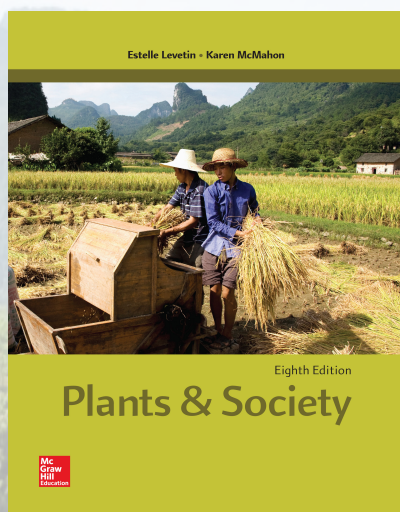


New Features You'll See in *Plants and Society*, 8e



Title: *Plants and Society*, 8e

Authors: Estelle Levetin
and Karen McMahon

ISBN: 1259880044/
9781259880049

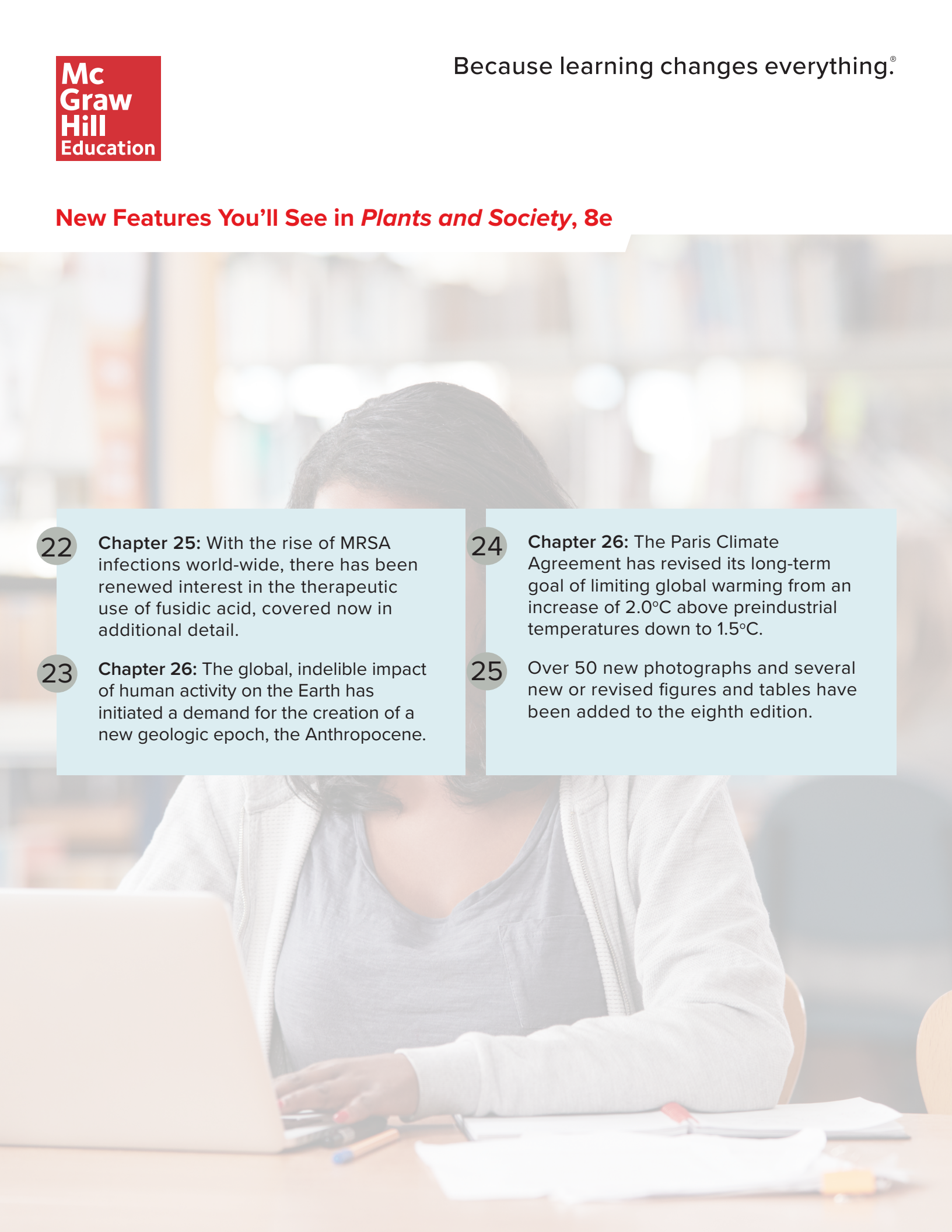
New to This Edition —

- 1 Chapter 3:** Subsidiary cells in grasses enable the greater inflation of guard cells to bring in more carbon dioxide for photosynthesis, as well as facilitating guard cells to respond rapidly to changing environmental conditions.
- 2 Chapter 3:** Sun pitchers (*Heliamphora*), carnivorous pitcher plants native to South America, exhibit remarkable adaptations: a nectar spoon to lure prey and a drainage pipe to siphon off excess water from the pitcher.
- 3 Chapter 5:** The section on orchids has been updated to include significantly more detail on the unique modifications of orchid flowers.
- 4 Chapter 5:** There are updates on the latest research surrounding colony collapse disorder and the search for alternative pollinators.

New Features You'll See in *Plants and Society, 8e*

- 5 Chapter 6:** There is additional coverage of the ways in which researchers are using genomic analysis to discover how to enhance the flavors of mass-market tomatoes to better resemble heirloom varieties.
- 6 Chapter 7 and 15:** Information on CRISPR, a powerful technique in the genetic engineering of organisms, is presented.
- 7 Chapter 10:** Fiber in the diet may promote health as the food to support microbiota beneficial to the digestive tract.
- 8 Chapter 11:** The Paleo Diet, the so-called original diet of ancient humans, is evaluated.
- 9 Chapter 12:** A new update on the International Wheat Genome Sequencing Consortium's work to sequence the bread wheat genome is featured.
- 10 Chapter 13:** The A Closer Look feature 13.1 has been updated to include new information on biofertilizers and A Closer Look 13.2 on Harvesting Oil also has data updates.
- 11 Chapter 14:** A Closer Look 14.1 features new information on the recent resurgence of Panama Disease and its effect on bananas.
- 12 Chapter 14:** New evidence on the disjunct distribution of sweet potatoes is detailed.
