Psocid: Liposcelis bostrychophilus



Characteristics:

The adult psocid is very small, about 1 mm in length. It is soft-bodied, globular and somewhat flattened. It is a translucent yellow. It can be mistaken for a grain mite because of its size and light coloration. The head is wider than the thorax and slightly narrower than the abdomen. The hind femur is enlarged. The adult is wingless

Diet:

Psocid is a minor pest of stored grain. It does not damage sound grain. Both the adult and nymph feed on damaged grain and molds growing in the grain. They will feed preferentially on the germ of broken kernels and then on exposed endosperm of damaged kernels. The presence of psocids is associated with damaged grain or grain that has a high moisture content. Infestations can develop in grain that is higher than 14% moisture content.

In museums and households, the larger pale booklouse may attack damp books, paper and fabrics. It feeds on glues made from animal and plant products. Severe infestations can contaminate the product with cast skins and frass. It is reported that in grain elevators, psocids cover walkways near the source of an infestation and pose a slipping hazard. The psocid is also reported to be the cause of inhalation allergies and is implicated in respiratory problems in people.

Biology:

Breeding conditions are high temperatures and high humidity. In general, the psocid requires humidity above 60%. The female lays her eggs randomly in a food source.

The nymph looks similar to the adult but it is smaller. The nymph is active. Conditions for development are temperatures between 27°C - 30°C, and 80% humidity. The nymph moults 3 or 4 times. The nymph can complete its development in 20 - 28 days. Several generations are produced a year.