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# DENDROLOGICAL LANDSCAPE VALORISATION OF THE COMMON FIG (Ficus carica L.) IN THE GARDENS OF ŠIBENIK

Dendrološko-krajobrazna valorizacija smokve (Ficus carica L.) u vrtovima Šibenika

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#### **Abstract**

The culture of breeding figs (Ficus carica L.) on the area of town Šibenik is greatly connected to rural areas, and in the town system it is rare and sporadic. Its decorative ability is reflected in decorative gray bark, tree tops, fragrant leaves and smaller or larger fruits black or green, which again depends on the cultivar. It is also decorative in the winter period when comes to the fore an interesting shape of the trunk. Because of these decorative characteristics and cultural value of the fig, it is necessary to give fig the meaning in landscape architecture which it belongs considering its contribution to the visual gestalt in authenticity of space. To achieve real aesthetic value of a given area fig should not be used with non-typical Mediterranean species. The aim of this work is to execute landscape valorization, inventarization and to demonstrate esthetic grade of garden landscape with figs. A taxonomic analysis of fig gardens with a spatial accent was completed in Šibenik area. According to the results of field research and considering the habitus type (according to EHHARDT et al. 2002.) it is obvious that gardens are dominated by decorative plants with bushy forms (18 families). followed by tree shapes (8 families). Based on gained results of visual gestalt research and survey interviews we can conclude that citizens experience park spaces with figs as pleasant, and that it really has a great meaning for landscape, which can be used in branding of Šibenik and surrounding areas.

Key words: fig, floristic research, valorization, esthetic value, landscape.

### **INTRODUCTION - Uvod**

The common fig (*Ficus carica* L.) belongs to the mulberry family (*Moraceae*) and is one of the oldest cultivated fruit trees. It is native to the Middle Eastern area between eastern Turkey and northern India. The life span for the fig tree is 50 to 70 years (VEGO et al. 2008). Recommended for cultivation in Croatia are the following cultivars of fig: Petrovka white and black, Bjelica, Šaraguja, ficodella Madona, Zamorčica, Bružetka white and black and crnica (PRGOMET and BOHAČ 2003, MUJIĆ et al. 2014).

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As a typically Mediterranean culture it is not sufficiently represented in the system of municipal vegetation of Šibenik and its surrounding region. The problem of the rare usage of this fruit tree can be tied to the increasing use of allochthonous and exotic species in the second half of the 20<sup>th</sup> century. Although even then there was a tendency towards preferring autochthonous species over allochthonous, the latter were chosen significantly more often. In accordance with its decorative and adaptable characteristics, the fig is ideal for usage in certain areas of urban landscaping and green avenues of piscatorial rural landscapes. The latter can be noted in Raslina near Šibenik. Here the fig is also a symbol of the place.

Lately, the fig has been recorded in the more contemporary landscaping of residential buildings in Šubićevac as an individual tree at certain localities of green areas. The problem in choosing fig in landscape architecture and planning is the fact that the ripe fruit falls off in late summer and dirties the streets. Its patchy leaves are not adequate either. The fig also requires a certain measure of plant protection, without which individual trees have been known to lose their decorative function in municipal vegetation. The common fig is an economic and decorative species, mostly used as a central emphasis in the shaping of private utilitarian or utilitarian-decorative gardens. Its decorative quality is best observed in the decorative grey bark, the tree top, the patchy leaves and the recognizable smaller or larger fruit that is either green or black, depending on the choice of cultivar. It remains decorative in the winter period when the interesting shape of the trunk becomes prominent, especially in older trees. The common fig is an indispensable culture to most private gardens in the Šibenik area, as well as the outskirts of Šibenik. In order to achieve the full aesthetic value of a certain space, the fig should not be used in conjunction with atypical Mediterranean species. The aesthetic value of the Mediterranean garden is dependent upon the landscape design being as simple as possible. High aesthetic value is achieved in the synergy of the common fig with aromatic herbs, cypress trees and vine. An example of this can be seen in the medieval Mediterranean garden of the monastery of St. Lawrence in Šibenik. In the past, figs were the preferred food of the poor populace, usually dried and stored in wooden chests for the cold winter days. Although not as significant for the economy of Šibenik as the vine or the olive tree, even this decorative fruit tree can serve as a potential brand of Šibenik. The purpose of this paper is to achieve a landscape valorization and inventarization and to submit an aesthetical evaluation of garden landscapes including the common fig tree.