- 13 Chapter 16:** There is a new A Closer Look feature on Climate Change and the Future of Coffee.
- 14 Chapter 18:** There is new content on the increased use of plant biomass (such as wood pellets) to supplement or replace coal.
- 15 Chapter 19:** A new section highlights the remarkable history of French lilac in development of the medicine Metformin, which is used to treat both diabetes and Polycystic Ovarian Syndrome.
- 16 Chapter 19:** Updated content is included on the antimalarial properties of certain plants used in Chinese medicine.
- 17 Chapter 21:** Giant Hogweed, an oversized invasive weed from Asia, produces a toxic sap that causes debilitating blisters and burns to the skin upon exposure to sunlight.
- 18 Chapter 21:** There are updates to gluten and non-celiac gluten sensitivity.
- 19 Chapter 22:** There is information on new research suggesting a potential connection between algae blooms and global warming.
- 20 Chapter 23:** 2018 research on *Batrachochytrium dendrobatidis* fungus highlights how the pathogen traveled from the Korean peninsula and has been responsible for the extinction or decline of frog and salamander populations around the world.
- 21 Chapter 24:** A new section covers the history and cultivation of apple ciders, the alcoholic beverages made by fermenting apple juice.

New Features You'll See in *Plants and Society*, 8e

- 
- A blurred background image of a student with dark hair, wearing a grey hoodie, sitting at a desk and working on a laptop. The student's hands are on the keyboard, and there are some papers and pens on the desk in front of them.
- 22 Chapter 25:** With the rise of MRSA infections world-wide, there has been renewed interest in the therapeutic use of fusidic acid, covered now in additional detail.
 - 23 Chapter 26:** The global, indelible impact of human activity on the Earth has initiated a demand for the creation of a new geologic epoch, the Anthropocene.
 - 24 Chapter 26:** The Paris Climate Agreement has revised its long-term goal of limiting global warming from an increase of 2.0°C above preindustrial temperatures down to 1.5°C.
 - 25** Over 50 new photographs and several new or revised figures and tables have been added to the eighth edition.