> Al-Fīrūzābādī. (1952). *Al-Qamūs al-Muḥīṭ*, p. 394.

<sup>13</sup> Tibi, A. T. (1986). *The Tibyān. Memoirs of ‘Abd Allāh b. Buluggīn, Last Zirid Amīr of Granada*, p. 207.

<sup>14</sup> The term *‘izba* (pl. *‘izab*) is used in Egypt with the meaning of “country estate, farm, rural settlement”. See H. Wehr. (1994). *A Dictionary of Modern Written Arabic (Arabic-English)*, p. 713. From the same root of *‘-z-b* we also find the term *‘azīb* (pl. *‘uzabā*) which is used in Algeria with the meaning of “ferme, métairie”: R. Dozy includes a quote by Eugène Daumas (1803-1871) in which he states that “c’est une sorte de ferme habitée pendant la saison des travaux agricoles ; mais plus tard il a dit qu’il faut y substituer celle-ci: portion de terre affectée au pâturage des bestiaux d’un *zāwiyya*; gourbi ou tente sous laquelle demeurent les bergers pendant la saison des pâturages”. R. Dozy. (1956). *Supplément aux dictionnaires arabes*, p. 124.

on the one hand, it had a strictly agricultural function, as this land was used for growing species of plants which would have supplied the tables of the caliphs and important landowners; (2) and on the other, it had an ornamental function, as these sweeping gardens would have been used as areas for recreation, pleasure and relaxation exclusively by the emirs, caliphs and aristocrats. This second function, which portrays the *munya* as a place of retreat, could be identified with the Persian *bustān* (pl. *basātīn*) — based on its etymology of *bū* (smell, perfume) and the suffix for place, *estān*. This has been defined as “a place where odour, or fragrance, collects, or is collected, a garden of sweet-scented flowers and trees”,<sup>15</sup> and the term was originally used in the Orient to denote gardens which had a purely ornamental and recreational purpose, although, as these pages will show, it is difficult to delimit the boundaries separating the two terms, as their use varied in Al-Andalus, and in certain periods they were used as synonyms.

These large estates were located in the outlying districts of the large Andalusian cities such as Cordoba, Seville, Granada and Almeria, and they were even found on the outskirts of the cities in the border areas of the Upper March,<sup>16</sup> such as Huesca (*Wašqa*),<sup>17</sup> among others. These expansive sites were used for cultivating ornamental flowers, aromatic herbs, fruit trees and other exotic plants which had been introduced into al-Andalus and which, once they had undergone an initial period of acclimatisation to these lands, were further introduced and spread around the rest of the country. As a result, we must consider the *munya* as a place where activities of a dis-

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<sup>15</sup> E. W. Lane. (1863). *Arabic-English Lexicon*, p. 202.

<sup>16</sup> “Al-Andalus had no northern frontier in the modern sense. Between the area securely held by Muslim and that securely held by the various Christian states was a tract of land more loosely held and merging into a no-man’s land. These were the Marches. The Muslim defense was based on Saragossa for the Upper March, on Toledo for the Middle March, and on Mérida for the Lower March”. W. Montgomery Watt, W. and P. Cachia. (2008). *A History of Islamic Spain*, pp. 27-28.

<sup>17</sup> “Les *munyas* de la région de Huesca (*Wašqa* ou *Waška*), dans la Marche Supérieure, sont de même nature. Ce sont des établissements agricoles ou domaines ruraux appartenant à un seul propriétaire”. V. Lagardère. (1993). *Campagnes et paysans d’Al-Andalus VIII-XV s.*, p. 56.

tinctly experimental nature were carried out, because in addition to being used as a gateway for the entry of new plant species, agricultural techniques were being put into practice there which were hitherto unknown in the Iberian Peninsula.<sup>18</sup> Thanks to these, new species were obtained, the quality of fruit was improved, production was increased and new uses were discovered (medicinal, pharmacological, dietary and cosmetic) for certain plants.

All the evidence points to the fact that the Muslim West had no experience of this type of residential construction until the arrival in Al-Andalus of the Umayyad caliphs from Damascus. At that point, for the first time, Caliph ‘Abd al-Raḥmān I (756-788)<sup>19</sup> commissioned the building on the outskirts of Cordoba of the *Munyat al-Rusāfa*, which is considered the first and one of the most important *munyas* in al-Andalus. According to the chroniclers, the Ruṣāfa, which is sometimes referred to in the sources as a *munya* and at other times as a *qaṣr* (palace), was designed as a place of recreation for the personal use of this caliph. It was located three kilometres to the north-west of Cordoba, and it was named by ‘Abd al-Raḥmān I after the *Rusāfa* in Syria, which had been built in the north-east of that country by his grandfather, Caliph Ḥiṣām b. ‘Abd al-Malik (724-743).