### MATERIALS AND METHODS - Materijali i metode

Interviews, terrain research, floristic research and a survey in the Šibenik area were used as sources of primary information. Archival material, publications, scientific and professional papers were used during the drafting of this paper as sources of secondary information. The goal of the survey was to determine the effect of spatial and structural relationships – criteria which affect the aesthetical experience

of a locale. The survey employed a questionnaire that contained questions of open and closed types, grouped into two blocks which concerned the perception, preference and stance of the participants towards the aesthetical experience of the common fig in parks or green areas. The survey was conducted during April and May of 2014 on a sample of 50 participants from the Šibenik area (19 women and 31 men). The age distribution of the sample was: 17 participants between 20-30 years, 8 between 30-40 years, 3 between 40-50 years, 13 between 50-65 years and 9 participants above the age of 65. The selection of participants was random. The survey utilized a five degree scale (for measuring the benefit and the landscaping value of fig) with values from 1 to 5, and a seven degree Likert scale (for measuring the stance, perception and preference of the participants) with answers from -3 to 3 with the following values: -3 very unpleasant; -2 mildly unpleasant; -1 unpleasant; 0 neither pleasant or unpleasant; +1 pleasant; +2 mildly pleasant; +3 very pleasant. The processing of the data was conducted according to the measure of central tendency; that is, on the basis of calculating the arithmetic mean and standard deviation. Statistical processing of the data was accomplished in the SPSS 16 software for Windows OS.

The research of garden dendroflora dominated by the common fig was published during the year 2013 and pertained to 5 gardens in the area of Šibenik town. The following florist literature was used to determine the plants: HORVATIĆ and TRINAJSTIĆ, (1967-1981); DOMAC, (1994); VIDAKOVIĆ and FRANJIĆ, (2004); IDŽOJTIĆ, (2009).

The division of life forms was accomplished using ERHARDT et al. (2002) with certain simplifications, and the following abbreviations are cited in the list of flora:  $\mathbf{G}$  – bush,  $\mathbf{Gna}$ –shrub,  $\mathbf{Gsu}$  – succulent plant,  $\mathbf{G/S}$  - bush or tree,  $\mathbf{S/G}$  – tree or bush,  $\mathbf{S}$  – tree,  $\mathbf{Li}$  – vine (liana). The Croatian nomenclature of species used: BORZAN, (2001); ŠUGAR, (2008); IDŽOJTIĆ, (2009).

The division of species to deciduous (L), evergreen (V), as well as the data on geographical origin, was taken from ERHARDT et al. (2002). Dendroflora is classified in either autochthonous or allochthonous species, based on the family origin. Autochthonous species are classified as the ones that grow wild in the researched area (Da), the ones that are cultivated (Db) and the ones that grew wild during cultivation (Dab). Allochthonous are categorized by their level of domestication in accordance with the suggestions of MITIĆ et al. (2008), in the following categories: species exclusive to cultivation – kult, undomesticated species – cas, non-invasive species – nat, invasive species–inv.

#### DISCUSSION AND RESULTS - Diskusija i rezultati

The common fig is a culture used primarily as a fruit bearing tree, especially in private gardens. Most often, the fig was not bought as a separate seedling, but transferred from fields, vineyards or neighbouring plots to city or village gardens as a cutting. Studying written data on the fig tells us the fig was never a primary economic

