

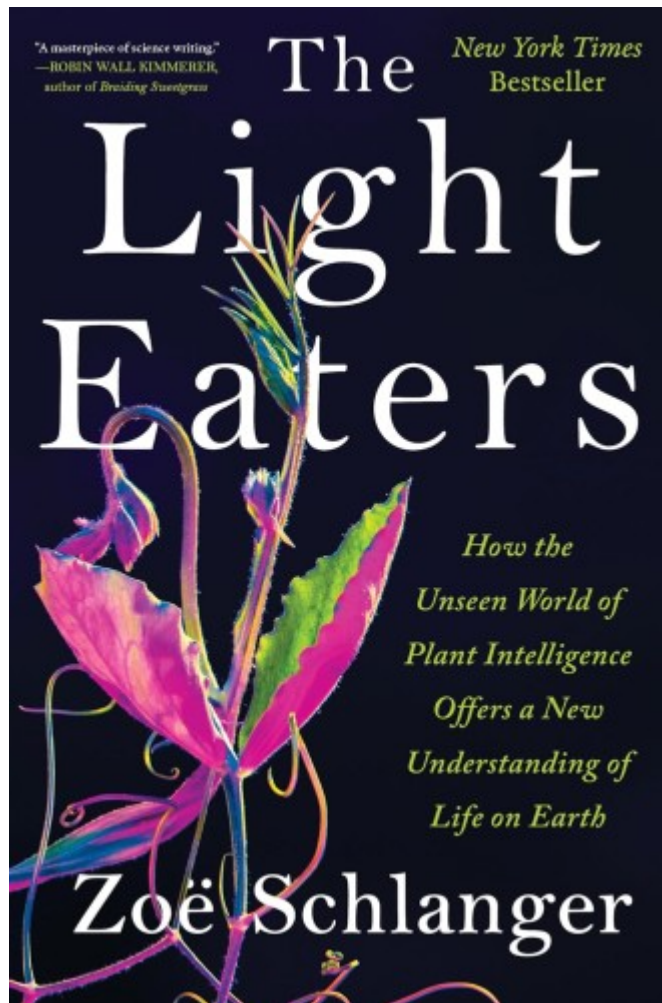
What if your plants could hear you?

Science writer Zoë Schlanger investigates the edges of botany research—and uncovers deep philosophical questions.

by [Tim Brown](#) in the [December 2024](#) issue

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## In Review



## The Light Eaters

## How the Unseen World of Plant Intelligence Offers a New Understanding of Life on Earth

By Zoë Schlanger

Harper

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RW-REPLACE-TOKEN

As I cracked the spine on Zoë Schlanger's deep dive into obscure corners of botany, I glanced at my forearms and smiled. Vines of recent red marks dotted my arms. While building a platform for our new backyard zip line, strung between two large loblolly pines (*Pinus taeda*), I'd unknowingly tussled with the creeping poison ivy (*Toxicodendron radicans*) that had vined its way up the tree.

The bottle of toxins that I purchased to rid that tree of that vine still sits in my garage, unopened. Since reading *The Light Eaters*, I find myself with mixed emotions on the subject of plant eradication. That kind of moral ennui may indeed be part of Schlanger's goal in writing this engaging and thought-provoking book.

What if we considered plants as subjects, not objects? How does our perception of our leafy neighbors change when we consider that plants can "hear" and adapt to what they're sensing? Or that they can "see" and make "decisions" based on their perception? These are controversial questions, as the author points out again and again. Through field trips, multiple interviews, and side-by-side science with researchers and botanists across the globe, Schlanger interacts with scholars doing work on the fringes of plant research, crafting their stories with a journalistic flair. Her excellent composition and engaging voice make what might be duller science a literary adventure and, from my vantage, a quite convincing one.

"Did you know . . . ?" I found myself saying more than once to my spouse, a molecular biologist, as I came across fascinating tidbits. Did you know that plants can hear caterpillars chewing on their leaves, analyze the saliva and regurgitated matter to detect the particular type of crawler, and then deploy signals to the specific wasps that kill these insects to preserve themselves? Did you know that parent plants can pass on new defense mechanisms to their young, responding within a single plant generation to newly detected environmental pests?

My enthusiasm was met with skeptical side-eye from my scientist spouse, the same side-eye (and sometimes outright hostility) with which the research community views some of these fringier botanic claims. And given the human propensity to anthropomorphize so much in this world, this skepticism is not unwarranted.

Schlanger acknowledges that many of the studies she investigates are seen as overreaching at best and might even be considered heretical by mainstream scientists. But coming from a background reporting on climate change and having already fallen into many plant research rabbit holes that came to be accepted over time, Schlanger knows that in scientific disciplines, the margins can move the center. Though we cannot say that plants see, hear, or know using the conventional definitions assigned to these terms, Schlanger argues, that may be more a problem with our thinking than with the reality of plants.

*The Light Eaters* had my imagination and perception reeling. Each chapter added a new dimension that further fuzzied my traditional understanding of not only plants, but the whole eco-web of life. If it is true, as Schlanger explores in a chapter called “The Social Life of Plants,” that plants are intentionally social and communicate with one another, and that pollution and global warming disrupt that communication, effectively breaking those social bonds and disrupting the community life, then “quality of life” questions come into play as we think ethically about our human actions and their consequences. We may not just be killing our plants but also killing their social webs, their inherent spirit (for lack of a better term). To my faith-fueled heart, this is not just unethical; it’s a violation of the stewardship responsibilities that God has given us.

In the creation accounts in Genesis, ancient wisdom creates plants as the first creatures, perhaps because plants make life possible for the rest of us. In objectifying plants—even the indelicate term “vegetative state” to describe a nonresponsive human betrays this propensity in us—we may miss not only their complexity but, dare I say, their unique personalities. Their character. Their needs and desires. Plants are more neighborly than we have traditionally thought.

Eco-theology has made strides to connect us more tangibly to our growing green earthly companions, and Schlanger’s secular scientific stories will only bolster that fringier area of our own scholarly discipline. Perhaps this work, along with subsequent botanical findings, will move our hearts from “there is more that we *can* do” to “there is more that we *should* do” to care for plants—not only for our sake,

but for their sake. Though no one would yet say plants can hear, taste, see, discern, or decide in any traditional sense, *The Light Eaters* suggests that they manifest variations of these attributes. Therefore the question of plant dignity, inconvenient as it is for those of us at the top of the food chain, is worth pondering as we consider the ways God calls us to care for creation.

Schlanger offers nearly 300 pages on how botany is evolving in real time. She investigates wild ideas and finds traction in places laughed about in years gone by. She makes frontier science accessible for the everyday science geek like me, expanding my worldview beyond where my usual boxes have allowed. *The Light Eaters* is not only worth the read, it's worth the work it takes to consider the larger questions Schlanger raises and to respond thoughtfully. What if plants are subjects, not objects? How should we behave in light of this?

I have a hunch that the weed killer in my garage will go unused and I'll look at other ways to live with the ivy around our zip line.