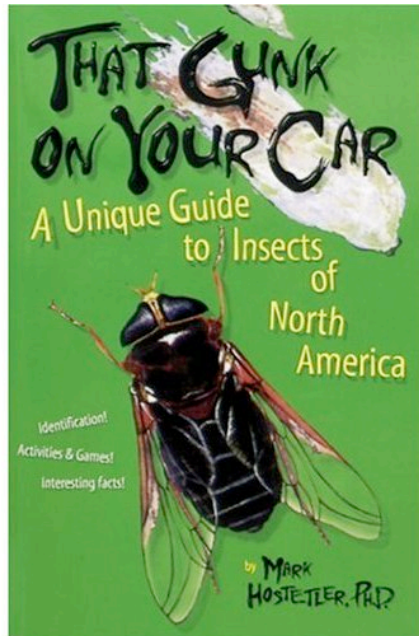


Evolution

That Gunk on Your Car



You will notice that after the common name for each insect or insect group, some weird-looking words follow. This is Latin, and it is used to give organisms and groups of organisms internationally recognizable names. Using a common language avoids the confusion that happens when organisms are given names in different languages. Further, Latin names are very precise. Common names used for an organism may actually include several species. For instance, the term “palmetto bug” encompasses several different species of cockroaches. In this book, when a common name of an insect is given, the scientific name follows in italics (i.e., Honey bees *Apis mellifera*). Scientific names are binomial, which means “two names.” Thus, for honey bees, *Apis* is the genus (or generic name), and *Apis mellifera* is the species (or specific name).

Further, most insects in the table of contents are placed under a broad classification called an order. Insects may also be placed under more specific categories, such as a family, genus, or species. Wherever I

Name:

Period:

indicate “spp,” that insect could be several species. “But,” you ask, “what the heck is an order, family, genus, or species?” These are taxonomic categories from a scientific filing system called taxonomy created by a Swedish physician and botanist, Carolus Linnaeus, in the eighteenth century. This filing system is a way of grouping similar-looking animals into separate categories. Organisms are placed in different categories depending on certain morphological characteristics (such as the shape of a wing or a leg). Scientists place organisms into increasingly more specific categories:

Kingdom
Phylum
Class
Order
Family
Genus
Species

Starting from the most specific category and working our way up the list, above, similar species are grouped in the same genus, similar genera (plural for genus) are placed in the same family, similar families into orders, orders into classes, classes into phyla (plural for phylum), and phyla into kingdoms (the broadest category). For example, all the insects in this book are grouped into the class Insecta (i.e., animals that have three pairs of legs, antennae, and three distinct body regions (head, thorax, abdomen), phylum Arthropoda (i.e., animals that have an exoskeleton), and kingdom Animalia (i.e., organisms that eat other organisms for nourishment). Thus both humans and insects are classified under the kingdom Animalia (the most general category), but humans are not grouped under the phylum Arthropoda (a more specific category which contains only animals with exoskeletons). A good way to remember the taxonomic categories is to use the mnemonic, “King Phillip’s Car Often Finds Gunk Splats!”