culture. In the field, the fig was mostly planted as a companion to vines and olive trees. In home gardens is either the prominent central tree or in a more distant position in the garden or croft. The fig is well known for growing on poor soil, so it could be seen everywhere in the backyard. In rural parts of the town during the summer droughts, the fig fruits would be dried in shallow wooden crates (so-called *granziole*) from the beginning to the end of August. These driers were also decorative and fig gardens would achieve an even greater decorative value. Figs were planted and processed in almost all seaside locales near Šibenik, such as Brodarica, Primošten, Vodice, Skradin etc. In the last period of tourist adaptation even hundreds-year-old figs were uprooted and in their place palm trees were planted. A certain ethnological and cultural value can easily be used as an incentive to increase the use of figs in a village's touristic identity (CORNARA et al. 2009). It is interesting to correlate the afore-mentioned with the presence of this culture in the landscaping of a village. As an example, the village of Jezera organizes a "festival of figs" in August, even though in the landscape of the village, the fig is underrepresented.

Valorisation of green surfaces dominated by the Common Fig (Ficus carica L.) - Valorizacija zelenih površina u kojima dominira smokva (Ficus carica L.)

## The Garden of the Restaurant "Zlatna Ribica" in Brodarica - Vrt restorana Zlatna ribica u Brodarici

The garden has elements of a terrace. In the upper part of the garden on the northern side, a mid-height hedge of cherry laurel (*Prunus laurocerasus* L.) was planted, which at the western part ends in a larger bush of the same species. A metal canopy was built by the hedge with common grape vine (*Vitis vinifera* L.), common ivy (*Hedera helix* L.) and Virginia creeper (*Parthenocissus quinquefolia* (L.) Planch.). To the left there is a small boxwood plant (*Buxus sempervirens* L.). By the boxwood, one can notice an old olive tree (*Olea europaea* L.). Near the lower side of the wall there are two smaller bigleaf hydrangeas (*Hydrangea macrophylla* (Thunb.) Ser.), and closer to the middle Japanese pittosporum (*Pittosporum tobira* (Thunb.) ex Murray W.T. Aiton), shrubby germander (*Teucrium fruticans* L.), rose (*Rosa hybrida* L.), an 8 meters tall Arizona cypress (*Cupressus arizonica* (Green.), two large olives (*O. europaea*) and two common yucca shrubs (*Yucca filamentosa* L.).

The lower part of the garden is decorated by several citrus fruit trees; lemon (Citrus limon L. Burm. F.) and mandarin (Citrus reticulata Blanco), magnolia (Magnolia grandiflora L.), two common figs (Ficus carica L.) and two large yuccas (Y. filamentosa). The plot is maintained and beautifully formed. The choice of species is not completely satisfactory.





Figure 1 and 2. The garden of the restaurant "Zlatna ribica" in Brodarica Slika 1 i 2. Vrt restorana Zlatna ribica u Brodarici

# The Medieval Mediterranean Garden of the Monastery of St. Lawrence in Šibenik - Srednjovjekovni mediteranski vrt Sv. Lovre u Šibeniku

A small fountain surrounded by four square surfaces with carved sides dominates the central garden space. On the western left side, there are different aromatic species as well as decorative ones, such as: lavander (Lavandula angustifolia Mill.), boxwood (Buxus sempervirens L.) as a hedge and rose trees (Rosa hybrida L.), shaped into an S. Symmetrical to this one, on the right side surface similar kinds of plants have been planted. Symmetrical surfaces are represented on the lower level, as well. On the south side by the very wall, the following plants have been planted: wild jasmine (Jasminum fruticans L.), Mediterranean cypress (Cupressus sempervirens L.), rose (R. hybrida L.), blue passion flower (Passiflora caerulea L.), common fig (Ficus carica L.), bay laurel (Laurus nobilis L.) and oleander (Nerium oleander L.). On the western side of this garden, the following species have been recorded: lemon (Citrus limon L. Burm. Fil), rose (Rosa hybrida L.), Mediterranean cypress (C. sempervirens), several bushes of bay laurel (Laurus nobilis L.), Virginia creeper (Parthenocissus quinquefolia L.). On the northern side, these species have been planted: Mediterranean cypress (C. sempervirens L.), rose (R. hybrida), pomegranate (Punica granatum L.), carob (Ceratonia siliqua L.), common grape vine (Vitis vinifera L.), rose (R. hybrida), common fig (F. carica), ivy (Hedera helix L.), Mediterranean cypress (C. sempervirens) and centuryplant (Agave americana L.).





