

ON SOME POORLY KNOWN, MISIDENTIFIED AND MISLABELLED CHILEAN CHRYSOMELIDAE (COLEOPTERA)

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ABSTRACT

Some species of Chilean Chrysomelidae have apparently been described from mislabelled specimens, from accidental introductions, or from adventitious specimens of Argentinian or Peruvian species. *Hypolampsis melanotus* Clark and *Stethispa chilensis* Pic are believed to be based on non-established taxa that have been described from Argentina or Peru. *Uroplata chilensis* Pic was probably based on an unestablished adventitious specimen from Argentina, and is placed as junior synonym of *U. nigratarsis* Weise. *Blepharida chiliensis* Baly was probably based on a mislabelled specimen and is reduced to synonymy of the Nearctic species, *B. rhois* (Forster). *Phaedon rubripes* Philippi and Philippi was based on a mislabelled specimen or unestablished accidental introduction, and is placed as a junior synonym of *Gastrophysa polygoni* (Linnaeus). *Megalostomis gazella* Lacordaire, *Calligrapha curvilinea* Stål, *Disonycha copulata* Germar, *Disonycha bicarinata* Boheman, *Disonycha argentinensis* Jacoby and *Diabrotica viridula* (Fab.) are not confirmed to have been collected in Chile and should be removed from faunal lists. *Xanthogaleruca luteola* (Müller) is recorded from Chile for the first time, but is not verified as established.

RESUMEN

Algunas especies chilenas de Chrysomelidae aparentemente fueron descritas en base a especímenes con etiquetas de procedencia incorrectas, especímenes introducidos accidentalmente, o en base a especímenes advenedizos de especies argentinas o peruanas. Se cree que *Hypolampsis melanotus* Clark y *Stethispa chilensis* Pic fueron basadas en taxa no establecidas que también pueden haber sido descritas de Argentina o Perú. *Uroplata chilensis* Pic probablemente fue basada en un ejemplar advenedizo de Argentina no establecido, y se sinonimiza con *U. nigratarsis* Weise. *Blepharida chiliensis* Baly probablemente fue basada en un ejemplar con etiqueta de procedencia incorrecta, y se sinonimiza con la especie neártica *B. rhois* (Forster). *Phaedon rubripes* Philippi y Philippi fue basada en un ejemplar con etiqueta de procedencia incorrecta o introducido accidentalmente y no establecido, y se sinonimiza con *Gastrophysa polygoni* (Linnaeus). No se ha podido confirmar que *Megalostomis gazella* Lacordaire, *Calligrapha curvilinea* Stål, *Disonycha copulata* Germar, *Disonycha bicarinata* Boheman, *Disonycha argentinensis* Jacoby y *Diabrotica viridula* (Fab.) hayan sido colectadas en Chile, por lo que deberían removerse de las listas faunísticas de este país. Se registra por primera vez la presencia en Chile de *Xanthogaleruca luteola* (Müller), pero no se ha podido confirmar si esta especie ha logrado establecerse.

INTRODUCTION

During investigation of taxonomic problem concerning the Chrysomelidae of Chile, type specimens were examined of some taxa that have not been collected in Chile subsequent to original description. The Chilean chrysomelid fauna is highly endemic and geographically isolated from the remainder of the Neotropi-

cal fauna (O'Brien, 1971), but it is not uncommon for specimens of various non-Chilean taxa to be found in Chile. For example, I have examined Chilean specimens of *Spintherophyta* Dejean, *Systema* Chevrolat and other genera which seem to be more widespread Neotropical species that have succeeded in arriving in Chile but did not become established. In other cases, the type specimen(s) of certain species described from Chile clearly represent mislabelled specimens because they are specimens of nearctic or Palaearctic species that have not otherwise been collected in Chile. Some other species have been listed in catalogues as occu-

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ring in Chile, but have not been collected there, as evidenced by lack of such specimens in collections examined to date.

The present paper details the taxonomic status of species that have been incorrectly recorded from Chile, that have been described from mislabelled specimens, or that have been described from specimens that probably occurred adventitiously in Chile and are not a constituent of the endemic fauna. I use the term adventitious to mean individuals that have, by some unknown means, been transported into Chile from neighbouring countries by prevailing climatic conditions, or accidentally by humans.

