

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

**Floriculture and territory - the protection of the traditional Italian tipicity: the case of “La Camelia del Lago Maggiore (PGI)”**

**This is a pre print version of the following article:**

*Original Citation:*

*Availability:*

This version is available <http://hdl.handle.net/2318/1661567> since 2018-05-02T10:06:58Z

*Published version:*

DOI:10.17660/ActaHortic.2018.1191.33

*Terms of use:*

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)



# UNIVERSITÀ DEGLI STUDI DI TORINO

***This is an author version of the contribution published on:***

Caser M, Berruti A, Bizioli R, Bianciotto V, Devecchi M, Scariot V

Floriculture and territory – the protection of the traditional Italian tipicity:  
the case of “La Camelia del Lago Maggiore (PGI)”

Acta Horticulturae (2018)

***The definitive version is available at:***

DOI [10.17660/ActaHortic.2018.1191.33](https://doi.org/10.17660/ActaHortic.2018.1191.33)

# FLORICULTURE AND TERRITORY. THE PROTECTION OF THE TRADITIONAL ITALIAN TIPICITY: THE CASE OF “LA CAMELIA DEL LAGO MAGGIORE (PGI)”

M. Caser<sup>1</sup>, A. Berruti<sup>2</sup>, R. Bizzioli<sup>3</sup>, V. Bianciotto<sup>2</sup>, M. Devecchi<sup>1</sup> and V. Scariot<sup>1</sup>

<sup>1</sup>Department of Agricultural, Forest and Food Sciences, University of Turin, Largo Paolo Braccini 2, 10095 Grugliasco (TO) Italy

<sup>2</sup>Institute for sustainable plant protection, National Research Council, Viale Mattioli 25, 10125 Torino, Italy

<sup>3</sup>Fiori tipici del Lago Maggiore e del Biellese srl, s.s. del Sempione 4, 28831, Baveno (VB), Italy

## Abstract

European Union legislation reserves specific labelling for typical products of a particular quality by offering three quality schemes: Protected Denominations of Origin (PDO), Protected Geographical Indications (PGI) and Traditional Specialities Guaranteed (TSG). PDO and PGI concern products characterized by a defined bond to a particular ‘milieu géographique’ and bearing a geographical trade name, consolidating the product on the market. Thus, both PDO and PGI certify the existence of a link between a product and its place of origin, yet the two differ with regard to the intensity of such a bond. The camellias of the Lake Maggiore area represent an example of a typical product of floriculture that needs to be protected and enhanced. In the first half of the 19th century, Europeans became enamoured with camellias and they were imported and planted in gardens and parks, in the many pedoclimatically suitable environmental niches, with particular regard to some Italian areas. This flowering plant was successfully introduced on the shores of the Lake Maggiore (Piedmont, Italy). For nearly two hundred years local growers have developed expertise on camellia cultivation but have recently been very open to experimenting. We hereby present the story behind the strategic decisions that are leading a consortium of growers and processing firms from the lake Maggiore area to enroll the typical local camellias, i.e. “La Camelia del Lago Maggiore (PGI)”, for registration at the Community register of PGI. Major steps prior to enrollment have consisted first in a historical, archival and bibliographical research about the introduction and the cultivation of camellias in this area. After that, the characteristics that make this local product qualitatively different from those produced in other areas of the world have been identified. In addition, the typical cultivation protocol has been outlined through technical meetings and structured interviews to the growers.