Figure 3 and 4. The medieval Mediterranean garden in Šibenik Slika 3 i 4. Srednjovjekovni mediteranski vrt u Šibeniku

# The Garden in the courtyard of the home of the Paić family in Šibenik - Vrt u dvorištu obiteljske kuće Paić u Šibeniku

This interesting court garden whose central space is dominated by an old fig tree (Ficus carica L.) is located at the address Martin Kolunić street, nm. 3, and is owned by mister Ante Paić of Gorica. From the entry to the courtyard, a cement flower box containing a small magnolia tree (Magnolia grandiflora L.) can be seen to the right. The concrete stairway offers an expanding view of the courtyard. This farmers' yard can be divided into three sections. In the first, eastern section, a red table grape (Vitis vinifera L.) is planted on the left side, by the pantry, and opposite it another grape vine (V. vinifera) and a climbing rose (Rosa hybrida L.) by a brick bakery. In the very center of the middle section of the yard is a table with chairs and a dominating fig (Ficus carica L.) that is 105 years old and was planted in 1908. It was planted by a young man from Vrlika who served the master of the house. The fig (F. carica) was planted for shade and its fruit, which is still regular. In the bricked up part right of the fig (F. carica) one can see a small hydrangea shrub (Hydrangea sp.) and a common vervain (Verbena officinalis L.) in stone flower boxes. In the extension of the garden, which serves as a place to rest in the shade, a small lemon tree (Citrus limon L. Burm. F.) planted in a stone pot dominates the area. In a flower box to the right are beautifully planted ivy-leaf geraniums (Pelargonium peltatum L.). This court garden completely fits the purpose of an old Šibenik stone house. Unassuming details and flower boxes, autochthonous species and the like are utterly pleasing.





Figure 5 and 6. The garden at the house of Paić family in Šibenik Slika 5 i 6. Vrt u dvorištu obiteljske kuće Paić u Šibeniku

## The green surface in Mandalinskih žrtava Street in Šibenik-Zelena površina u ulici Mandalinskih žrtava u Šibeniku

This surface is intriguing for the dominance of the fig as a main accent in the space and its solid connection to other Mediterranean species. By the building on the green surface shaped like a square triangle in the Mandalinskih žrtava Street on the left side the following species have been planted: a small bay laurel tree (*Laurus nobilis* L.), oleander (*Nerium oleandrum* L.), a large fig tree (*Ficus carica* L.), several large shrubs of Van Hout's spirea (*Spiraea x vanhouttei* Briot Zabel) and three large atlas cedar trees (*Cedrus atlantica* (Endl.) Manetti ex Carriere) whose height reaches

over 25 m. Several old fashioned types of benches stand in front. At the eastern edge, there are several shrubs of Van Hout's spirea (*S. x vanhouttei*), an elm tree (*Ulmus* sp.) and a downy oak tree (*Quercus pubescens* Wild.) of medium height. This green surface should be more carefully and regularly maintained: the forming of shrubs and trees, grass mowing, phytosanitary protection and regular supplementing of dendrological species.





Figure 7 and 8. The green surface in Mandalinskih žrtava Street in Šibenik Slika 7 i 8. Zelena površina u ulici Mandalinskih žrtava u Šibeniku

#### The green avenue at the shore in Raslina - Linijsko zelenilo na obali u Raslini

Seven smaller fig trees (*Ficus carica* L.) planted as a green avenue are situated by the sea shore in Raslina. To the south of the avenue is an outdoor bowling alley. The figs (*F. carica*) are exceptionally vital, decorative, cut in the shape of a vase and are an excellent example of the usage of typically Mediterranean species on public surfaces. It is also important to mention that precisely fig (*F. carica*) was an important food of Raslina folk before and during the Second World War. The fig trees are partnered with a group of greenery: lavender (*Lavandula angustofila* L.), rosemary (*Rosmarinus officinalis* L.), pampas grass (*Cortaderia selloana* L.) oriental Arbovitae (*Thuja orientalis* L.) and the elm tree (*Ulmus* sp.). The use of palm trees and exotic grass lowers the aesthetic quality of the space. Simplicity in the application of Mediterranean species fitted into the landscape of the sea shore gives a much greater aesthetical value then the aforementioned.





