

## ON HOMOPTERA AND ALLIED FORMS.

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The species of *Homoptera* stand in need of a revision. They are usually but partially and confusedly named in such collections as I have had access to. With regard to the generic title, its acceptance is only provisional. Two species, *Phacocyma lunifera* Hübn. and *Phacocyma fluctuaris* Hübn., are unknown to me. The descriptions hitherto published in this genus are difficult to use for identification; no comparative characters are given, no analysis of the lines entered upon. The characters separating *Zalc* and *Ypsia* are in great part unexplained, and of the latter dependant on larval characters. *Obliqua*, *duplicata* and *benesignata* are allied, the two first perhaps synonymous; *nigricans* is unknown to me; probably no one has yet correctly identified *calycanthata* of Abbot & Smith. Walker's and Bethune's "*calycanthata*" is *Zalc horrida* Hübn. Guenee's *calycanthata* I think I have identified. *Minerea* I think I know. Walker's *herminioides* is *Episcuxis aemula*! Leaving Walker's names out of the question, we have *lunata*, *edusa* and *Saundersii* generally fixed in collections; besides this, I have *calycanthata* Guen. and *albifasciata* Beth. determined. *Atritincta* and *edusina* are small dark forms from Texas. The present paper calls attention to the want of information and is written in the hope that material will come in so that the species may be worked over. It is necessary in studying the species to observe the course of the thread-like transverse posterior (t. p.) line. In *lunata* it is waved; in its course superiorly, opposite the cell, it will be seen to be dentate in addition to the usual central indentation. It is also dentate in *Saundersii* and *edusa*. *Rosæ* Behr., from California, from a single specimen, does not seem to me distinct from *lunata*. Drury's fig. (pl. 20) is hardly well enough drawn to decide, but the t. p. line appears to be given as somewhat jagged, so I do not venture to alter our usual determination of his species, which is our dark brown and stouter form. Another species, which I propose to consider as *minerea*, is similar to *lunata*, but differs by this line, frequently obliterate, being nearly even except the discal notch; it is a little waved inferiorly, but is not dentate superiorly. *Minerea* is of