**Keywords:** protected geographical indications, flowering plants, camellia spp, sustainable cultivation, european union legislation

## INTRODUCTION

The genus *Camellia* L. belongs to the section *Gardonieae* of the family *Theaceae* Mirbel (Sealy, 1958) and comprises more than 325 species (Mondal, 2002). All the naturally occurring species and hybrids are distributed in the south-eastern regions of Asia, from Himalaya to Japan and from southern China (Guangxi and Yunnan) to Java and Sumatra. The chromosome set is basically diploid ( $2n=2x=30$ ; Caser et al., 2010), such as in *C. sinensis* (L.) O. Kuntze and *C. japonica* L. For ornamental value, *C. japonica* is the main widespread commercial species, with thousands of different cultivars. From the beginning of the 20th century, *C. sasanqua* also started to be promoted in Europe for its winter blooming (Scariot et al., 2009). While it has been long appreciated in Japan and China, only in the 18th century this species was recorded by Kaempfer in his *Amoenitatum Exoticarum* (1712). *C. japonica* and *C. sasanqua* are both native species of Hirado Island, Japan (Scariot et al., 2009). This

area seems to be the origin place of *C. x vernalis*, as many variants of *C. japonica* and *C. sasanqua* are present (Uemoto et al., 1980). As well as *C. sasanqua* and *C. x vernalis*, *C. x hiemalis* and *C. hybrida* are two other interesting ornamental fall-blooming species traded in the mid- XXth century in Europe and North America.

Floriculture in the district of the Lake Maggiore (Verbania Province, Piedmont, North West Italy) is a micro-economic reality that, despite its limited production value continues to provide income to several families in this area and can be considered an asset enterprise of excellence with unique characters, linked to tradition and typicality (Corneo and Remotti, 2003). The territorial vocation that distinguishes this area for growing camellias is presented here as a possible approach to improve companies' competitiveness by integrating agronomic and environmental goals with a more sustainable and multifunctional production system. Recently, this economic sector has been very open to experimenting, in collaboration with local research institutions, on molecular biology (Scariot et al., 2007a; Scariot et al., 2007b; Caser et al., 2010; Caser and Scariot, 2011), *in vitro* propagation (Seglie et al., 2012), sustainable cultivation (Scariot et al., 2013; Demasi et al., 2015), post-harvest (Caser et al., 2015), plant growth regulation (Berruti and Scariot, 2013), growing media (Larcher et al., 2011) and biofertilization (Berruti et al., 2013).

Currently, because of globalization, Italian companies need to be more competitive with other productive areas in which production costs are very low, focusing primarily on product quality. This product quality has its basis in maintaining the characteristics of the initial germplasm, specific cultural practice, to the mode of presentation and marketing of the final product. The production and promotion of specific products, with high quality characteristics, as verified by the certification process and/or product, therefore can be a benefit for nurseries. To this end, the ability to provide instruments for the production enhancement is a possible source of income and can trigger value-added processes for the development of the area under consideration (Blakeney, 2014). European Union (EU) legislation reserves specific labelling for typical products of a particular quality by offering three quality schemes: Protected Denominations of Origin (PDO), Protected Geographical Indications (PGI) and Traditional Specialities Guaranteed (TSG) (EU Regulation n. 1151/2012 of the European Parliament and Council of 21 November 2012). The PGI legislation insures protection from imitations and counterfeits who may usurp the name and characteristics of an agricultural product. It is in fact one of the most restrictive forms of protection by which the Community legislation may provide agricultural products, also recognized in international treaties such as the World Trade Organization (WTO). Furthermore, the acquisition of the recognition of a product allows the consolidation of market position (Blakeney, 2014). Also, the link between land floriculture and tourism are becoming more strongly interconnected in our local economy. A specific flower product is now indissolubly bound to the landscape and has become an icon of the territory in which it is grown and also in promotional and marketing territorial operations.

The goal of the present research was to verify the feasibility of the registration of camellias and, consequently, of the main products of the area of Lake Maggiore (azaleas and rhododendrons) for registration as a PGI.

