

1. Ladies and gentlemen good evening. My name is Daniela Romano and I work at Catania University. My interest is focused on ornamental plants and their utilization in the Mediterranean climate. I apologize don't speak English well, but I hope that the common interest in gardens and ornamental plants allow us to overcome this problem. It is a pleasure for me to talk to people who, like me, love Mediterranean plants and gardens. This evening, in particular, I want to talk to you about the Sicilian gardens.
2. Before to start our visual tour on typical elements of gardens and ornamental plants in Sicily, we can ask: What is a garden? I believe that a preliminary definition is to consider a garden as a blend of several ornamental species. I think plants are the key element of garden.
3. But what is happening in contemporary garden design? The modalities to make gardens are changing under the pressure of ecological demands: words, like sustainable landscape, environmental friendly landscape, xeriscaping, wild garden, are becoming more and more popular.
4. We increasingly realize that it is necessary to rethink our development models because we are destroying the Earth.
5. The earth overshoot day always falls earlier in the year: in 2021, it was set on 29 July; for 2022, however, we already know that Qatar consumed its resources on February 10, the United States on March 13; Italy will consume them on May 15 and the United Kingdom on May 19.
6. We must be aware that we are destroying the Earth.
7. We have no more time because we don't have another planet, we don't have a planet B. So, what will we leave for our children?
8. We must stop!
9. Numerous documents remind us of the importance of sustainable development; among the different goals of the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, numerous are linked to plant presence in the cities.
10. There is another question: what is an ornamental plant?
11. For us it is certainly not the beautiful plants that need a lot of quantity of water, as *Hydrangea macrophylla*, but the one that can adapt better. The increased awareness of the importance of environmental issues has also changed the aesthetic point of view on gardens and ornamental green spaces.

12. In the past, we consider ornamental the plants capable of providing aesthetical pleasure, thanks to the showy flowers, fruits, leaves. Today this concept, as Savè recalled, has changed due to ecological considerations. The ornamental plant is the one that responds to certain functions: restore the disturbed landscape, control erosion, reduce water consumption, etc.
13. Another question is linked to the Mediterranean environment.
14. As it is known, there are five regions on the Earth with a Mediterranean climate.
15. In this slide, you can see the key aspects of these environments: the ancient presence of the man – also 100,000 years ago in Cape Region and 50,000 in the Mediterranean Basin - the plant species richness; for example, in the Mediterranean basin there are over 23,000 plant species, the prevalence of rainfall is in the winter – from 72 to 90% - and hence the high fire frequency, favoured by the summer drought, that reduces plant biodiversity.
16. The shrubs, in particular, are the main components of the Mediterranean vegetation: the macchia (as called in Italian)
17. It is therefore not surprising that the areas with a Mediterranean climate are hot spots, with high exclusive biodiversity at risk of erosion. Ten areas, often islands and isolated areas, are important reserves of biodiversity in the Mediterranean Basin; all Sicily is a hot spot.
18. There are numerous native species (and therefore very resistant to the environmental stresses of the Mediterranean), very interesting from an ornamental point of view and which until now have not been used for ornamental purposes. In this slide and in the following you can see, only as examples, because there are over 140 woody plant species of potential interest, some shrub plants of the Sicilian flora, not present in ornamental nurseries.
19. Other species
20. Other species
21. Other species
22. Surely, besides the species variability, there is the intraspecific one: here you can see only part of the variability present in Nature for *Cistus creticus*
23. and in *Nerium oleander*
24. A few years ago I found this definition of biodiversity, “*the accumulation of three and a half billion years of coexistence and experience of all life-forms*”; I don't remember the source, but it seems very interesting to me because it reminds us of the millennial effort of Nature that we must respect

