

## **Biblical Gardens in dissemination of ideas of the Holy Scripture**

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### ABSTRACT

The major aim of creating biblical gardens is to combine popularising the Scripture with a chance to experience the beauty of nature. The most striking biblical garden among the considerable number of those founded all over the world is the Biblical Landscape Reserve Neot Kedumim in Israel. Situated in the territory where the Bible was actually written, it provides favourable growing conditions for all biblical plant species. The fact that most of the plants mentioned in the Scripture can be planted in colder climates makes it possible to cultivate biblical plants also in Europe and North America. Some species, very sensitive to low temperature, are grown in flowerpots. The arrangement of plants according to specific themes, such as "The Pool of Salomon", "The Vineyard of Isaiah", "The Garden of the Song of the Songs" or "Resurrection Garden" is a typical feature of biblical gardens. They sometimes feature flowerbeds in the shape of religious symbols, such as the cross or the Star of David, and buildings and statues depicting biblical scenes. The paper presents the results of the questionnaire survey led in 1999 – 2001 in 13 biblical gardens in Israel, Europe and the USA.

## INTRODUCTION

As much as 85% of all information reaches us through the sense of sight. This way of perceiving the world also applies to the art of gardening where live plant substance constitutes construction material. By presenting the plants mentioned in the Bible in various arrangements, one can popularize images from antiquity. Some botanical gardens, displaying numerous plant species from all over the world, contain collections made up from plants mentioned in the Bible. Certain large park establishments, founded as recreational facilities, may also include gardens displaying biblical plants.

Botanists have unquestionably identified about 100 known plant species mentioned in the Bible. However, not all terms referring to plants used in the original text of the Scripture, whether Hebrew or Greek, can be easily identified; therefore, there is an ongoing debate about another possible 100 plant species. Thus, the list of biblical species is subject to constant verification.

The aim of this research was to locate existing biblical gardens, become acquainted with the way they are established, and gather information about the arrangement of plants.

## MATERIAL AND METHODS

In the years 1999 – 2001, a questionnaire was created and sent to numerous institutions in Asia Minor, Europe and North America in order to investigate the popularity of the idea of biblical gardens and their characteristic features. During this time the author was in contact with the founders and managers of the biblical gardens. One result was the accumulation of abundant data pertaining to 13 biblical gardens situated in Israel, Western Europe and the USA. The following publication presents their location, composition and manners of plant display.

## RESULTS AND DISCUSSION

As a result of this research thirteen biblical gardens were located, four in northern Europe, seven in the United States of America and two in Israel (Table 1).

The Biblical Landscape Reserve Neot Kedumim is an unsurpassed model for emerging biblical gardens. Founded in 1968, it stretches over the area of 250 hectares. It features reconstructed fragments of various Holy Land landscapes, with soil and vegetation typical of a given region. It contains terraces constructed in imitation of ancient fields. Earthworks in the area discovered remains of ancient buildings, such as wine and olive presses, which were then reconstructed.

Table 1. Distribution of biblical gardens surveyed

Country	Name of the garden	City	Approximate location	Geographic location
Ireland	The Biblical Garden, Cobh.	Cork	south coast of the Atlantic, on the mouth of the Lee River	latitude 52°N longitude 8.5°W
Israel	Neot Kedumim	Lod	central part of the country, by Road 443 between Tel-Aviv and Jerusalem	latitude 31°50'N longitude 35°E
	"The Path of Bible Plants" at the University, Botanical Garden	Jerusalem	central part of the country	latitude 31°45'N longitude 35°15'E
Germany	Pflanzen der Bibel	Hamburg	North German, Lowland on the Elbe River	latitude 54°N longitude 10°E
The United States of America	Biblical Garden at Magnolia Plantation and its Gardens	Mt. Pleasant	South Carolina, 10 miles from Charleston, the Atlantic coast, on the Ashley River	latitude 33°N longitude 80°W
	Biblical Garden, Cypress Gardens	Winter Haven	Florida, between Orlando and Tampa	latitude 29°N longitude 81°30'W
	Biblical Garden of Ojai	Ojai	California, between Santa Barbara and Los Angeles	latitude 34°N longitude 119°W
	Lowe Herb Garden	Ellicottville	New York, near Buffalo	latitude 42°N longitude 79°W
	Rodef Shalom Biblical Botanical Garden	Pittsburgh	Pennsylvania, the Allegheny Mountains on the Monongahela River	latitude 40°N longitude 80°W
	Temple Sinais Edward E. Kahn Memorial Biblical Garden	Newport News	Virginia, the Atlantic coast near Norfolk	latitude 37°N longitude 76°15'W
	The Biblical Garden, Cathedral of St. John the Divine	New York	New York, the Atlantic coast	latitude 41°N longitude 74°W
Great Britain	The Biblical Garden	Elgin	Scotland, on the north coast of the North Sea, the mouth of the Spey River	latitude 58°N longitude 5°W
	Veritas Nursery	Girvan	Scotland, on the Firth of Clyde Bay, west coast of the Atlantic	latitude 55°N longitude 5°W

