

Agrovoc descriptors: tulipa, ornamental bulbs, plant introduction, introduced varieties, plant breeding, landscape plants, landscaping, identification, censuses, gardens, collections, plant collections

Agris category code: F01, B50, F70

The introduction of decorative bulbs in Slovenia

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Received December 9, 2008; accepted April 2, 2009.

Delo je prispelo 9. decembra 2008; sprejeto 2. aprila 2009.

ABSTRACT

This paper presents a comparative study of the introduction of the tulip in Slovenia and in Europe. The method is based on the investigation of archival material, provincial chronicles, and descriptive accounts. The goal of the research is to establish as precisely as possible the structure and form of gardens where decorative bulbs were planted, the habits of the owners of such gardens, and their relationships with each other. The second part of the research paper will present a comparison of the types of tulips found in Slovenian and foreign gardens in the 17th century. At the centre of the research project is the assortment of tulips from the park at Castle Lisičje, the first and most extensive collection of tulips in Slovenia dating from the mid-17th century. On the basis of comparisons with contemporaneous foreign tulip collections, we evaluated the collections in terms of the origin of various types and provide a description of prevailing social and economic factors. On the basis of the evaluation of this collection, it is possible to strongly support the hypothesis that the introduction of decorative bulbs (and particularly tulips) in Slovenia did not lag far behind the rest of Europe.

Key words: Landscape architecture, history, decorative bulbs, tulip, introduction

IZVLEČEK

INTRODUKCIJA OKRASNIH ČEBULNIC NA SLOVENSKO OZEMLJE

V prispevku je predstavljena raziskava o introdukciji tulipana na slovensko ozemlje in umestitev slovenske introdukcije v evropski okvir. Raziskava temelji na proučevanju arhivskega gradiva in deželnih kronik z namenom opredeliti strukturo in obliko prvih nasadov okrasnih čebulnic, kje in kdo jih je gojil, ter povezave med lastniki vrtov. V drugem delu raziskave je izdelana primerjava med domačimi in tujimi sortimenti tulipanov iz 17. stoletja. Kot najpomembnejši je predstavljen sortiment tulipanov iz parka gradu Lisičje (prva in najboljše zbirka tulipanov v sredini 17. stoletja na Slovenskem). Izdelan je bil popis sort tulipanov iz tega vrta. Na podlagi primerjave s tujimi sočasnimi zbirkami tulipanov je bila popisana zbirka ovrednotena glede na poreklo oz. izvor sort, sodobnost in ekonomski vidik. Na podlagi omenjenega vrednotenja zbirke je moč potrditi uvodoma postavljeno hipotezo, da introdukcija okrasnih čebulnic (tulipanov) na slovensko ozemlje časovno ni bila v zaostanku glede na ostale evropske dežele.

Ključne besede: krajinska arhitektura, zgodovina, okrasne čebulnice, tulipani, introdukcija

1 INTRODUCTION

Definition of Theme

From their first introduction in Slovenia until the present, decorative bulbs have been popular above all because of the visual appearance of the flower. However, their value has not always rested on appearance alone. In the 16th and 17th centuries, possession of such bulbs indicated a certain social status. By the end of the 17th century, the perceived financial value of decorative bulbs led to an economic

surge that ended with the market euphoria known as tulip mania (Garber, 2000; Chancellor, 1999). Facts about the introduction, expansion, and economic significance of decorative bulbs in the world, or more specifically in Western Europe, are well known (Missel, 2008; Moggach, 1999; Pavord, 1999; Proctor, 1998), while their early introduction into Slovenian territory is much less researched.

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2 MATERIAL AND WORK METHOD

In terms of assortment, dissemination, and economic value, tulips, among all the decorative bulbs, played a special role in both Europe and Slovenia. Because of the many impacts, not least social, of the introduction of the tulip in Europe (tulip mania), this research paper focuses particularly on this type of bulb.

