

Jim Endersby, “Deceived by Orchids: Sex, Science, Fiction and Darwin.”
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Taking as his intriguing starting point three botanical problems that had stumped Charles Darwin, Jim Endersby persuasively argues that the reason why early twentieth-century botanists were able to solve these questions was because of the “imaginative re-creation” of the orchid by popular interpreters of science, especially writers of fiction. Scientists were able to see plants as active agents with cunning strategies, even able to outwit animals when their reproduction was at stake. This new science was inspired not by technological breakthroughs or other standard scientific inquiry, but by the fact that plants had been reimagined to such an extent that scientists were able to see what their predecessors had not. The traffic in these sets of ideas is tantalizingly complex: late nineteenth-century imaginative writers such as Grant Allen and H.G. Wells took up insinuations about plant agency made by Darwin and effectively ran with them, producing a genre of orchid stories that created a cultural shift around plants that then inspired new botanical thinking. Endersby demonstrates the rich fluidity between various publics of science, effectively undermining any whiff of dismissiveness that might linger around the terms “popularizers” and “interpreters”. The heady scent of this engrossing story will interest any historian, literary critic, or scientist interested in the study of and representation of plants.

It was the late eighteenth-century German naturalist Christian Konrad Sprengel who first noted there were orchid species whose flowers offered no inducement for pollination: they lacked nectar. Charles Darwin, who wrote on orchids and their fertilization as well as the movement of climbing plants, was frustrated by this question, as well as why some orchids mimicked insects; the third puzzle was why a bee would “‘attack’ the flowers of one particular British orchid species” (207). Twentieth-century botanists now understand these specific orchid mysteries as part of a more general phenomenon called “pseudocopulation”: essentially the biological process whereby male insects are deceived into pollination because they think they are mating with a female insect; “Darwin’s are crafty orchids,” Endersby evocatively writes (211). Darwin’s botany “exalted” and blurred the hard boundary between animal and plant, which later fiction then magnified: H.G. Wells’ short story “The Flowering of the Strange Orchid” reimagined Darwin’s rendering of orchids as active agents into killers.

The most persuasive aspect of Endersby’s story is about the movement of a set of ideas from the mid-Victorian moment onward: ideas that began in contexts that were recognizably scientific and mid-Victorian, which then were translated by popularizers, and then migrated to fiction, which in turn inspired new botany in the early twentieth century. Botany in previous eras had likewise borrowed plots and metaphors from fiction; Carl Linnaeus’s taxonomical system defined plant reproduction through “marriage,” separating “public” from “clandestine” marriages, rendering the biological fact of visible or invisible florescence through narratives of courtship borrowed from novelistic marriage plots. Endersby’s article perhaps overly condenses the complex signification of the flower in the early nineteenth century to innocence, basing this in the cultural acceptability of botany for women. Charles Darwin would have known that flowers did not unproblematically signify innocence because it was his grandfather, Erasmus Darwin, whose botanical poetry, *The*

Loves of Plants (1789), pushed to the foreground the erotic aspects of the Linnaean system, as well as certain plants' capacity for irritability, pleasure, movement, and sensitivity.

In the first and second sections of the article, "When orchids attack" and "Sham nectar producers," Endersby explains Charles Darwin's botanical researches in rich detail and shows how his interpreters represent and transform his work on orchids through non-fiction and literature. In the third and fourth section of the article, "Queer flowers" and "Strange orchids," Endersby shows how novelists such as Grant Allen "seize on" the qualities that Darwin's science had suggested, and in so doing help "create a new language with which to describe plants," as well as a new genre: "the killer-plant story" (213). In the final section of the article, "Biology as public culture," Endersby argues that botanists in the early twentieth century were able to solve Darwin's three puzzles in no small measure because of "new imaginative possibilities" about plants; although the article modestly acknowledges that "a direct causal link is difficult to establish" (220), the idea of imaginative re-creation is more persuasive in being more diffuse. It was because of the imaginative appropriations of Darwin's botanical ideas that early twentieth-century botanists approached the study of orchids differently, and in so doing were finally able to explain the workings of those crafty flowers.

Amy M. King
St. John's University