

## Chapter 22 Order Lepidoptera

True aquatic moths belong to the family Crambidae in Lepidoptera. Many lentic species are stem borers of rice in paddy fields. Little attention is given to lotic lepidopterans. The caterpillar has prolegs on the ventral of abdominal segments. Five genera are common in lotic habitats. *Eoophyla* larvae construct and live in tents that are fastened to rock surfaces in fast flowing streams. Larvae use hook-like crochets on the prolegs to attach to rock surfaces and move in the lateral direction. They feed on diatoms and algae. *Paracymoriza* and *Potamomusa* larvae feed on leaves. *Eophila* larvae cut leaves into two small pieces and glue them together with silk to make portable shelters. The larva feeds on leaves of water lilies and attaches its shelter to the surface of a leaf for pupation. Yoshiyasu (1985: cited in Habeck and Solis, 1994) has provided useful information on and illustrations of larvae of the Nymphulinae and the Musotiminae of Japan. A key to the five common genera of Crambidae larvae is provided.

### KEY TO GENERA OF AQUATIC LEPIDOPTERA (CRAMBIDAE) LARVAE OF INDOCHINA

- 1 Thorax and abdomen with gills ..... 2
- 1' Thorax and abdomen without gills (Fig. 1a); larvae live in portable retreats made of leaves or leaf pieces (Fig. 1b) ..... *Elophila*
  
- 2(1) Head flattened dorsally, prognathous (Fig. 2); mandibles prominent; gill tufts on lateral side of body; larva lives under a silken tent-like retreat on a rock in riffle areas ..... *Eoophyla*
- 2' Head rounded, hypognathous (Fig. 1, 3, 4, 5); mandibles not visible dorsally; gills vary ..... 3
  
- 3(2') With branched or unbranched supraspiracular and subspiracular gills (Fig. 3); larvae in portable retreats constructed of aquatic plant material ..... *Parapoynx*
- 3' With unbranched gills usually arising separately ..... 4
  
- 4(3') With gills on thoracic segment I (Fig. 4) ..... *Potamomusa*
- 4' Without gills on thoracic segment I (Fig. 5) ..... *Paracymoriza*