As a result of the recent discovery of new material, extensive new research has been done using primary source data (accessible archival data). This paper presents a comparative study of the introduction of the tulip in Slovenia and in Europe based on this new data. The first part of the research analyses the social factors that created conditions for the introduction of tulips and other decorative bulbs in Slovenia as well as their dissemination and use. This paper will answer the following research questions:

- what were the reasons underlying the introduction of decorative bulbs in Slovenia,
- when, how, and in what quantity did decorative bulbs arrive in Slovenia,
- who first introduced decorative bulbs in Slovenia and where.

The work method is based on the investigation of archival material (the Franciscan cadastral register, the main book of names, probate lists of nobility, estate records, collections of plans and manuscripts) and on the investigation of provincial chronicles and descriptive accounts (for example, the chronicles of Valvasor and Vischer). The goal of the research is to establish as precisely as possible the structure and form of gardens where decorative bulbs were planted, the habits of the owners of such gardens, and their relationships with each other.

The second part of the research paper presents a comparison of the types of tulips found in Slovenian and foreign gardens in the 17th century. Some of the same data used in the first part of the study (inventories of plant types in the first gardens and collections of decorative bulbs in individual parks in Slovenia – Lisičje, Castle Brdo pri Kranju, Dol pri Ljubljani) will be supplemented in the second part by the inventories of similar collections in Western Europe (in the Netherlands, Germany, Italy, and France). The majority of data for Slovenia was found among the archival material of manor houses and in provincial chronicles (Valvasor, 1689, and Vischer, 1681). Data about the extent and structure of decorative bulb collections in Europe were found in Dutch (Wageningen UR Library, Wageningen; Stichting Het Nederlandsch Economisch-Historisch Archief, Amsterdam), American (Norton Simon Museum of Art, Pasadena; ASU Libraries, Arizona State University), and German archives.

At the centre of the research project is the assortment of tulips from the park at Castle Lisičje, the first and most extensive collection of tulips in Slovenia dating from the mid-17th century. An inventory of the types of tulips used in this garden was well documented. On the basis of comparisons with contemporaneous foreign tulip collections, we evaluate the collections in terms of the origin of various types and provide a description of prevailing social and economic factors.

3 RESULTS AND DISCUSSION

2.1 Overview of Historical Sources

In terms of research from archival sources, an important part of the results derive from the discovery of rare entries in various documents.

Western European Sources

Special Collections of Wageningen UR Library
Register van de prijzen der bloemen, zijnde de derde samen-spraeck, tusschen Gaergoed ende Waermond, inhoudende het vervolgh van den op ende ondergangh van flora / [door Adriaen Roman], [1e dr.] - Haerlem : Adriaen Roman, 1637.

Document comprising 24 pages; listed on pages numbered 6, 7, 8, and 9 are 194 various prices for different tulips. The tulip with the highest price was named Audernaede (5,700 guldens), the least expensive was the Rattebeet tulip (30 guldens).

Samen-spraeck, tusschen Waermond ende Gaergoedt, nopende de opkomste ende ondergangh van flora / Adriaen Roman, [1e] dr. - Haerlem : Adriaen Roman, 1637.

Document comprising 24 pages; listed on pages numbered 11, 12, and 13 are 131 types of tulips that were present on the Netherlands market in 1637; quoted on pages numbered 24 and 25 are the prices for selected tulips.

Tweede samen-spraeck tusschen Waermond ende Gaergoedt, zijnde het vervolgh van den op ende ondergangh van Flora / Adriaen Roman, Haerlem, 1637. Document comprising 24 pages; enumerated on page 5 are 25 kinds of tulips with their prices.

Lijste van eenighe tulpaen : verkocht aen de meest-biedende op den 5 Februarij 1637 : op de sael van de Nieuwe Schutters Doelen, int bywesen van de E. Heeren Wees-meesteren ende voochden, ghecoomen van Wouter Bartelmiesz. Winckel, in sijn leven casteleyn van de Oude Schutters Doelen tot Alckmaer, [Alckmaer : s.n.], 1637.