Figure 9 and 10. Green avenue at the shore in Raslina Slika 9 i 10. Linijsko zelenilo na obali u Raslini

### Inventarization of dendrological species-Inventarizacija dendroloških vrsta

Field researches in the form of taxonomic analysis 29 species of decorative dendroflora have been established, and the results are demonstrated in Table 1.

Table 1. Dendrological species in the sampled gardens *Tabela 1. Dendrološke vrste u oglednim vrtovima* 

| O.num.                                       | Common name           | Latin name of the species      | Family        | Life form, origin, geographical origin |  |  |  |  |
|--|-----------------------|--------------------------------|---------------|--|--|--|--|--|
| SPERMATOPHYTA / GYMNOSPERMAE / CONIFEROPSIDA |                       |                                |               |  |  |  |  |  |
|  |                       |                                |               |  |  |  |  |  |
| 1.   | Arizona               | Cupressus arizonica Green      | Cupressaceae  | (S), kult, V, North<br>America         |  |  |  |  |
|  | cypress               | arizonica Green                |               | (S), Dab, V,                           |  |  |  |  |
| 2.   | Mediterranean cypress | Cupressus<br>sempervirens (L.) | Cupressaceae  | southeast Europe,                      |  |  |  |  |
| ۷.   |                       |                                |               | southwestern Asia                      |  |  |  |  |
|  | Oriental              | Thuja orientalis               |               | Southwestern Asia                      |  |  |  |  |
| 3.   | Arborvitae (L.) Cup   |                                | Cupressaceae  | (G/S), kult, V, East Asia              |  |  |  |  |
|  |                       | Cedrus atlantica               |               |  |  |  |  |  |
| 4.   | Atlas cedar           | (Endl.) Carriere               | Pinaceae      | (S), kult, V, North Africa             |  |  |  |  |
|  | ANCIOSDEI             | RMAE / MAGNOLIO                | DEIDA (DICOT  | VI EDONES)                             |  |  |  |  |
|  | ANGIOSPEI             | KMAE / MAGNOLIU                | PSIDA (DICOT  | (G), Dab, V,                           |  |  |  |  |
|  |                       | Nerium oleander<br>(L.)        | Apocynaceae   |  |  |  |  |  |
| 5.   | Oleander              |                                |               | North Africa, East                     |  |  |  |  |
|  |                       |                                |               | Mediterranean, Southeast               |  |  |  |  |
|  |                       | Hedera helix (L.)              |               | Asia                                   |  |  |  |  |
| 6.   | Common ivy            |                                | Araliaceae    | (Li), Dab, V, Europe and               |  |  |  |  |
|  |                       |                                |               | western Asia                           |  |  |  |  |
| _  | Boxwood               | Buxus<br>sempervirens (L.)     | Buxaceae      | (G), kult, V, Western and              |  |  |  |  |
| 7.   |                       |                                |               | Southern Europe, North                 |  |  |  |  |
|  |                       |                                |               | africa                                 |  |  |  |  |
|  | Carob                 | Ceratonia siliqua<br>(L.)      | Fabaceae      | (G/S), Db, V,                          |  |  |  |  |
| 8.   |                       |                                |               | Mediterranean, Northern                |  |  |  |  |
|  |                       |                                |               | Africa, Middle-East,                   |  |  |  |  |
|  |                       |                                |               | Western Asia                           |  |  |  |  |
| 9.   | Downy oak             | Quercus pubescens Wild.        | Fagaceae      | (S), Dab, V, Europe,                   |  |  |  |  |
| _  |                       |                                |               | Western Asia                           |  |  |  |  |
| 4.0  |                       | Hydrangea                      | Hydrangeaceae | (5)                                    |  |  |  |  |
| 10.  | Hydrangea             | macrophylla                    |               | (G), kult, L, Asia                     |  |  |  |  |
|  |                       | (Thunb.)                       |               |  |  |  |  |  |
| 11.  | Lavender              | angustifolia (Mill.)           | Lamiaceae     | (G), kult, V,                          |  |  |  |  |
|  |                       |                                |               | Mediterranean                          |  |  |  |  |
| 12.  | Rosemary              | Rosmarinus                     | Lamiaceae     | (G), Db, V,                            |  |  |  |  |
|  |                       | officinalis (L.)               | Lamaceae      | Mediterranean                          |  |  |  |  |
| 13.  | Shrubby               | Teucrium fruticans             | Lamiaceae     | (G), Db, V,                            |  |  |  |  |
|  | germander             | (L.)                           | Zamaccac      | Mediterranean                          |  |  |  |  |
| 14.  | Southern              | Magnolia                       | Magnoliaceae  | (S), kult, V, North                    |  |  |  |  |
|  | Magnolia              | grandiflora (L.)               | iviagnonaceae | America                                |  |  |  |  |