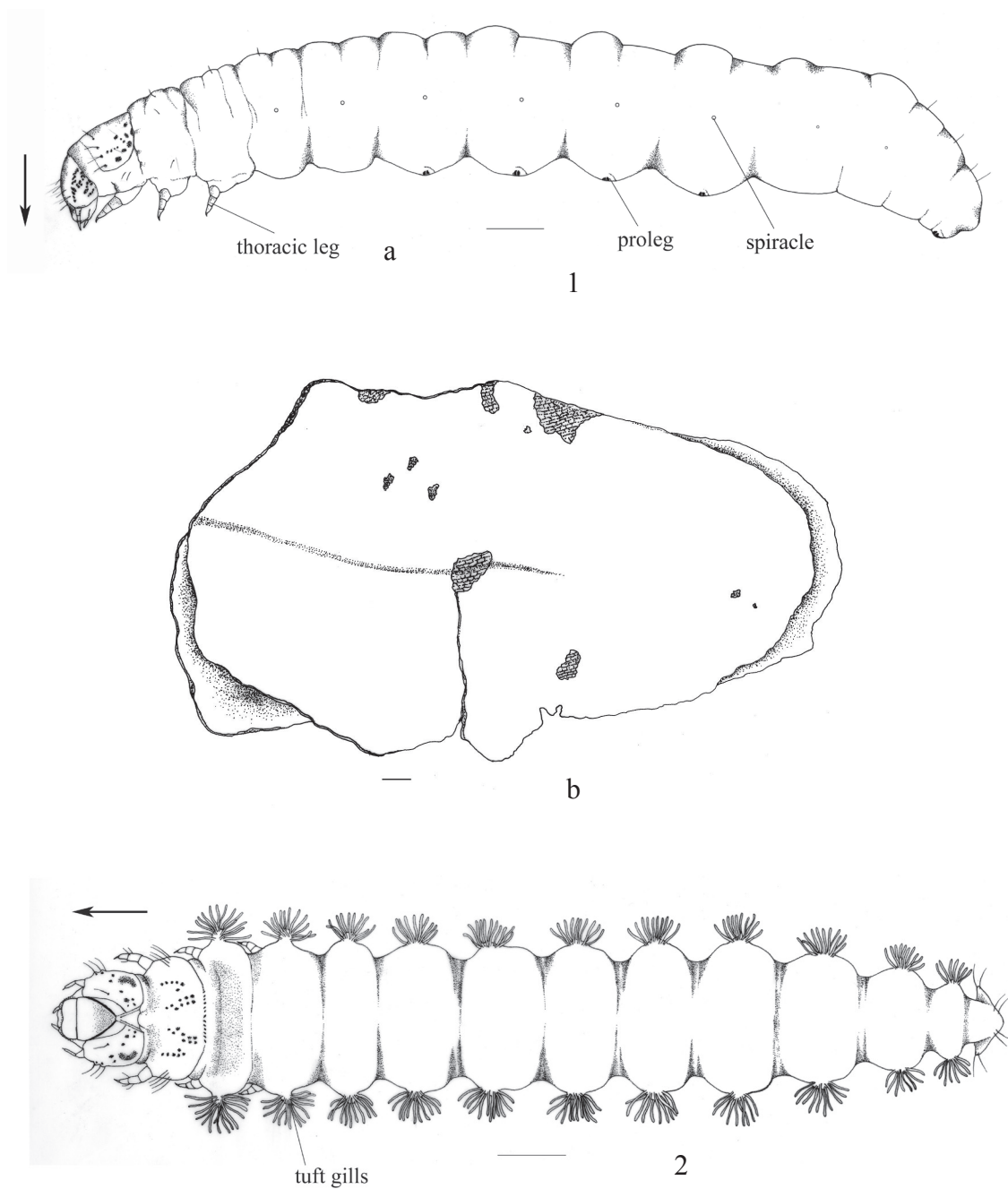


Fig. 1-2: 1. Lateral view (a) and portable retreat (b) of *Elophila* sp. larva; 2. Dorsal view of larva of *Eoophyla* sp. ( ↓ head hypognathous, ← head prognathous)  
Scale = 1 mm.

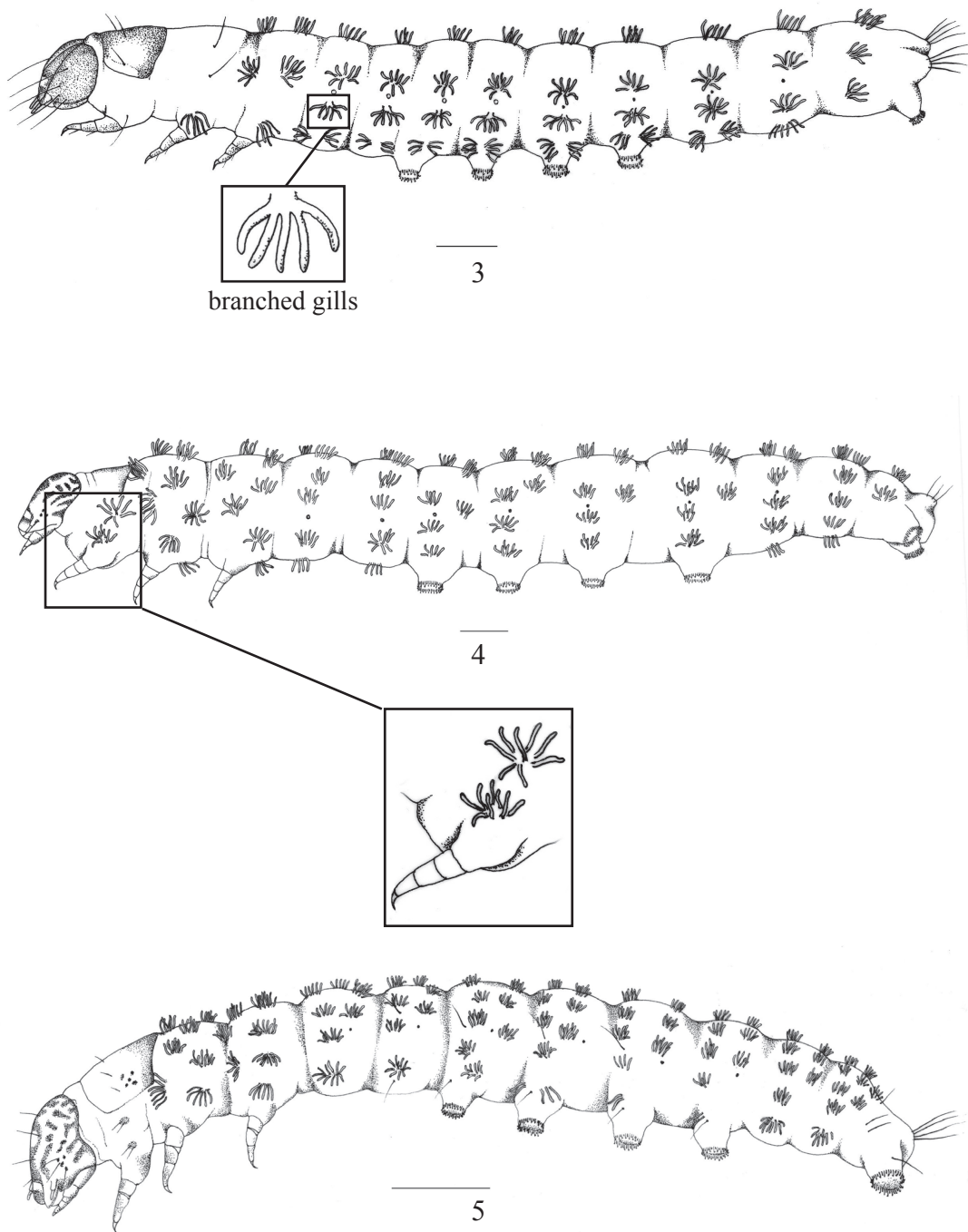


Fig. 3-5: 3. Lateral view of *Parapoynx* sp. larva; 4. Lateral view of *Potamomusa* sp. larva; 5. Lateral view of *Paracymoriza* sp. larva. Scale = 1 mm.

