Smithsonian Gardens manages a large and significant collection of orchids, both species and hybrids. It has been collecting rare and unusual orchids for over 40 years and maintains over 8,000 specimens in its greenhouses. Many of these plants are not widely cultivated and are carefully selected for their beauty, educational value, rarity, or endangered status.

Commercially available hybrids included in the collection are displayed year-round in exhibits, special events, and at Smithsonian information desks. A selection of plants in the collection is featured in an annual Orchid Exhibit that is co-sponsored every year by Smithsonian Gardens and the U.S. Botanic Garden.