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Biblical garden – a review, characteristics and definition based on twenty years of research

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ABSTRACT

Biblical gardens have existed in the public space for almost 80 years, and yet still up to this moment no scientific definition of this type of garden layout has been developed, nor has any detailed characterization of them been published. Multifaceted, interdisciplinary research carried out in the years 1996-2017 made it possible to gather detailed data pertaining to 63 biblical gardens all over the world, primarily including the oldest ones. The fundamental characteristics of existing sites were determined on the basis of these results, including their naming in different languages, presentation through a logo and motto, plant selection along with the manner of its presentation, the symbols that they employ, street and garden furniture being used and the arrangements of miniature landscapes. An in-depth analysis of the material that had been gathered made it possible to formulate a scientific definition of a biblical garden as a specific type of greenery arrangement. The specifics of biblical gardens lie in the fact that they possess significant semantic value and are an illustration of the sacred texts of the Bible, one of the greatest works of literature. Various artistic works are being used in their arrangement, in addition to modern forms of design, which highlight sensory values through referring to the senses: sight, touch, hearing, smell and taste.

Keywords: Bible, biblical plants, garden design, sensory garden, terminology, thematic garden

INTRODUCTION

In scientific publications on garden design and landscape architecture there is no scientific definition of a biblical garden despite the fact that such gardens have existed in the public space for almost 80 years. They are located in different countries all around the world and new ones are constantly being established. Attempts at defining what a biblical garden is have been undertaken mostly by theologians, who explain what significance such sites have to the spread of biblical messages. Another group of people who are attempting to define the phenomenon of biblical gardens, which are enjoying a significant interest among visitors, are the journalists who often report on their establishment and describe the function that they fulfil in society. Research was thus undertaken with the goal of formulating a scientific definition of a biblical garden. The author decided to determine the fundamental characteristics of existing biblical gardens and, using them as a basis, to formulate generalised conclusions that can characterise this undescribed type of garden. The author of the research and of this article has an educational background in gardening, specialising in garden design, in addition to having Bachelor's and

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Master's degrees in Theology, with a specialisation in Biblical studies.

The research work performed in the years 1996-2017 was multifaceted and was based on survey studies, correspondence with the owners or designers of gardens, the gathering of any accessible materials in the form of plans, maps, plant lists and biblical garden guides. The author's additional asset is the preparation of the layout plans and the supervision of the execution of several designs of biblical gardens and the observation of their functioning.

MATERIAL AND METHODS

The author has familiarised herself with the literature on garden design, searching for appropriate chapters in essential, specialist dictionaries and in general garden design history and landscape-shaping books. The author also searched for publications on keywords, such as "biblical garden", "bibel garden" and "Bibelgärten" in the collections of the following libraries: the Library of Congress, the British Library, Katalog der Deutschen Nationalbibliothek, Academic Search Complete, Arts and Humanities Citation Index, Agricola, GreenFile, JSTOR – The Arts & Web of Sciences, Collection I, II, III, Scopus, Web of Science, Europa Sacra, Science Direct, Springer Link, Science Citation Index – Expanded, Bibliografia Zawartości Czasopism of 23.02.2018). The author also simultaneously queried publications on Biblical studies and Biblical flora.

In the years 1996-2016, the author carried out survey studies using the correspondence method with numerous owners of biblical gardens, in addition to gathering all manner of materials pertaining to gardens: plans, maps, plant listings, guides. The author exchanged correspondence with the founders and caretakers of existing biblical gardens, among them authorities in this field such as the late Nigel Hepper or Nogah Hareuveni. The letters and survey questionnaires constitute the author's own archive. The author also performed field trips to 27 biblical gardens around the world (these were the gardens in: Bangor, Berlin-Lichterfelde, Berlin-Teltow, Bolestraszyce, Bremie, Chorzów, Cobh, Elgin, Greisinghof, Hamburg, Jerusalem, Kehl, the Jagiellonian University in Kraków, the Agricultural University in Kraków, Kraków-Łosiówka, London, Lublin, Madrid, Muszyna, Myczkowce, Neot Kedumin, Neinburg, New York, Ostritz, Schleswig, Utrecht, Wołcze), gathering photographic documentation. The gathering of research materials using these methods mutually intertwined numerous times during the course of the long process of obtaining results.

Ultimately, 63 sites had been subjected to evaluation, and the gathered source materials were judged to be sufficient in order to get to know and understand the concept of the biblical garden and to provide a definition to an item that has not yet been described in the literature on the subject of "garden design" and "landscape architecture", as well as to determine its fundamental characteristics. The analysis of results and the formulating of final conclusions was performed on the basis of the following criteria:

- The city in which a given garden is located, along with the date of its founding.
- The country in which a given garden is located.
- The name of the garden.
- The motto of a garden.
- The logo of a garden.
- Overall plant selection: biblical plants [b], ornamental plants [o], plants related to Christian symbolism [ch], plants that grow in the wild in Israel [w], herbs [h].
- The form of the presentation of plants: plant name in a site's local language, name in Latin (scientific name), biblical quote, additional explanations, the involvement of a guide (human), book guide (brochure), virtual presentation/QR code, photograph of a plant or herbarium.
- Elements of symbolism: water [w], the cross [c], the tree [t], the star [s], the letters Alpha and Omega [AΩ], the menorah [m], other [o].
- Elements of street and garden furniture: miniature building [b], farm equipment [fe], agricultural tools [at], statues, sculptures [sc], benches.
- Miniature landscapes, such as: a farm field [f], an orchard [or], a desert [d], the water reservoirs of the Holy Land [wr].

RESULTS AND DISCUSSION

Biblical gardens have, up until this point, not been mentioned in the garden design literature. They were not mentioned in essential specialist dictionaries, including, among others, The Oxford Companion to Gardens (2001), The Oxford Companion to the Gardens (2006), Symes (2006), nor in any publications on the general history of garden design and the shaping of the landscape, including, among others, Thacker (1985), Jellicoe and Jellicoe

(1995), Hobhouse (2002), Turner (2005), Böhm and Zachariasz (1997, 2000, 2005), Siewniak and Mitkowska (1998).

In addition, no publications with the keywords "biblical garden", "bibel garden" and "Bibelgärten" were found in the collections of the following libraries: the Library of Congress, the British Library, Katalog der Deutschen Nationalbibliothek (of 4.02.2018), Academic Search Complete, Arts and Humanities Citation Index, Agricola, GreenFile, JSTOR – The Arts & Sciences, Collection I, II, III, Scopus, Europa Sacra, Science Direct, Springer Link, Science Citation Index – Expanded, nor in Polish collections: Bibliografia Zawartości Czasopism (of 13.01.2018).

