

some of these characters become highly untrustworthy, though they may hold good throughout other groups. It is often quite impossible to decide their values correctly without the aid of the reproductive and early-stage characters to guide us in the matter of close relationships. An intricately interrelated system of specialization in external adult anatomy has resulted in producing in distinct stock forms which closely approach each other in external characters. This was not realized until the investigation of the reproductive and early-stage characters had considerably progressed.

Until this work was well under way no one could interpret the genera as they actually exist, and all generic work was largely guess-work. Even at the present time muscoid genera as they commonly appear in the literature are in numerous cases complexes of widely different stocks. Forms belonging to distinct families have for a century been classed as congeneric, and the external differences between them are sometimes so inconspicuous that careless workers have even pronounced them conspecific. These facts serve to emphasize the invaluable aid to be derived from the reproductive and early-stage characters, and the necessity for taxonomic manipulation of the superfamily by means of smaller groups than families, subfamilies, tribes, and subtribes.

The following tabular summary will be useful. It shows the known main differentiations of the female reproductive system, eggs and first-stage maggots in the eleven muscoid families here recognized, exemplified by group-units. The group-unit consists, as already stated, of the typic genus plus the atypic genera which belong with it, and is a division of the subtribe.

Its ending is *iæ*, which is added to the root of the name of its typic genus.

I. PHASIIDÆ

1. Elongate macrotype eggs deposited subcutaneously without incubation, no uterus—Phasiidæ.
2. Flattened subovate macrotype eggs deposited supracutaneously without incubation, no uterus—Ectophasiidæ, Trichopodiæ, Xanthome-