Al-Maqqarī (1577-1632),<sup>20</sup> the North-African historian born in Tlemcen, in his work *Nafh al-Ṭīb min Ġusn al-Andalus* (“The Breath of Perfume from the Branch of Green Andalusia”),<sup>21</sup> cites some of the many *munyas* which were built in the area surrounding the city of Cordoba, among them the

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<sup>18</sup> Prominent in this respect was the technique of grafting (*tarkīb*), in all of its various forms, which was carried out in these estates. The way in which it was done is described in many of the agronomic treatises, in particular in ch. VIII of *Kitāb al-Filāḥa* by Ibn al-‘Awwām, which is dedicated exclusively to grafting techniques, the various types and how it was done.

<sup>19</sup> ‘Abd al-Raḥmān b. Mu‘awiyya, the nephew of Caliph Ḥiṣām (724-743), fled to Al-Andalus following the fall of the Umayyad Caliphate in 750, establishing himself and proclaiming himself “Amīr” in 756. Concerning the rule of ‘Abd al-Raḥmān, see the second chapter of H. Kennedy. (1997). *Muslim Spain and Portugal: A Political History of al-Andalus*, pp. 30-38.

<sup>20</sup> For further information on this author, see E. Lévi-Provençal. (1978). “Al-Makkarī”. *EI* (IV): p. 187.

*Munyat al-Ruṣāfa*, of which he writes that it was built “at the beginning of his rule (the rule of ‘Abd al-Raḥmān b. Mu‘awiyya) for his personal enjoyment (*li-nuzhi-hi*); and where, to the north-west of Cordoba (*bi-ṣamāl Qurṭuba munḥarifat ilā al-ġarb*), he spent long periods of time in the beautiful residence (*qaṣr ḥasan*) which he had ordered to be built there”.<sup>22</sup> Later his successors, in particular his grandson, Emir Muḥammad I (852-886), made various improvements and extensions to this *munya*.

Regarding the agricultural activities engaged in at *al-Ruṣāfa*, many of which, as previously mentioned, were experimental in nature, the introduction and acclimatisation of new species must be highlighted. An example of this can be found once again in the work by the author al-Maqqarī,<sup>23</sup> quoted above, who writes that among other species, a variety of pomegranate (*rummān*) known as *safarī* was introduced, a species which was brought from the *Ruṣāfa* of Caliph Hiṣām, in Syria, and which was strikingly beautiful. One interpretation regarding the name of this variety is that it was Safar ibn ‘Ubayd al-Kilāī, one of the closest friends of ‘Abd al-Raḥmān I, who brought it from Syria, and that after sowing the seeds in the land that he owned in Malaga he managed to produce a fruit with similar characteristics to the *munyat Ruṣāfa* in the East. The Caliph immediately ordered it to be grown in the *Ruṣāfa* in Cordoba and other gardens in that city, which is how the species came to be introduced. People subsequently attributed its origin to Safar, and as a result, from then onwards the variety was known as *safarī*.<sup>24</sup>

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<sup>21</sup> A work in two parts, the first of which is dedicated to the history and literature of Muslim Spain, and the second of which is dedicated to the figure of Ibn al-Ḥaṭīb. Al-Maqqarī. (1855). *Kitāb Nafh al-Ṭīb min Ġuṣn al-Andalus al-Ratīb wa-Dīkr Wazīr-hā Lisān al-Dīn ibn al-Khaṭīb*. Leiden.

<sup>22</sup> *Op. cit.*, vol. I, p. 304.

<sup>23</sup> *Op. cit.*, vol. I, pp. 467-468.

<sup>24</sup> According to other interpretations, this variety is called *safarī* (“traveller”), “as a result of the tales surrounding its Eastern origin”. E. García. (2008). “Utility and Aesthetics in the Gardens of Al-Andalus: Species with Multiple Uses.” In: P. Dendle (ed.). *Health and Healing from the Medieval Garden*, p. 209.

Another important *munya* near Cordoba was *Madīnat al-Zahrā'*.<sup>25</sup> A palace was built in this agricultural space along with various other elements of architecture including mosques, reception rooms and baths. Its construction was begun by 'Abd al-Raḥmān III (912-961) in 936, but as with the *Ruṣāfa*, it was destroyed in 1010<sup>26</sup> following the revolts which brought about the end of the rule of the Umayyad dynasty and the fall of the Caliphate of Cordoba. However, in spite of the destruction of *Madīnat al-Zahrā'* and the scarcity of surviving texts which describe the agricultural and botanical activities carried out in the gardens there, archaeology has allowed its design to be reconstructed with a reasonable degree of reliability. As such, the various archaeological studies which have been carried out on the site indicate that *Madīnat al-Zahrā'* must have had at least three gardens: (1) "the small garden (or Prince's Garden) on the uppermost terrace that was reserved for elite inhabitants of the palace", (2) "a large quadripartite garden on the lowest terrace that has only partially been revealed through excavation", and east of this (3) "a garden of equal dimensions and similar layout on the middle terrace, extending in front of the reception hall known as Salon Rico".<sup>27</sup>

In *Calendar of Cordoba (Kitāb al-Anwā')*,<sup>28</sup> a work from the tenth century, the *Munyat 'Ajab* is also mentioned, which was located on the other side of Cordoba, on the left bank of the Guadalquivir River, "where the lepers are". This *munya* is described as the "maison de plaisance" (Dozy 1961, 110)<sup>29</sup> of al-Ḥakam I (796-822). *Munyat 'Ajab* is also referred to in the work by

<sup>25</sup> "... the origin of his name is lost in the mists of time. Some say it was to please his mistress, Zahrā', whose statue stood over the main entrance; others, that it was named after the Prophet's daughter, Fāṭimat al-Zahrā'. This second explanation seems the more likely, for the newly self-declared caliph was keen to show his subjects, and the world, his power and religious credentials". J. al-Khalili. (2011). *The House of Wisdom: How Arabic Science Saved Ancient Knowledge and Gave Us the Renaissance*, pp. 192-193.