| 15. | Common fig                               | Ficus carica (L.)                                | Moraceae       | (S/G), Dab, L, Middle<br>East, Western Asia    |
|-----|--|--|----------------|--|
| 16. | Olive                                    | Olea europaea (L.)                               | Oleaceae       | (G/S), Dab,V, Middle<br>East,<br>Mediterranean |
| 17. | Winter jasmine                           | Jasminum fruticans (Lindl.)                      | Oleaceae       | (G), kult, L, East Asia                        |
| 18. | Japanese<br>pittosporum                  | Pittosporum tobira Thunb.ex Murray W.T.Aiton     | Pittosporaceae | (G/S), Cas, V, East Asia                       |
| 19. | Pomegranate                              | Punica granatum<br>(L.)                          | Punicaceae     | (G/S), kult, L, Southeast<br>Asia              |
| 20. | Rose                                     | Rosa hybrida (L.)                                | Rosaceae       | (G), kult, V, Asia, Europe                     |
| 21. | Bridal wreath<br>(Van Houtt's<br>spirea) | Spiraea x<br>vanhouttei Briot<br>Zabel           | Rosaceae       | (G), kult, L, East Asia                        |
| 22. | Mandarine                                | Citrus reticulata Blanco                         | Rutaceae       | (G), kult, V, China                            |
| 23. | Lemon                                    | Citrus limon (L.)<br>Burm.F                      | Rutaceae       | (G), kult, V, Asia                             |
| 24. | Elm                                      | Ulmus sp.  | Ulmaceae       | (S), Db, L, Europe, Asia                       |
| 25. | Common grape vine                        | Vitis vinifera (L.)                              | Vitaceae       | (Li), Cas, L, unknown<br>origin                |
| 26. | Virginia<br>creeper                      | Parthenocissus<br>quinquefolia (L.)<br>Planchon. | Vitaceae       | (Li), kult, L, East Asia                       |
|     | L  | ILIOPSIDA (MONO                                  | COTYLEDONE     |  |
| 27. | Centuryplant                             | Agave americana<br>(L.)                          | Agavaceae      | (S), nat, V, North<br>America                  |
| 28. | Yucca                                    | Yucca filamentosa<br>(L.)                        | Agavaceae      | (G), kult, V, South<br>America                 |
| 29. | Pampas grass                             | Cortaderia<br>selloana (L.)                      | Poaceae        | (Gna), kult, V, South<br>America               |

According to Table 1, the species were organised into 20 families. Out of the 20 families, two are represented, the families Cupressaceae and Lamiaceae. Analysis of the gardens by growth habit (according to ERHARDT et al, 2002) shows a dominance of shrubs (18 species), followed by trees (8 species). The number of units determined by terrain research, is larger with deciduous plants (8 identified species) compared to the number of semideciduous plants (21 recorded species). Out of 29 species, 10 are autochthonous and 19 allochthonous. Analysis of allochthonous dendroflora by geographical origin shows a greater representation of plants of Asian origin, followed by American and Mediterranean species.