Lectotype designations are made where appropriate. Label data from type specimens are recorded here *verbatim*: "/" is stated to indicate different labels borne by the type. Codens refer to collections in which specimens are preserved (*i.e.* Chil, MNHN, BMNH, MCZ, are specified in acknowledgements). Taxa reported are detailed by subfamily.

Clytrinae

1. Blanchard (1851) figured and provided a description of *Megalostomis gazella* Lacordaire, stating this to be a species so widespread in South America that it probably would be found in Chile also. However, no species of Clytrinae, save two in the genus *Dachrys*, are known to occur in Chile. This species, *M. gazella*, must therefore be deleted from catalogues of Chilean Coleoptera (*e.g.* Blackwelder, 1946) and faunal treatments (*e.g.* Peña, 1988) that include it.

Chrysomelinae

2. The holotype of *Phaedon rubripes* Philippi and Philippi (1864:390) was examined, and found to belong to the Holarctic genus *Gastrophysa*. It was compared with specimens of *G. polygoni* (Linnaeus) from Europe and North America, and found to be indistinguishable in detail from such specimens. No additional specimens of any species of *Gastrophysa* have been found in collections of Chilean Chrysomelidae. Therefore, the species must be regarded as having been descri-

bed from either an unestablished introduction or a mislabelled specimen. The holotype (sex undetermined) (Chil) bears the following label data: "1093. / Typus [red] / *Phaedon rubripes* Ph. p. 848 [pale blue, pencil] / *Phaedon rubripes* Ph. Typus! [label by Kuschel] / Chile M.N.H.N. Tipo N° 3113". The specimen is not in good condition, missing left antenna, left mid- and hindlegs, and right elytron loose on pin.

3. *Calligrapha curvilinea* Stål (1859:325) was described from Perú, and has been listed in catalogues as occurring in Chile. No species of this genus have been collected in Chile and I have examined no specimens of Chrysomelinae from Chile that agree with Stål's description; therefore, occurrence in Chile must be considered unsubstantiated and it should be deleted from faunal lists of Chile. I have not been able to examine the type of this species.
4. *Chrysolina quadrigemina* (Suffrian) and *C. hyperici* Forst. are species that have been introduced to various areas of North America for biological control of *Hypericum perforatum* (*e.g.* Fields *et al.*, 1988). They were introduced to Chile in 1950, but this is not widely known (Jerez pers. comm. 1989).

Chrysolina quadrigemina has been collected at the following localities: Bio-Bío: Mulchén. Concepción: Chivilingo. Coquimbo (no specific locality). Malleco: Termas de Manzanar; 15 km. W. Victoria; 4 km. W. Victoria; Victoria. Ñuble: Chillán, Las Trancas; Invernada; Recinto. Quillota: La Cruz. Talca: Alto Vilches. Valdivia: Huelleshue; Panguipulli.

Chrysolina hyperici has not been widely collected. Jerez (1989, pers. comm.) provided me with the following data, but I have not personally examined any specimens: Talca, Altos de Vilches, diciembre 1970, T. Ramírez.

Galerucinae

No galerucines are confirmed to be endemic to Chile. Some specimens have been found in collections but with one exception these are old collections without specific locality data.

5-6. Two species of *Diabrotica* have been listed as occurring in Chile in catalogues (Blackwelder, 1946; Krysan and Smith, 1987). *Diabrotica viridana* Baly (1886:443) was described from Chile. Smith and Lawrence (1967:141) place this species in the *D. virgifera*-Group. Krysan and Smith (1987) included *D. viridana* in their key to species of the *D. virgifera* LeConte-Group but further treatment of the name was given because it is not a member of this species group (Krysan pers. comm. 1990). I suspect that it is not a species endemic to Chile and was probably described separately from another region of South America; it may have been described from a mislabelled specimen.

Krysan and Smith (1987:415) gave only "Chili: (nfd)" [no further data] as distributional data of *D. viridula* (Fab.) (based on a single specimen, MCZ - Krysan, pers. comm. 1990). I think *Diabrotica viridula* should be deleted from lists of Chrysomelidae occurring in Continental Chile² because the record is an unsubstantiated, old occurrence or mislabelled specimen.

7. A single specimen of *Xanthogaleruca luteola* (Müller) was examined, labelled "Valparaíso, Ritoque, 17.APR.1982 (Chil). This species typically uses *Ulmus* as a host plant, and has been introduced to North America. This single specimen may represent an introduction to Chile, but no additional specimens have been found.