25. We must save the Mediterranean biodiversity: it is for us an imperative.
26. The conservation of genetic resources of ornamental plants is strategic. If you consider, like underlined by *Khoshbakth and Hammer*, the percentage of threatened plant species in relation to the total of existing plants, unexpectedly, the ornamental plants are the more threatened plant species. Their presence in the gardens does not protect them from extinction. They have, in fact, a higher percentage of risk than that of all known higher plants.
27. But what is the Mediterranean garden?
28. *Russell Beatty* wrote that the gardens evolve from a confluence of culture and climate. The adaptation to the region's climate comes from "**a cultural interpretation incorporating intellectual and spiritual thought and values**". So there are differences between gardens of Italy and Greece and between the gardens of different regions of Italy.
29. The Sicilian garden and especially the traditional ones are particular examples of Mediterranean garden.
30. What is special about the Sicilian garden?
31. First of all, Sicily is an island, isolated from the mainland
32. Bufalino, a Sicilian writer, some years ago, defined Sicily as a plural island because over the centuries it has served as a link between West and East. This has also favoured the exchange of cultures and also plants. Many of the plants, that characterize the gardens and the landscape of Sicily, are exotics.
33. I want briefly to talk about the elements of Sicilian garden.
34. In Sicily, the garden is often confused with fruit orchards and, not surprisingly, the same word, *jardinu*, garden, is used to indicate ornamental gardens and fruit orchards, especially of Citrus plants.
35. Another element is the intricate blend between native and exotic species.
36. I want start with Pantelleria
37. It is a small island between Sicily and Africa
38. In Pantelleria there is the smallest garden I know: the *giardino pantesco*. A tall, thick stonewall is built to protect an only citrus plant.
39. This is a winning strategy to conserve water and allow the plant to survive even without irrigation.
40. However, this garden is very similar to the oldest known representation of a garden: The Elamite one, which dates back to the third millennium BC: a stonewall with in the middle a tree.
41. Native and exotic plants are the frame of the ancient monuments of Greek age: here Segesta
42. For a long time, exotic plants have been connected with Sicilian monuments

43. This is a suggestive corner of the botanical garden of Palermo
44. This is a detail of the roof garden of the bishop at Syracuse
45. It is not a garden, but it looks like us: it is the Ragusa countryside
46. A suggestive staircase in Taormina
47. *Centranthus ruber* at Nicosia, a small town in the interior of Sicily
48. *Opuntia ficus-indica* on a rock overlooking the sea in Acitrezza
49. Which ornamental plants do we find in the Sicilian landscape?
50. There are native plants as *Pistacia terebinthus*, here in the winter season
51. or *Spartium junceum* near the sea
52. The Sicilian gardens are very rich in exotic plants
53. Which are capable of resisting even in absence of cultivation
54. The beauty of the fruit orchards, our gardens
55. Particular of lemon plant
56. What are the elements of traditional Sicilian gardens?
57. First of all, the gates
58. There are potted plants in the courtyards, true examples of minimal gardens, very frequent in Sicily
59. You can find a lot of large trees to ensure shade: *Ficus macrophylla*
60. *Phytolacca dioica*
61. Shade is also ensured by the large vine pergolas. Shade is an important element in withstanding the summer heat
62. Another element, very important in relation to drought conditions of the Mediterranean environment, is the **water**
63. Small aquatic gardens are very frequent: in the slide that of the botanical garden of Catania University. The thing is not strange: in a dry environment the charm of a small water garden, of an oasis of coolness increases.
64. This strange construction, like a pyramid, is a useful solution to conserve water, thanks to water condensation
65. There are obviously the classic tanks
66. Another solution to water conservation is the use of paved paths instead of lawns
67. The elephant is simple of Catania city
68. The lawns are substitute by creeper plants: tradescantia,
69. Phyla
70. Ophiopogon
71. The ceramic elements are very typical: this is in the municipal garden of Caltagirone
72. This fantastic seat is at Villa Patti always in Caltagirone
73. A private garden at Catania