## **MATERIALS AND METHODS**

The presence of numerous cultivar cultivated in a concentrated area of Lake Maggiore, Piedmont, North-West Italy, represents a historically significant, heterogeneous germplasm pool with diverse forms, perceived to have a high index of biodiversity. In the present study, historical, archival and bibliographical research in municipal and private archives and libraries aimed to the retrieval of unpublished archival materials, which together provide key information to qualify the studied territory. Furthermore, the study of the Regulations of the European Commission has allowed for the extension of the general rules governing the

issue of product protection to the consideration of floriculture products. Interviews with growers, technical meetings, and structured interviews focused on the presentation of the PGI project. A participation and business form was used to describe all the companies from a productive and structural point of view. Moreover, during the summer 2015, Matteo Caser conducted interviews to the local camellia growers (questions are listed in Table 4). By these interviews emerged the awareness of the stakeholders on the issues and the importance of product protection. Through visits to nurseries during the entire cultivation cycle, key elements of the qualifying aspects of camellia cultivation have been identified. All notes taken in site visits and interviews have allowed the guidelines for defining production protocol acts to be formalized and included in the request for inclusion in the Community register of PGI.

## RESULTS AND DISCUSSION

### The introduction and cultivation of camellias in the Lake Maggiore district

The first camellia was introduced in Italy at the end of the 17th century in Caserta (Campania, South Italy). Admiral Horatio Nelson gifted the camellia to Emma Hart, who later became the second wife of Lord William Hamilton, ambassador of Great Britain to the Kingdom of Naples. This plant, according to tradition, was planted in the English Garden of the Royal Palace in Caserta. This camellia, which we can still admire, is officially considered the oldest in Italy and is known as the 'Celebratissima' or 'Maria Carolina' (Corneo and Remotti, 2003). Almost simultaneously, camellia cultivation spread to nearby places such as Salerno, Naples, offshore islands, and finally to central and northern Italy, mainly in Tuscany, Lombardy and Piedmont. At the end of the 17th and the first years of the 18th century, many breeders devoted themselves to create new cultivar of camellias, finding in this plant a natural genetic malleability. They were thus able to create new cultivar with floral shapes, varying the number of petals, from simple to semi-double and double, the size of the flower, the colour combinations and the variegation (Corneo and Remotti, 2003).

There are no reliable sources describing the introduction and spread of camellia in the district of the Lake Maggiore; however, the actual presence of centuries-old plants, especially in private parks, allows us to assume the species appeared here during the first half of the 18th century. The suitability of the environment and climate favoured the acclimatization and dissemination of this exotic species, without special protection in "cold stove" or orangeries as stated in other European countries (Scariot et al., 2007a). Less favourable for camellia was the Lombardy side of Lake Maggiore. Although there was a similar climate, the generally alkaline and calcareous soil made it unfavourable for an acidophilus plant such as the camellia. Only on Lake Maggiore were ideal conditions found for growing camellias in the ground elsewhere, however, they were required laborious covers of purchased land, at times, hauled from very far (Scariot et al., 2007a).

Camellia cultivation started around 1820, when an expert head-gardener of the Borromean Islands started a nursery business in Pallanza, founding the company Fratelli Rovelli (Accati et al., 2006). Renato Rovelli was the true founder and was responsible for the first planting of camellias on the island, a 'Pinch Rosea' in 1823. Among other, he performed experiments in breeding and propagation. Among the most prized cultivar of camellia produced by the Rovelli company include 'Lavinia', 'Principessa Clotilde', 'Lavinia Maggi', 'Adelina Patti', 'Gloria del Verbano' and 'Conte di Cavour' (Accati et al., 2006).

Starting from 1970, some companies have begun the cultivation of other species and hybrids of camellia characterized to have the bloom in winter: *C. sasanqua*, *C. x hiemalis*, *C. x vernalis* and *C. oleifera* (Scariot et al., 2009). Finally, the region supplied camellia as the official flower of the XX Olympic Winter Games of Turin in 2006 and the World University Games in Torino in 2007 represented an important showcase for the local floriculture.

Towards the end of the first decade of the 2000s, there were an estimated 200 cultivars of camellias being grown and marketed, with approximately 800,000 plants sold (per year). The most interesting feature is the large range of cultivars available, which probably makes the Lake Maggiore district the most important European area known for the number of cultivars in cultivation and product quality that is now appreciated and known all over the Italian and European market.