Numerous exhibits, such as irrigation devices, mills, house furnishings and farming tools from biblical times, were either brought to the site or reconstructed (Naveh 1989). The reserve includes areas of farmland, vineyards, olive groves, sites for thrashing and cleaning grain, and goat and sheep folds, where farming is conducted as it was done in the ancient times. Visitors move along planned routes in a train powered by electricity. They may observe or even take part in the farmwork. Neot Kedumim is a museum where life stopped in biblical times. It performs educational, cultural and religious roles; it has also been an inspiration

for similar establishments in other parts of the world, such as the one in Newport News.

Creators of biblical gardens outside the Holy Land encounter some limitations caused mainly by low winter temperatures, which do not constitute an unbreakable barrier for founding such gardens. A lot of plants mentioned in the Bible grow well in the climatic conditions of Europe and colder regions of North America (Hepper 1998), where such sensitive species as *Aloe vera* L., *Capparis spinosa* L., *Ceratonia siliqua* L., *Cinnamomum cassia* Blume, *Lawsonia inermis* L., *Nerium oleander* L., *Phoenix dactylifera* L., *Punica granatum* L. or *Tetraclinis articulata* (Vahl) Mast. are cultivated in flowerpots.

The questionnaire established that all biblical plants collected in the six gardens of Cork, Lod, Jerusalem, Winter Haven, Ojai and Newport News are planted in the ground throughout all seasons. Elgin, the northernmost garden situated at 58°N, possesses the greatest number of plants wintered in greenhouses and taken out in summer. These plants constitute 25% of all exhibits. In the Botanical Garden in Hamburg, the percentage of similarly treated plants amounts to 20% (Hamburg is situated at the 54°N). 10% of plants grown in the gardens at the Cathedral of St. John in New York and at Magnolia Plantation in Mt. Pleasant winter in greenhouses. A very insignificant number of plants, only 2%, are kept indoors in winter at Lowe Herb Garden in Ellicottville.

Only one garden, the one in Elgin, displays 50% of the presented biblical plants in the form of herbaria. None of the gardens have permanent hothouse collections. The garden in Ojai displays nuts, grains and spices.

Swenson (1995) and Hepper (1998) advocate the introduction of other related species, similar in appearance, in place of original biblical plants. These species would be indigenous or well adapted to the climate where a garden is planted. This mainly refers to arborescent and herbaceous plants growing outdoors all year round. For instance, they recommend a replacement of *Cedrus libani* A. Rich with *C. atlantica* (Endl.) Menetti ex Corricre, *C. brevifolia* (Hook.f.) A. Henry or *C. deodara* (Roxb. ex Don) G. Don; *Pinus halepensis* Mill. - with *Pinus sylvestris* L.; *Platanus orientalis* L. - with *Platanus occidentalis* L. Swenson (1995) and Hepper (1998) are of the opinion that fruit-bearing plants, such as vine, decorative plants, such as tulip or crocus, and vegetables, such as onion or lima beans, all existing as garden varieties, may be planted in biblical gardens instead of pure botanical species. Garden varieties are easily available and easy to cultivate.

Biblical gardens worldwide are designed in different ways. Out of the 13 biblical gardens, the five gardens of Jerusalem, Hamburg, Neot Kedumim, Ojai and Winter Haven were established independently by their owners. Benedictine Sisters in Cork used the help of volunteers apart from their own work. The gardens of Ellicottville and Newport News are the work of volunteers alone. Specialised

gardening companies founded biblical gardens in the city parks of Magnolia Plantation in Mt. Pleasant and Elgin, at the New York cathedral and in Pittsburg.

Out of 13 studied gardens, no manner of plant organisation was applied in three. Six used the criterion of utility value (Cork, Mt. Pleasant, Ojai, Ellicottville, Pittsburg and Newport News). Only in Neot Kedumim, apart from organisation according to biblical themes, the plants were arranged according to their habitat conditions. As it is clear from correspondence, special geographic enclaves were designed and created to host plants typical for such areas as forests, farmlands, orchards (with olive and wine presses), deserts and saline soils.