Names of the studied biblical gardens against the historical background of the coining of the term "biblical garden"

From among all the names referring to the themed garden showing biblical plants, the oldest documented name is "bible garden". It is mentioned in the title of the work by Joseph Taylor "The Bible garden or a familiar description of the trees (…) mentioned in the Holy Scripture" published in London in 1836 (Stückrath, 2012). It concerned a set of descriptions of plants mentioned in the Bible, not a real garden with plants. But the first description as "biblical garden" referring to a biblical garden as an existing one was used in a brochure about the Methodist church and the garden around it in Carmel, California, USA, published in 1940 (Simson and Farley, 1968). The garden in Carmel is alternatively called the "Master's Garden" (Reeves, 1996). One year later, Eleonor King, an American biologist, used the name "bible garden" in her book "Bible plants for American garden" in reference to potential gardens with biblical plants. There she encouraged Americans to found biblical plant collections in private gardens, even on terraces or near churches (King, 1975; Moldenke and Moldenke, 1952). The name synonymous with "biblical garden" was created in that way, also meaning a garden with biblical plants (Moldenke and Moldenke, 1952).

Tatham Whitehead was the first to use the term "bible garden" in the European literature in English. As early as in 1961, it appeared in his guidebook for the first Biblical garden in Bangor, UK, designed by himself (Whitehead, 1961).

The next author to use the name "bible garden" was Nigel Hepper, who published "Planting a Bible Garden" in 1987 in London. Because of the huge popularity of that book, even beyond the United Kingdom, the name "bible garden" spread across the whole of Europe. The publication of the book was resumed four times in the UK (Hepper, 1987, 1997, 1998), and it was translated into German, Dutch, Norwegian, Swedish, Finnish and Danish (Hepper Nigel, letter June 2012).

The word "Bibelgarten" in German was mentioned for the first time on 20 April 1993 in the Austrian newspaper "Die Presse", where an article about the "Agrarium" recreational park including various themed gardens, among them one biblical garden, was published (Stückrath, 2012). Until the publishing in German of the book by Frank Nigel Hepper "Der Bibel-Garten. Pflanzen der Bibel im eigenen Garten" in 1998, nothing had contributed to the spreading of the name "Bibelgarten" across Germany. The book's subtitle explains its contents, showing that the biblical garden issue in Germany was not common in that country in those days (Stückrath, 2012). Although a garden of biblical plants had existed in the Botanical Garden in Hamburg since 1979, its name was: "Pflanzen der Bibel". Currently, the name "Biblischer Garten" is used equivalently to the German "Bibelgarten". This term is in use in southern Germany (Saxony, Palatinate, Bavaria and Baden) for naming biblical gardens.

The Danish Biblical garden in Viborg named "Bibelhaven" was made in 1989, two years after the first edition of the book by F. N. Hepper on how to establish a biblical garden, while the Dutch "Bijbelse Tuin" in Hoorn – in 1994, in the third year after that publication. Both these names are the translation of the English "bible garden".

The Polish name: "ogród biblijny" was used for the first time in 2002 in Zofia Włodarczyk's doctoral thesis "Plants of biblical gardens", and later, in several articles by the same author (2003a, 2003b, 2004a, 2004b, 2005, 2006a, 2006b). This name was accepted as the translation of the English "biblical garden".

The first use of the Ukrainian "biblijnyj sad" ("біблійний сад") in Ukrainian appeared in 2012 on the map of the biblical garden designed in Wołcze.

The name "biblical garden" is a classic type of the two-element nomination, with an identifying element ("garden") and a discerning element ("biblical"). It is represented by the English "biblical garden", the German "Bibelgarten", "Biblischer Garten", the Dutch "Bijbelse Tuin", the Danish "Bibelhaven", the Polish "ogród biblijny" and the Ukrainian "біблійний сад".

From among the researched gardens, as many as 44 facilities (i.e. 70%) have the name of this type (Tab. 1). However, certain researched Bible-themed gardens have their names representing various nominating types. Some of them refer only to biblical plants, for example the German "Bibelpflanzengarten", "Garten der Bibelpflanzen" (garden of plants of the Bible), "Pflanzen der Bibel" (plants of the Bible), the Dutch "Planten unit de Bijbel" (plants from the Bible). An interesting name, created more as a metaphorical meaning, was found in the Croatian garden. This is "biblijski vrt mira" (biblical garden of peace); the German garden names "Paradiesgarten" (paradise garden) and "Bibelland" (land of the Bible) are constructed similarly. The other types of names of the analyzed gardens are the names with a narrower denotation, such as the English "Master's Garden", "Lowe Herb Garden", "Jesse tree", the German "Christusgarten" (garden of Christ) and "Der Moses Bibelgarten" (biblical garden of Moses). Two researched facilities refer in their names to more than one Holy Book (the Old and the New Testament, and the Quran). These are Jardin de las Tres Culturas in Madrid and Gärten der Weltreligionen: Paradiesgarten Christlich-Judischer Garten in Osnabrück. The Nogah Hareuveni Biblical Landscape Reserve in Israel is one of these facilities. Four gardens in Poland have the name: "biblical plant collection", and one in Israel is named "the path of bible plants".

Mottos and logos of the investigated gardens

A trademark or signature is very important in all facets of life. Fifteen of the studied biblical gardens were found to have a symbol in the form of a logo (Tab. 1). These symbols are highly varied. They are: in Bruck an der Mur – a hand that drops seeds along with a germinating plant, in Circleville – an angel with a wind rose, blowing his horn in all the cardinal directions, in Hamburg – a branch of the pomegranate plant and a vine, in Harptstedt – an open book, in Hohenwestedt – a fig leaf with five lobes, with a letter on each of them, together forming the word Bibel, in Kalnik – an open book with a tree growing out of it, in Korbach – a bitten apple, in Kraków-Łosiówka – an open Bible with emanating rays that combine with an olive branch symbolising Nature. In turn, at the Agricultural University in Kraków the signature is the sign of a fish. In Malvern, the logo is composed of a tree with branches, called the tree of Jesse, on which there are symbols depicting selected events from Bible stories. The logo in Muszyna contains many symbolic elements: the letters Alpha and Omega – a symbol of Christ – inscribed into a square that symbolises earthly life, while it, in turn, is inscribed into a circle representing the Divine sphere; wavy lines that symbolise living water are drawn as flowing out of the letters Alpha and Omega. The logo also contains the Latin phrase Veni Domine Jesu, which is the penultimate sentence of the Scripture (Revelation 22,21). In Myczkowce, the logo is a tree with its trunk and branches in the shape of a menorah, with two crown layers (symbolising the two Testaments: the Old and the New) against a background of the cross (the symbol of Caritas – the charity organisation of the Catholic Church). In Neot Kedumin, the logo is a stylised flower of the caper bush (*Capparis spinosa*), which is a symbol of perseverance, drive and survival (Naveh, 1989; Hareuveni, 1996), in Oberlichtenau it is the sign of the fish, in Proszowice the "flaming bush", with a heart symbol in its upper part, while in Wołcze it is a symbol of the orthodox cross with a fruit-bearing vine branch.