### Research of visual gestalt- Istraživanje vizualnog geštalta

The goal of the survey was to research the visual impact of the whole (visual gestalt) in green surfaces which include the common fig in their array of dendrological species.

Table 2. Research results on a scale of stance, perception and preference of the participants *Tabela 2. Rezultati istraživanja na skali stavovi, percepcije i preferencije ispitanika* 

| Survey question (Scale -3 to +3)  | Arit.mean (X) | Stand. deviation (σ) |
|---|---------------|----------------------|
| 1. Experience of pleasure/displeasure by the presence of fig on green surfaces            | 2,42          | 1,012                |
| 2. Evaluation of attractiveness/unattractiveness of the presence of fig on green surfaces | 2,40          | 1,030                |
| 3. Evaluation of acceptability of fig in public environments – yard, park, village, town  | 2,18          | 1,320                |
| 4. Evaluation of fig benefits in landscaping for the human mental health                  | 2,34          | 1,189                |

The participants experience green areas that include fig according to the offered scale of -3 to +3 (Table 2) and evaluate them between very unattractive to very attractive with the grade - pleasant (attractive) (2,40); between very unpleasant and very pleasant with the grade - pleasant (2,42); the evaluation of acceptability of fig in public environments - yard, park, village, town - with the grade - pleasant (acceptable) (2,18); the evaluation of fig benefits in landscaping for the mental health of man with the grade - pleasant (acceptable) (2,34).

Table 3. Research results on the scale of usefulness and landscaping value of the common fig Tabela 3. Rezultati istraživanja na skali korisnosti i krajobrazne vrijednosti smokve

| Survey question (Scale 1 to 5)   | Arit.mean (X) | Stand. deviation (σ) |
|--|---------------|----------------------|
| 1. Role of fig in the economic history of Šibenik and surrounding area                           | 4,04          | ,832                 |
| 2. Rule of fig in future planting in urban and rural landscaping of Šibenik and surrounding area | 4,16          | 1,017                |
| 3. Evaluation of existing individual fig trees in the landscape of Šibenik and surrounding area  | 3,14          | 1,246                |
| 4. Evaluation of fig placement in landscaping splendour of Šibenik and surrounding area          | 3,86          | 1,069                |

To the question of what kind of and how much value the fig has in landscaping and economics, the participants have assessed, on a scale of 1 to 5 (Table 3.), in the following way: the role of fig in the economic history of Šibenik and surrounding area with the grade – very good (4,04); the role of fig in future planting in urban and rural landscaping of Šibenik and surrounding area with the grade – very good (4,16); evaluation of existing individual fig trees in the landscape of Šibenik and surrounding area with the grade – good (3,14); evaluation of fig placement in landscaping splendour of Šibenik and surrounding area with the grade – very good (3,86).

Based on the presented results, the clear conclusion is that the common fig has great value to the landscaping of Šibenik and surrounding area, which can be used when branding the aforementioned areas.

#### **CONCLUSION-Zaključak**

Analysis of gardens of Šibenik that include the fig (as a spatial accent) by growth habit (according to ERHARDT et al, 2002) shows a dominance of shrub forms (18 species), followed by trees (8 species). Of 20 families, two are most represented with more than three species. The families with the largest number of different species are the families Cupressaceae and Lamiaceae. A survey was conducted whose purpose it was to research the perception of citizens on landscaping valorization of the fig in gardens, parks and green surfaces.

Based on the achieved results, the conclusion is that the citizens perceive park surfaces which include fig pleasantly, and that the fig carries great value to the landscape of Šibenik and its surrounding area, which can be used in the brand management of the aforementioned areas.

The aforementioned research gives valuable guidelines for future aesthetical and functional enhancement of certain surfaces with park greenery. It can also serve in the popularization during the selection process and planting of typically Mediterranean and autochthonous dendrological species in city parks and green areas.