### **The European legislation**

Participation in the EU Quality Schemes for agricultural products is a way for farmers and growers to maintain competitiveness and profitability via all the advantages collective reputations of quality products can offer. Three widely adopted EU schemes are the following: PDO (protected designation of origin), PGI (protected geographical indication) and TSG (traditional specialty guaranteed). Protected Geographical Indication – PGI is a label for agricultural products and foodstuffs whose production is closely associated with a particular geographical area and at least one of the stages of production, processing or preparation takes place in the defined area. In addition, the product's quality, reputation or other characteristics are essentially attributable to its geographical origin (**Regulation (EU) No 1151/2012**). This last regulation confirmed the inclusion among the products of the sector eligible for registration 'Flowers and Ornamental Plants'. The protection of these indications of quality are intended to provide assurances to consumers on the origin and production methods, to deliver effective marketing messages about high value-added products, and to support companies producing quality products by protecting them against fraudulent imitation. In the case of PDO and PGI these aims have been achieved, as in recent years, 1,379 products have requested and obtained Community protection to December 6, 2016 (<http://ec.europa.eu>), and the number is constantly growing. The Regulation contains all the information and the main elements of the product specification to be taken into consideration to qualify for a Protected Geographical Indication. This must include: name; description; geographical area; proof of origin; method of production; bond; control structure; and labelling. The Regulation is intended to provide guidance for production that clearly defines all steps of the production process; setting limits and establishing the requirements, procedures, and objective method, that are easily achievable and verifiable. The specification must be written in such a way that an independent body can certify, on the basis of analytical tests and routine, the correct application of the rules and procedures and thus ensure the quality parameters of the final product. Currently at the European level, only three "Flowers and Ornamental Plants" products have a PGI: the **"Gentse azalea"**, the **"Szőregi rózsató"** and the **"Vlaamse laurier"**.

### **Local nurseries and their production**

Among agricultural productions, floriculture is a relevant sector from both an economic and environmental point of view. By fostering many satellite activities, in the pre and post production phases, floriculture can be considered a significant source of value creation. EU has the world's highest densities of flower production per hectare, with a 10% of total world area, and 44% of world flower and pot-plant production (**EU, 2015; Zavareh et al., 2013**). In Italy, over 100.000 employees, and 2.6 billion euro generated per year, give to this sector a major economic role (**Mipaaf, 2014**). Furthermore, floriculture has often lower environmental impact than other productions, contributing to biodiversity and landscapes conservation (**Marzialetti and Pardossi, 2003**), performing a central role for the creation of a multifunctional agriculture able to accomplish economic, social and environmental purposes. Nevertheless, the recent world financial crisis have forced Italian floricultural sector to deal with a critical period that still persists. High production costs, consumes reduction, as well as the competition of low-cost flowers imported from extra-EU countries



(Rabobank, 2015), are negatively affecting Italian companies operating at all stages of the value chain. As for Italy, though its prominent position within European and international market, the effects of crisis have given a serious blow to this sector.

Through a collaboration with the “Consorzio Fiori Tipici del Lago Maggiore e del Biellese” a collection of the most significant data of the productive reality of nursery floriculture in the district of Lake Maggiore was conducted. The data are reported in the following tables (1-4) and the results were compared to a census carried out in 2008.

Twenty-six companies were surveyed (about 40% of the companies still active), representing 70% of the total production on a total area of 89.80 ha, of which 61.33 are opened and 27.09 protected (Table 1).

Table 1. The sum of the total farm area, open and protected, and type of business management of surveyed companies in 2015 and 2008.