Another sign that allows us to identify a biblical garden is a motto which is a sentence or biblical quote. Thirteen of the studied sites were found to have them.

The most popular mottos are quotes from the Gospel of St. John, which have been chosen in four gardens: in Bruck an der Mur, Gossay, Harpstedt and in Wołcze. Quotes from the Book of Genesis were adopted in Kraków-Łosiówka, Duisburg and Ellicottville, from the Book of Psalms in Greisinghof and Myczkowce, while in Proszowice – from the Letter to the Colossians.

In six biblical gardens: in Bangor, Canberra, Carmel, Chorzów, Ritzholf and Werlte, the motto is composed of sentences that are not from biblical texts. The sentence from the garden in Bangor, although originating from a period over half a century ago, constitutes a sort of a modern-style advertisement and reads: "Some six thousand years into sixty minutes". In the garden in Canberra, which was founded in 1966, the sentence "In this life Christ is the only way to real happiness" was placed on a large stone. In Carmel, it is a text borrowed from a stone bench, which had been located at the peak of the pass between Loch Long and Loch Fyne in Scotland; "Rest and be thankful", in addition to an inscription from a solar clock: "Hours fly, flowers die – new days, new ways – love stays". In Chorzów, the sentence that is the biblical garden's advertisement are the words "In the beginning there was a garden", through which the authors wanted to

Table 1. Characteristics of biblical gardens

No.	City/ Country /Year when the garden was established	Name of the garden	Motto of the garden	Logo of the garden	Overall plant selection	Elements of symbolism	Benches	Elements of street and garden furniture	Miniature landscapes
1.	Bad Sooden-Allendorf/ Germany 2008	Bibelgarten			[b], [o]	[w], [c], [f], [AΩ]	+	[at]	[f]
2.	Bangor/United Kingdom 1962	Bible Garden – Bishop's Garden	Some six thousand years into sixty minutes		[b] (in the original assumption) [b], [o] (now)	[w], [t]	+	[b]	
3.	Berlin – Lichterfelde/ Germany 2008	Bibelland			[b], [o]	[w]		[b]	[wr]
4.	Berlin – Teltow/Germany 2006	Bibelgarten der Teltow Diakonischen Westestätten			[b]	[w]			
5.	Bolestraszyce/Poland 2006	Kolekcja roślin biblijnych			[b]	[t], [m]	+	[at]	
6.	Bremen/Germany 1998	Bibelgarten			[b], [o]	[w], [t]		[sc]	
7.	Bruck-Mur/Austria 2008	Bibelgarten der Evangelischen Pfarrgemeinde AB und HB Bruck an der Mur, Österreich	"I am the vine, ye *are* the branches: He that abideth in me, and I in him, the same bringeth forth much fruit: for without me ye can do nothing" (J 15,5)*	A hand dropping seeds along with a germinating plant	[b], [o]	[w], [c]	+	[at], [fe]	[d], [wr]
8.	Canberra/Australia 1966	The Bible Garden	In this life Christ is the only way to real happiness		[b]	[w]	+	[b]	
9.	Canberra/Australia (revaluation) 2008	The Bible Garden			[b]	[m]	+		
10.	Carmel (California) /USA 1940	Master's Garden	Rest and Be Thankful and Hours Fly, Flowers Die – New Days, New Ways – Love Stays	An open Bible	[b], [o]	[w], [c]	+	[fe]	
11.	Chorzów/Poland 2013	Biblical Garden	In the beginning there was a garden		[b], [o]	[w], [m]	+	[sc]	[d]

No.	City/ Country /Year when the garden was established	Name of the garden	Motto of the garden	Logo of the garden	Overall plant selection	Elements of symbolism	Benches	Elements of street and garden furniture	Miniature landscapes
12.	Circleville (Ohio) /USA 1994	Biblical Garden of Trinity Lutheran Church		A wind rose, along with an angel blowing his horn in all the cardinal directions	[b], [o]	[w]	+		
13.	Cobh/Ireland 1995	Bible Garden			[b], [Ch]	[w], [c], [f]	+	[b], [fe]	[f]
14.	Duisburg/Germany 1987	Biblischer Garten der Evangelischen Kirchengemeinde Rumeln-Kaldenhausen	"And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed *is* in itself, upon the earth: and it was so" (Genesis 1,11)*		[b], [h], [Ch]	[w]’	+		
15.	Dundee (Michigan) /USA 2003	Bible Garden			[b], [o]	[w]	+		
16.	Elgin/United Kingdom 1996	Biblical Garden			[b], [o]	[w], [c]	+	[b], [sc]	[d], [wr]
17.	Ellicottville (New York) / USA 1984	Lowe Herb Garden	"And God said, Behold, I have given you every herb bearing seed, which *is* upon the face of all the earth, and every tree, in the which *is* the fruit of a tree yielding seed; to you it shall be for meat" (Genesis 1,29)*		[b], [o]	[w]	+	[b]	
18.	Fair Haven (Vermont) /USA 1983	The Biblical Garden			[b], [o]	[w]	+		
19.	Garstang/United Kingdom 1999	The Bible Garden			[b], [o]	[w]	+	[fe]	
20.	Gossau/ Switzerland 2005	Bibelgarten Gossau	"In the beginning was the Word, and the Word was with God, and the Word was God" (John 1,1)*		[b], [o]	[w]	+		[f]

