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Letter to the Editor

We do not want to “cure plant blindness” we want to grow Plant Love

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We are excited to join the authors of this special issue of *Plants, People, Planet* in highlighting how connections with plants foster a greater appreciation of the flora in our lives. We submitted this Letter to the Editor following advance publicity surrounding this special issue on the topic of “plant blindness”. We are a group of conservation scientists focused on the study of plants from a variety of places, perspectives, and scales; from genomes to ecosystems, in forests and prairies, oceans and lakes, mountains and caves, farms and cities, streams and rivers, deserts and wetlands. We are united by our mission - to better understand and appreciate plants.

In the same vein, we also pursue ways to enable society to explore their own personal relationships with plants. On Valentine’s Day 2018 we launched Plant Love Stories ([www.plantlovestories.com](http://www.plantlovestories.com)), a project that fosters and shares stories about plants that have shaped people’s lives. We believe that everyone has a Plant Love Story and we are collecting and sharing these stories to show how plants affect us all. Plant Love

Stories can be written and submitted by anyone. Contributions range from humorous to heartwrenching to heartwarming. We believe that connecting with people's emotions is an effective way of deepening their awareness of plants. By nurturing a broader social discussion and awareness of the value of plants to human and ecosystem health, we strive to increase public interest in plant conservation (Balding and Williams 2016). Indeed, there is an urgent need for this. Plants are woefully underrepresented in conservation spending, despite providing the foundation for human societies and life on Earth. For instance, although plants make up 57% of the federally-listed endangered species in the United States, they receive less than 4% of federal endangered species expenditures (Havens et al. 2014).

We have a duty to conserve plants for the health of current and future generations. To do that, we, as a community of scientists, need to move plants from the background and into the foreground of people's hearts and minds. Effective movements need a clear, unifying rallying cry. We have made a decision not to use "curing plant blindness" as ours. Instead, we would like to encourage an honest and inclusive discussion about the disenfranchising and exclusionary term "plant blindness".

Plant blindness as a metaphor first appeared in the literature in 1999: "Those persons afflicted with the condition known as plant blindness exhibit symptoms such as the following: (a) thinking that plants are merely the backdrop for animal life; (b) failing to see, notice or focus attention on plants in one's daily life; (c) misunderstanding what plants need to stay alive; (d) overlooking the importance of plants to one's daily affairs" (Wandersee and Schussler 1999). A broad amalgam of underappreciation, unawareness, and ambivalence towards plants was packaged in this tidy metaphor. And while there is evidence that visual attention mediates human relationships with plants — evolutionarily we needed to notice the movements of predators and prey more immediately than the sessile plants around them (Wandersee and Schussler 1999) — we contend that plant blindness is an inaccurate metaphor for the wide ranging phenomena that Wandersee and Schussler describe in their foundational papers (Wandersee and Schussler 1999, Wandersee and Schussler 2001). The term plant

blindness does not refer to people's inability to visually see plants; it is referring to an inability to distinguish among plant species or appreciate their value (Schussler and Olzak 2008; Wandersee and Schussler 1999; Wandersee and Schussler 2001).

This metaphorical plant blindness can manifest as a barrier to understanding and conserving the remarkable diversity of plant species that support human and other animal life (Wandersee and Schussler 1999, Wandersee and Schussler 2001). The term is catchy — major news outlets have adopted it, including The New York Times (Popkin, 2017), The Wall Street Journal (Belkin 2018), The Guardian (Blackhall-Miles, 2015), and The Seattle Times (Fosdick, 2011) — and the metaphor has increased both public and scientific awareness of our zoocentrism. However, behind the enthusiasm to engender greater appreciation for the Plant Kingdom, the very language used to describe biases against plants — plant blindness — exposes our own implicit biases.