<sup>26</sup> However, *Madīnat al-Zahrā'* (we suppose the farming lands belonging to the destroyed palace) is also quoted by the author of *'Umdat al-Ṭabīb*, who declares that another kind of sorrel (*ḥummāḍ*) is the species that he has seen "in Madīnat al-Zahrā'". AbulḤayr al-Iṣbīlī. (2007). *'Umdat al-Ṭabīb fī Ma'rifat al-Nabāt*, p. 252.

<sup>27</sup> D. F. Ruggles. (2007). *Islamic Gardens and Landscapes*, p. 152.



Al-Maqqarī, quoted above, which includes an excerpt by Ibn Baškuwāl (1101-1183)<sup>30</sup> describing the districts (*arbād*) which had grown up around the edges of the city of Cordoba, where he himself had been born and had grown up. Ibn Baškuwāl mentions that “among the various suburbs of the city (of Cordoba) there are, in the Eastern part, on the other side of the river, the suburbs of *Šaqunda* and *Munyat ‘Ağab* and, to the west, the suburbs of *Munyat ‘Abd Allāh* and *Munyat al-Muğīra*”.<sup>31</sup> From this quotation it can be established that in the areas surrounding the *munyas* which were built on the outskirts of cities, other buildings were in turn erected which ended up becoming districts in their own right and which took the same name as the *munya*.

As well as those already mentioned, there is a long list of other *munyas* which the Umayyad rulers commissioned in the time of the emirate and the caliphate, many of which are included in another important historiographical work, *al-Muqtabas* V, by the Cordoban historian Ibn Ḥayyān (987-1075).<sup>32</sup> *Munyat al-Nā‘ūra* (of the waterwheel), constructed on the right bank of the Guadalquivir River, near Cordoba, by Emir ‘Abd Allāh (888-912); *Munyat*

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<sup>28</sup> “A heterogeneous blend of book of *anwā’* and Christian saints’ calendar, this text marks the first in a series of these treatises to be written in al-Andalus (...). The two authors of the Calendar were ‘Arīb ibn Sa‘īd, secretary to the Umayyad monarchs of Córdoba, and Recemund (Rabī ibn Zayd), bishop of Iliberis (...). A large part of the documentary value of the Calendar derives from the fact that it is the earliest Andalusī text on agronomy: the introduction, as it were, to the many and significant treatises on agronomy that were later to be written in al-Andalus (...) it provides unique information on Andalusī agriculture in the tenth century, which is very useful when it comes to reconstructing the economic history of the period”. M. Forcada. (1998) “Books of *anwā’* in al-Andalus.” In: M. Fierro and J. Samsó (eds.). *The Formation of al-Andalus: Language, Religion, Culture and the Sciences*, pp. 311-315.

<sup>29</sup> R. Dozy. (1961). *Le Calendrier de Cordoue*, p. 110.

<sup>30</sup> This Andalusian scholar was born in Cordoba. His work *al-Šila* (“the Continuation”) gathers 1400 biographies of men of letters who had flourished in the eleventh and twelfth centuries. Ben Cheheb. (1971). “Ibn Baškuwāl”, *EI* (III); pp. 733-734.

<sup>31</sup> Al-Maqqarī. (1855). *Kitāb Nafh al-Ṭīb min Ġuṣn al-Andalus al-Ratīb wa-Dīkr Wazīr-hā Lisān al-Dīn ibn al-Khaṭīb*, pp. 303-304.

<sup>32</sup> Ibn Ḥayyān. (1979). *Al-Muqtabas* V. Madrid.

*al-Naşr*, so-named because it was commissioned by al-Naşr, a relative and confidant of ‘Abd al-Rahmān II (822-852); *Munyat al-Ramla*, built by Caliph ‘Abd al-Rahmān III (912-961); and *Munyat Arḥā’ Nāsiḥ*, which was the favourite of the latter’s son, al-Mustaṣir (962-976). Al-Maqqarī<sup>33</sup> also makes reference to *munyas* which were located near other Andalusī cities, such as *Munyat Ibn ‘Abd al-‘Azīz* in Valencia.<sup>34</sup>

