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DESIGN AND PRINCIPLES OF A BIBLICAL GARDEN IN THE TRANSYLVANIAN AREA REGARDING LANDSCAPING

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University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca
Faculty of Horticulture and Business in Rural Development

Master of science:
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Abstract

Planning a garden according to the principles and rules that aim to reproduce a theme can be found as a main motive in the design of gardens since ancient times. Biblical gardens have huge potential because they are part of a wide niche of ideologies that have left their mark on entire civilizations, their way of life and their subsequent development. [4] The aim of this project is to establish templates for the arrangement of biblical gardens and their implementation within two church settlements, in order to best illustrate their functionality and importance in distinct locations: urban and rural site. These two contrasting layouts are analyzed in parallel to highlight the differences on a historical, cultural and social level, approached and adapted to the architectural aspects and framing in the territory, applying as effectively as possible the principles of a biblical garden for each individual situation in a practical and pragmatic way. An extensive study of the different categories of plants found in the Bible [1], as well as of the ethnobotany of the romanian people [5, 11], was carried out in order to select those specimens that lend themselves to the location and pedo-climatic conditions in Romania and can be included as a motif through urban planning in designing the site and surroundings.

Material and Method

Locations:

(1) Urban - The Orthodox Church "Descent of the Holy Spirit" from Zalău, Sălaj county

(2) Rural - The wooden church "Saints Archangels Michael and Gabriel" Bulgari village, Sălățig commune, Sălaj county

Introduction

Landscaping using biblical plants is not so well defined and imagined on the territory of our country, being a subject that has not been practiced or studied throughout the ages. "However, one should not neglect the significance of the symbolic impact on the landscape when dealing with churches and monasteries." [10]

The Bible makes numerous references to various plants, fruits, foods, timber, as well as gardening and agriculture. There is almost no chapter without such a reference, and in many chapters they are multiple: the Old Testament depicts God the giver of life, while in the New Testament we are shown a new life in Christ << And God said: "Let the earth bring forth green plants, plants yielding seed, and fruitful trees yielding fruit from which their seed is, each according to its kind, on the earth" >> (O.T., Genesis 1: 11). [7, 8]



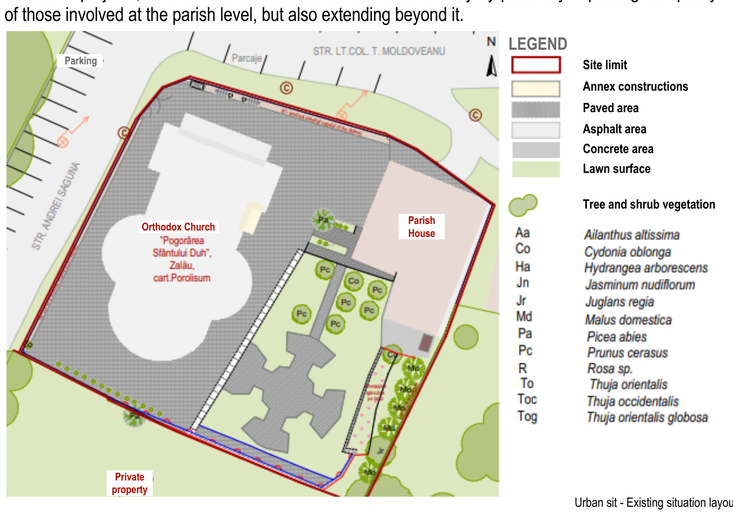
Urban sit - The Orthodox Church dedicated to the "Descent of the Holy Spirit" from Zalău (1)
Scale 1:1000





Urban sit - Existing situation (parish house, the church as seen from the garden)

