

Rhododendron

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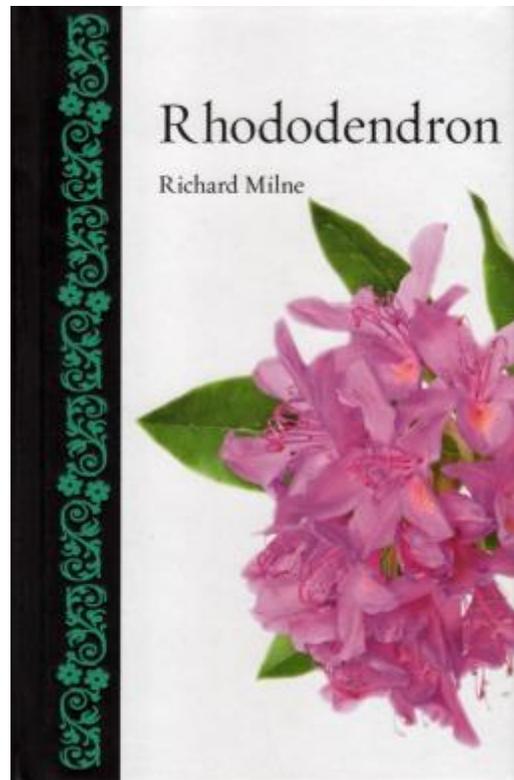
In this beautifully illustrated book, Richard Milne shows the many ways that rhododendrons have influenced human societies. Over one thousand species exist in the Genus *Rhododendron*, ranging from rugged trees on Himalayan slopes to rock-hugging alpines, and delicate plants perched on trees in rainforests.

Chapter 1 explores the promiscuous behavior of rhododendrons since each of the 1000 species can cross with many of the other rhododendron species. The rhododendron's propensity towards sexual infidelity makes it very popular in horticultural breeding programs. However, there are limits on which species can cross with which other species. Hybridizers face the challenge of choosing the most promising viable crosses. In the wild, evolution combined with natural hybridization has enabled the genus to adapt and migrate over millions of years.

Chapter 2 follows the constantly changing classification of rhododendrons and azaleas. Recent results of DNA studies enable us to follow the path that rhododendrons followed in the millions of years they have evolved. In fact, the evolution of rhododendrons has assisted scientists in following the drifting of the continents. Although the natural range of rhododendrons is currently confined to the northern hemisphere, rhododendrons were on continents before the continents drifted into the northern hemisphere. Equally interesting is the beauty and variety of hybrids developed in nurseries after the hybridization of rhododendrons and azaleas became common place.

Chapter 3 shows how early merchants delighted in bringing back exotic plants. This led to merchants bringing botanists to find and care for these treasures. Eventually botanists, merchants, missionaries and other early explorers became plant collectors, trying to satisfy the tastes of sponsors who were eager to obtain new and novel plants, especially rhododendrons. The many species introduced by plant explorers further fueled the efforts of nurseries to combine the best qualities of various species through hybridization. Rhododendrons were initially very expensive, but soon became widely available.

Chapter 4 demonstrates how the beauty of the approximately 250 species of tropical rhododendrons, the *Vireyas*, led to an intense interest in greenhouse rhododendrons. Spice merchants brought back *Vireya* rhododendrons that caught the interest of nurseries. With the development of the Wardian Case, a type of terrarium, merchants and botanists could bring back live plants. Work hybridizing the *Vireyas* produced many compact plants with vivid colors. Since *Vireyas* grow in the tops of trees in jungle regions, they are still being found in the Malay Archipelago.



Chapter 5 investigates how rhododendrons were known and appreciated in China for centuries. After China opened up its borders to traders in the mid-18th century, explorers, missionaries and merchants arrived in China. They were constantly discovering new species of rhododendrons. Plant collectors became intent on bringing back seed for their sponsors in Europe and North America. Not only have explorers brought back seed, they have found fossil records which add a time-line to the evolution of rhododendrons. Scientists have matched fossil evidence with DNA studies to follow the evolution and migration of rhododendrons over millions of years. Rhododendrons were in central Europe, China, and eastern North America before the Himalaya Mountains were formed. *R. camtschaticum*, which is found in Alaska, was one of the first species to split off. When Mao took power, foreign exploration stopped. Alertly, botanists in the West made connections with Chinese botanists. This has led to more Chinese botanists being interested in the study of rhododendrons. This eventually led to joint plant exploration by Western and Chinese botanists that continues today.