### 3. Experimental Gardens in the Andalusian Agronomic and Botanical Treatises: the *Bustān* of *Ṣumādihīyya*

After the fall of the Umayyad dynasty in Al-Andalus at the beginning of the eleventh century, the period known as the “Taifa Kingdoms” began, an era characterised by political instability arising from the internal struggles between the different kingdom-states into which Al-Andalus had been divided. However, this period of instability and internal struggles — as we have seen above — contrasts with the splendour achieved by the science of agronomy in the eleventh century, especially in the *taifa* of Seville, which was governed by the Banū ‘Abbād dynasty. That kingdom saw the formation of a group of agronomists and botanists, mainly from Seville but also from Toledo, known as the “Sevillian Agronomists School”. These agronomists wrote a series of agricultural treatises in the second half of the eleventh century and at the beginning of the twelfth century, which included a series of works on agronomy, the *Kutub al-Filāḥa* (Books on Agriculture). These compiled a large part of the agronomic knowledge from the classical tradition — especially Dioscorides and Galenus—, the Semitic tradition — *al-Filāḥa al-Nabaṭiyya* (the Book of Nabatean Agriculture)<sup>35</sup> — and Arabic works written in the Orient. They included, furthermore, the wisdom of popular tradition which was at that point already widespread in the Iberian

<sup>33</sup> Al-Maqqarī. (1855). *Kitāb Nafh al-Ṭīb*, pp. 155-159.

<sup>34</sup> Although they had very similar characteristics to the *munya*, in the region of Valencia and the Levante these aristocratic properties located on the outskirts of cities were known as *raḥal* (pl. *riḥāl*). See V. Lagardère. (1993). *Campagnes et paysans d’Al-Andalus VIII<sup>e</sup>-XV<sup>e</sup> s.*, pp. 58-64.

Peninsula, as well as the results of their own experiments on the land. Yet these treatises were not mere compilations: they also included many original and innovative aspects, reflecting the degree of development which the agronomic and botanical sciences had already reached by that stage in Al-Andalus.

It seems interesting, however, to note that in these agronomic texts there are very few references to *munyas*, although allusions to other cultivation sites belonging to the sultan are relatively common, which are referred to using the terms *basātin* (gardens), *jannāt* (vegetable gardens) or *ḥā'it* (walled gardens), in which the agronomists put their experiments into practice.

This change in the terminology is reflected, for example, in the *Kitāb al-Filāḥa* ('Book on Agriculture'), attributed to Abū al-Khayr al-Isbīlī (XI-XII), in which no reference is found to any *munya*, although Abū al-Khayr indicates that he himself has observed (*ra'aytu anā*) "many trees of the species previously mentioned in the "Garden of the King" (*ḥā'it al-sultān*) in our region (*bi-bilād-nā*)".<sup>36</sup> Several references are also found in this work to *jinnān*, for example, when it describes the method and place for growing hackberry (*ḥarnūb*), which "must be planted in a place apart from vegetable gardens (*jinnān*) on land (*mawāḍi'*) which is not required".<sup>37</sup>

Another of the most important treatises from this period, which is also attributed to Abū al-Khayr, is '*Umdat al-Ṭabīb fī Ma'rifat al-Nabāt* (the Pillar Book of the Physicians for the Knowledge of Plants), which is the first Anda-

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<sup>35</sup> "The *Kitāb al-Filāḥa al-Nabaṭiyya*, the original title of which is the *Kitāb iflāḥ al-arḍ wa-iṣlāḥ al-zar' wa-l-ṣāḡar wa-l-ṭimār wa-daf' alafāt 'an-hā* (Book on the cultivation of the land, the improvement of seeds, trees and fruit, and the protection of these from diseases), has aroused great interest among scholars of Arabic, not only on account of its content, but also due to the questions which arise from studying it, for example concerning its source and authorship. It is the key text among all of the Arabic geponic works, and its hugely important contents combine all kinds of philosophical, agricultural, botanical and medical knowledge". V. M. Barraso. (2011). "El proceso de traducción de dos obras agronómicas: *al-Filāḥa al-Nabaṭiyya* y *Kitāb al-Filāḥa* de Ibn al-'Awwām". *MEAH* 60: pp. 40-41.

<sup>36</sup> Abū al-Jayr. (1991). *Kitāb al-Filāḥa*, p. 60.

<sup>37</sup> *Op. cit.*, p. 90.

lusi work exclusively on botany, and which may have been written at the end of the eleventh and the beginning of the twelfth century. Among the various references concerning “*basātīn*” in ‘*Umdat al-Ṭabīb*’ we find one relating to the various uses of the mandrake (*yabrūḥ*), a species whose seeds had been brought from Syria and which Ibn Baṣṣāl had cultivated successfully in the vegetable gardens (*basātīn*) of Toledo (*bi-Ṭulayṭula*). This species is distinguished, he writes, “by the beauty and pleasant appearance of the plant and by the aroma of its fruit; which can be given as a gift and which are edible”<sup>38</sup>. He also mentions, on several occasions, plots of land belonging to the sultan in which, as previously described, the introduction of new species was common. One example can be found in the description of an ornamental plant called the “bunchflower daffodil” (*ward al-ḥimār*), the scientific name of which is *Narcissus tazetta* L., about which the author of ‘*Umdat al-Ṭabīb*’ writes, “we were brought something (of this plant), which grew in the Vegetable Garden of the Sultan (*jannat al-sulṭān*)”,<sup>39</sup> referring to this space not by the term *bustān* or *ḥā’iṭ* — as we have seen above in the *Kitāb al-Filāḥa* — but rather as *janna*. In addition to plants with merely ornamental uses, in these same royal vegetable gardens plant species were grown for other purposes, such as for use in medicine, pharmacology and as a foodstuff. Regarding the latter, it is written that cultivated asparagus (*halyūn bustānī*) is a species which “is grown in vegetable gardens (*basātīn*) for the honour of kings (*mulūk*) and lords (*ru’asā*)”, and for the amazement of guests (*adyāf*), and he adds that he has seen and identified it “planted by Ibn Baṣṣāl in the Vegetable Garden of the Sultan (*bi-jannat al-sulṭān*)”.<sup>40</sup> Although it is not possible to establish the exact site of the garden, which is referred to in these texts sometimes as *janna*, at other times as *ḥā’iṭ*, and even as, *bustān al-sulṭān*, as no explicit reference is made to its location, taking into account that Abū al-Ḥayr, Ibn Baṣṣāl and Ibn Wāfīd all carried out their work mainly

