

PRACTICAL SOLUTION TO ACHIEVE A UTILITY SECTOR IN A PRIVATE GARDEN

SOLUȚIE PRACTICĂ DE REALIZARE A UNUI SECTOR UTILITAR ÎN CADRUL UNEI GRĂDINI PRIVATE

SANDU Tatiana^{1*}, IVAȘCU Cl.², TROFIN Alina -Elena¹,
BERNARDIS R.¹, GRECU Codrina¹

*Corresponding author e-mail: tatiana_sandu69@yahoo.com

Abstract. This paper presents the solution of setting up a utility sector grown with traditional and exotic vegetables, but also aromatic and pharmaceutical utilitarian plants, necessary for the use of a household. The style of arrangement of the utility sector is the English one, following the classic pattern of vegetable gardens, with well-defined geometric shapes, but which, in addition to the utilitarian role, also serve as a relaxation space. Thus the sector is provided with a small square in the center, with seating, a vessel of water for birds in the center and an ornamental brick wall with a waterfall in the form of a curtain. In the center of the arrangement, but also on the alley, were placed pots with flowering plants but also exotic tree species such as lemons, oranges, mandarins, etc. The utility sector will have a fence consisting of a white picket of 70 cm high that has not only an aesthetic but also a functional role, stopping the access of pets in the area. The entrance to this sector will be made through a vault with a gate, on which specimens of honeysuckle will be erected, and behind the arrangement, next to the ornamental wall with water and pool, two triads have been proposed that create an intimate but also aesthetic environment, opting for their coverage with the help of specimens of improved ivy. The vegetal material is assumed to be planted in raised layers (cofferdams), made entirely of built bricks, as well as the pavement and the ornamental wall. The paper presents both the planning stage and the execution stages of this utility sector within a private property in Focșani, Vrancea, during May-August 2019.

Key words: garden, utility sector, vegetables, aromatic and pharmaceutical herbs

Rezumat. Această lucrare prezintă soluția înființării unui sector utilitar cultivat cu legume tradiționale și exotice, dar și plante utilitare aromatice și farmaceutice, necesare pentru uzul unei familii. Stilul de amenajare al sectorului utilitar este cel englezesc, urmând tiparul clasic al grădinilor de zarzavat, cu forme geometrice bine delimitate, dar care, pe lângă rolul utilitar să deservească și ca spațiu de relaxare. Astfel, sectorul este prevăzut cu o mică piațetă în centru, cu locuri de stat, un vas cu apă pentru păsări pe centru și un zid ornamental din cărămizi cu un joc de apă sub formă de perdea. În centrul amenajării, dar și pe alee, au fost poziționate vase cu plante floricole dar și specii de pomi exotici precum lămâi, portocali, mandarina etc. Sectorul utilitar va avea o împrejmuire constituită dintr-un gard alb de 70 cm înălțime care nu are doar rol estetic ci și funcțional, oprind accesul animalelor de companie în zonă. Intrarea în acest sector se va face printr-o boltă cu porțiță, pe care se vor

¹University of Agricultural Sciences and Veterinary Medicine Iasi, Romania

²SC Doctor Green SRL Iasi, Romania

ridica exemplare de caprifoi, iar în spatele amenajării, lângă zidul ornamental cu apă și bazin, au fost propuse două treiaje ce au rol de creare a unui mediu intim dar și estetic, optând pentru acoperirea lor cu ajutorul unor exemplare de iederă ameliorată. Materialul vegetal este prevăzut a fi plantat în straturi înălțate (casetoane), realizate în totalitate din cărămizi zidite, la fel ca pavajul și zidul ornamental. Lucrarea prezintă atât etapa de planificare cât și etapele de execuție a acestui sector utilitar în cadrul unei iproprietăți private din municipiul Focșani, Vrancea, în perioada mai-august 2019.

Cuvinte cheie: grădină, sector utilitar, legume, plante aromatice și farmaceutice.

INTRODUCTION

Research on the utilitarian sector in private gardens highlights the fact that, in most cases, they are considered miniature versions of old farmland, but these "vegetable" gardens differ both from a historical and a design point of view (Bentley, 1998).

For example, in France these gardens are called "Potager Jardin" and we can see in their design the influence of the Renaissance periods by arranging these floors where there were not only vegetables but also flowers (which helped to maximize the effect), plant pots, gravelands and alleys and other period-specific compositional elements (Bartley, Jenifer, 2006).

The se small utilitarian gardens, regardless of time, period, needs, have kept their place and continue to be an important part of the arrangement.

The art of arranging utilitarian gardens, according to the rules of landscape architecture, has experienced a sharp development in recent years because, if in the past Romanians wanted a yard with many layers of vegetables, now they have changed their tastes, wanting a combination of decorative and utilitarian. Thus, decorative gardens appear more and more often in the new neighborhoods of villas where the utilitarian sector is considered special and treated as such (Sima, 2009).

This arrangements started from the owner's desire to have a space where you can cultivate what you need to get food but also natural remedies in your own family.

MATERIAL AND METHOD

The purpose of this work is to present the realization, inside a landscaping in a private yard in the city of Focșani, at the request of the client, of a utilitarian sector, with aromatic and medicinal plants, but also with vegetable specimens.