This document is one page long. It is a leaflet offering 101 tulips. The prices range between 51 guldens for a

tulip called Ian Gerritz and 4,200 guildens for the Viseroy.

Dood-rolle ende groef-maal van Floortie-Floraas / I. Soet, 1636.

This document is one page long. The author of the text is I. Soet; 139 tulips are listed.

Troost-brief, aen alle bedroefde Bloemmisten, die treuren over 't sterven of 't overlijden van Flora, Goddinne der Floristen.

Document comprising 24 pages. The pages numbered 22, 23, and 24 feature a sales offer for tulips (similar to the document *Listje van eenighe tulpaen*).

There are approximately 43 known books (manuscripts) about tulips. The majority (34) of these emerged from the Netherlands in the first half of the 17th century. Among the most important of these are as follows:

Cos, P. (1637) The Tulip Book

Verzameling van een meenigte tulipaenen, naar het leven geteekend met hunne naamen, en swaarte der bollen, zoo als die publicq verkogt zijn, te Haarlem in den jaare A. 1637, door P. Cos, bloemist te Haarlem. - Haarlem : [s.n.], 1637. - 75 pl.

This book is comprised of sections from a larger collection (Krelage Collection, Wageningen). The manuscript features 54 illustrations of tulips made in gouache, and an appendix with 12 additional illustrations of tulips and 9 watercolours of other plants. The illustrators are Pieter Holsteijn the Younger and Peter Schangen. Most of the names of the tulips are written below the illustration. At some later point, prices and weights were added (weight expressed in 'aasen' which equals 0.048 grams). The prices are comparable to those called at a February 5, 1637 auction in Alkmaaron.

Bijzondere Collecties NEHA, Tulpen, Signatuur Bijzondere Collecties 254, Periode 1630-1639, Stichting Het Nederlandsch Economisch-Historisch Archief, Amsterdam.

Document comprising 116 pages on which are featured the image of various plants. Watercolours of tulips appear on 75 of these pages (29 of which are unnamed). There is a register of names in the appendix.

Slovenian Sources

Provincial chronicles

Valvasor V. 1689. Die Ehre des Herzogthums Krain, 3. Band. Rudolfswerth, J. Krajec: 730 pages. From page 173 to 179, Valvasor describes an extensive collection of exogenous plants in the park of the Castle Lisičje pri Ljubljani. Special emphasis is given to tulips. The following varieties of decorative bulbs appear in the description: anemone (simple, 15 types), double

anemone (double, more than 20 types), ranunculus (simple, many types), irises (various types), double white lilies (double, two types), golden lily (also Turkish bouquet), fritillaria (three types), tulips (107 different types).

Vischer G.M. 1971. Topographia Ducatus Stiriae. Ljubljana, 1971, Cankarjeva Založba: 540 pages.

Archival sources

Dol Estate Records, Manuscript Collection, manuscript 203, Archives of the Republic of Slovenia.

Title: Annalen des Gartens zu Lustall für das Jahr 1840

Author: Henrik Freyer

61 pages on which are enumerated all the work and directives for the maintenance of the park as well as a description of the various plants that are grown in the garden. Bulbs from Holland are also featured as are hyacinths (*Hyacinthus*), tulips (*Tulipa*), anemones (*anemone coronaria*), ranunculus (*Ranunculus asiaticus*), and various daffodils (*Narcissus*).

Zois Collection, fascicule 19, Archives of the Republic of Slovenia

Contains a list of plants that Karel Zois obtained from the Netherlands (Mellung aus Holland); tulips are among the plants mentioned.

Zois Collection, fascicule 13, Archives of the Republic of Slovenia

Contains garden inventory for the botanical park at Brdo pri Kranju. Information from the years 1792, 1793, 1799, 1834, and 1835 has been preserved.