Year	Total	Surface (ha)		Family run	Management (%)	
		Opened	Protected		Permanent position	Not permanent position
2015	89.80	61.33	27.09	41.8	39.8	18.4
2008	188.18	100.02	28.27	40.7	60.3	

The comparison between the present situation and the 2008 census shows an average decrease of the total farm area (-24%) and open area (-2%), while there was an increase (+36 %) in protected (e.g. tunnels and greenhouses). Table 1 also shows how in the surveyed companies prevail the family conduction (41.8%). This user does not differ much from the previous census, where the family business accounted for 40.7% of the staff. Table 2 depicts a comparison of the sales volume for the years 2008 and 2014. It shows that 39.1% of the surveyed companies have sales between € 100,000 and € 200,000 in 2014, highlighting a general decrease from the previous analysis. Specifically, in 2014 47.8% of the companies have a sales volume between € 100,000 and € 300,000, an increase of 16.8% compared to the previous study. In addition, there was a 9.1% increase in the number of companies with sales between 50,000 to 100,000 € from 2008 to 2014. Analyzing sales volume superior than 300,000 €, the number of companies decreased by 16.2%. In particular, there was a drastic decrease of companies with sales > € 500,000 (-22.3%). At the time of the inspections and interviews, local growers were asked what the percentage variation in sales and production was compared to 2013. On average respondents reported a decrease equal to -7.7% but with a highly variable range between -60% and + 55%.

Table 2. Sales volume percentage in six classes for the years 2014 and 2008 for twenty-six nurseries in the Lake Maggiore area.

Year	Sales volume (%)					
	<50000€	50000-100000€	100000-200000€	200000-300000€	300000-500000€	>500000€
2014	17.4	8.7	39.1	8.7	17.4	8.7
2008	17.0			31.0	21.0	31.0

The growers have also indicated that probably the worst period of the world financial crisis is positively evolving and that some of them, particularly attentive, are turning their attention to other sources of income. Regarding the companies, we have in fact tried to investigate the complementary activities and future investments. Only 34.8% started complementary activities (eg. renewable energy, product diversification) and only 19.2% have a planned investment. If compared with the 2008 census, the figure is alarming because at that time (2008) more than 50% the number of companies that would invest and

26% of them had already defined the near future complementary activities (eg. expansion of the product range, organizational improvement, renovations).

Table 3 shows a sharp decline in sales of floricultural products in the Lake Maggiore area in 2014/15 compared to 2007/08. A total of about 1.5 million plants were sold in 2014/15 with an overall reduction equal to -53% compared to the 2007/2008 season. Albeit to a net reduction, the highest number of plants sold is represented by camellia, azaleas and rhododendrons, which account for 49.5% of total production sold.

Table 3. List and number of plants sold in the 2014/2015 season by the interviewed companies and percentage change compared to the same parameter in the 2007/2008 season.

Product	Sold plants (n.) 2014/2015	Variation (%) related to 2007/2008
<i>Camellia japonica</i>	463,786	-43.2
Azaleas	452,857	-45.8
Rhododendrons	80,771	-50.9
<i>Erica</i> spp.	61,429	+66.0
<i>Pieris japonica</i>	50,643	-62.5
<i>Camellia sasanqua</i>	33,000	-43.2
<i>Photinia</i> spp.	30,714	-66.2
<i>Ilex</i> spp.	23,600	+66.2
<i>Rhyncospermum</i> spp.	17,000	+112.5
<i>Leucothoe</i> spp.	14,757	-45.3
<i>Osmanthus</i> spp.	12,571	-54.3
<i>Nandina</i> spp.	12,000	+166.7
Small berries	9,829	-76.0
<i>Hydrangea</i> spp.	8,143	-12.9
<i>Skimmia</i> spp.	7,186	-79.7
<i>Acer</i> spp.	7,043	-90.1
<i>Viburnum</i> spp.	6,714	+42.9
<i>Kalmia</i> spp.	5,733	-40.3
<i>Daphne</i> spp.	2,086	-30.5
<i>Gardenia</i> spp.	1,471	-1.9
<i>Magnolia</i> spp.	1,229	-12.2
<i>Sciadopytis</i> spp.	714	-68.9
<i>Cornus</i> spp.	714	-93.4
Rooted liners	155,714	-96.6

Among the most noticeable reductions is the number of rooted liners (96.6%) mainly due to the failure of the main company for the production of rooted plants caused by financial crisis. Other sharp declines noted has been in selling *Acer* (-90.1%) and *Cornus* (-93.4%). Among other products, some have shown a significant increase such as cultivars of *Calluna* (+ 66.0%), *Ilex* (+ 66.2%), *Rhyncospermum* (+ 112.5%), *Nandina* (+ 166.7%) and *Viburnum* (+ 42.9%).

