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Exotic ornamental plants in Sicily before 1790

Abstract

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An essential frame of the exotic ornamental flora of Sicily, based on pre-linnean herbaria, literature and illustrated material, is presented with the aim of giving a picture of the human landscape and its plant heritage before 1790. As it is know the ornamental flora which characterized the baroque parks and gardens of Sicily – especially in the Palermo area – started declining when, in the first half of the XIX century, a great number of new exotic plants was introduced to Sicily and changed dramatically both agricultural and urban landscape. Such process was particularly increased by the Botanical garden of Palermo that, soon after its setting up (1790-1795), spread several important groves and hundreds of subtropical decorative plants from the Americas, S. Africa and Australia. Most of them were implanted in the baroque pattern, following the new romantic trend of enriching floristically as more as possible the new gardens and parks. As a consequence the pre-existing characteristics of the baroque gardens were almost lost. Identification of the extant elements belonging to the plant heritage in question can be useful especially for restoring purposes.

Introduction

When, in 1787, W. Goethe visited Villa Giulia, the main public garden of Palermo built between 1777 and 1779, he fixed a wonderful plant wealth and ideas referring to his 'Uhrpflantze' Theory.

Few years later, in 1790, in an area adjacent to Villa Giulia the setting up of the Palermo Botanical Garden started. Hence a great number of useful and ornamental plants was soon spread all over Sicily, whose human landscape changed rapidly. Indeed this process had slowly started some centuries before, but the pressing increase of new plants, introduced from Africa, the Americas, Australia and other tropical and subtropical regions of the world, took place mainly in the course of the XIX century in many European and Mediterranean regions, including Sicily. Here it developed very quickly owing to the influence of the Botanical garden since its first decades activity. In this period, in the fields along the coast *Eriobothrya japonica* and *Citrus deliciosa* had been spread as crops while *Sophora japonica*, *Erythrina corallodendron*, *Ficus microcarpa*, *F. benghalensis* and many other ornamental trees were cultivated in the open air in the Botanical garden (Tineo 1827) and probably in avenues and squares of Palermo (Raimondo & Mazzola 1992).

Furthermore the public and private parks and gardens had been enriched with dozens of newly introduced plants that gradually but steadily affected the original baroque schemes of the most important parks and villas, especially in the Palermo area. In fact, many species formerly cultivated for both ornamental and other practical (medicinal, productive, etc.) purposes, were later forgotten and now only isolated individuals can seldom be found in the old baroque parks and gardens. Few others, such as *Rumex lunaria* (Mazzola & al. 1999) and *Cardiospermum halicacabum* (Schicchi 1999), firstly exclusive to the aristocratic mansions, today are scattered naturalized in the rural landscape.

In conclusion, when Goethe published the final version of the "Italienische Reise" in 1829, the gardens and the relevant flora and landscape he enthusiastically admired in Sicily were not the same any more having partly been embodied into the nineteenth century pattern and partly forgotten or lost.

The frame of the exotic Sicilian flora of ornamental interest before 1790 is outlined here not only from the pure historical point of view but also with the aim of giving a picture the human landscape of that time and also with restoring purposes, especially as regards the extant baroque parks and gardens.

Sources

The main sources of this survey have been some extant pre-linnean herbaria dating back to the end of XVII century and literature relevant to the Sicilian botanical gardens from this period. Among the herbaria, two tomes of the Cupani's herbarium recently rediscovered in the library of the Istituto Agrario Castelnuovo (Mazzola & Raimondo 1995) and the herbarium of Giovanni Maria Lattini kept in the Herbarium Mediterraneum of Palermo (PAL) made up of about 500 sheets in 6 tomes (Mineo & al. 2003) of which only the first had been described by Mattei (1906), were analysed. As to literature, the main references are the lists of plants cultivated in the first Sicilian botanical garden, founded in Messina by Castelli (1640), in the *Hortus catholicus* set up by Cupani (1696-1697) at Misilmeri near Palermo and, besides, the list provided by Ucria (1789) at the foundation phase of the Botanical garden of Palermo. Chronological references on the introduction of the plants to Italy are based on Saccardo (1909) and Maniero (2000). These sources cover almost the whole period in which the baroque culture of the garden developed in Sicily.

