#### DISCUSSION

## FAMILY PHROSINIDAE

Bate (1862:316) separated the family Phronimidae into 2 subfamilies, Phrosinides and Phronimides, which are both now being classified as valid families. He described the former family according to the three pairs of pleopods which are foliaceous and membranous. He described 4 species of Phrosina including 1 new and 1 doubtful species; 1 species of Primno and 7 species of Anchylomera including 1 new species.

Barnard (1916:291; 1925:375) raised the subfamily Phrosinides into a new family by using the name Phrosinidae as the name of the family, based on the earlier date of the genus Phrosina Risso, 1822; and described a single species of each genus Phrosina and Primno.

Stephensen (1924:134; 1925:249) revised the family, but he used Anchylomeridae as the name of the family, and described a single species of each genus, Phrosina, Euprimno, and Anchylomera. He also showed the geographical distribution of each species. Moreover, there were few other authors who again revised the family under the name of Anchylomeridae (Pirlot, 1930:21) or Phrosinidae (Barnard, 1932 287, Dakin and Colefax, 1940:123, Hurley, 1955:170). Some described new species which was later found to be only

synonyms of other species.

All three genera of this family were found represented in the Naga samples taken from the South China Sea basin, three species were found, each belongs to each genus, Phrosina (Ph.), Anchylomera and Primno (P.). The distributional patterns of all these species found can be distinguished into the following groups:

- 1. Common
  - Ph. semilunata

- P. macropa
- Not common, and not present all year round
   A. blossevillei

### FAMILY PRONOIDAE

Bate (1862:335) described 1 new species of Amphipronoe and 2 species of Pronoe as members of the family Platyscelidae. Claus (1879) removed both genera from the family Platyscelidae and established them as two separate species in the family Pronoidae. He later found Pronoe to be only synonyms of Eupronoe, and also Amphipronoe to be only synonyms of Parapronoe.

Barnard (1916:293) described 1 species of <u>Parapronoe</u>, which Stephensen (1925:165) later found to be only synonyms of other species. Besides, Barnard (1930:426; 1932:289), Pirlot (1930:30), Dakin and Colefax (1940:123), Shoemaker (1945:245), Hurley (1955:174; 1960:281), Reid (1955:33),

had been working on the same family, giving some detailed description, figures and geographical distributions.

From the Naga samples examined, only 2 genera out of 4 in the family, <u>Eupronoe</u> and <u>Parapronoe</u> were represented, with 2 species belong to <u>Eupronoe</u> and 2 species to <u>Parapronoe</u>.

The distributional patterns of all the species found from the Naga samples examined can be distinguished into the following groups:

- I. Present both in the Gulf of Thailand and in the South China Sea
  - 1. Common in both areas

# E. armata

# E. maculata

- Not common in both areas, and not present all year round in the Gulf, but present all year round in the South China Sea
  - P. crustulum
- II. Present only in the South China Sea
  - Not common, and not present all year round
     <u>P. parva</u>

#### FAMILY PLATYSCELIDAE

Bate (1862:326) has summarized the family, giving detailed description and figures to 3 species of <u>Thyropus</u>, and 2 new species of new genus <u>Platyscelus</u>.

Chevreux and Fage (1925:419) summarized the family again, but he used Typhidae as the name of the family, which Stephensen (1925:212) later found to be only the synonyms of Platyscelidae and Eutyphidae.

Pirlot (1930:37) revised the family and used the name Platyscelidae, giving detailed description, figures, key to the species and geographical distribution of each species. There are also few authors who again revised the family under the same name (Barnard, 1932:297; Dakin and Colefax, 1940:128; Hurley, 1955:187).

Out of the 5 genera of this family, 5 species from 3 genera were found in the Naga samples examined, of which 2 species belong to the genus <u>Platyscelus</u> (P.), 2 species belong to the genus <u>Paratyphis</u> (Pa.), and 1 species belongs to the genus <u>Tetrathyrus</u>. The distributional patterns of all the species found can be distinguished into the following groups:

- I. Present both in the Gulf of Thailand and in the South
  China Sea
  - 1. Common in both areas
    - P. ovoides

### Pa. promontorii

- Not common in the Gulf, but common in the South China Sea
  - P. serratulus

## T. forcipatus

3. Not common in both areas, and not present all year round

# Pa. maculatus

There are fewer species of those 3 families in the Gulf of Thailand than in the South China Sea, and all species present in the Gulf are also present in the South China Sea. Those which were found in the Gulf showed some connections with the populations outside the Gulf, but some of them showed that they also maintained their populations by circulating in the Gulf, following the pattern of water circulation which was worked out by Robinson (1963:34) from the Naga's data.

Most of the species which were found only in the South China Sea were found in the areas of the deep South China Sea basin, or slightly overlying the offshore part of the Sunda Shelf during some periods. Phrosina semilunata and Primno macropa were found ranging from north to the southern limit of the deep basin, and slightly overlying the offshore part of the Sunda Shelf. Parapronoe parva was found along the coast, in the central and southern portions of the deep basin, and also slightly overlying the edge of the Sunda Shelf.