No.	City/ Country /Year when the garden was established	Name of the garden	Motto of the garden	Logo of the garden	Overall plant selection	Elements of symbolism	Benches	Elements of street and garden furniture	Miniature landscapes
21.	Greisinghof/Austria 2003	Bibelweg und Bibelgarten Greisinghof	"The Lord is my light and my salvation; whom shall I fear?" (Psalm 27,1)*		[b]	[w]	+	[sc]	[d], [f], [wr]
22.	Hamburg/Germany 1979	Pflanzen der Bibel		Pomegranate plant and vine branches	[b], [w]	[w] [c]	+		[wr]
23.	Harpstedt/Germany 2003	Christusgarten Harpstedt	"I am the door …" (John 10,9)*	An open Bible	[b], [h], [Ch] (included in songs religious)	[w], [c], [f], [s]		[b]	
24.	Hohenvestedt/Germany 2003	Bibelgarten		A fig leaf with five lobes, each with a letter forming the word Bibel	[b], [h]	no	+		
25.	Hoofddorp/The Netherlands 2000	Bijbelse Tuin in Hoofddorp			[b], [o]	[w], [c]	+		
26.	Hoorn/The Netherlands 1998	Bijbelse Tuin Foreestenhuis			[b], [o]	[w]	+		
27.	Jägerwirth/Germany 2005	Der Moses-Bibelgarten in Jägerwirth			[b], [o]	[w]	+		[d], [wr]
28.	Jerusalem/Israel 1999	The Path of Bible Plants			[b], [w]	[w]	+		
29.	Jever/Germany 2004	Bibelgarten Lütje Eden			[b]	[w], [t]	+		
30.	Kalnik/Croatia 2000	Biblijski vrt mira		An open Bible with a tree growing out of it	[b], [o]	[t]	+	[sc]	
31.	Kehl/Germany 2004	Biblischer Garten Kehl			[b]	[w], [t]		[sc]	
32.	Korbach/Germany 2002	Der Bibelgarten der Markusgemeinde		A bitten apple	[b], [o]	[w], [c], [t], [f], [AΩ]	+		
33.	Königstein/Germany 2005	Bibelpflanzengarten d. ev. und kath. Kirchgemeinde Königstein			[b], [Ch]	[w], [t], [f]	+		

No.	City/ Country /Year when the garden was established	Name of the garden	Motto of the garden	Logo of the garden	Overall plant selection	Elements of symbolism	Benches	Elements of street and garden furniture	Miniature landscapes
34.	Kraków (Łosiówka) /Poland 2016	Ogród biblijny – Ogród Boga	"And the Lord God planted a garden eastward in Eden;… and put him into the garden of Eden to dress it and to keep it" (Genesis 2,8.15b)*	An open Bible, with rays coming out of it, along with an olive branch above them	[b]	[w], [c], [t]		[b], [sc]	[f]
35.	Kraków (Jagiellonian University)/Poland 2000	Kolekcja roślin biblijnych			[b]	no	+		
36.	Kraków (Agriculture University)/Poland 2000	Kolekcja roślin biblijnych		A fish	[b]	[w], [f]	+		
37.	London/United Kingdom 1980	The Biblical Garden			[b], [o]	[w]	+		[wr]
38.	Lublin/Poland 2003	Kolekcja roślin biblijnych			[b]	[o]	+		[f]
39.	Madrid/Spain 1990	Jardin de las Tres Culturas			[b]	[w], [s]	+	[b]	[wr]
40.	Malvern/United Kingdom 2008	The Jesse Tree		The Tree of Jesse	[b], [o]	[w], [t], [f] [AΩ]	+	[sc]	
41.	Mt. Pleasant (South Carolina) /USA 1984	Biblical Garden			[b], [o]	[c], [s]	+	[sc]	
42.	Muszyna/Poland 2015	Ogrody biblijne	"Veni Domine Jesu" (Revolution 22,20b)*	The letters Alpha and Omega inscribed into a circle and square	[b], [w]	[w], [c], [t], [f], [s], [AΩ]	+	[b], [at], [fe], [sc]	[d], [f], [or] [wr]
43.	Myczkowce/Poland 2010	Ogród biblijny w Myczkowcach	"Yea, though I walk through the valley..." (Psalm 23,4a)*	A tree with its trunk and branches in the shape of a menorah	[b], [w]	[w], [c], [f], [s], [m], [AΩ]	+	[b], [at], [fe], [sc]	d], [f], [or] [wr]

No.	City/ Country /Year when the garden was established	Name of the garden	Motto of the garden	Logo of the garden	Overall plant selection	Elements of symbolism	Benches	Elements of street and garden furniture	Miniature landscapes
44.	Neot Kedumim/Israel 1968	The Biblical Landscape Reserve of memory Nogah Hareuveni		A stylised caper bush flower	[b], [w]	[w]	+	[b], [at], [fe]	d], [f], [or] [wr]
45.	Nienburg/Germany 2000	Bibelgarten der Kreuzkirchen-Gemeinde			[b], [o]	[o]	+		
46.	New York /USA 1973	Biblical Garden			[b], [o]	[w], [c], [s]	+		
47.	Oberlichtenau/Germany 2002	Bibelgarten		A fish	[b], [o]	[w], [c]	+	[b], [at], [fe]	
48.	Ojai (California) /USA 1957	Biblical Garden of Ojai			[b], [o]	[w]	+	[fe]	
49.	Osnabrück/Germany 2005	Gärten der Weltreligionen: Paradiesgarten Christlich-Judischer Garten			[b], [o]	[w], [t]	+	[b]	
50.	Ostritz/Germany 1999	Garten der Bibelpflanzen St. Marienthal			[b], [h], [Ch]	[w]	+	[sc]	[wr]
51.	Ottendorf/Germany 2003	Bibelgarten Ottendorf			[b], [o]	[w], [t]	+		
52.	Oyten/Germany 2002	Bibel und Paradiesgarten			[b], [o]	[t]	+		
53.	Pittsburg (Pennsylvania)/ USA 1986	Rodef Shalom Biblical Botanical Garden			[b], [o]	[w]	+		[wr]
54.	Proszowice/Poland 2008	Ogród Biblijny	"And whatsoever ye do, do it heartily…" (Colossians 3,23a)*	"The burning bush" with a heart symbol in the upper part	[b], [w]	[w], [c], [m], [AΩ]	+	[sc]	[d], [f], [or]
55.	Rheinfelden Beuggen/ Germany 2008	Biblischer Garten			[b]	[w], [c]	+	[sc]	
56.	Ritzlhof/Austria 2011	Bibelgarten Ritzlhof, Bibelschen Erzahlungen nachgehen	Biblical stories engage		[b], [o]	[w], [t]	+	[sc]	[d], [f], [wr]
57.	Schleswig/Germany 1996	Bibelgarten St. Johannistklastor			[b], [o]	[w], [c]	+	[at], [sc]	[d], [f], [wr]
58.	Schöningen/Germany 1996	Bibelgarten St. Lorenz Schöningen			[b], [h]	[w], [c], [f]	+	[b], [at]	

No.	City/ Country /Year when the garden was established	Name of the garden	Motto of the garden	Logo of the garden	Overall plant selection	Elements of symbolism	Benches	Elements of street and garden furniture	Miniature landscapes
59.	Tübingen/Germany 1998	Eberhardskirche Tübingen Bibelgarten			[b], [o]	no	+		
60.	Utrecht/The Netherlands 1999	Planten uit de Bijbel, Botanic Garden University Utrecht			[b], [o]	[t]	+	[at]	
61.	Viborg/Denmark 1989	Bibelhaven			[b], [o]	no	+		
62.	Werlte/Germany 2003	Bibelgarten	Who meets biblical plants, meets another man and God		[b], [h]	[w], [s]	+		[d], [f],
63.	Wołcze/Ukraine 2012	Biblijnyj sad	"And this is his commandment, That we should believe on the name of his Son Jesus Christ, and love one another, as he gave us commandment" (1 John 3,23)*	An open Bible	[b]	[w], [c], [m], [AΩ]	+		[d]

*Bible quotes come from: The Holy Bible, King James Version

point out that the beginning of biblical descriptions has its source in the garden – the garden of paradise. The creators of the garden in Ritzlhof wrote the following sentence: "Bibelschen Erzahlungen nachgehen" (biblical stories engage), while in the garden in Werlte "Wer biblischen Pflanzen begegnet, begegnet dem Leben der Menschen Und begegnet Gott" (who meets biblical plants, meets another man and God).