<sup>38</sup> AbulḤayr al-Isbīlī. (2004). ‘*Umdat al-Ṭabīb fī Ma’rifat al-Nabāt*, p. 586.

<sup>39</sup> *Op. cit.*, p. 575.

<sup>40</sup> *Op. cit.*, p. 566.

in Seville and Toledo, the most likely scenario is that the gardens and vegetable gardens belonged to Sultan al-Mu'tamid of Seville or to Sultan al-Ma'mūn of Toledo.

Another Andalusī agronomist was the Granada-born al-Ṭiġnārī (twelfth century). In chapter twelve of the *maqāla* V<sup>41</sup> of his treatise entitled *Zuhrat al-Bustān wa-Nuzhat al-Aḏḥān* (*The Splendour of the Garden and Recreation of the Minds*), we find a reference to vast *munyas* (*al-munā al-kubār*),<sup>42</sup> in his writings on the cultivation of vines. However, in the rest of the handwritten copies — MS no. IV in the Municipal Archive of Cordoba, MS no. 2162 in the National Library of Algiers and MS no. 1674 in the General Library of Rabat — it can be detected how the term *munā* has been replaced by *basātīn*.

According to the biographical data available to us, Al-Ṭiġnārī moved from Granada to the *taifa* of Almeria, which was governed by the Banū Ṣumādīḥ, at a time when that city was enjoying a period of great political stability and economic prosperity, especially during the years of the rule of al-Mu'taṣim (1051-1091). He joined the group of poets and scientists at the court there, taking part in the experimental activities which were being carried out in the gardens. In his treatise he also includes some references to these lands (*arāḏī*) which formed the "*bustān*" at the palace of *al-Ṣumādīḥiyya*,<sup>43</sup> which is located on the outskirts of the city of Almeria (*bi al-Muriyya*).

Lastly, another of the most notable gardens in this period of the Taifa

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<sup>41</sup> The *Maqāla* V consists of twenty-one chapters dedicated entirely to the cultivation of vines. This covers the choice of land for planting, preparatory work on the ground, crops which work well next to vines and alternated between them, and the right time for planting, all while making the appropriate distinction between irrigated and unirrigated land. It then goes on to describe the various tasks required in vineyards, ways of training vines, terracing and layering, as well as fertilizing and watering. In addition to these purely agronomic references, there are also practical ones: how to keep bees and wasps away from vines, how to prevent grapes from rotting, etc. This proves both the importance and the widespread nature of cultivating vines in that period, given the length and scope of this *maqāla* - almost twenty folios - devoted, what is more, to a single crop.

<sup>42</sup> *Op. cit.*, p. 343.

<sup>43</sup> *Op. cit.*, pp. 277-278.

Kingdoms is the *Bustān al-Na'ūra* (Orchard of the Waterwheel) in Toledo, which was commissioned by Yaḥyà ibn Ismā'īl Dū al-Nūn, known as al-Ma'mūn (1043-1075). It was situated on the left bank of the Tajo River, from which it drew the water needed for irrigating its plants and fruit trees with the aid of a waterwheel (*na'ūra*), which gave it its name. These gardens were under the management of the physician and agronomist Ibn-Wāfid (997-1074) from Toledo, who was the author of the *Kitāb al-Adwiya al-Mufrada* (Book of Simples) and of *Majmū' fī al-Filāḥa* (Compendium on Agriculture).

#### 4. Royal Estates Tradition in *Ifrīqiyya*: the *Munyas* of *Tilimsān* and *Raqqāda*, and the *Agdāls*

Among the North-African chroniclers of the Almoravid (1040-1147) and Almohad (1130-1269) periods, we also find some references to *munyas* located in the geographical area of Al-Andalus, such as the *Munyat Ibn Ḍabbūn*, mentioned by the Ceuta-born geographer Al-Idrīsī (1099-1165) in his work *Uns al-Muhaj wa-Rawḍ al-Furaj* (The Entertainment of Hearts and Meadows of Contemplation), which, he writes, was situated on the road from Malaga to Granada and represented the first station (*wa-bi-hā manzil*), at a distance of "four miles" (*arba'at amyāl*) from Malaga.<sup>44</sup>

However, it is perhaps even more interesting to discover North-African authors from this period, characterized by a predominance of Berbers, who make reference to *munyas* located in North Africa, indicating that this same type of palace construction that is found so frequently in Al-Andalus also existed in the North of Africa, at least in the coastal regions closest to the Iberian Peninsula, and that it was also known by the name of *munya*.