74. The stones are used to create raised flower beds and allow the cultivation of trees
75. What are the main groups of plants?
76. There are a lot of native and exotic species in the Sicilian gardens
77. Of course you can find many succulent plants, very efficient in a drought environment: in this slide *Opuntia ficus-indica* at Aci Castello, the small town where I live
78. *Agave attenuata* at ancient theatre of Taormina
79. *Portulacaria afra* at municipal garden of Catania
80. The strange shapes are a fascinating element of succulents
81. The thorns
82. The thorns
83. The succulents are characterized by beautiful and strange flowers: for instance, *Selenicereus grandiflorus*
84. *Lampranthus*
85. *Stapelia gigantea*
86. Also the fruits assure a prolonged ornamental effects
87. The palms are very important element of Sicilian gardens and landscape, and in particular the native *Chamaerops humilis*
88. In this slide you can see a particular of its fruits
89. Palms in the archaeological area of Syracuse
90. The English garden at Palermo
91. Villa Cattolica at Bagheria
92. A private house at Catania
93. The endemic species are very interesting: this is the summer look of *Euphorbia dendroides*
94. This species is able to grow on the rocks and near the sea
95. Particular of blooming of *Euphorbia rigida*
96. Other Native plant is *Cistus creticus*. In Nature it is possible find plant with different flower colour
97. *Cistus creticus*
98. *Asphodelus albus*
99. *Vitex agnus-castus*, that flowering in the summer
100. The splendid caper flower, which is a typical ingredient of Sicilian cuisine
101. *Phlomis fruticosa*
102. A group of oleander plants near the sea
103. Together with native species, exotic plants add charm to our gardens: *Hibiscus rosa-sinensis*
104. *Strelitzia reginae*

105. *Leucospermum cordifolium*
106. *Protea*
107. There are a lot of exotic shrubs: *Caesalpinia gilliesii*
108. *Lantana camara*
109. *Wigandia urens*
110. *Camellia*
111. *Rosa*
112. There are a lot of trees. In this slide you can see a big specimen of *Ficus macrophylla*. In Palermo, in Piazza Marina, there is a ficus 30 meters high, with a circumference at the base of the trunk that measures more than 21 meters and its crown has a diameter of 50 meters.
113. *Ceiba speciosa* in blooming
114. Detail of the thorns on the bark of this plant species
115. The red flowers of *Erythrina caffra*
116. The orange blooming of *Grevillea robusta*
117. There are many climbing plants: *Solandra maxima* that blooming in the winter season
118. *Dolichandra unguis-cati*
119. *Passiflora caerulea*
120. There are also many bulbous plants, native or exotic: *Hippeastrum vittatum*
121. *Amaryllis belladonna*
122. *Dahlia maxonii*
123. A typical element is the presence of aromatic plants: *Aloysia citriodora*
124. *Lavandula stoechas*
125. *Salvia officinalis*
126. Basil, very widespread in Sicilian gastronomy
127. and also in the popular tradition: this is a picture of Madonna of basil
128. *Viola odorata*
129. *Gardenia*
130. A lot of jasmines: *Jasminum azoricum*
131. *J. sambac* 'Gran duca di Toscana'
132. *J. grandiflorum*, cultivated in the past to obtain perfume.
133. *Pittosporum tobira*
134. The zagara, the citrus flower
135. *Plumeria rubra*, the symbol plant of Palermo
136. An important element of Sicilian garden is the large presence of perfume plants

137. The garden described in the book *Il Gattopardo* (here a famous scene from the film) is described as «a garden for the blind», because it is the intense smell that helps to orientate.
138. The flowers of the native *Matthiola incana*
139. are used, at Scicli near Ragusa, in a folk festival to decorate horses
140. At the end the citrus
141. The citrus orchard is truly ornamental gardens
142. The kolymbetra garden at Agrigento, near to the Valle dei Templi
143. Citrus plant and a palm
144. As Bussato wrote in the sixteenth century: No garden without citrus trees!
To underline the ornamental values of these species and the narrow link that was in the past with the ornamental gardens
145. In the Sicilian ornamental gardens there are a lot of edible plants, especially for their fruits.
146. *Eryobotria japonica*
147. *Musa x paradisiacal*
148. also *Ruscus* plant, as asparagus spears are edible
149. The fruits of *Monstera deliciosa* are edible
150. The last question is about traditional Sicilian garden: can be a model for the future or is it only a remember of the past?
151. I believe that we can learn from these gardens: they are able to remain without maintenance
152. Like demonstrated by the garden of Donnafugata castle in Ragusa
153. In this slide you can see garden of Milazzo, that maybe you will visit
154. A small garden of Milazzo overlooking the sea
155. Villa Zirilli always at Milazzo
156. And a very small private garden at Milazzo, rich of charm
157. The very interesting garden of Sangiuliano at Villasmundo
158. A spontaneous garden at Nicosia
159. The traditional Sicilian garden are very sustainable, because it adopts different strategies to saving water.
160. The traditional irrigation modality is very ancient: it is of Arabian origin
161. We need to focus on our roots to build our future
162. Thanks for your attention