2.2 The Introduction of Tulips in Europe

Records indicate that tulips were raised in Turkey even before the year 1000 (Time Table for Tulip, 2008). There are poems by Omar Khayyam from the 12th century about the tulip, and a century later poems by Rumi that celebrate the tulip. According to Hall (1940:6), the original name for tulip (*lale*) appears for the first time in Persian literary texts by Omar Khayyam (dated 1123) and Hafiz (dated 1390). This is the word still used for tulip in the Persian and Turkish languages today. During the time of Suleiman II's reign (1522-1566), there was an extraordinary enthusiasm for growing tulips in Turkey. Exotic plants were also of great interest to A.G. Busbequius (sy. Busbeq), the ambassador of the Austrian Emperor Ferdinand I to the Ottoman Empire. He documented his observations in the 1554 book entitled *The Four Epistles of A.G. Busbequius* (Missel, 2008). It is clear from his 1554 Constantinople travel journal that he sent or brought back to Vienna with him the first bulbs. However, Hall (1940:6) allows for the possibility that the first introduction of tulips to Vienna came even before

Busbequii. The first visual image of the tulip can be found in 1561 in a book by C. Gesner. In 1568, we find a Dutch portrait of a tulip in a book by R. Dodoens 'Cruydtboeck' (Herbal). Ten years later the first tulip appears in England and a decade after that, in France (Time Table for Tulip, 2008).

Most botanical types of tulips come from Central Asia, the northern Caucasus, Persia, Turkistan, and Bukhara. The first tulips introduced in Europe came from the *T. gesneriana* group, which, during Busbequii's time, were cultivated in Turkish gardens. Bailey (1950:215) states that Gesner saw his first tulip in Augsburg in 1559. On the basis of his descriptions of the flower, we can conclude that it came from the *T. gesneriana* group. Not only Bailey (1950:3395), but Hall (1990:94) also suspects that contemporary tulips came from the *T. gesneriana* group. Linnee combines all garden tulips under this name. Tulips in this group include those that Europeans have been growing in their gardens for two hundred years, and before the Europeans, Turks (though more precise data about such tulips is difficult to find). Interest in this type of plant led to the discovery of autochthonous types and caused their near extinction in the natural environment. Some sources claim that the original *T. suaveolens* was discovered in southern Europe, though that it is truly autochthonous to this region has been questioned (it may have spread in the wild after the first foreign introduction). The first records that make reference to tulips brought from Turkey speak of fragrant, early blooming flowers with drooping stems that would seem to be a perfect description of *T. suaveolens*. On the first images (lithographs), we do not see tulips with rounded petals (Pena and Lobel, 1570; Clusius, 1576; Dodoens, 1578; Besler, 1613). Bailey (1950:3394) concludes his thoughts about the original types with the notion that late-blooming tulips came from the *T. gesneriana* group and early-blooming tulips from *T. suaveolens* (Duc van Thol). With the cross-breeding of tulips, the number and variety of tulip types greatly increased. Even before tulip mania, Dutch growers used selection to raise tulips with the pointed and rounded petals which even today are the most treasured feature of the tulip. The wide variety of shape and colour is apparent in Besler's collection of 53 coloured lithographs (Hortus Eystettensis) and the book entitled *Cruydtboeck* in which Matthias de l'Obel describes 41 varieties of tulips.

One person named Carolus Clusius was decisive for the introduction of the tulip into Europe when he planted the first tulip bulb in the Leiden botanical garden in the Netherlands (Time Table for Tulips, 2008). He wrote and published numerous botanical works of which *Historia stirpium per Pannonium* (1583) was important for Slovenia. The work comprises a study of Austrian

