

Word Find: Snails and Mimicry

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Find the words in the word list using the article below. Brackets indicate the amount of times the word appears—make sure to find them all!

The Weird and Wonderful with a Biologist: *Aggressive Mimicry*

Many organisms have evolved to use **mimicry** as a **defense** from **predators**. The two types most often taught in school are **Batesian** and **Müllerian mimicry**. **Batesian** refers to an edible **organism** that evolves to look like an **unpalatable organism** to try to avoid being eaten, such as a harmless fly looking like a **stinging** bee. Müllerian **mimicry** refers to an **unpalatable organism** looking like other **unpalatable** organisms, such as a **stinging** bee having similar colours to a **stinging** wasp. Many bees and wasps use the same yellow and black patterning so **predators** know to avoid these colours in general. There is another type of **mimicry** which is less common: **aggressive mimicry**. **Aggressive mimicry** refers to an **organism** looking like another **organism** in order to obtain a food source or be eaten itself. This is most often done as a dupe by an animal looking like prey to draw in a small predator which is then eaten by the mimic. For example, a **Bolus** spider will emit a chemical similar to the sex pheromones emitted by a



Succinea putris snail with a parasitic *Leucochloridium* worm in its eyestalk (cropped photo) by Thomas Hahmann, CC BY-SA 3.0 (<https://creativecommons.org/licenses/by-sa/3.0/>)

species of moth. This entices a real moth to come and mate. When the moth arrives, it will be eaten by the spider. Another example is the **parasitic** worm *Leucochloridium*. This parasite lives inside of birds, but needs to travel between birds to find mates so that, when one bird host dies, it will continue to live in other birds. In order to do this the parasite lays its eggs inside the bird's **digestive** system, which will then be pooped out. The poop is then eaten by snails that will accidentally eat the parasite. The parasite will take over the mind of the snail so that it moves out into the open exposing it to **predators**, a behavior that is unusual for the snail. The parasite then moves to the **eyestalk** of the snail, engorging the **eyestalk** and making movements that resemble a caterpillar. Even though a bird will not usually eat snails, the bird will pluck the eyes off the snail which look like caterpillars. Once the parasite is back into a bird it will start the whole life cycle once again.

- Colin Johnson

Word List

Batesian (x2)

Bolus

Defense

Digestive

Eyestalk (x2)

Müllerian (x2)

*Mimicry (x4)

Organism (x5)

Predators (x3)

*Parasitic (x6)

Stinging (x3)

Unpalatable (x3)

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***NOTE: Mimicry appears 6 times and Parasitic only appears once. Sorry for the inconvenience.**