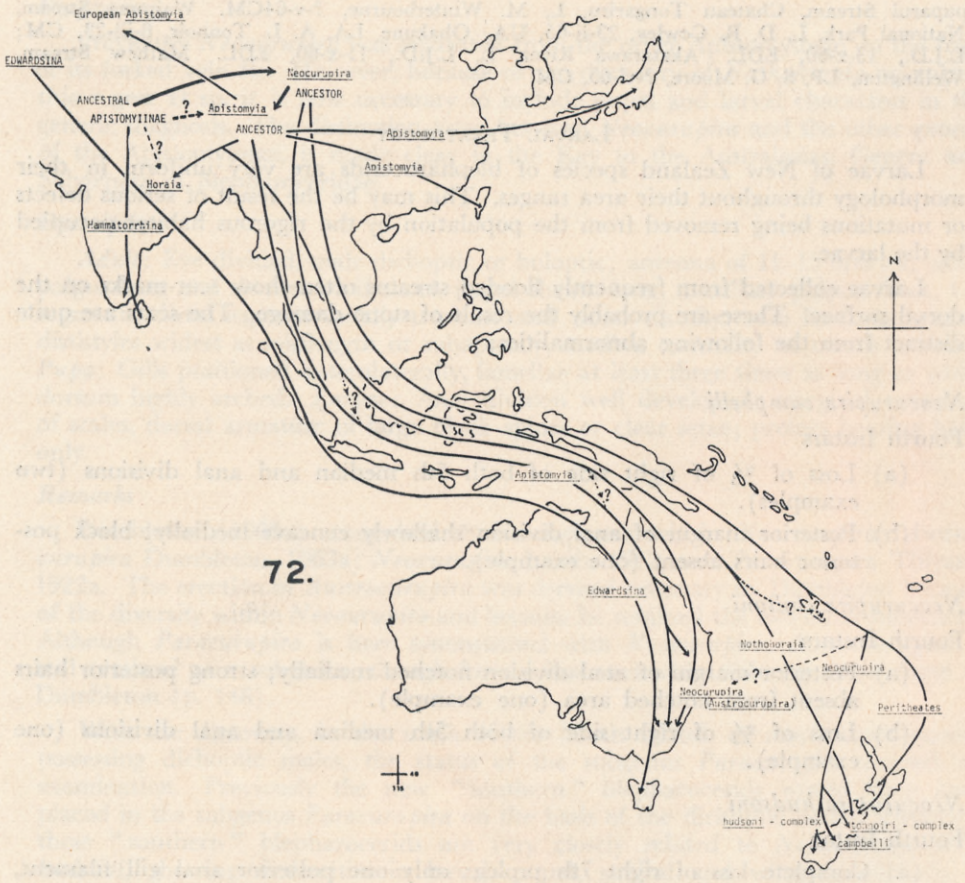

Fig. 72.—The probable phylogenies and dispersal routes of the Apistomyiinae. Broken lines and query marks indicate uncertain relationships.

remainder of the Blepharoceridae. However, Edwards (1929) believed that it was unwarranted to assume an ancestral nature for *Edwardsina* and more recently Stuckenberg (1958) after examining the affinities of *Edwardsina* and *Paulianina* with other Blepharoceridae came to the same conclusion. However, even if the Edwardsininae were not ancestral, phylogenies of Blepharoceridae are usually based on *Edwardsina*-like ancestors.

The major evolutionary trends in the blepharocerid adults appear to have been reduction of venation, development of divided eyes, loss of mandibles and reduction of the other mouthparts. These trends have taken place independently within the subfamilies of blepharocerids, resulting at times in considerable convergence. Within the Apistomyiinae the extent of reduction in venation is one of the main characteristics separating the genera. The most primitive venation is in *Neocurupira hudsoni* and *Neocurupira tonnoiri* where vein Rs is forked and all veins reach the wing margin (Figs. 5 and 40). Other *Neocurupira* species show some reduction in venation. *Neocurupira chiltoni,* and *N. rotalapisculus* of the *hudsoni*-complex do not have vein 1A reaching the margin and *N. campbelli* has neither vein 1A nor Cu1 reaching the margin. The simple vein Rs of *Peritheates* probably came from a neocurupirid vein Rs by loss of vein R2+3. That this was the pathway of reduction is suggested by the very weak vein R2+3 found now on some specimens of *Neocurupira hudsoni.* The presence of a spur vein R2+3 on vein Rs in some specimens of