

ON THE SYSTEMATIC POSITION OF THE SO-CALLED  
SUBFAMILY PLATYCHASMATINÆ NAKAMURA, 1956  
(NOTODONTIDÆ)

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NAKAMURA described (1956: 143) a new subfamily of the Notodontidæ which he called Platychasmatinæ. His text was in Japanese, and I can unfortunately only make use of the English summary which runs as follows (spelling original): "Platychasmatinae nov. Involvs Japanese *Platychasma* and Indian *Cyphanta*, charcterized by the forewing with  $R_2$  from lower angle of cell". This statement is of course wrong because  $R_2$  obviously is a misprint for  $M_2$ . Moreover, even if corrected, it does not explain the reason for the transfer of the noctuid genera *Platy-chasma* and *Cyphanta* to the Notodontidæ, since the family Noctuidæ has, among its basic characters,  $M_2$  in the forewing arising from the lower angle of the cell, while the family Notodontidæ has that vein placed in the middle portion of the discocellulars, and sometimes even above the middle. Further, both *Platychasma* and *Cyphanta* have, in the hindwing, the characteristic basal loop or cell formed by anastomosis of 8 and the stalk of 6+7 shortly after the base, with both veins subsequently diverging, while the Notodontidæ have these veins approximated for some distance, usually almost to the end of cell.

Still more important than the basic venational features are of course the tympanic structures, and the study thereof permits us to assign the genera involved with certainty to their true place, either in the family Noctuidæ or in the family Notodontidæ.

Thanks to the kindness of D. S. FLETCHER of the British Museum (Natural History), I have been able to dissect specimens of the typical species of both genera, viz. *Platychasma virgo* Butler and *Cyphanta xanthochlora* Walker.

The results of the dissection are shown in figs. 1 and 2, so that a short comment is sufficient. Both structures are unquestionably of the noctuid type, with an oblique tympanum, without the "kettledrum" of the Notodontidæ and with the broad pocket-bearing frame. *P. virgo* (fig. 1) is peculiar in the large, double pocket I, whereas pocket IV is large but shallow. But for the much larger pocket I, it is rather similar to *Plusiodonta* (group 2 of the Erebine-Catocaline complex of RICHARDS, 1933: 17). However, its relatively narrow scutal phragma reminds one of that

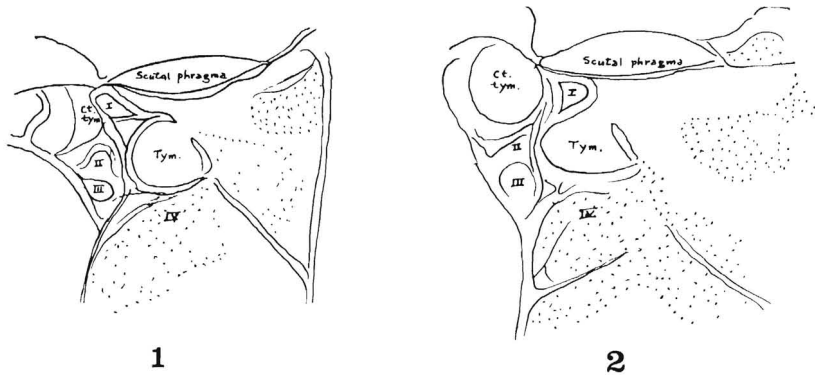


Fig. 1. *Platychasma virgo*, tympanic structures. Fig. 2. *Cyphanta xanthochlora*, tympanic structures. See discussion in text.

of the Herminiinæ and Hypheninæ of RICHARDS. Since, however, the scutal phragma varies a great deal in individual genera, the best place for *Platychasma* seems to be in the vicinity of *Plusiodonta*.

*Cyphanta xanthochlora* (fig. 2) has all four pockets moderately developed, but well formed, and is on the whole similar to the "First group" of the subfamily Erastrinæ of RICHARDS (*l. c.*: 23 ff.) which, as that writer points out, differs but slightly from the "Trifid subfamilies". The latter are, however, mostly characterized by a relatively large counter-tympanum. In *C. xanthochlora* that structure is about of the size of the true tympanum, so that this genus should probably be placed with the subfamily Acronictinæ, where as a matter of fact it has been placed in the British Museum (Natural History). *Cyphanta* has, like *Platychasma*, a relatively narrow scutal phragma.

Both genera are most definitely noctuids, and the subfamily Platy-chasmatinæ should accordingly be suppressed.

The above instance shows once more the importance of the tympanic structures for the classification of the Lepidoptera.

#### References

- Nakamura, M., 1956. Contribution to the knowledge of some Japanese notodontid moths. Revisional Notes X. *Tinea* 3: 142-143.  
 Richards, A. G., Jr., 1933. Comparative skeletal morphology of the noctuid tympanum. *Ent. Americana* (n.s.) 13: 1-84.