



## Additions to Pentatomoidea (Hemiptera: Heteroptera) wrongly labelled in Gay’s “Atlas de la Historia Física y Política de Chile (1854)”

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The Historia Física y Política de Chile of Claudio Gay is one of the founding works of Chilean natural history, and the most important for the Heteroptera (Faúndez 2010).

The Atlas de la Historia Física y Política de Chile is a part of Gay’s work and contains illustrations concerning the text books; and several of these illustrations belongs to the new taxa described by different specialists in Gay’s work.

Recently a series of labelling mistakes of Pentatomoidea species in the Atlas have been detected (Faúndez 2010). These mistakes also have been reproduced in a later work in which Gay’s figures are reproduced: Peña’s (1987) “Introducción a los Insectos de Chile” (Faúndez 2010).

Additionally a new problem was found in plate XXI [= Hemípteros Lámina 1; = Emipteros] of Gay’s Atlas. Figures 6 and 7 of this plate belong to the Asopinae *Oplomus chilensis* Spinola 1852 [currently *Tylospilus chilensis* (Spinola, 1852)]; figure 6 is the species described, and figure 7 is a variety; however, if both figures are compared, two species totally distinct are illustrated. Neotropical Pentatomidae of Spinola have been recently treated by Grazia & Campos (2010), and there both *O. chilensis* and *O. chilensis* var. specimens (handwritten labelled) have been examined, belonging to the same taxon; thus we are in presence of a new wrongly labelled figure.

Figure 6 is correct according Spinola’s description, but figure 7 is clearly a species of another group, especially because of the lack of pronotal humeral spines, which are present in both, *O. chilensis* and the variety described by Spinola.

The morphology of the specimen illustrated in figure 7, resembles several Acanthosomatidae species. It is very interesting that also one acanthosomatid, *Ditomotarsus punctiventris* Spinola, 1852 (figure 9), was also wrongly labelled in the same plate, and also reproduced in Peña’s (1987) book (Faúndez 2010). Faúndez (2010) wrote that possibly the specimen of figure 9 belongs to an Asopinae species. With the new mistake here reported, the possibility is opened that the *D. punctiventris* figure could have been exchanged with the *O. chilensis* var. figure; the figures of *O. chilensis*, *O. chilensis* var., and *D. punctiventris* are compared in the following table:

**TABLE 1.** Comparison among *Oplomus chilensis* and *Ditomotarsus punctiventris* figures in Plate XXI of Gay’s Atlas.

	<i>Oplomus chilensis</i> Fig. 6	<i>Oplomus chilensis</i> var. Fig. 7	<i>D. punctiventris</i> Fig. 9
Pronotal shape	Subtriangular	Deltoid	Subtriangular
Pronotal humeral spines	Present	Absent	Present
Head shape	Elongated, apical zone rectangular shaped, “Y” design across its length	Less elongated, apical zone rounded shaped, without “Y” design across its length	Elongated, apical zone rectangular shaped, “Y” design across its length
Connexiva	Exposed	Covered	Exposed

According to this comparison, it is evident that figure 9 is very close to figure 6. Figure 9 matches with Spinola’s *O. chilensis* var. description, especially the scutellum; therefore we believe that figure 9 of plate XXI of the Atlas, labelled as *Ditomotarsus punctiventris*, really belongs to *O. chilensis* var.

The species illustrated in figure 7 of plate XXI of the Atlas is hard to identify, because there is less detail of the figure; however, for the general morphology, and the mistake reported here, it is very possible that the species illustrated is *D. punctiventris*, and figures 7 and 9 should be exchanged.