#### REFERENCES-Literatura

- BORZAN, Ž. (2001): Imenik drveća i grmlja: latinski, hrvatski, engleski, njemački sa sinonimima. Hrvatske šume p.o. Zagreb.
- CORNARA, L., LaROCCA, A., MARSSILI, S., MARIOTTI, M.G. (2009): Traditional uses of plants in the Eastern Riviera (Liguria, Italy). Journal of Ethnopharmacology. 125: 16.
- DOMAC, R. (1994): Flora Hrvatske. Priručnik za određivanje bilja. Zagreb.
- ERHARDT, W., GöTZ, E., BöDEKER, N., SEYBOLD, S. (2002): Zander. Handwörterbuch der Pflanzennamen. 17. Auf. Eugen Ulmer, Stuttgart.
- HORVATIĆ, S., TRINAJSTIĆ, I. (1967-1981): Analitička flora Jugoslavije. Šumarski fakultet, Sveučilišna naklada Liber. Zagreb.
- IDŽOJTIĆ, M. (2009): Dendrologija-List. Šumarski fakultet Zagreb: 904.

- MITIĆ, B., BORŠIĆ, I., DUJMOVIĆ, I., BOGDANOVIĆ, S., MILOVIĆ, M., CIGIĆ, P., REŠETNIK, I., NIKOLIĆ, T. (2008): Alien flora of Croatia: proposals for standard sin terminology, criteria and related dana-base. Natura Croatica. 17 (2): 73-90.
- MUJIĆ, I., KALIĆ, S., ŠAROLIĆ, M., GUGIĆ, M. (2014): *Prerada smokava*. Veleučilište u Rijeci.
- ŠUGAR, I. (2008): Hrvatski biljni imenoslov. Matica Hrvatska. Zagreb. 2008: 977.
- VIDAKOVIĆ, M., FRANJIĆ, J. (2004): Golosjemenjače. Šumarski fakultet Zagreb. 823.
- VEGO, D. (2008): Wild fig (*Ficus carica* L. *var caprificus*) in Herzegovina. Pomologia Croatica, Vol. 14, br. 2: 73.

### **SAŽETAK**

Kultura uzgoja smokve (Ficus carica L.) na području grada Šibenika je u većoj mjeri vezana za ruralna područja, a u sustavu gradskog zelenila je rijetka i sporadična. Njena ukrasna sposobnost se ogledava u ukrasnoj sivoj kori, krošnji, krpastom listu i prepoznatljivom sitnijem ili krupnijem plodu crne ili zelene boje što opet zavisi o kultivaru. Također je dekorativna i u zimskom razdoblju kada do izražaja dolazi interesantan oblik debla. Upravo zbog izrazito dekorativnih karakteristika te kulturološke vrijednosti smokve, neophodno je smokvi dati onaj značaj u krajobraznoj arhitekturi koji joj pripada obzirom na njen doprinos vizualnom geštaltu u autentičnosti prostora. Za postizanje stvarne estetske vrijednosti određenog prostora ne bi se smjela koristiti s netipičnim mediteranskim vrstama. Cilj ovog rada je izvršiti krajobraznu valorizaciju, inventarizaciju i predočiti estetsku ocjenu vrtnih krajobraza sa smokvom. Provedena je taksonomska analiza vrtova sa smokvom, kao prostornim akcentom, na području Šibenika. Prema rezultatima terenskih istraživanja evidentno je, obzirom na tip habitusa (po Erhardtu i dr. 2002), da u vrtovima dominiraju vrste ukrasnog bilja grmolike forme (18 svojti), a potom slijedi forma stabla (8 svojti). Temeljem dobivenih rezultata kod istraživanja vizualnog geštalta, putem anketnog ispitivanja, možemo zaključiti da građani ugodno doživljavaju parkovne prostore sa smokvom te da ista ima veliki značaj za krajobraz, što se može koristiti i u brandiranju Šibenika i okolice.