Ibn 'Idārī al-Marrakuṣī,<sup>45</sup> the *maḡribī* historian from the thirteenth century, includes the term in his chronicle *al-Bayān al-Muḡrib*, although in this case it is mentioned indirectly by quoting the words of another author, in his

<sup>44</sup> Al-Idrīsī. (1989). *Los caminos en al-Andalus en el siglo XII según "Uns al-muhaj wa-rawḍ al-furaj"*, p. 60.

<sup>45</sup> See J. Bosch-Vilá. (1971). "Ibn 'Idārī". *EI*<sup>2</sup> (III): p. 805.

account of the siege by the Almohads of the Almoravids in Oran following the death of their leader Ibn Tāšufīn in 1145, which had occurred in strange circumstances when he fell from a horse. After the occupation of Oran, ‘Abd al-Mu‘min (1095-1163), the leader of the Almohads, turned towards Tlemcen (Tilimsān),<sup>46</sup> which was soon occupied, and the Almohads subsequently entered the Iberian Peninsula.

*Qāla al-Ašīrī: wa-kāna qudūm Abī Muḥammad ‘Abd al-Mu‘min ‘alā Tilimsān ba’d fath Waharān yawm al-jumu’a al-mutawaffī talātīn li-ramaḍān ‘ām tis’a wa-talātīn fa-nazala bi-l-munya wa-nafaḍa ḥukm Allāh fī-l-mu‘zam min ahl Tajart wa-ḍalika ġudwat ‘īd al-fiṭr wa-dakhala al-muwahḥidūn.*<sup>47</sup>

“Al-Ašīrī said: the valiant Abū Muḥammad ‘Abd al-Mu‘min was in Tlemcen following the occupation of Oran on Friday 30<sup>th</sup>, which marked the end of the month of *ramaḍān* (of the year 539). He set himself up in the *munya* and the order of Allāh was executed on the majority of the people of Taġart, in the morning of the day of *‘īd al-fiṭr*, when the Almohads entered there”.

This may possibly refer to one of the *munyas* on the outskirts of the city of Tlemcen. The name *nīsba* of the author of this quote refers to Ašīr, an area near Oran, which makes it very likely that this person referred to by Ibn ‘Idārī as al-Ašīrī was originally from there, thus confirming that the term *munya* was also in use in North Africa.

Effectively, in this area, known in that era as *Ifrīqiyya*,<sup>48</sup> there had been,

<sup>46</sup> “Tilimsan, which was built by the Sufrite Berbers on the foundations of an ancient Roman town, became the capital of the Sufrite *imam* (Abū Qurra). The Banū Ifran were able to repulse the attacks launched against them by the ‘Abbasid army and on one occasion even raided Tunisia. From the early 770s, however, they lost their leading position amongst the Kharijite tribes in Algeria”. J. M. Abun Nasr. (1993). *A History of the Maghrib in the Islamic Period*, p. 43.

<sup>47</sup> Ibn ‘Idārī. (1985). *Al-Bayān al-Muġrib fī Akhbār al-Andalus wa-l-Maġrib*, p. 22.

since an early time, a tradition of building this type of palace residence on the outskirts of cities. In what is today Tunisia, the members of the Berber dynasty of the Aghlabids (ninth–tenth centuries), emulating the palaces and gardens that the Abbasid caliphs built in the lands surrounding the most important cities of the Orient, also built, at a distance of “four miles” (*arba’at amyāl*) from Qayrawān (about eight kilometers to the south-west of Qayrawān), a palace which they named *Raqqāda*,<sup>49</sup> and which was initially used as a second home. It was surrounded by extensive lands, “twenty-four thousand and forty cubits”, according to the description by the Andalusī geographer al-Bakrī (1014-1094), with most of this site being taken up by gardens (*basātīn*). It also boasted a water system based on large basins which were used for collecting water which was brought from the mountains some thirty kilometers to the west. About the name of this *munya*, Al-Bakrī tells us that one of the Aghlabid sovereigns suffered from insomnia, and that despite the care he received from the Jewish physician Ishāq ibn Sulaymān, he was unable to sleep. Finally, following the advice of this doctor, he went out for a walk, and when he got to this site he fell asleep. Thus, this place became known by the name of *Raqqāda*, “the sleeper”. Later, a palace was erected here which became a place of residence (*dār wa-maskan*) and recreation for the Aghlabid sovereigns (*mawḍi’ farḥat li-l-mulūk*).<sup>50</sup> According to another legend, in *Raqqāda*, which as al-Bakrī indicates “was at that time a *munya*” (*wa-hiyya id dāk munya*), a battle took place between the Berber

<sup>48</sup> “Ce pays se prolonge depuis Barca, du côté de l’orient, jusqu’à Tandja-t-el-Khadra « Tanger la Vert », du côté de l’occident (...). L’Ifrikiya s’étend, en largeur, depuis la mer (Méditerranée) jusqu’aux sables qui marquent le commencement du pays des Noirs. Cette région se compose des montagnes et des vastes plaines de sable, qui se déploient depuis l’orient jusqu’à l’occident”. Al-Bakrī. (1965). *Kitāb al-Maḡrib fī Dīkr Bilād Ifrīqiyya wa-l-Maḡrib. Description de l’Afrique Septentrionale*, p. 48.