and Hungarian flora that Clusius researched while managing the construction of the Viennese garden of medicinal plants. He described about 34 variegated early tulips and some later types, all of them being part of the *T. sylvestris* group (Missel, 2008). In 1592, he accepted an invitation to Leiden and took the position of head gardener in the botanical garden. He was assisted in his work by Dirck Outgaerzoon Cluyts, also known by the name Clutius (Hyams, 1961). He cultivated a number of tulips in his garden and carefully kept them to himself. Tulip admirers who didn't want to pay a lot of money for seed material simply stole them from Clusius. By this time, tulips had spread through the Netherlands and the price had risen. Clusius also introduced the tulip to England (around 1577) where they remained in fashion until the beginning of the 18th century when they were supplanted by foreign trees (Bailey, 1950). Matteo Caccini was another important figure for the wider dissemination of the tulip throughout Europe, sending out a variety of tulips (*Tulipa saxatilis*, *Tulipa chrysantha*, *Tulipa clusiana*) as well as pictures of rarer types from his garden (Masson, 1972: 74). Caccini closely collaborated with Francesco Caetani. Caetani's manuscripts published around 1630 refer to parcels of bulbs from Constantinople, Paris, Avignon, Brussels, Amsterdam, Vienna, and Frankfurt. The bulbs were intended for the Cisterna gardens (Masson, 1972: 182). Caccini raised approximately 15,000 tulips and 29,000 anemones in his garden (Schnapper, 1991: 176). It is clear from Caetani's correspondence that he traded samples with various representatives of society (merchants, nobles, and monks). From his correspondence, we are able to follow the names of people with whom he exchanged plants and bulbs (Caccini, Charles d'Arenberg, Acquaviva, Sweerts, and Bartolotti).

As early as 1600, an extensive range of tulips was being cultivated south of Haarlem (Wagenweg, Kleine Houtweg). In 1612, Emanuel Sweerts published the first sales catalogue of tulips. Tulip mania (1626-1637) came soon after. By 1661, approximately 120 different tulips were recorded (Branderberg). But tulip mania was not limited to Europe. Between 1700 and 1730, a similar fever seized Turkey then under the reign of Mohammed Lalazar, a great tulip enthusiast who imported a large quantity of tulips into Turkey from the Netherlands. The high price of tulips and the rich buyers encouraged the publication of a number of high-quality catalogues for which the illustrations were done by well-known artists such as Pieter Holsteijn the Younger, Peter Schangen, and Jacob Marrel (Missel, 2008).

During the 18th century, the fame of tulips slowly faded and hyacinths took their place. During that same century, tulips were introduced to America. (J.B. der

Scout was one of the first travelling merchants selling decorative bulbs).

2.3 The Introduction of Tulips to Slovenian Lands

The first data about the planting of tulips in Slovenia dates back to 1689 when Valvasor (1689: 174) described the collection of non-indigenous plants at the castle park at Lisičje pri Škofljici in his book *Die Ehre des Herzogthums Krain*. Slovenian lands were under a strong Italian influence during the Renaissance. Builders and artists in Slovenia worked to introduce novelties in structural and garden architecture as well as in plantings. The reasons for the introduction of various plants can be attributed to the imitation of Italian fashion, which also dictated the rising trend of flowering bulbs (Masson, 1972: 180). We also find proof of the connection with Italian cultivators in the Italian names of many types of tulips in the Slovenian lexicon. An analysis of the assortment of tulips in 17th century European collections indicates that tulips came not only from Italy, but also from Germany and the Netherlands. The participation of Slovenian lands in the Spanish-Dutch wars was an important factor in creating a connection between Slovenian lands and the Netherlands in the 16th century. At that time, the Netherlands united with Belgium and parts of northern France to create the so-called Low Countries which were especially known for the cultivation of tulips. We discover in Valvasor's inventory that the owner of Lisičje Castle, Lenart Merharič Fabjanič, served in the military in the Netherlands for twenty-four years. During his years there, he brought home many decorative bulbs. According to statements of Valvasor,