Alticinae

8-10. *Disonycha copulata* Germar was described from Argentina, and listed in catalogues as occurring in Chile (e.g. Blackwelder, 1946). Da Costa Lima (1954) listed no species occurring in Chile, but Blake (1955) gave "Chile: Germain" (no specific location) for three species: *D. bicarinata* Boheman (p. 12), *D. argentinensis* Jaco-

by (p. 71), and *D. copulata* Germar (p. 68). Vogt *et al.* (1979) did not include Chile or any adjacent areas in the distribution of *D. argentinensis*. The type of *D. copulata* was not found in Berlin by Blake (1955:68), nor more recently (Hieke, pers. comm. 1989), and is presumed lost. No specimens of any *Disonycha* have been found that have been collected in Chile. It is possible that catalogues refer to an apparently undescribed species of *Asphaera* which is similar in colour and elytral pattern to *Disonycha* species, and to the Chilean *Kuschelina decorata* (Blanchard).

11. *Hypolampsis melanotus* Clark (1860:233) was described from Chile. No other specimens of this widespread New World genus have been collected in Chile and I conclude that it was probably described from an adventitious specimen. The species should be deleted from catalogues, though it may well be a valid name for some other Neotropical species. The holotype is preserved in BMHN: "67.56 / Type [red trim disc] / H. melanotus Clk.". The specimen bears no locality data, but Clark (1860) stated "Chili ex coll Chevrolat" and may simply have been mistaken.

12. *Blepharida chiliensis* Baly (1865:432) was described from Chile. The holotype ♀ was examined, and was found to be indistinguishable in detail from North American (Illinois) specimens of *Blepharida rhois* (Forster) in my collection (this was confirmed by D. Furth, MCZ; pers. comm., 1991). The specimen should be considered as having been mislabelled, and is hereby reduced to a junior synonym of *B. rhois*. The holotype (BMNH) bears the following label data: "Type H.T. [red trim disc] / Baly Coll. / *Blepharida chiliensis* Baly Chili [bluish]".

Hispinae

Pic (1933a&b) described two hispines from Chile, *Uroplata chilensis* and *Stethispa chilensis*. The holotype of each species keys to these genera in Monrós and Viana (1947), and

²Previously cited as present in Easter Island (Campos, L. y L. Peña. Rev. Chilena Ent., 7: 217-229, 1973); it is necessary confirm this record.

agrees in structure with descriptions of those genera presented by these authors. Thus, these taxa can be considered as correctly assigned to genus but their taxonomic validity must be doubted because no other specimens of the subfamily Hispinae have been collected in Chile.

13. *Uroplata chilensis* Pic (1933a:293) keys to *U. nigratarsis* Weise in Monrós and Viana (1947), and agrees with the description and figure provided. It has not been possible to examine the type of Weise's species, because it is not preserved in Berlín (Hieke, pers. comm. 1989). A few additional specimens of this species have apparently been collected in Chile [labelled simply "Chile: Germain" (MCZ 3) and "Pampas: Germain" (MCZ 1). However, specimens apparently collected in Chile are very likely adventitious individuals from Argentina and not established. *Uroplata chilensis* Pic is hereby placed as junior synonym of *U. nigratarsis* Weise; it should be considered deleted from catalogues of Chilean Coleoptera.

The holotype (MNHN, sex undetermined) bears the following label data: "Chili / Uroplata probable / ou Octhispa / Museum Paris Coll. M. Pic [greenish, added by N. Berti / Uroplata chilensis n sp / Holotype Uroplata chilensis Pic [red, added by me]".

14. *Stethispa chilensis* Pic (1933b:36) keys, with difficulty, to this genus in Monrós and Viana (1947), but agrees well with the description of the genus. It does not correspond to either of the two species treated by these authors, and therefore is probably not an Argentinian species. Uhmman (1957) listed 18 species in the genus; it is possible that Pic's species corresponds to the Peruvian species *S. bonvouloiri* Baly, but this has not been ascertained.

The holotype (MNHN, sex undetermined) bears the following label data: "Chili [pencil] / type [yellowish] / type [red, added by N. Berti] / Museum Paris Coll. M. Pic [greenish], chilensis n sp / Holotype Stethispa chilensis Pic [red, added by me]". The specimen lacks the right apical elytral spine and right protarsus.

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