A logo and motto occur jointly in six of the studied sites: in Bruck an der Mur, Harpstedt, Muszyna, Myczkowce, Proszowice and Wołcze.

Overall plant selection of biblical gardens

The essence of biblical gardens is that biblical plants are cultivated there, plants which are mentioned in the texts of the Scripture. The latest index of these plant species can be found in publications by Włodarczyk (2007, 2011). Nearly 1/4 (24%) of the owners of the gardens covered by the study had gathered in their collections solely the plants mentioned in the Bible (Tab. 1). In six gardens, apart from biblical plants, species that grow in the wild in Israel were used as the material for the arrangement of miniature landscapes of the Holy Land. Such a measure on behalf of the designers is typical of gardens in Israel and sites in Poland, as well as of the garden in Hamburg. This manner of plant selection appears to be highly beneficial and compliant with the concept of biblical gardens, as the use of plants of Israeli origin creates a substitute for the natural landscapes of the Holy Land. It was used in the youngest biblical gardens, in which their designers arranged miniature landscapes featuring deserts, farm fields, water reservoirs and orchards. We can thus assume that 1/3 (33%) of biblical gardens are composed of original plants that were indicated by the first designers of biblical gardens, with this principle being fiercely defended by them (Moldenke and Moldenke, 1952; Whitehead, 1961). The majority of the garden owners (67%), apart from the aforementioned species, also planted other ones, mostly due to ornamental considerations.

The owners of two of the oldest surviving biblical gardens, those in Carmel (from the year 1940) and Ojai (from the year 1957), located in California, where the natural and climatic conditions are conducive to the development of plants from the Near East and the Mediterranean, have been able to effortlessly cultivate original biblical plants in the soil. The biblical garden in Bangor (1962) located at a northern latitude of 51°, does not have

such suitable climatic conditions, and despite this the plants that were cultivated there were original biblical species and the author of the design stressed appropriate plant selection – compliant with the latest discoveries on biblical flora at the time – in his self-authored guide numerous times (Whitehead, 1961).

On the other hand, Gerald Hercules Robinson, when designing the biblical garden in Canberra, which was modelled after Whitehead's guidelines (Nelson Jessica, letter March 2010), had travelled to Israel and procured seeds and young plants for his garden there. It needs to be stressed that 1988 saw an intense development of the first biblical garden in Germany in the Botanical Garden in Hamburg, founded in 1979, when – as part of a collaboration with the Botanical Garden in Jerusalem – the number of splendid specimens of biblical plants was increased. It is a garden whose decoration, both in botanical and theological terms, is highly meticulous to this day and contains not only biblical quotes, but also theological commentaries and plant drawings (Struss, not dated). This garden can thus be considered a model one.

In contemporary biblical gardens, less and less stress is being placed on the exclusive use of biblical plant species. Bushes with ornamental leaves and flowers are planted there, in addition to numerous fully blooming plants, although they come from completely different areas of the world than those described in the Bible. This has even happened in the oldest biblical garden in Carmel, in which only a number of biblical species remain: the European olive (*Olea europea*), the Lebanon cedar (*Cedrus libani*), the cypress (*Cupressus* sp.), the pine (*Pinus* sp.), the common fig (*Ficus carica*), the citron (*Citrus medica*), the aloe plant (*Aloes* sp.) and linen (*Linum* sp.). The remaining 53 plant species that grow in this garden, listed by Gary Girard, are plants that are not associated with a biblical text and have been planted solely for decorative purposes (Gleason Karol, letter November 2011).

Some biblical gardens feature the introduction of collections of herbs which do not belong to biblical flora, but are a reference to monastic, medieval European gardens. Such solutions were adopted in five gardens: in Harpstedt, Hohenwestedt, Ostritz, Schöningen and Werlte. Furthermore, plants associated with the wider Christian tradition were found to have been planted in five gardens, including those that are mentioned in the lyrics of religious songs or are present in legends. Such is the case with the biblical gardens in Cobh, Duisburg, Harpstedt, Königstein and Ostritz. Examples of these plants include: the black hellebore, called the Christmas rose (*Helleborus niger*), the angular Solomon's seal (*Polygonatum* sp.), rosemary (*Rosmarinus* sp.) and the lady's mantle (*Alchemilla* sp.).

Similar research results were produced by Strückarth (2012) and Brocks and Weidenweber (2016), who concluded that the designers of the biblical gardens they investigated had used different plant selection criteria in them. Some plant solely the plants mentioned in the Bible (e.g. in the garden in Kiel), others add to them other plants that grow in Israel, or those associated with Christian symbolism.

In order to preserve the original idea of the construing of biblical gardens, we would have to return to perceiving this basic principle that was the use of only those plants that are mentioned in the pages of the Bible, with only a small addition of wild-growing plants that are native to Israel in order to show the natural landscapes of the Holy Land.

The form of the presentation of plants

Unlike in the majority of gardens, the plants of biblical gardens are conveyors of a message, and this is their primary role. This is why the plants planted within them are accompanied by descriptions that make it easier to identify them and associate them with appropriate passages from biblical texts (Tab. 2). They are placed not only on various forms of plaques, but also constitute the content of guidebooks or brochures that aid the visitors to a particular site.

