

These are commonly called the psocids, book lice, and bark lice. The order name means **rub small winged**, and refers to their gnawing habits. In the older literature this order was called the **Corrodentia** or the **Copeognatha**.

Worldwide there are 37 families, 224 genera, and 3000 species. There are about 85 N. Am. genera and 340 N. Am. species. They are found in all regions, but they are the most abundant in the tropics.

They are minute to small in size, often dorso-ventrally flattened. The head is hypognathous, and appears somewhat large for the body. They also have a Y-shaped epicranial suture. The head is characteristically bulbous, having a large postclypeus. They have chewing mouthparts. Compound eyes are usually well-developed; they have 3 ocelli in winged forms (often lacking in non-winged forms). The antennae are long and filiform. The prothorax is small. Many species lack wings. If they have wings, the venation has an elongate open cell in the middle with veins radiating out. Tarsi are 2-3 segmented. They lack cerci.

Economic importance: psocids are important as pests in stored products, usually due to poor storage conditions which provide suitable microfloral food supplies. They also can attack neglected insect and plant collections (museum pests). Occasionally they are pests in large numbers in homes. Ones in homes feed on paste of book bindings. Most species live out of doors where they are associated with tree bark, bird's nests where they feed on algae or lichens. Some species live symbiotically with termites.

There are 3 suborders:

Suborder Trogiomorpha: The antennae have more than 20 segments, not annulated. The adults have 3-segmented tarsi. The labial palps are 2-segmented. Worldwide there are 5 families, 28 genera, and 218 species.

1. Family Trogiidae: Some of these species are found in granaries. The head is short; and they lack ocelli. The claws are simple, without teeth. In nature, these species occur under bark, in trees or shrubs, or in bird nests.

Suborder Troctomorpha: The antennae have less than 20 (usually 13-17) segments, usually annulated beyond segment 4. The labial palps are 2-segmented. Tarsi are 3-segmented.

1. Family Liposcelidae: This family contains the most common household pest species, *Liposcelis* sp., a book louse, which is very tiny. Note the angle on the hind femur. These psocids have the body dorso-ventrally flattened. This is the most economically important family of psocids.

Suborder Psocomorpha: This suborder used to go by the name Eupsocida. These have 13 or fewer antennal segments. The labial palps are 1-segmented. The tarsi are 2 or 3-segmented.

1. Family Myopsocidae: slides in collection.
2. Family Psocidae: This is the largest family. These are the bark lice.
3. Family Pseudocaeciliidae: This family includes the cosmopolitan grain psocid. The Cu 1A is not fused. The tarsi are 2-segmented. This species shows up in stored grain samples in North Dakota.