

Molting

Arthropods, including insects, have an exoskeleton (their bones are on the outside of their body). The exoskeleton gives structure and support. Unfortunately since the exoskeleton is rigid, it cannot grow larger and arthropods have to lay down a completely new exoskeleton when they need to grow. The process of shedding the old exoskeleton to grow larger is known as molting.



Hormones control the production of a new exoskeleton under the old one. The new exoskeleton is soft and mushy so the arthropod can wriggle out of the old exoskeleton. When hormones signal that the new exoskeleton has completed development, the arthropod will break open the old exoskeleton along the ecdysial cleavage line and slowly work its way out of the old exoskeleton. The arthropod swells its body size so when the new exoskeleton hardens it is larger.

When an arthropod first emerges from its old exoskeleton, it is vulnerable to predation and adverse environmental conditions. For this reason, molting usually occurs in hidden and/ or protected locations.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600. Check out my blog at www.urban-ipm.blogspot.com