In as many as 60 gardens (95%), the plants were found to be annotated using names in the local national language, while in 44 gardens (70%) with the addition in the form of Latin names – their scientific plant names (Tab. 2). In a couple of gardens, apart from names in the local language, names in the languages of neighbouring countries were also listed. And thus, for instance, in Germany, in the garden in Ostritz, which is located near the borders with Poland and the Czech Republic, the Polish and Czech languages were also used to describe the plants, while in the garden in Hamburg the names of plants were also provided in Hebrew. In Kehl, located near the border with France, the additional language was French, while in Königstein it was the Czech and the English language. In the biblical garden in London, apart from English names, there were also plant names in Hebrew. In the Biblical garden in Kraków-

Table 2. The form of the presentation of plants in the biblical gardens

No.	City/Country/Year when the garden was established	Local national language names	Latin names	Biblical quotes	Additional explanations	Human guide	Printed guides or brochures	Virtual presentation/ QR code	Photographs of landscapes and plants from natural sites in Israel
1.	Bad Sooden-Allendorf/Germany 2008	+	+	+		+	+		
2.	Bangor/United Kingdom 1962	+	+	+			+		
3.	Berlin – Lichterfelde/Germany 2008	+	+						
4.	Berlin – Teltow/Germany 2006	+	+	+		+			
5.	Bolestraszyce/Poland 2006	+	+	+	+				
6.	Bremen/Germany 1998	+							
7.	Bruck/Mur/Austria 2008	+				+	+		
8.	Canberra/Australia 1966	+	+	+					
9.	Canberra/Australia (revaluation) 2008	+	+	+				+	
10.	Carmel (California)/USA 1940	+	+				+		
11.	Chorzów/Poland 2013	+	+	+		+			
12.	Circleville (Ohio)/USA 1994	+	+	+		+	+		
13.	Cobh/Ireland 1995	+	+	+			+		
14.	Duisburg/Germany 1987					+	+		
15.	Dundee (Michigan)/USA 2003	+	+	+		+ also children as a guide			

No.	City/Country/Year when the garden was established	Local national language names	Latin names	Biblical quotes	Additional explanations	Human guide	Printed guides or brochures	Virtual presentation/ QR code	Photographs of landscapes and plants from natural sites in Israel
16.	Elgin/United Kingdom 1996	+		+					+
17.	Ellicottville (New York /USA 1984	+	+				+		
18.	Fair Haven (Vermont) /USA 1983	+	+	+		+	+	+	+ and herbaria
19.	Garstang/United Kingdom 1999	+	+	+					
20.	Gossau/ Switzerland 2005	+	+	+					
21.	Greisinghof/Austria 2003	+	+	+		+			
22.	Hamburg/Germany 1979	+ and Hebrew	+	+	+				+ and drawings of plants
23.	Harpstedt/Germany 2003	+		+					
24.	Hohenvestedt/Germany 2003			+	+	+			
25.	Hoofddorp/The Netherlands 2000	+					+		
26.	Hoorn/The Netherlands 1998	+	+	+					
27.	Jägerwirth/Germany 2005				+		+		
28.	Jerusalem/Israel 1999	+	+	+					
29.	Jever/Germany 2004	+	+	+					
30.	Kalnik/Croatia 2000			+					
31.	Kehl/Germany 2004	+ and French	+	+			+		
32.	Korbach/Germany 2002	+	+	+			+		

No.	City/Country/Year when the garden was established	Local national language names	Latin names	Biblical quotes	Additional explanations	Human guide	Printed guides or brochures	Virtual presentation/ QR code	Photographs of landscapes and plants from natural sites in Israel
33.	Königstein/Germany 2005	+ and Czech and English	+	+		+			
34.	Kraków (Łosiówka)/Poland 2016	+ and English	+	+		+		+	
35.	Kraków (Jagiellonian University)/ Poland 2000	+	+	+					
36.	Kraków (Agriculture University)/ Poland 2000	+	+	+		+			+ and herbaria
37.	London/United Kingdom 1980	+ and Hebrew	+	+					
38.	Lublin/Poland 2003	+	+	+		+			
39.	Madrid/Spain 1990				+				
40.	Malvern/United Kingdom 2008	+	+	+			+		
41.	Mt. Pleasant (South Carolina)/USA 1984	+		+					+
42.	Muszyna/Poland 2015	+	+	+		+	+	+	
43.	Myczkowce/Poland 2010	+	+	+		+	+		+
44.	Neot Kedumim/Israel 1968	+	+	+	+	+			
45.	Nienburg/Germany 2000	+				+	+		
46.	New York/USA 1973	+	+	+		+			
47.	Oberlichtenau/Germany 2002	+		+		+			
48.	Ojai (California)/USA 1957	+		+			+		

No.	City/Country/Year when the garden was established	Local national language names	Latin names	Biblical quotes	Additional explanations	Human guide	Printed guides or brochures	Virtual presentation/ QR code	Photographs of landscapes and plants from natural sites in Israel
49.	Osnabrück/Germany 2005				+		+		
50.	Ostritz/Germany 1999	+ and Czech and Polish	+	+			+		
51.	Ottendorf/Germany 2003	+				+			
52.	Oyten/Germany 2002	+		+		+			
53.	Pittsburg (Pennsylvania)/USA 1986	+	+	+	+	+	+		
54.	Proszowice/Poland 2008	+	+	+		+	+		+
55.	Rheinfelden Beuggen/Germany 2008	+		+			+		
56.	Ritzlhof/Austria 2011	+	+	+		+			
57.	Schleswig/Germany 1996	+	+	+		+	+		
58.	Schöningen/Germany 1996	+	+	+		+			
59.	Tübingen/Germany 1998	+				+			
60.	Utrecht/The Netherlands 1999	+	+	+	+		+		
61.	Viborg/Denmark 1989	+	+	+			+		
62.	Werlte/Germany 2003	+	+	+					
63.	Wołcze/Ukraine 2012	+	+	+					
	Total amount (number)	60	44	50	9	28	26	4	7
	Total amount (%)	95	70	79	14	44	41	6	11

Łosiówka, the English language was also used beside Polish in all descriptions.

An additional supplementation of plant presentation are biblical quotes in which the names of particular plants are mentioned, and these were introduced in 50 gardens, which constitutes 79% of the studied sites (Tab. 2). At times, instead of entire quotes, there were only references to appropriate passages of the Bible, in the form of the so-called sigla, which contain the name of the book, the number of the chapter and the number of the verse. The creators of 26 gardens (41%) prepared and printed guides or brochures describing the garden and the plants that it contained, while a human guide was employed at 28 sites (44%) in order to help visitors to get to know the plants and the idea behind the entire garden. Additional reference materials in the form of photographs of the landscapes and plants from natural sites in Israel were used sporadically and could be found in the gardens in Elgin, Fair Haven, Myczkowce, Proszowice, Mt. Pleasant and Schleswig. Drawings depicting biblical plants along with bible quotes and explanations regarding the use of these plants in biblical times were presented in the garden in Hamburg (Strauss, not dated; Stückrath, 2012), while in Myczkowce (Włodarczyk, 2014) and Proszowice there were drawings showing farm work during biblical times with sizeable passages from the Bible, along with explanations.

Stückrath (2012), Brocks and Weidenweber (2016) and Bielo (2018) generally point to the fact that the biblical gardens that they studied presented plants along with their names, at least one Bible quote, as well as with the help of printed guides or electronic devices.