<sup>49</sup> “The immense new residence, which included a number of palaces besides barracks for the troops, seems to have been viewed by Ibrahim II as the signal of initiating a new era in the history of the dynasty, in which the amir’s authority would no longer be shared with the Arab aristocracy”. J. M. Abun Nasr. (1993). *A History of the Maghrib in the Islamic Period*, p. 59.

<sup>50</sup> *Op. cit.*, p. 27.



tribes of the *Abāḍiyya* from Tripoli and the *Warfağūma*, in which there were many corpses “lying on top of each other” (*raqqād ġutaḥ-him ba‘d-ha fawq ba‘d*), giving this site the name *Raqqāda*. Over and above the anecdotal accounts surrounding the origin of its name, it is of interest to us to note that al-Bakrī considered *Raqqāda*, on the outskirts of Qayrawān, to be a *munya*, in which a palace was built to replace the old palace city (*al-qaṣr al-qadīm*) of the Aghlabids, also on the outskirts of Qayrawān. Lastly, this quote includes a reference to another *munya*, once again located on the outskirts of Qayrawān, called *Munya Ma‘rūfa* (“the well-known”), about which al-Bakrī writes in his chronicle that it had a large population.<sup>51</sup>

Afterwards, following the fall of the Almohad empire, there is documentary evidence that one of the emirs of the Berber dynasty of the Hafsids (1230-1574), Muḥammad I al-Mustansir (1249-1277), also had another of these palace constructions built, which he called *Abū Fihir*, on the outskirts of the city of Tunis, in which the gardens dedicated to the cultivation of ornamental and agricultural species were of primary importance.

In discussing plantations adjoining palaces in the westernmost part of *Ifriqiyya*, which in the same period of the Hafsids was under the rule of another Berber dynasty, the Marinids (1258-1465), we must mention the *agdāls*, expansive plots of land, sometimes walled, which were built on the outskirts of cities such as Fez, Meknes and Marrakesh. Like the *munya*, they were used for agricultural purposes and provided, at the same time, a space for recreation and relaxation for the sultans and their entourages. The *agdāls*, the origin of which also seems to lie in the oriental tradition of royal gardens, were equipped with large reservoirs which were used for supplying the water needed for irrigating the gardens and vegetable gardens. These agricultural structures seem to have existed from very early times. Al-Bakrī, as early as the eleventh century, describes a place near the city of *Nikūr* which was known as an *agdāl* (*yuqāl lahu agdāl*), at the confluence of the *Nikūr* and *Ġīs* Rivers, on the road from the city of Oujda to Fez (in the

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<sup>51</sup> *Op. cit.*, p. 28.

east of the modern-day region of Rif in northern Morocco), in which there was also a fortress (*ribāʿ*), by the name of *Nikūr*, and a mosque, built by Saʿīd b. Šāliḥ.<sup>52</sup>

However, undoubtedly one of the most widely studied of these *agdāls* is the one located on the outskirts of Marrakesh, which, although it has been altered, still exists today. It was built during the Almohad period, and it is remarkable, from an architectural perspective, on the one hand because of its water-supply system, consisting of two rectangular artificial reservoirs which were used for irrigating the gardens and vegetable gardens, and on the other hand because of the nine kilometers of walls which enclose the entire agricultural area. Each garden was dedicated to a single species, and plants which were less able to adapt to the desert climate, and which therefore had a greater need for irrigation, such as certain fruit trees, were planted close to one of the large reservoirs.

## 5. The Gardens and Orchards of Granada in the Nasrid Period: the *Jannat al-ʿArīf*

The last historical period of the Muslim presence in the Iberian Peninsula began with the foundation of the Nasrid Kingdom of Granada (1232-1492)<sup>53</sup> by Muḥammad ibn Yūsuf ibn Naṣr, who was known as Ibn al-Aḥmar (1194-1273), in 1231. The development of this small kingdom was based to a significant extent on commerce, craftsmanship and agriculture, and Muḥammad ibn Naṣr devoted his time to the latter of these activities in the wide domains of inherited land which belonged to his estate (*mustahlaṣ al-sultān*).

In this period, Ibn al-Khaṭīb<sup>54</sup>, the vizier, poet and historian born in Loja (Granada) in 1313, in the first chapter of *al-Lamḥa al-Badriyya fī al-Dawla*

<sup>52</sup> The nephew of Šāliḥ ibn Maṣṣūr al-Ḥimyarī, known as ʿAbd al-Šāliḥ, from the Yemeni Banū Šāliḥ dynasty, and founder of the Kingdom of Nekor, which controlled the region of what is nowadays the north of Morocco until 1019. *Op. cit.*, p. 91.

