

THE AMERICAN BIOLOGY TEACHER



About Our Cover

This month's cover offers an intriguing view of *Momordica charantia*, a tropical climbing fruit also known as bitter melon, bitter squash, balsam pear, and karela, with many additional monikers worldwide. It has a variety of cultivars and thrives in the warm tropical areas of Asia, India, Africa, and the Caribbean. This image is of a ripe fruit in dehiscence, a spontaneous process by which a mature plant splits open and releases its seeds. The bright red color may play a role in attracting birds to aid in dispersal of the seeds. (It is interesting to note that the term *dehiscence* also refers to the rupturing of a surgically closed wound.)

The photographer noticed this fruit in a roadside hedge, thinking at first that it was a beautiful and unusual flower. As biology teachers, we know how important it is to teach our students to pursue their curiosity about the world around them, and this is a good example of that in action. Here, a glimpse of the intriguing can lead to questions: What is that? Why is it like that? Is it useful? Encouraging our students to continually question their world will expand their knowledge, broaden their understandings, and allow them to make connections to other ideas, disciplines, and even cultures.

When young, this bitter, edible, oblong fruit is green, with a warty surface and an inner cavity that contains large flat seeds surrounded by white pith. As it matures, the rind begins to turn yellow and has a texture similar to cucumber. *Momordica* is usually eaten green or at the early yellow stages, but the mature red pulp becomes sweeter and is also edible. Globally, many cultures enjoy the fruit, using diverse cooking methods and recipes, including stir-fries, soups, pickles, teas, and even beers and soft drinks. *Momordica* also has medicinal uses, for instance as a folk treatment for intestinal and respiratory problems. In India it is used to treat diabetes; there is some research evidence that it helps improve glucose tolerance.

The cover photo was taken by Dr. Kishore Pawar, a Professor of Botany in the Department of Seed Technology at the Government Autonomous Holkar Science College in India, with an Olympus SP-510 UZ digital camera.

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