In six gardens, the displays were fully or partly designed on the basis of biblical scenes or themes. The most outstanding examples of such organisation are The Biblical Landscape Reserve in Neot Kedumim, the garden in Elgin and the gardens at the convents of Benedictine Sisters in Cork and in Pittsburg. The Botanical Garden in Hamburg also features biblical themes. Cork and Magnolia Plantation in Mt. Pleasant applied two criteria for plant organisation: utility value and biblical themes. None of the gardens displayed plants organised according to the taxonomical criterion.

In six gardens, various biblical themes were grouped separately. Also in six there is no such division, and the garden in Jerusalem did not provide an answer to this part of the questionnaire. The greatest number of biblical themes - 14 - are presented in Neot Kedumim, and the smallest number - 2 - in the garden in Mt. Pleasant. The garden in Elgin presents 8 biblical scenes, the one in Cork - 7, and the one in Pittsburg - 5. The most common ones are "Proverbs", "The Way of Moses", "The Vineyard of Isaiah", "The Pool of Salomon", "The Garden of the Song of the Songs" or "The Olive Grove". Some flowerbeds were designed in the shape of religious emblems, such as the cross in Cork, Elgin, Magnolia Plantation and New York, and the Star of David in Magnolia Plantation and Newport News. A few gardens: Cork, Hamburg, Neot Kedumim, Ojai and Pittsburg, had water tanks constructed as habitat for water and bog plants mentioned in the Bible. The source of water in Elgin is a well complemented by sculptures portraying Jesus and the Samaritan Woman, an illustration of the scene described in John 4:6-14. Complement of plant arrangements may include figures, statues and buildings referring to the Bible. Two gardens, Cork and Elgin, had Jesus's tomb constructed, and in Elgin and Magnolia Plantation many statues portray David, Mary, Jesus the Good Shepherd, Jesus the Sower, the Samaritan Woman, the father of the prodigal son and Samson pushing two columns apart. The garden in Pittsburg was designed as an imitation of Palestine topography with its characteristic elements of the Sea of Galilee, the Jordan and the Dead Sea. Apart from their decorative and esthetic value, biblical gardens popularize the contents of the Bible by quotes placed by displayed plants. The biblical garden in Ellicottville is a part of a larger complex,

which includes tennis courts, pitches, swimming pools and some forested area. It also contains a field altar, prepared for offering a mass, which presents a possibility of reconciling active relaxation and religious observances.

## CONCLUSIONS

1. As a result of the research thirteen biblical gardens were examined.
2. Foundation of collections of biblical plants and biblical gardens is not limited to the area of the Holy Land, but takes place in Europe and North America as well.
3. In the climatic conditions of Europe and the USA, where the cultivation of hot climate plants is not possible, some biblical plants are replaced with related species of similar appearance or original species grown in containers.
4. Biblical gardens display plants according to their practical value, habitat conditions or according to biblical themes.
5. Plant arrangements in biblical gardens are complemented with buildings or statues referring to biblical themes.

## REFERENCES

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## SZERZENIE IDEI PISMA ŚWIĘTEGO POPRZEZ OGRODY BIBLIJNE

Streszczenie: Głównym celem tworzenia ogrodów biblijnych jest popularyzacja Pisma Świętego poprzez obcowanie z przyrodą. Na całym świecie powstało wiele ogrodów biblijnych, jednak Rezerwat Krajobrazu Biblijnego Neot Kedumim wydaje się być najlepszym przykładem takiego obiektu. Został on założony na terenach gdzie powstawała Biblia, dlatego też istnieją tam najlepsze warunki dla wzrostu i rozwoju roślin wymienionych na kartach Pisma Świętego. Wiele z tych gatunków może być z powodzeniem uprawianych także w zimniejszym klimacie

jakim cechuje się Europa i Ameryka Północna. Rośliny szczególnie wrażliwe na niskie temperatury mogą być sadzone w pojemnikach. W ogrodach biblijnych rośliny grupuje się tematycznie w kolekcjach np.: „Staw Salomona”, „Winnica Izajasza”, „Ogród Pieśń nad Pieśniami” oraz „Ogród Zmartwychwstania”. Znajdują się tam również rabaty w kształcie emblematów religijnych takich jak krzyż i Gwiazda Dawida oraz budowle i posągi, które przedstawiają sceny biblijne. Artykuł prezentuje wyniki badań ankietowych przeprowadzonych w latach 1999–2001, w trzynastu ogrodach biblijnych w Izraelu, Europie i USA.

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