Finally, growers were asked to respond to a short questionnaire on the issues and causes they have run into during the 2014/2015 season (Table 4). The interviews showed that the main problem was the reduction of the value of sales that was caused primarily by the global economic crisis and then by the product crises and the high production costs.

Table 4. The main problems and causes of the crisis of the floriculture industry of the Lake Maggiore district. The answers of the growers are presented in percentage.

Main problems 2014/2015	Answers (%)		Causes 2014/2015	Answers (%)	
	Yes	No		Yes	No
Turnover impairment	61.9	38.1	World economic crisis	85.7	14.3
Sales volume reduction	38.1	61.9	Customer management	28.6	71.4



Credit management	33.3	66.7	difficulties		
Unsold management	47.6	52.4	Product crisis	66.7	33.3
Customer management	28.6	71.4	Distribution difficulties	23.8	76.2
Personnel management	9.5	90.5	Inadequate advertising	19.0	81.0
			Difficulties in production technique	38.1	61.9
			Inadequate company	28.6	71.4
			High production costs	61.9	38.1

During the interviews it was possible to outline a general decrease in production of the entire area of the floriculture district due to the difficulty of selling, difficulties in management of market tightness and increased foreign competition resulting in a state of uncertainty about the near future and disappointment on the part of growers.

## CONCLUSION

During the visits with the companies and through the analysis of previous research studies regarding camellia growing and cultivation in the Lake Maggiore district, it has been possible to define which are the main defining elements of camellia cultivation. This information is of particular interest, especially for the definition of the geographical area, the specificity of the product, and the production protocol relating to the request for the PGI.

Specifically, the camellia is a typical acidophilus plant for which the land and growing media must be free of an excess of carbonates which can cause leaf chlorosis and associated non-aesthetic phenomena. A high content of organic substance and a soil pH between 5.0 and 6.5 to encourage regular plant development (Accati, 1993). The survey conducted shows that camellias root systems are relatively shallow, reaching a maximum depth of 60 cm. Fertilization of plants in the ground, when necessary, can be made with either organic or mineral fertilizers. Iron deficiency induced leaf chlorosis, not a rare event for camellias, can be treated with chelated iron (Scariot et al., 2007a).

The optimum temperature for vegetative growth is between 18 to 24 °C. However, in the areas where camellias originate, they are able to survive in temperatures ranging between -7 and 35 °C. This fact reveals the high ecological plasticity of the species that allows the successful cultivation of camellias in the area of Lake Maggiore. Sunlight requirements varies from species to species, but it seems that in general the camellia prefers partially shady areas. Thus, it follows that, although they can be grown with positive results in southern Italy, it is necessary to provide adequate shading in order to limit dehydration and sunburn of the leaf blades in this region. In addition, a series of surveys assessing the analytical data from waters of public water systems of the municipalities of the Province of Verbania in which there are the companies that grow camellias, emerges as the salinity measured in mS / cm, is frequently below 100 mS / cm, with a mean value of 81 mS / cm. The characteristic of this water quality is a hallmark of the Lake Maggiore area, which together with the other: geographic location, the presence of lake etc., affects the quality of the local plants.

The quality of water for irrigation is crucial, being that camellia is an acidophilic species. Calcareous soils, or those high in salts and/or carbonates cause chlorosis on plants (Scariot et al., 2007a). The large water mass, performs a climate mitigating function, resulting in low annual temperature variations and lower average summer and higher average winter temperatures respectively, than that of the lowlands. Thanks to this mild and

rainy microclimate, the lake shores are home to a very rich flora of Mediterranean and exotic species that can be seen in the sumptuous gardens of the villas. In fact, the area around Lake Maggiore has been nicknamed the “Garden of Europe”, because of its wealth of flowers and plants from all over the world.

