

# Immature Stage of the Aquatic Moths, *Elophila interruptalis* (Lepidoptera, Crambidae, Nymphulinae) in Korea

Jae-Ho Jin and Yang-Seop Bae

Department of Biology, College of Natural Sciences, University of Incheon, Incheon 402-749, Korea

Subfamily Nymphulinae, one of the small group of the Pyralidae, was erected by Duponchel (1884), based on the type genus *Nymphula* Schrank in 1982. The Nymphulinae is mainly distributed throughout the temperate and tropical regions of continents and continental islands, with Micronesia, Polynesia to Fiji, Cocos, and introduced in Hawaii, and with approximately 716 described species. The almost all species belong to this group are aquatic in their larval and pupal stage, living either in the stagnant ponds on vascular plants, often incases and in some species swimming from plant to plant, or in rapid streams, usually under-webs on rocks and feeding on algae. *Elophila* (formerly has been known as *Nymphula*) has been to be one of the largest genera of the Nymphulinae until Lange's revision (1956). In the Korean Peninsula, Leech (1889) first reported one species, *Elophila interruptalis*.

In this study, the immature stage of *Elophila interruptalis* commonly found in the ponds or lakes in Korea is described. The female of this species lays eggs underside of the host-leaves in fan-shaped mass of *Potamogeton ditinctus*. The number of eggs in a mass is usually 21-25. The 1st instar larvae mine the leaf-tissue from the underside or enter the space between the attached two leaves, or sometimes live on the underside and feed on the surface. In the 2th to 6th instars, some larvae makes the portable cases by two cutted pieces of leaves, some tightly combine two leaves by silk and live in such cases. The larvae abandon one piece of the case and attach the new larger piece when they moult. The pupation takes on place in the 6th instar larval case, which is attached to the leaves or the stems of the host in the water. This species pass

through two or three generations a year, and adults appear from June to November.

This species is characterized as the followings: mature larvae (6th instar)-head width 1.4 mm, body length 19-24 mm; thorax brownish white; prothorax with the prothoracic shield moderately developed. Pupa- body length 10.2-10.4 mm, width 2.8-3.2 mm; head with front slightly concave medially in dorsal view; apical margin of 10th abdominal segment evenly rounded.

**Key words:** Nymphulinae, *Elophila interruptalis*, immature stage, host plant