

Preface

Orchids employ an amazing array of impressive strategies to achieve sexual reproduction. These strategies have intrigued biologists and amateur naturalists at least since Christian Konrad Sprengel (1750–1816) first associated the variation in orchid flowers with the attraction of pollinators. Since Darwin’s 1862 book, *The Various Contrivances by Which Orchids are Fertilized by Insects*, and especially in the past 50 years, a very large number of studies have revealed remarkable complexity and diversity in orchid–pollinator relationships. These studies comprise a vast literature currently scattered in numerous, often obscure, journals and books. *The Pollination Biology of North American Orchids* brings together, for the first time, a comprehensive treatment of this information for all native and introduced American orchids found north of Mexico and Florida. The book offers detailed descriptions and information on genetic compatibility, breeding systems, pollinators, pollination mechanisms, fruiting success, and limiting factors for each species. Distribution, habitat, and floral morphologies are also summarized. In addition, detailed line drawings emphasize orchids’ reproductive organs and their adaptation to known pollinators. All drawings are by the author, sometimes based on the published work of others, as indicated. Areas where information is limited are noted, thus spotlighting topics in particular need of further research.

The Pollination Biology of North American Orchids will be of interest to both regional and international audiences including the following:

- Researchers and students in this field of study who are currently required to search through the scattered literature to obtain the information gathered here.
- Researchers and students in related fields with an interest in the coevolution of plants and insects.
- Conservation specialists who need to understand both the details of orchid reproduction and the identity of primary pollinators to properly manage the land for both.

- Orchid breeders who require accurate and current information on orchid breeding systems. The artificial cultivation and breeding of native orchids is an important conservation measure aimed at reducing and, hopefully, eliminating the collection and sale of wild orchids.
- General readers with an interest in orchid biology. Technical terminology is kept to a minimum, and the text includes an introduction to concepts and terminology (Chap. 1) supplemented by brief parenthetical explanations of terms where they first appear in later chapters. An extensive glossary is also provided for the non-specialist reader.

Saint Paul, MN

Charles L. Argue



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Argue, C.L.

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