Chapter 6 reveals the medicinal uses and toxicity of different rhododendrons from ancient times through to modern times. Rhododendrons can poison livestock and intoxicate humans, and its narcotic honey has been used as a weapon of war. And it can also be used as an herbal remedy for an astonishing range of ailments. Many of the powers attributed to rhododendrons have been confirmed by modern medicine and science. The most famous story is of the military use of mad honey made from the nectar of rhododendrons in 69 BC. The Nepalese have discovered a way to enjoy honey from rhododendron nectar. Sheep in Scotland have learned not to eat *R. ponticum*, even though it is widespread. These effects have caused rhododendrons to gain a prominent role in myths and traditions of several Chinese ethnic groups. Medicinal uses of various rhododendrons are found in both Eastern and Western medicine. Prior to the reformation, gruit ales were made with *R. tomentosum* and *groenlandicum* for their intoxicating effects. This practice was eventually banned entirely in Germany in 1855.

Chapter 7 follows the impact of rhododendrons on culture. This is especially true in southwest China where the Yi people hold their Torch Festival, offering rhododendron flowers to their Flower God. Every year, at the height of the rhododendron flowering season, the minority people will put on their holiday costumes, light a fire, sing and dance, and warmly welcome guests. Numerous Chinese folktales link the plant with tragedy and death. Some Chinese legends describe a tragic figure that turns into a cuckoo whose song recalls its tragic life and whose mouth spills blood which sprouts into rhododendrons. In Nepal, *R. arboreum* is a female god that bursts into beautiful bloom. Daphne du Maurier used the red rhododendron as a symbol of blood in her best-selling novel *Rebecca*. Milne enumerates other instances where rhododendrons and azaleas appear in literature.

Chapter 8 reports that there can be too much of a good thing. *R. ponticum* has run wild across the British countryside, but the full story of this invader contains many fascinating surprises. One is that *R. ponticum* was native to Ireland 400,000 years ago. Another is that it was introduced on purpose, and the common wild variety comes from an area in Spain and Portugal where the original native form is struggling. It easily establishes itself in areas where the soil is disturbed, much as Scotch broom does in the Pacific Northwest. Today, *R. ponticum* is an even greater problem today since it is a carrier of *Phytophthora ramorum*, sudden oak death. The negative economic and ecological impact has led to efforts to eradicate *R. ponticum*, but also permitting it to be left on limited sites where its beauty can be appreciated. Obviously, this leads to charged discussions.

The last chapter, chapter 9 is a look at the ecological status of rhododendrons and their possible plight in the future. We have detailed records from plant collectors of where the various species of rhododendrons were found. More and more, when plant explorers return, the rhododendron species are no longer there. Rhododendrons are being cleared to make room for agricultural development. Not only are known species disappearing, many species that had not yet been discovered are thought to be destroyed as well. The work of plant collectors to bring these species to other parts of the world provides a safety net for these species, but does not allow for the natural evolution that was occurring in the wild. In “captivity,” the natural diversity of a species in the wild is lost. Fortunately, native habitat of some rhododendrons is in areas where agricultural development is not practical. Throughout the world, many botanical gardens are working to collect and protect different forms of the known rhododendron species. Milne concludes: “The future of rhododendrons is in our hands.”

Milne’s book, *Rhododendron*, is not a gardening book or a horticultural book, but rather a very readable and up-to-date book of interesting facts about Genus *Rhododendron* that most other rhododendron books gloss over if they mention them at all. This is not a reference book, but a book of interesting information that is especially great for those of us with a keen interest in rhododendrons. Dr. Milne is an evolutionary biologist whose expertise is teaching. This book is a great example of his capabilities.

The publisher is correct when it says, “Milne relays tales of mythical figures, intrepid collectors, and eccentric plant breeders. However, much you may think you know about the rhododendron, this charming book will offer something new.” [224 pp, 70 color plates, 30 halftones.]

It became available on September 15. The list price is \$27, but it is discounted at [ARS Amazon store](#) or [ARS Walmart store](#).