his son Lenart (Leonard) Fabjanič gave the castle garden with a second blossoming. Valvasor's pictorial representation of the castle garden is from this period (Valvasor, 1689: 173). That the owner of the tulip collection, Lenart Merharič Fabjanič, was an educated man and fervent botanist is also evident from the testimonies that Valvasor made about his many non-indigenous plants. In addition, Fabjanič's castle contained botanical records by other important writers, above all Clusius, Bauhin, and D. Jacobi Theodor Tabernaemontani in which tulips are divided into groups. Fabjanič also had contact with German lands through the Berlin professor and doctor Henrik Munting. In the Lisičje Castle records, Valvasor stumbled across an extensive inventory of tulips available in Germany that were cultivated by Munting and represent an important source of study of tulip varieties from the 17th century (Valvasor, 1689: 176). The collecting period at Lisičje Castle ended in 1710 with the death of its last owner, Ernest Engelhart, the grandson of Lenart (Leonard) Merharič Fabjanič (Smole, 1982: 257).

Presented below is an inventory of tulips translated from Valvasor's original text. It is necessary to emphasize the complexity that arises from the names of the various bulbs. The author himself warns the reader of this, noting that the same type of tulip may have many names depending on the individual language of the nation from which it came. In 1689, there are 107 types of tulips in the Lisičje collection:

Table 1: Presence of tulips from Lisičje in European collections.

Admiral von Gent	Admiral del mar	Africana
Agata	Amoraglio Deman	Alagrand Groll
Agata marlin	Agata Giocosea	Agata d'Rampar
Amadis	Angles	Apollo
Arateur	Aria	Armida
Assure	Aurora Celeste	Bella Helena
Bella d'Ramar	Brabantea	Bella d'Brussel Costante
Bella d'Brussel	Vagabunda	Bagina
Bauger	Ballada d'Olanda	Blanc Bichot
Beleonberg	Bella Diana	Bella Sylvia
Bellina	Belvedere	Blumashe
Cardinale Costante	Cardinal Vagabondo	Cittadella Cornart
Corno di Cervo	Cistenmoher	Cyrus
Duste	Don Diego	Dulsina
Clairmond	Cesar d' Marans	Doelman
Florida Doman	Gabriel	Gial Holandia
Gial Monde	Grand Duce	Magnifeur
Maller	Ottoman Paragon Costante	Palamedes
Semper Augustus	Tragena	Echomede
Emphemerides	Euphrosyne	Foret
Gial Doman	Grand Duc d'Fiorenz	Gial Blucart
Gial Alagrand	Gial Holandia	Gail Horlat
Giallo Coronato	Gatta Biatana	Giallo Rosso
Jacosa	Liste	Lydias Bizar
Lacle Bleionberge	Marstion Superbe	Monsuest
Marent Starcluit	Molsuich	Meliaris
Orgelosa	Paraches Raiselle	Perfetta
Pussart	Pastor Fido	Piccardo
Portuges	Purpur Foret	Purpurea Bianco Obscura
Pypinis	Romana	Rex
Ratevul	Rottan	Solo Regal
Senateur Sollicitant	Spigelle	Salamelech
Sol	Tornei Delphin	Triumphante
Veste Diana	Vilana	Vice-re d'Ingil-terra
Zystenmacher		

Comparison of Slovenian and European collections of tulips.

Featured in the table below are data about the 107 tulips cultivated at Lisičje Castle that appear in individual European collections.

Vir (zbirka)	leto	poreklo (država, kraj)	zastopanost sort (št.)
Lisičje (sinonimi)	1689	Slovenija (Ljubljana)	107
Elsholstius	1689	Nemčija (Berlin)	23
The Tulip Book P.Cos	1637	Nizozemska Haarlem	14
Bijzondere Collecties NEHA	1628	Nizozemska Amsterdam	7
Register Tulpen der Blumen	1637	Nizozemska Haarlem	4
Lijste van eenighe tulpaen	1637	Nizozemska	4
Floortie-floraas	1636	Nizozemska	5

The particular assortment of tulips from the Lisičje gardens is most similar to Berlin assortments. Both collections (Lisičje and Berlin) overlap over a period of time (of the 107 tulip types cultivated at Lisičje, 23 types appear in the Berlin inventory). We can also find many types of tulips cultivated in Lisičje in various Dutch sales catalogues (34 types). Most come from Haarlem, a region of Amsterdam which was one of the largest tulip centres in Europe.