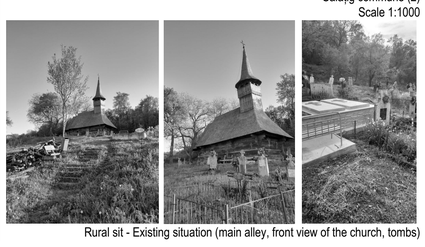
Consecrated in 2001, the church`s construction was inspired by the neo-Byzantine architectural style. Due to the architectural style, as well as the community of parishioners consolidated over time, this place represents the right object of study for the integration of the chosen theme in the arrangement of the gardens related to the churches in the urban environment. [9] The studied site has a total area of 2.138 square meteres, of which 588 square meters is the green space, and 546 square meters is the grassy, garden area. As an institution, the church in question operates locally and regionally through involvement in numerous projects, involvement in the social life of the community by positively impacting the quality of life of those involved at the parish level, but also extending beyond it.



Urban sit - Existing situation layout (1)

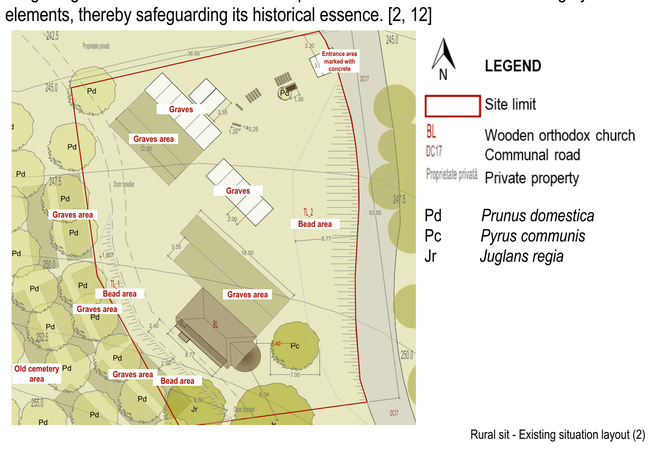


Rural sit - The wooden church "Saints Archangels Michael and Gabriel" Bulgari village, Sălățig commune (2)
Scale 1:1000



Rural sit - Existing situation (main alley, front view of the church, tombs)

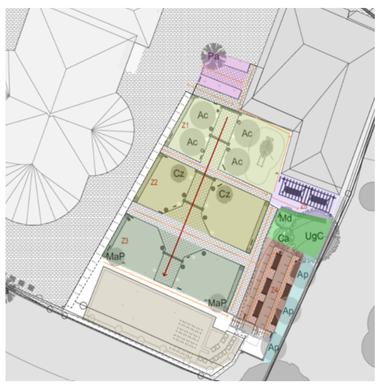
The studied site, specifically the Wooden Church of Bulgari, holds significant historical and cultural importance, the wooden church is listed on the List of Historical Monuments of Sălaj county, being part of the national cultural heritage. According to the data from the List of Historical Monuments in Sălaj county, the wooden church "Saints Archangels Michael and Gabriel" dates from 1547, being the oldest wooden church in the administrative territory of Sălaj county. The LMI code (List of Historic Monuments) assigned to the mentioned monument, SJ-II-m-A-05029, signifies its registration within the official inventory of historic sites as an architectural monument of national interest. [3, 13] Preserving such sites is crucial not just for their visual appeal but also for the cultural heritage they represent. Incorporating sustainable and environmentally friendly design elements can further enhance the site's value while ensuring its longevity for future generations by integrating modern conservation techniques to maintain the structural integrity of the wooden and stone elements, thereby safeguarding its historical essence. [2, 12]



Rural sit - Existing situation layout (2)

Results and discussions

Through this paper, a comparison is made between the ways of approaching a biblical garden in different conditions from a historical, cultural and aesthetic point of view. Because the study proposes the arrangement of biblical gardens for both urban and rural sites and with the aim of parallel analysis of different approaches depending on genius loci, customs, architecture, lifestyle, population, users and terrain, the green spaces will be arranged accordingly to the environment, using the biblical plants selected. [6]



Zoning of the green space of an urban church (1)

Regarding the functionalities proposed for the biblical garden, a zoning scheme has been developed to explain the concept as a whole, as well as the connectivity at a comprehensive level:

Zone 1: Almond Grove and Children's Playground Area;
Zone 2: Aromatic Zone;
Zone 3: Altar Facade Zone;
Zone 4: Seating Area with Benches;
Zone 5: Relaxation Zone with Swings.

