**Bergamotene in *Manduca sexta***

1. Read the Phys.org News article:

Bergamotene—alluring and lethal for Manduca sexta (2017, April 2019)

[phys.org/news bergamotene article](https://phys.org/news/2017-04-bergamotenealluring-lethal-manduca-sexta.html)

1. Complete the following questions before our next class:
2. What is the benefit to *Nicotiana attenuata* of emitting (E)-α-bergamotene in its flowers? Why / how does this work?
3. What is the benefit to *Nicotiana attenuata* of emitting (E)-α-bergamotene in its leaves? Why / how does this work?
4. What is NaTPS38, and what might be the benefit to *Nicotiana attenuata* of using it to differentially regulate production of a single compound in different tissue types? Give at least three potential benefits.
5. Explain how (E)-α-bergamotene production in *Nicotiana attenuata* demonstrates ecological pleiotropy.