The table below shows the presence of Lisičje tulips in other European countries. The table shows in which European countries the same types of tulips were cultivated as at Lisičje, what types they were and how often they appeared in individual countries (the number of foreign collections where we have recorded individual tulips types from Lisičje).

Table 2: Presence of tulips from Lisičje gardens in contemporaneous European collections (Germany, the Netherlands).

Sorta (Slovenija, Lisičje)	Nemčija (št.)	Nizozemska (št.)	Skupno (št.)
Barbanson	1	2	3
Bella Helena	1	1	2
Olinda	1	4	5
Blijenburgher	1	4	5
Cornart	1	4	5
Semper Augustus	1	1	2
Giallo Rosso	1	1	2
Jacosa	1	2	3
Giallo Coronato	1	2	3
Lacle Bleionberge	1	2	3
Bella d'Brussel Vagabunda	1	-	1
Bauger	-	1	1
Bella Diana	1	-	1
Bella Sylvia	1	-	1
Belvedere	1	-	1
Cittadella	1	-	1
Cesar d'Marans	-	1	1
Gabriel	1	-	1
Grand duc d'Fiorenz	1	-	1
Molsuich	-	1	1
Portuges	1	-	1
Africana	1	-	1
Agata	-	1	1
Agata Marlin	-	1	1
Agata d'Rampar	-	1	1
Bella d'Brussel Constance	1	-	1
Spigelle	1	-	1
Admiral de Mann	1	1	2
Veste Diana	1	-	1
skupaj	23	34	57

We can also make conclusions about the origins of specific tulips by their names. In Valvasor's inventory, there are 30 tulips with Italian names (Amoraglio deman, Agata Giocosea, Bellina, Cardinal Vagabondo, Cittadella, Corno di Cervo, Gial monde, Gial Holandia, Gial doman, Giallo coronato, Gatta Biatana, Giallo rosso, Perfetta, Orgelosa...), many with French names (Agata d'Rampar, Clairmond, Cesar d'Marans, Ephemeredes, Foret, Grand Duc d'Fiorenz, Marstion

Superbe, Meliaris, Triumphant, Pussart, Senateur Sollicitant, Paraches Raiselle...), German names (Admiral von Gent, Bauger, Cistenmoher, Maller, Spigelle, Salamelech, Veste Diana, Zystenmacher...), and most of all Dutch names (Lacle Bleionberge, Monsuest, Marent Starcluit...). Descriptions of collections from that time also allow us to identify the most valuable type of tulips, namely Semper Augustus, the price of which reached astronomical levels on the

European market. In 1624, it was necessary to part with 3,000 guilders for a single bulb (1 guilder = approximately 6 grams of gold). The following list of items should give an idea of what that amount of money could buy at the time: two loads of wheat, four loads of rye, four fate oxen, five swine, twelve sheep, two hogsheads of wine, four barrels of beer, two barrels of butter, a thousand pounds of cheese, one complete bed, one suit of clothes, one silver tankard and one sizeable wagon to haul it all away! How much the owner of Lisičje spent for his collection remains unknown.

In the 17th century, the most highly-regarded tulips were those with multi-coloured blossoms (broken tulips) of which the variegated colour was a result of the introduction of a viral infection rather than a morphological cause. Tulips with single-coloured flowers were considerably less appreciated and therefore less expensive. Analysing the assortment of tulips at the Lisičje Castle gardens, we conclude that it had representatives from the three major groups into which tulips were categorized during the 17th century in

accordance with their colour. Prices were also included in some inventories of tulips from the era. Not only were the countries comparable, but the two primary currencies of the time had comparable values (German guldens and Dutch guilders).

