



Smithsonian Gardens

Orchids Through Darwin's Eyes

15th Annual Orchid Show

Presented by

Smithsonian Institution Horticulture Services Division and United States Botanic Garden

Exhibition Preview

Arguably the largest family of flowering plants, orchids are also among the most successful having adapted to live in virtually every type of environment around the world. As a youth, Charles Darwin (1809–1882) studied wild orchids in his native England. His observations helped him formulate his theories of natural selection and evolution. Since then, the orchid family has been more thoroughly studied and has become one of the most illustrative examples of the strange and amazing world of plant adaptations.

In this exhibit, we'll explore the alluring world of orchids through the eyes of Darwin and those he influenced—naturalists, horticulturists, and scientists who continue to find new insights and curious surprises while working with these captivating plants in greenhouses, laboratories, and in the wild. Recently, the first known orchid fossil, a piece of amber with a preserved ancient bee bearing primitive orchid pollinia, was found. Its discovery revolutionized the thinking about when and how orchids evolved. This groundbreaking fossil will be displayed along with terrariums showing examples of the primitive orchids and their environment. This centerpiece will be flanked by other living orchid exhibits, illustrating just a few of the fascinating adaptations that have allowed the orchids flourish in so many environments throughout the world.

Orchids

Through
Darwin's Eyes

January 24
to
April 26
2009

www.gardens.si.edu



Smithsonian
National Museum of Natural History





2009 Orchid Exhibit Website Description

Orchids, Through Darwin's Eyes, the 15th Annual Orchid Exhibit, will be held at the National Museum of Natural History from January 24 to April 27, 2009. This exhibit was developed by the Smithsonian Institution's Horticulture Services Division in collaboration with the United States Botanic Garden.

The year 2009 marks the 200th anniversary of the birth of Charles Darwin as well as the 150th anniversary of the publication of his landmark book, *On the Origin of Species*. Although this book outlined Darwin's theory of natural selection, it was his subsequent research on orchids which provided additional evidence on how species adapt to their environment.

This exhibit will feature live orchids, a fossilized bee specimen with a pollinia (pollen packet) of an extinct orchid attached to it, a family tree of orchid genealogy, excerpts from Darwin's writings, and more recent evolutionary discoveries related to the orchid family. All of this will

illuminate the connections that have been and continue to be made between orchids and the processes of natural selection and adaptation.