The design aims to create a functional and educational space, which seeks to highlight the defining elements of the neo-Byzantine construction and accentuate its architectural style by integrating vegetation in an aesthetic and original manner, influenced by the biblical garden theme.



Zoning of the green space of an wooden church (2)

The concept aims to integrate natural elements, native plant species with religious significance from the ethnobotany of the Romanian people, into the landscaping project of the green space adjacent to the church.
To ensure the preservation of the site's identity, its memory is brought to light through the use of natural materials (rough stone, wood, gravel) in harmony with the existing elements on-site.

Zone 1: Platform zone with gabions arranged in the form of an amphitheater;
Zone 2: Observation and meditation platform area;
Zone 3: Observation and meditation platform area, panoramic point;
Zone 4: Flowered graves.

In addition, a series of functional areas that can take the place of a small summer shrine, observation platforms and benches for relaxation at key points on the site have been created.



Amygdalus communis | *Cinnamomum zeylancium* | *Platanus orientalis* | *Hedera helix* | *Juniperus horizontalis* | *Lillium sp.* | *Myrtus communis* | *Coriandrum sativum* | *Mentha sp.* | *Parthenocissus tricuspidata*

Vegetation for the layout suggestion (1)

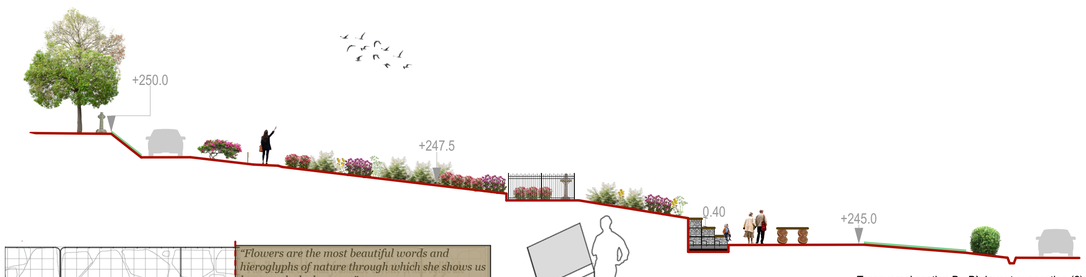


Ailanthus altissima | *Philadelphus coronarius* Aureus | *Aruncus dioicus* | *Callistephus chinensis* | *Aster novi-belgii* | *Galium verum* | *Paeonia peregrina romanica* | *Rosa* "Mister Lincoln"

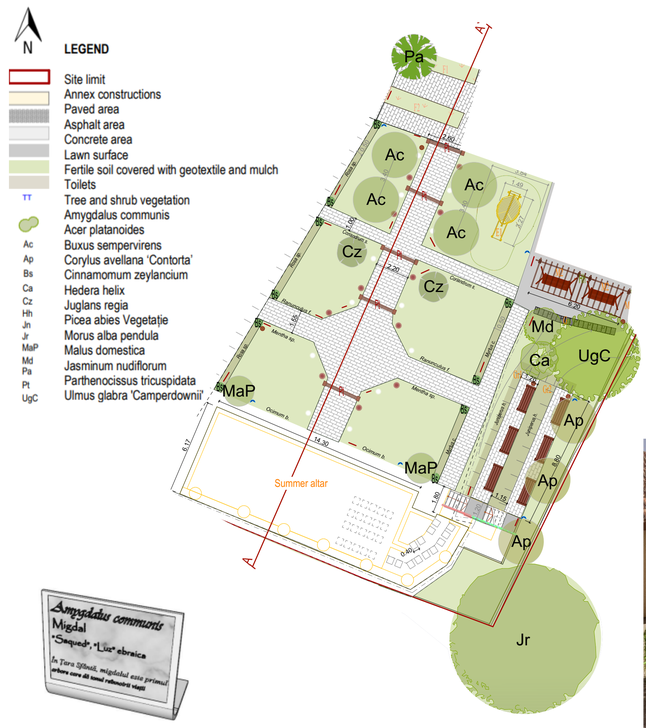
Vegetation for the layout suggestion (2)