The main symbolic elements of biblical gardens

A water source, playing the role of a symbol, has been appearing in the arrangements of biblical gardens from the very start. After analysing the plans and descriptions of the 63 gardens that were studied, it was concluded that water features were arranged at 51 sites, which constituted 81% of the total (Tab. 1).

In the oldest biblical garden, near the church in Carmel, there is currently a fountain, but initially there was a pond with reeds, a bathing spot and a drinking trough for birds, all of it guarded by a statue of St. Francis of Assisi (Reeves, 1996). Near the church in Ojai there is a small fountain and a modest water cascade, in addition to a water reservoir which is a place of the cultivation of biblical water plants (garden plan sent by Wilson Ginger, letter June 1999). In the biblical garden in Bangor, water was used to arrange a biblical image showing Jesus with the Samaritan Woman near Jacob's well. The well and stone bench beside it still dominate this arrangement, which was supplemented with a plaque with an appropriate passage from the Gospel of St. John (John 4,7-15). In Hamburg, water was used to create a place for the cultivation of biblical water plants, but also simultaneously to depict the biblical scene tied to the discovery of little Moses in a papyrus basket among the reeds of the waters of the Nile (Exodus 2,3). A water reservoir was also an element of the decoration of the Biblical garden in Canberra, the first to be established on Australian soil.

The cross is an often-used symbolic sign. This symbol was present in 20 of the gardens being studied, which constitutes 32% of these sites. In the biblical gardens that had been modelled after the cloister garths typical of medieval monastic gardens, the layout of paths has the shape of a cross. The standing cross, like, for instance, in Carmel and Canberra, as a plant ornament, or horizontally laid out from stone has been present since the beginnings of the history of biblical gardens. The oldest ones come from the gardens in Carmel, Cobh, Elgin and Schöningen, but some have also been placed in the newest gardens in: Kraków-Łosiówka, Muszyna, Myczkowce and Proszowice. It is interesting that in the Berlin Botanical Garden there stands a large timber cross, placed in the collection of biblical plants in 2003 – the year that was celebrated as the Year of the Bible. Symbolic elements other than water and the cross started to be introduced in gardens established in the 1990's. The tree, most often in the form of an apple tree, which symbolises the tree of the knowledge of good and evil, became a common symbol. This symbolic element was present in 16 gardens (25%). In ten gardens, which constitute 16% of the studied sites, the sign of the fish as a symbol of Christianity was used, while in 10% two other biblical symbols were used: the menorah and the star of David. The symbol of the menorah has been used since 2006 and it is characteristic mainly of Polish biblical gardens. A new symbol has appeared in recent years, being the two letters of the Greek alphabet, A and Ω, taken from the Apocalypse of St. John, symbolising Jesus Christ. It was found to have been featured at 7 sites (11%). It was used for the first time in 2002 in the garden in Korbach, with additional uses in the years

2006-2015. Only four gardens had no symbolic element whatsoever.

Elements of street and garden furniture

Individual elements of street and garden furniture were already used in the first biblical garden arrangements: in Carmel, Bangor, Ojai and Canberra. Over the years, the number of various elements of street and garden furniture had risen. From among the investigated gardens, slightly over a half (54%) had at least one object that could be counted as street or garden furniture associated with the biblical content presented at a given site (Tab. 1). Various sculptures and statues were set up in ¼ of the gardens, while a slightly lower number of gardens – 24% – had structures of various types. Farming tools were found to be exhibited quite often – at 16% of the sites, with agricultural devices being exhibited at 14% of them.

Arrangements depicting miniature landscapes: deserts, farm fields, orchards and plant groupings associated with marsh sites are being more and more boldly created in biblical gardens in the twenty-first century. Such compositional measures make it possible to plant the message of biblical quotes in a landscape typical of the Holy Land more firmly so that – in combination with a presentation of farming tools and devices – the visitor can be brought to an ancient time and the realities of a farming economy, when a given biblical text was being written. Miniature landscapes were established in 38% of the investigated gardens. The arranging of marsh plants was the most common, with these being featured in 24% of the investigated gardens. Deserts and farm fields were located in 21% of the investigated sites. Vineyards and olive orchards were presented in only 6% of biblical gardens.

The use of these diverse measures allows us to arrange gardens with narrative properties that speak of the "history of salvation" and with sensory qualities that make it easier to receive the content contained in the gardens that are being created.

Benches are an inseparable element of biblical gardens, which indicates the manner of their use – people stay longer in these gardens, as they are rich in semantic value, while they can become a place of contemplation due to the content being presented. Benches were placed in 90% of the investigated sites, with their number ranging from several to over twenty, depending on the site in question (Tab. 1). Bielo (2018), while characterising the sites under investigation, also pointed to this characteristic quality of biblical gardens.

Review of terms used to describe a biblical garden

A concise characterisation of a biblical garden, provided by a journalist, was referenced by Hermann Scheuer. It states that a biblical garden is an exhibition of plants and structures in an open space that references biblical times. It is a visual instrument of conveying a biblical message in an enclosed space (Scheuer, 2008). This author also stated that "biblical gardens were a niche offering a positive space of resistance against the constant increasing of efficiency, the absolute power of the media and the vertiginous pace of life". He also concluded that the biblical garden that, in the twenty-first century, is becoming a conveyor of biblical history, can serve people as a key to understanding and accepting God's message contained in Scripture. Especially in contemporary times, during which man is being pushed into the role of a consumer, religious roots can give him strength in the search for the meaning of life (Scheuer, 2008).

Slightly different aspects, resulting from the fact of establishing a biblical garden, were pointed at by Henning Adam König (2004), which he expressed in the following definition: "A biblical garden is a place in which man is close to God, here he thinks, here he experiences the Divine precept to shape the earth and protect it". He thus references God's order contained in the Book of Genesis: "The Lord God took the man and put him in the Garden of Eden to work it and take care of it" (Genesis 2,15). Within a biblical garden, man "senses Divine omnipotence, which manifests itself in things grand and small, for the garden is a place of reflection, it teaches respect, humility, gratitude and joy", and through this it encourages man to make his everyday decisions in accordance with not only the order to shape, but also to protect this "garden" that has been given to him (König, 2004). This author also defined the biblical garden as "an internal page of the soul of a man (...), a centre which connects the world with God", in addition to concluding that a biblical garden is an "aid in faith" (König, 2004). He perceived the garden as a suitable space to remind man of the necessity to convert and improve his behaviour. This is meant to be achieved by observing one's surroundings. Man, when looking upon the failures associated with caring for a biblical garden, sees that nature, when left to its own designs, "heals itself", it repairs prior errors. A similar process can take place inside a man, who, after realising his mistakes, provided he has a positive attitude, can soon be ready to undergo an internal transformation, which will constitute

proof of his maturity and can lead to his success and contentment (König, 2004).