The private garden covers an area of about 8,000 squaremeters, with the landscaping around the house which is 3,000 squaremeters, with a strong emphasis on watergames.

The total area of the utility sector is approx. 70 sqm, of which approx. 70% of the total area was planned to plant species of flowering plants, aromatic and medicinal herbs, and the other 30% vegetable plants for family consumption. The design phase is represented by the realization of the 2D utility sector plan (in .dwg format) in Autocad, after which the 3D projection was made in the RealtimeLandscaping program, to help the client to better visualize the final product. The execution phase

followed, between May and August 2019, when the projected solution for arranging the utilitarian sector was put into practice.

RESULTS AND DISCUSSIONS

From the initial analysis of the site to be arranged it is found that on the place of the future utility sector there were initially only a few improvised layers, where vegetables were already produced for family consumption, but the space was not well organized or easy to maintain given that there was no irrigation and no paved alleys to facilitate access. The fencing was made only from the side with mesh panels and did not offer anything attractive from an aesthetic point of view and to a more detailed analysis, also not from a practical point of view given that the owner had pets. (fig.1).



Fig. 1 The initial situation of the site to be arranged (*original*)

Figure 2 shows the 2D plan of the utility sector, noting the geometric style of the arrangement solution, the central area provided with decorative vessel, along with the built elements: 4 boxes in the shape of the letter L, 8 rectangular boxes, 6 square boxes, 2 narrow-rectangular and decorative wall with falling water.



Fig. 2 Utility sector layout sketch (*original*)

The location of the utilitarian sector is in the south-eastern area of the property, a favorable situation, through exposure to maximum sunshine, for the

development of leguminous, medicinal and floricultural plants that have been proposed in the arrangement (fig. 3).



Fig. 3 General plan of the private garden and the utilitarian sector (original)

The arrangement project provides 3D details that illustrate the solution of arranging this sector in an obvious geometric style, in figures 4 and 5 being shown the central square, with seating and a vessel of water for birds, as well as the ornamental wall of bricks with a game of water in the form of a curtain.



Fig. 4 Central area of the sector (original)



Fig. 5 Trenches and water curtain (original)

The execution phase of the arrangement started with the picketing works of the future sector, delimiting the necessary space. All the strings were placed with the help of the laser to be perfectly straight, after which the excavations were started and the form works were made to pour the foundation (fig. 6 and 7). This was followed by the pouring of the concrete slab on the center of the sector,

comprising the water basin, the entrance and the interior of the four cofferdams that delimit this whole area. The other layers were built on a concrete belt but at the end of the project the access to the mis made on the lawn.



Fig. 6. Land picketing (*original*)



Fig. 7. Belt formwork (*original*)

It was decided to pour a concrete slab (fig. 9) to provide strength and stability of future cofferdams, wishing to keep the raised layers in time, as intact as possible. Welded mesh was used to pour the concrete (fig. 8).



Fig. 8 Welded mesh detail (*original*)



Fig. 9 Concrete pouring (*original*)

Next, the construction works of the cofferdams were started, these having the edge of the width of a brick (0.12 m) being built on 6 rows to reach the desired height (approx. 0.5 m) (fig. 10 and 11).



Fig. 10 Construction of cofferdams (*original*)



Fig. 11 Cofferdams almost completed (*original*)

After making the brick elements, which constitute the raised layers of plants, the brick base was made on which is placed a bowl of burnt clay, which serves as a drinker for birds or which can be decorated with plant species with

seasonal flowers. Next to this pool with a decorative wall, on both sides there are wooden trusses specially made to make the area more intimate.

The final result of the arrangement (fig. 12), by arranging a drip irrigation system (fig. 13), allows the beneficiary to produce his own vegetables and at the same time to produce enough plant material for the preparation of phytotherapy products, also offering a special recreational area.



Fig. 12 The completed central little plaza of the utility sector (*original*)



Fig. 13 Detail—irrigation system (*original*)

CONCLUSIONS

1. In the arrangement presented, the main elements are represented by the 20 built coffers, of variable shapes and sizes, ideal for the cultivation of vegetables and aromatic and floricultural plants..

2. This utilitarian sector is fenced with a simple wooden fence, 0.7 m high, and the entrance is made through a vault with a gate, to restrict the access of pets but, at the same time, it offers a special decoration (*Lonicera caprifolium*).

3. The cost of arrangement was approx. 10,000 euros, of which approx. 6,000 euros for materials and 4,000 euros for labor.

4. Even if the costs of making this sector are not small at all, it can be considered that it was to the liking of the beneficiary because the sector allows the family to produce their own vegetables and at the same time to produce enough plant material to prepare their own phytosanitary products, also offering a recreational area.

REFERENCES

1. **Bartley Jenifer R., 2006** - *Designing the New Kitchen Garden: An American Potager Handbook*. Editura Portland.
2. **Bentley A., 1998** - *Eating for Victory: food rationing and the politics of Domesticity*, Urbana, Editura University of Illinois
3. **Sima Rodica, 2009** - *Legumicultura—sursă de hrană si potențial ornamental*, Editura AcademicPres, Cluj-Napoca.