<sup>53</sup> This reached the height of its splendour between 1344 and 1396, when the Alhambra was built.

<sup>54</sup> See J. Bosch-Vilá. (1971). "Ibn al-Khaṭīb". *EI* III: p. 835.

*al-Naṣriyya* (The brilliance of the full moon on the Naṣrī dynasty), a work in which he presents a panorama of the civilization of Granada from the year 1230 to 1363, uses the term *munya* to describe the lands surrounding the city of Granada. The information which he contributes concerning the location and composition of the property of the sultan is highly relevant.

*Wa-yahuffu bi-sūr al-madīna al-basātīn al-‘arīḍa al-muṣṭahliṣa fa-lā ta ‘rā jihha min jihāt-ha ‘an al-jannāt wa-l-kurūm wa-l-basātīn wa ammā mā ḥāza-hu al-sahl min jawfī-hi fa-munā ‘aẓīma al-khaṭr (...) yakhtaṣṣ min-hā bi-mustakhlaṣ al-sulṭān mā yunāhizu ṭalāṭīn munya (...).*<sup>55</sup>

“The walls of the city (of Granada), are surrounded by extensive gardens (*basātīn*) which belong to the estate of the sultan (...). There is no part of the city wall which does not have vegetable gardens (*jannāt*), vineyards (*kurūm*) or gardens (*basātīn*). In the flat area of the northern part of the walled enclosure there are magnificent *munyas* (*munā*), prominent amongst which are those belonging to the sultan, of which there are some thirty (...).”

From this short but interesting excerpt it can be established that, in describing the lands surrounding the city (*sūr al-madīna*), Ibn al-Khaṭīb distinguishes between vegetable gardens (*jannāt*), vineyards (*kurūm*), gardens (*basātīn*) and *munyas*, as effectively these refer to different kinds of plantations.<sup>56</sup> In terms of the *munyas*, which would have been situated to the north

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<sup>55</sup> Ibn al-Khaṭīb. (1998). *Historia de los Reyes de la Alambra: el resplandor de la luna llena (Al-lamḥa al-badriya)*, p. 24.

<sup>56</sup> “Whilst the term *bustān* is most frequently used to designate these types of gardens (owned by kings and illustrious figures in the periphery of the city), at times the term *janna* (pl. *jannāt*, *jinān*) is employed in order to establish a logical differentiation that is mainly based on the property regulations applied to each area”. E. García. (2008). “Utility and Aesthetics in the Gardens of al-Andalus: Species with Multiple Uses”. In: P. Dendle (ed.), *Health and Healing from the Medieval Garden*, p. 215.

of the city walls, these must have occupied flat (*sahl*) land. The large number of *munyas* which existed in Granada, as indicated in the description by Ibn al-Khaṭīb, confirms that this period, from an agricultural and economic point of view, was characterized, among other things, by the construction of vegetable gardens and gardens, many of which were among the private possessions of the Nasrid rulers. Ibn al-Khaṭīb, in *al-Iḥāta fī Akhbār Ġarnāṭa* (The Complete Source on the History of Granada), gives the number of vegetable gardens which belonged to the royal family as seventeen. Among these, he lists the *Jannat Faddān al-Maisa*, the *Jannat Faddān 'Isām* and the *Jannat al-'Arīf*, the third of which was located on one of the hills next to the Alhambra Palace (*Qaṣr al-Ḥamrā'*) and is known today as the Generalife. It was built by Sultan Muḥammad III (1302-1309) in the first decade of the fourteenth century and was a place of rest and recreation.

Nowadays, of the gardens which comprise the Generalife, only two are maintained with relatively few alterations from the point of view of their architecture and of their basic layout, although both gardens are planted according to modern tastes. These are the Palacio de la acequia (Palace of the irrigation channel) on the one hand, and on the other, the set of steps which passes through the wood of shady trees to reach the highest areas of the domain. In addition, the complex includes other gardens such as the Sultana's Garden (built in the fourteenth century), irrigation channels, courtyards, towers, vaults, oratories and other architectural elements which are modern in terms of their construction and design.

Despite all the changes which they have undergone, the enormous value of the current vegetable gardens must not be underestimated, as they have lost nothing of their basic agricultural purpose.

## Conclusions

The concept of the *munya* was introduced into Al-Andalus by the Umayyad caliphs for their own enjoyment, in emulation of the *Munyat al-Ruṣāfa* in Syria. From that point onwards, they had a dual agricultural and ornamental purpose. They were always found on the outskirts of cities, and were the

property of aristocratic families. Many Andalusí and even North-African authors have listed, described or referred in their works to the *munyas* which existed in Al-Andalus and *Ifriqiyya*. Furthermore, it can be observed that to a greater or lesser extent, depending on the era, these authors use the term *bustān* or *janna* to refer to these types of estates. It is interesting to note how three terms, which refer to different realities, may fluctuate to the point where they are used as synonyms.

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