The plants

From the lists analysed, at first sight the Sicilian floristic pattern is on the whole the same as the Italian and European context. Many exotic species of *Acacia*, *Aeonium*, *Agave*, *Aloe*, *Althaea*, *Amaranthus*, *Brugmansia*, *Capsicum*, *Cardiospermum* (Fig. 1), *Citrus*, *Colocasia*, *Convolvulus*, *Dolichos*, *Fritillaria*, *Gladiolus*, *Helianthus*, *Hibiscus*, *Jasminum*, *Malva*, *Opuntia*, *Phaseolus*, *Polygonatum*, *Tulipa*, etc., included by Castelli (1640) among the *simplices* and *hortensia* cultivated in the botanical garden of Messina were also frequent in the botanical gardens of that time. At Misilmeri, at the end of the XVII century, Cupani (1696-1697) listed *Parthenocissus quinquefolia*, *Tropaeolum majus*, 47 tulips (Fig. 2) (cfr. *Tulipa gesneriana*) and several varieties of *Papaver somniferum*, as

Fig. 1. *Cardiospermum halicacabum*, recorded by Castelli in 1640, today occurs as a naturalized hedge-forming climber in disturbed habitats.

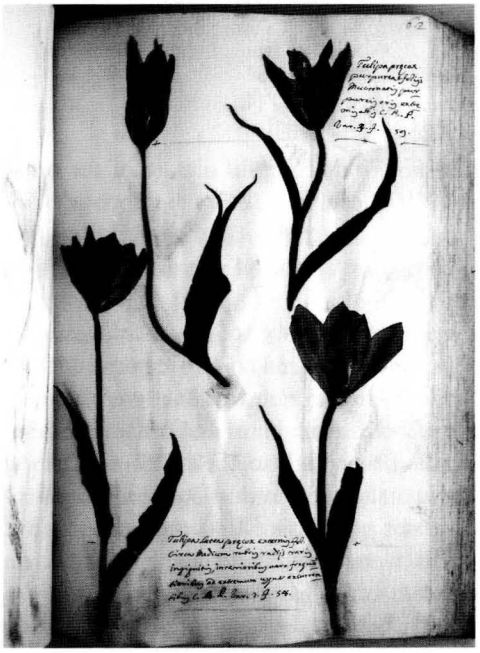

Fig. 2. *Tulipa* sp. in the sheet 62 of the vol. III of Cupani's *Hortus Principis Catholicae*.

Fig. 3. *Musa paradisiaca* in the field. Today abandoned as a crop and mainly used as ornamental, the cultivation of the banana in Sicily dates back at least to the XVI century.

well as few other exotics, such as *Musa paradisiaca* (Fig. 3), whose cultivation in Sicily was known since ancient times (Mattioli 1565). Furthermore, he engraved *Opuntia ficus-indica*, *O. dillenii* (the same quoted by Castelli) and beside *Vinca major*, *Phytolacca americana*, *Capsicum* sp. pl., etc. in the *Panphyton siculum* (Cupani 1713). But, despite this early scarce attention to the exotics, in the two above mentioned tomes of his herbarium, 103 of the whole 410 specimens refer to cultivated plants mainly of ornamental concern, belonging to *Althaea*, *Canna*, *Haemanthus*, *Ipomoea*, *Parthenocissus*, *Phytolacca*, *Physalis*, *Polianthes*, *Tagetes*, *Thuja*, *Tradescantia*, *Tropaeolum*, etc. This material, even if remarkable, being just a fragment of the original herbarium that consisted of many other volumes, provides only a partial vision of the ornamental flora around Palermo at the time of Cupani. In fact, it was still really conspicuous in 1757, when Giovanni Maria Lattini, a Pontedera's pupil from Padua, gathered the last herbarium of the plants cultivated in the Misilmeri *Hortus catholicus* few years before its disappearance. This collection, mainly made up of cultivated plants, includes almost all the above quoted plants and many others belonging to the genera *Chasmanthe* (Fig. 4), *Campsis*, *Elaeagnus*, *Euphorbia*, *Gasteria*, *Justicia*, *Leonurus*, *Lonicera*, *Melia*, *Mesembryanthemum*, *Paeonia*, *Passiflora*, *Pelargonium*, *Philadelphus*, *Sesbania* etc. All these plants are summarized, at the starting of the Palermo Botanical garden, by Ucria (1789). Among the taxa not previously reported from Sicily there are *Parkinsonia aculeata*, *Lantana camara*, *Cassia fistula*, *Cotyledon orbiculata* var. *spuria*, *Yucca aloifolia*, *Hylocereus triangularis*, *Cereus peruvianus*, *Opuntia curassavica*, *Euphorbia mammillaris*, *E. caput-medusae*, *E. officinarum*, *E. neriifolia*, *E. canariensis*, *E. cereiformis*, *Gasteria disticha*, *G. bicolor*, etc.