## ACKNOWLEDGMENTS

The authors thank all the camellia growers and producers of the district of Lake Maggiore that have collaborated in this project. The authors thank Fondazione Giovanni Goria and Fondazione CRT for partially funding the research project titled “Le camellie del Lago Maggiore (VB). Definizione di standard di qualità e valutazione di fattibilità per l’iscrizione al registro comunitario delle Indicazioni Geografiche Protette (IGP)”.

## Literature Cited

- Accati, E. (1993). Trattato di floricoltura. Edagricole, Bologna, Italy, pp. 419.
- Accati, E., Corneo, A., Hillebrand, P., Lombardo, D.M., Merlo, F., Pisoni, C.A., et al. (2006). Le antiche Camellie dei Rovelli. Grossi, Domodossola, Italy.
- Berruti, A., Borriello, R., Della Beffa, M.T., Scariot, V., Bianciotto, V. (2013). Application of nonspecific commercial AMF inocula results in poor mycorrhization in *Camellia japonica* L. *Symbiosis* 61, 63-76.
- Berruti, A., Scariot, V. (2013). Efficacy of flurprimidol and peat alternatives on growth control of potted camellias. *New Zeal. J. Crop Hortic. Sci.* 41, 230-239.
- Blakeney, M., (2014). The Protection of Geographical Indications: Law and Practice. Edward Elgar Publishing, pp 512.
- Caser, M., Torello Marinoni, D., Scariot, V. (2010). Microsatellite-based genetic relationships in the genus *Camellia*: potential for improving cultivars. *Genome* 53, 384-399.
- Caser, M., Scariot, V. (2011). Characterisation of fall-blooming camellias as revealed by sequence tagged microsatellite site markers and morphological traits. *Acta Hort.* 918, 237-243.
- Caser, M., Seglie, L., Bizioli, R., Scariot, V. (2015). Ethylene and the postharvest performance of cut camellia flowering branches. *Adv. Hortic. Sci.* 29, 116-120.
- Corneo, A., Remotti, D. (2003). *Camellie dell’Ottocento nel Verbano. Regione Piemonte, Torino, Italy.*
- Demasi, S., Caser, M., Kobayashi, N., Kurashige, Y., Scariot, V. (2015). Hydroponic Screening for Iron Deficiency Tolerance in Evergreen Azaleas. *Not. Bot. Horti Agrob.* 43, 210-213.
- Larcher, F., Berruti, A., Gullino, P., Scariot, V. (2013). Reducing peat and growth regulator input in camellia pot cultivation. *Hort. Sci.* 38, 35-42.
- Scariot, V., Handa, T., de Riek, J. (2007a). A contribution to the classification of evergreen azalea cultivars located in the Lake Maggiore area (Italy) by means of AFLP markers. *Euphytica* 158, 47-66.
- Scariot, V., De Keyser, E., Handa, T., de Riek, J. (2007b). Comparative study of the discriminating capacity and effectiveness of AFLP, STMS and EST markers in assessing genetic relationships among evergreen azaleas. *Plant Breed.* 126, 207-212.
- Scariot, V., Gullino, P., Caser, M. (2009). *Le camellie invernali. Supplemento to Quaderni della Regione Piemonte-Agricoltura No. 64. Regione Piemonte, Turin, Italy.*
- Scariot, V., Caser, M., Kobayashi, N. (2013). Evergreen azaleas tolerant to neutral and basic soils: breeding potential of wild genetic resources. *Acta Hort.* 990, 287-291.
- Seglie, L., Caser, M., Berruti, A., Scariot, V. (2012). Investigation on *in vitro* multiplication and rooting in *Camellia japonica* L. *Acta Hort.* 961, 599-605.