Longitudinal section A - A`, layout suggestion (1)
Scale 1:150

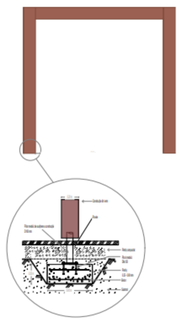


Transversal section B - B`, layout suggestion (2)
Scale 1:150



Orthodox church, urban environment- Layout suggestion (1)
Scale 1:1000

Detail of the pannels (1)



Detail of the pergolas (1)



Main alley,, entrance view (1)



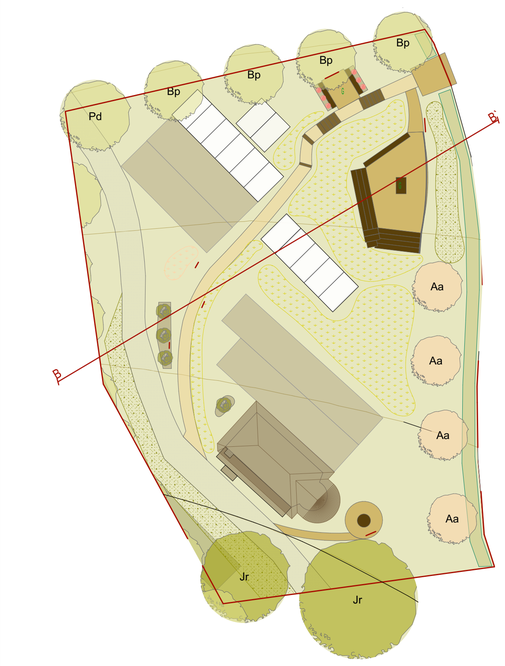
N-V view of the site (1)

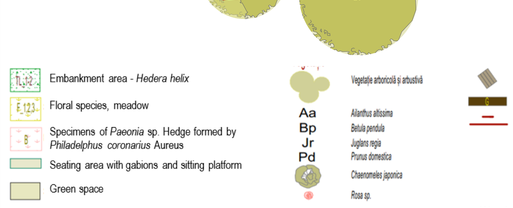


Summer altar and main alley view (1)



Seating area with benches view (1)





Detail of the gabions transformed in sitting benches, inscribed with representative quotations (2)
Top view



Detail of the information boards (2)
Isometric, top and front view



Top view of the wooden church`s garden (2)



Perspective from the main alley (2)



Sitting area near the main alley (2)

Wooden church, rural environment- Layout suggestion (2)
Scale 1:1000

Conclusions

This project highlights the significance of themed landscaping to the public, advocating for the incorporation of biblical garden styles within our country as a distinct theme. It adheres to specific principles and recommends an array of fitting elements and structures. The case study conducted on the urban site has demonstrated the usefulness and importance of selecting and creating a database of plants with biblical significance, to be used as a source of information and guidance in the development of future landscaping. These species are suitable for integration into urban developments, provided the architectural style of the building is respected, and landscape style elements are included. Similarly, the establishment of a biblical garden in a rural setting has proven, in comparison, to be distinct, emphasizing the significant importance of a detailed study of the site's history, the restoration of buildings, and the implementation of a rustic style that is in complete harmony with the site's image.

PAISV
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