Comments

The taxa above quoted, although incomplete, show a meaningful picture of the ornamental exotics in cultivation during the XVII and XVIII centuries. From the floristic point of view, on the whole this heritage agrees with that of other parts of Italy and Europe.

Nevertheless, considering in particular some components, several interesting details on the evolution of the regional gardens could arise.

The first distinctive characteristics are given by the high number of ornamentals and by the fact that several crops, such as all the *Citrus* species, are placed among the ornamentals.

This is connected with the nature of the Sicilian baroque gardens that were usually based on the geometrically balanced assessment of both agricultural and ornamental elements, each of them playing its own role and location, as noted Goethe (1829) on visiting the Villa Palagonia at Bagheria, near Palermo (as a matter of fact this is a peculiar aspect of the Sicilian baroque gardens whose origins are not properly of Renaissance concern). This structure, of which several interesting items were illustrated by the well known engraver Antonino Bova (Augello 1983), influenced somewhat the characteristics of the heritage in question as far as some factors, such as shape, size or scent, are concerned and especially consistency. In particular, in the garden there is very little difference between crops like citrus trees and roses and therefore each species is often bi- or multifunctional. In this structure shrubs, bulbs and other ornamental elements were placed at the borders of the paths, and could remarkably increase in number. As an additional factor, the paths and

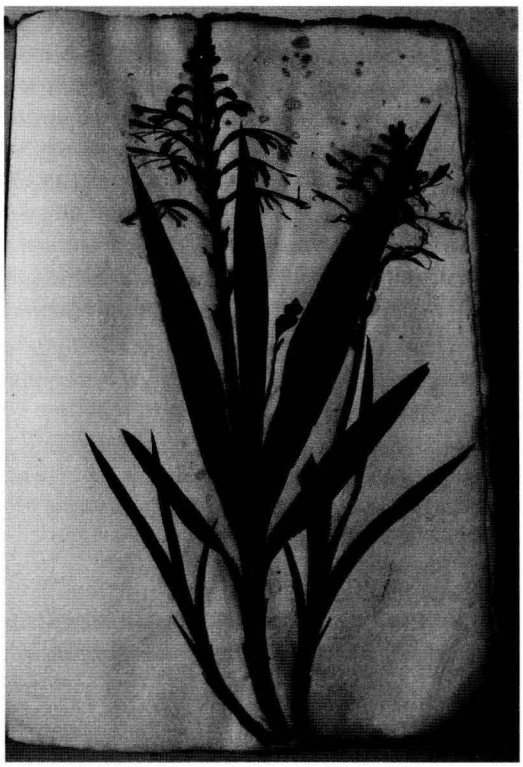

Fig. 4. *Chasmanthe aethiopica* in the Lattini Herbarium. Introduced in the XVIII century, this species is now naturalized to Sicily and S. Italy.

the garden itself were delimited by walls or columns that, each bearing on the top a pot with pelargoniumr or little succulents, formed a true garden inside the garden.

Substantially the baroque gardens in Sicily were characterized by a highly variable number of species, whose size was only conditioned by the crops (Domina & al. 2003).

Other interesting considerations conçern the geographical origins of the plants and the pathway they followed to reach Sicily in comparison to Italy. In the case of *Opuntia dillenii*, its first ascertained record in Italy dates back to 1894, but its occurrence in Sicily is well documented after Castelli (1640). To explain this contrast, it can be considered that *O. dillenii*, as *O. ficus-indica*, might be introduced via N-Africa or more likely straight from Spain, during the XVI century when the island was under its domination. This is also indirectly suggested by the fact that in both southern Spain and Sicily *O. dillenii* occurs widely naturalized spread by the same, still actual use as hedge plant (Berthet 1990) or living barriers on the walls (Mazzola & al. 1988). Reliably, also for other *Cactaceae*, such as *Hylocereus triangularis*, *Cereus peruvianus*, *Opuntia curassavica*, an almost straight introduction from Spain may be hypothesized. Similarly interesting may be to clarify the introduction route to Sicily followed by various species of *Euphorbia*, *Aloe*, *Gasteria*, overridden by Saccardo (1909). More remarks may be added about the fact that most

plants listed by Cupani bear a Sicilian vernacular name. All these sides of the question and more others will further be developed.

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