Specifically, plant blindness is a disability metaphor, which is why we choose not to use this phrase (Schalk 2013, Smith 2015). Disability metaphors often assume that all people experience and sense the world in the same way, that abled bodies are the default, and that disabled bodies are lacking or less than (Schalk 2013). The term plant blindness is ableist and problematic because it positions “blindness” as a deficit that must be cured and negates the possibility that blind people can lead lives that are full of rich sensory flora experiences. Ableism refers to the continual devaluing of disability, or the belief that disability is an inherently negative state of being (Campbell 2009). The US Census Bureau estimates that nearly one in five people in the United States reported a disability (Brault 2012), which means we are implicitly devaluing many of our friends, family members, colleagues, students, and neighbors by using ableist language.

The problem with the term plant blindness, as well as all disability metaphors, is that they contribute to the implicit stereotypes of people with disabilities. By using these metaphors, we suggest that disabilities are conditions that require “cures” or “preventions” and highlight our association of “disability” with something “bad”. For

example, blindness is a pervasive disability metaphor, especially in situations where information or knowledge is lacking, for example “blind date” or “the blind leading the blind”. These phrases suggest that non-blind humans think we understand the blind experience and the experience is inherently “less-than”. Disability metaphors use perceptions of disabilities as tropes. These metaphors are tired and imprecise (Smith 2015). While legally, the term “blind” refers to a person with visual acuity of 20/200 or lower (many people with vision loss are not considered blind, but identify as “visually impaired” or as a “person with low vision” [Axelrod et al., 2018]), culturally, the term “blindness” is often shorthand for a person who lacks perception, awareness, or discernment of an obvious fact or thing. In other words, we often equate “blindness” with imperfection, inadequacy, or ignorance. In essence, plant blindness implicitly equates something “bad” (lack of appreciation for plants) with a disability (low vision).

Here, we call for a shift in the narrative. We have the power to change our phrasing and eliminate the use of ableist language; this would be one step toward recognizing all abilities as a valued part of human diversity (Smith 2015, Schalk 2013). The power to eliminate ableist language, while promoting plant appreciation, comes with great responsibility in choosing a new term. We posit the new term should be more than a non-ableist synonym or euphemism for “plant blindness”. Ideally, the new term should be an antonym that signifies Plant Love, appreciation, and respect. Some terms have been previously used such as “flora appreciation” (Balding & Williams 2016).

The objective of this piece is not to unilaterally select a new term. We recognize that none of us identify as blind, visually impaired, or as members of the disabled community and thus do not feel that it is our place to propose or back a new term. However, we wish to highlight that an extended, inclusive conversation on this topic is required. Moving forward, we will continue to demonstrate through the Plant Love Stories project that it is possible to successfully promote plant love and appreciation whilst avoiding problematic terms and ableist language.

Plant Love Stories values a diversity of experiences with plants. An appreciation of plants is not just about *seeing* plants, it can encompass all of our senses and emotions. Our collection of stories are also about *smelling* plants like milkweeds, prairie dropseed, and allergy trees (Bletz 2019, Brunson 2018, Tonietto 2018); *hearing* plants that have funny voices and divulging secrets to our cacti (Acevedo 2018, S. 2018); *tasting* fruits like tomatoes, mangoes, and lemons and leaves like garlic mustard (Galperin 2018, Gill 2018, Nocco 2018, Tingley 2018); *feeling* the texture of plants by rubbing dandelions under our chins or scraping our legs as we wade through *Juncus* marshes (Cate 2018, Zipf 2018). Our relationships with plants can be a vehicle for discovering deep personal insights, forming lifelong relationships with other humans, getting through serious illness, and remembering those we have lost (Bier 2018, Lin 2019, Villa 2019). We believe that everyone has a Plant Love Story in their lives, even if they do not think they do. We do not share these stories to “cure” or “prevent” or “stop” anything. Rather, we bring attention to these emotional relationships that *already exist*. We choose not to root ourselves in metaphors that assume that all people experience the world in the same way; we hope others will consider this position as well.

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Author contributions:

This manuscript was born of the program and mission development among the Plant Love Stories co-founders. Joint first-authors SK and CMM outlined the manuscript and corresponding author RKT proposed and submitted the article. All authors, co-first and

corresponding included, brainstormed, wrote, and edited the manuscript with RSB, MB, JD, BMM, MAN, TY all contributing equally and listed alphabetically.

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