If we compare the purchase price of tulips at Lisičje (Valvasor, 1689: 174-175) with those of foreign suppliers, we conclude that they were considerably lower. This is due to the fact that, as a result of the wider cultivation of tulips in the second half of the 17th century, prices had already fallen. Among the most expensive tulips in the Lisičje collection (over 1,000 guldens) were *Semper Augustus*, *Cornart*, *Brabantea*, *Giallo Coronato*. These were followed by *Lacle Bleionberge*, *Torneo Delphin*, *Ottoman Paragon Costante*, *Ballada d'Olanda* (between 200 and 600 guldens) and by *Perfetta*, *Aurora Celeste*, *Bella Sylvia* which were the least expensive (under 200 guldens).

4 CONCLUSION

Facts about the introduction, dissemination, and economic significance of decorative bulbs in the world, and more precisely in larger European countries, are well-known (Missel, 2008; Moggach, 1999; Pavord, 1999; Proctor, 1998). In contrast, the early introduction of decorative bulbs in Slovenia is poorly researched. Research was conducted into the first introduction of geofits in Slovenian territory. The principle method of acquiring necessary data is based on the study of domestic archival material, provincial chronicles, and descriptive accounts of the countryside (specifically Valvasor's and Vischer's chronicles) as well as foreign archival sources.

It has been concluded that the first and most extensive collection of tulips on Slovenian territory was in the mid-17th century at the Lisičje Castle park, which contained more than 107 varieties. On the basis of studies of foreign tulip collections, the Slovenian collection is comparable with others, given the origins, contemporaneity, and economic aspects of tulips in the collection.

Of the 107 sorts cultivated in Lisičje, twenty-three kinds were from German lands (mostly from Berlin) and thirty-four were from the Netherlands (Haarlem). There were also many samples in the collection without a known supply source. The origins of these tulips were determined according to their name. In the inventory made by Valvasor, most of these were from Dutch

sources, many from French and German sources, and some thirty from Italian sources.

As far as the economic value of the Lisičje gardens derived from the purchase prices of Lisičje tulips (Valvasor, 1689; 174-175) from foreign suppliers, we conclude that the prices were lower when the collection was made. This can be explained by the fact that the increased cultivation of tulips in Slovenia took place in the second half of the 17th century when the price of tulips had already fallen in Europe. Nevertheless, the economic value of the Lisičje gardens was extraordinary given the social circumstances in Slovenia at the time.

They were clearly ties between Slovenia and Dutch, German, and Italian suppliers of tulips. In establishing these links between foreign and Slovenian lands, we note three important factors. In the 16th century, the connection between Slovenian lands and the Netherlands had been enhanced because of the participation of Slovenians in the Spanish-Dutch war. Leonhard Merherič, the owner of Lisičje Castle and the father of the tulip collector Leonhard Merherič Fabjanič, had worked as a mercenary soldier in this war for twenty-four years. He was one of the first to bring tulip bulbs from the Netherlands to Slovenia.

The son of the abovementioned owner of Lisičje castle made contact with German lands through the Berlin professor and doctor Henrik Munting, whose inventory

of tulips was discovered in Lisičje by Valvasor (Valvasor, 1689: 176).

We can assume that the reason for the introduction of bulbs from Italy had to do with following Italian fashion and methods in cultivating flowering bulbs. Indirect evidence of a link to Italian cultivators can be found in the Italian names of many sorts of tulips in Slovenia.

We can explain the size of the tulip collection at Lisičje gardens with the popularity of tulips at the time, the same factors that led to their dissemination throughout Europe and wider access to them in general. On the basis of the evaluation of this collection, it is possible to strongly support the hypothesis that the introduction of decorative bulbs (and particularly tulips) in Slovenian lands did not lag far behind the rest of Europe.

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