Sebastian Kijas, in turn, concluded that "a biblical garden is a mysticism of the open eyes, a type of practical lesson on religion, a foreboding of the future world and a longing for paradise" (Kijas 2004). According to Niklaus Popp: "A biblical garden is a place of contemplation and meetings, a place where heaven and the earth touch, of their mutual communication and dialogue", just as John the Evangelist told us: "In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning" (John 1,1-2). These words, as the author concluded, indicate that one of the qualities of God is a living connection with creation. Creation in and of itself is limited and impermanent, only through the word (dialogue) does it gain its God-given perfection (Popp, 2006).

Dieter Andresen (2003) pointed to a different aspect of biblical gardens – their thematic character – on the example of "Propheten im Garten" in Schleswig, showing that this garden, and particularly the subject of the teachings of biblical prophets that it features, is what causes "a concern with the word, which becomes alien, but at the same time tempts us, inspires interest and agitates. It allows one to see the present, but in a manner that is different than usual: one that is clearer, more precise, sober, but also with greater comfort". According to him, a biblical garden forces the modern man to ask himself many fundamental questions about truth, its sense, source and the price that the biblical prophets paid for it. He also calls for life in truth, which leads to man becoming truly free.

Hans Eidenberger (2008), in turn, considered the biblical garden as a "space of spiritual rest, similar to an imagining of paradise". It is meant to encourage man to involve "all of creation" in his existence, whose representatives are all the plants on Earth, the "garden of God", with the biblical garden representing them.

Ingrid Penner, Franz Kogler and Friedrich Schwarz from the Botanical Garden and Naturkundliche Station of Linz defined the biblical garden in a similar manner. They stated that a biblical garden provides an opportunity to better understand the flora of the Near East, where biblical events had happened, and gives us the ability to better understand the significance of a biblical text written in another culture and in different living conditions. Especially to people from cities, such a garden is like an "oasis in the desert" (Penner et al., 2007). According to them, a biblical garden allows one to experience the world of plants through many senses, which facilitates a better understanding of the Bible.

The thematic and learning concepts of the biblical garden can be described as "Through the senses to sense", which means that the path to knowledge about the word of the Bible leads through the medium of plants (Mendl et al., 2008).

Anette Lukesch (2009), as a gardener, expressed the opinion that biblical gardens are a type of garden that stands out because it conveys a specific message and shows the Bible in a new manner. This highlights the similarity in the functioning of biblical gardens with the cloister garths of monasteries, which is based on the fact that both gardens are an isolated space that facilitates focus and contemplation. It also shows the function of the tree in these gardens as a symbol of wisdom, which is at the same time a symbol of earthly and heavenly paradise. In turn, water and stone, so widely present in biblical gardens, are considered a demonstration of the opposites of evanescence and lasting, which symbolise earthly and eternal life (Lukesch, 2009).

Bielo (2018) cites, after the creators of the Biblical garden in Paradise Valley, that a biblical garden is "a sacred place of healing and beauty", "a place of [God's] presence", a place "for a quiet stroll, a time of meditation or a picnic" and "a place of prayer, healing, and celebration", in addition to citing words from the Greenville garden: "to bring the Bible to life through God's green and growing things". However, he himself defines a biblical garden as "a complex kind of religious attraction with a hybrid quality, mixing elements and influences from monastic gardens, public botanical gardens, Holy Land re-creations, interactive museums, and immersive theme parks".

The author's own definition of a biblical garden based on original research

Biblical gardens are a certain specific illustration of the Bible. They have turned out to be one of the interesting methods of a deeper and more precise reading of biblical texts by modern man in different corners of the world. The creators of biblical gardens use various scientific and cultural achievements in order to create interesting spaces, rich in numerous symbolic and sensory elements, serving modern man, transporting him into the environmental, economic and cultural reality of the period during which the Bible was written.

Based on the interdisciplinary research of the subject of gardens that has been conducted for

20 years, the author of this article states that she has grounds to generalise and formulate a scientific definition of a biblical garden for the first time, the definition being:

A biblical garden is an arranged area of greenery, in which, with the help of various means of expression, a scenery reflecting the environmental and economic reality of the Holy Land is created in order to facilitate the reading of a biblical text, and through this a deeper and more precise understanding and knowledge thereof.

The material of a biblical garden is mainly composed of the plants mentioned in Scripture. They are placed in the garden along with their names and Bible quotes in which the said plants are mentioned. To highlight the symbolic message conveyed by a biblical text, compositional layouts referencing religious symbols are used, while miniature landscapes and structures that occur in the Holy Land are used in order to illustrate the environmental and economic background. Paintings, works of sculpture, music and garden design are used in the presentation of selected biblical events. A biblical garden often becomes a narrative garden, as it "narrates" the history of salvation, as well as a sensory one, as it refers to the senses: sight, touch, hearing, smell and taste. By presenting the plants of the Near East, it constitutes an example of a thematic garden in the understanding of a natural domain, while through the fact of illustrating a text of the Bible it constitutes an example of a thematic garden in the literary sense.

CONCLUSIONS

1. In 24% of the investigated gardens, biblical plants were the only ones to be cultivated, while successive gardens (9%) featured the addition of species native to Israel in order to create a biblical landscape. This composition of flora was recommended by the first creators of such gardens. In over a half of biblical gardens (54%), ornamental plants were used for decorative purposes along with biblical species, while a couple also saw the planting of herbs or plants associated with the Christian tradition.
2. Biblical plants are presented in gardens in such a way as to show their characteristics, significance and place in biblical texts to the fullest extent: 95% of such sites feature plant names in the local national language, 70% – in Latin, 79% – along with a quote, 41% – along with a description in a guidebook, while from several to over a dozen % feature them along with additional information plaques, photographs, or virtual presentations. In close to a half of the gardens (44%), visitors can use the services of a guide.
3. The most often used symbolic element – used in 81% of the gardens – are water features, something that already characterised the first such sites in history. The next element in order can be the cross (32% of sites), the tree of the knowledge of good and evil (25%), the fish (16%), the letters Alpha and Omega (11%), as well as the star of David and the menorah (10% each).
4. Slightly over a half of the gardens (54%) feature elements of street and garden furniture associated with the conveyed biblical message being presented at a given site, while from among these the most common to be set up are statues or sculptures (in 25% of the sites), structures (24%), as well as farming tools and devices. In 38% of the gardens miniature landscapes depicting the Holy Land were set up.
5. Based on the author's research, the first scientific definition of a biblical garden, constituting a significant supplementation of subject literature, has been formulated.

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CONFLICT OF INTEREST

Author declares no conflict of interest.

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